PNEUMAX

PROCESS AUTOMATION TECHNOLOGY

CATALOGUE

Process automation technology Catalogue

Stainless steel and aluminum components and systems: valves and solenoid valves, components for air treatment and accessories for applications in the process industry

Pneumax

Smart Technologies and Human Competence

Founded in 1976, **Pneumax S.p.A.** is today one of the leading, international manufacturers of components and systems for automation. It is at the fore front of a group comprised of **28 companies**, with **over 850 employees worldwide**.

Ongoing investment in research and development has allowed **Pneumax** to continually expand its range of standard products and customised solutions, adding to the well-established pneumatic technology, a range of electric drive actuators and fluid control components.

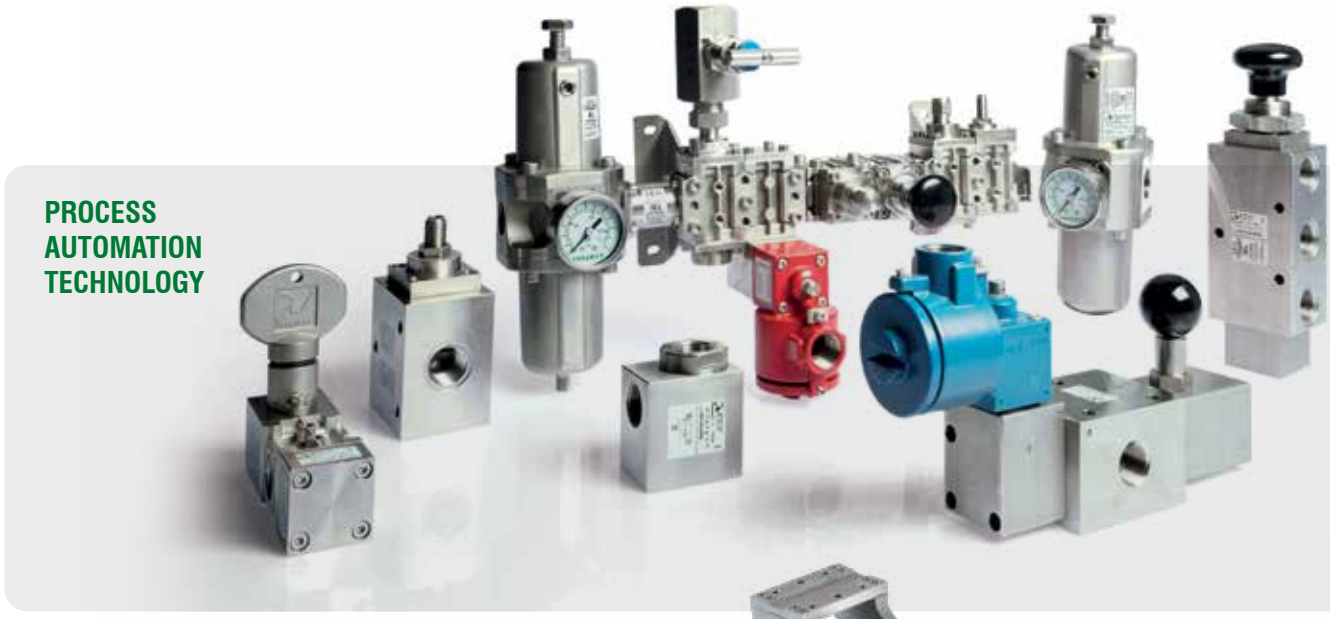
The desire to provide the service and specific application skills has led to the creation of 3 business units, dedicated to Industrial Automation, Process Automation and Automotive sector.

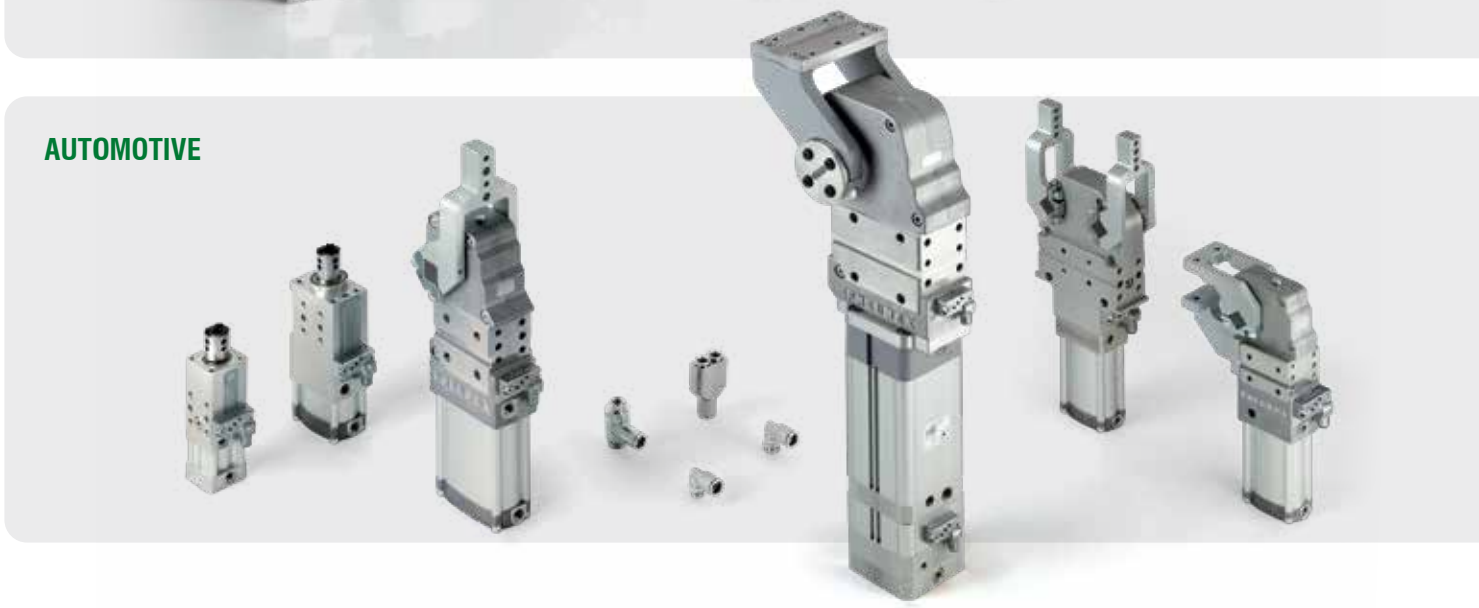
Pneumatic technology

Electric actuation

Fluid control

INDUSTRIAL AUTOMATION





The ability to provide various technologies and solutions for each of our clients applications is the main objective of the Company, making Pneumax the ideal strategic partner.

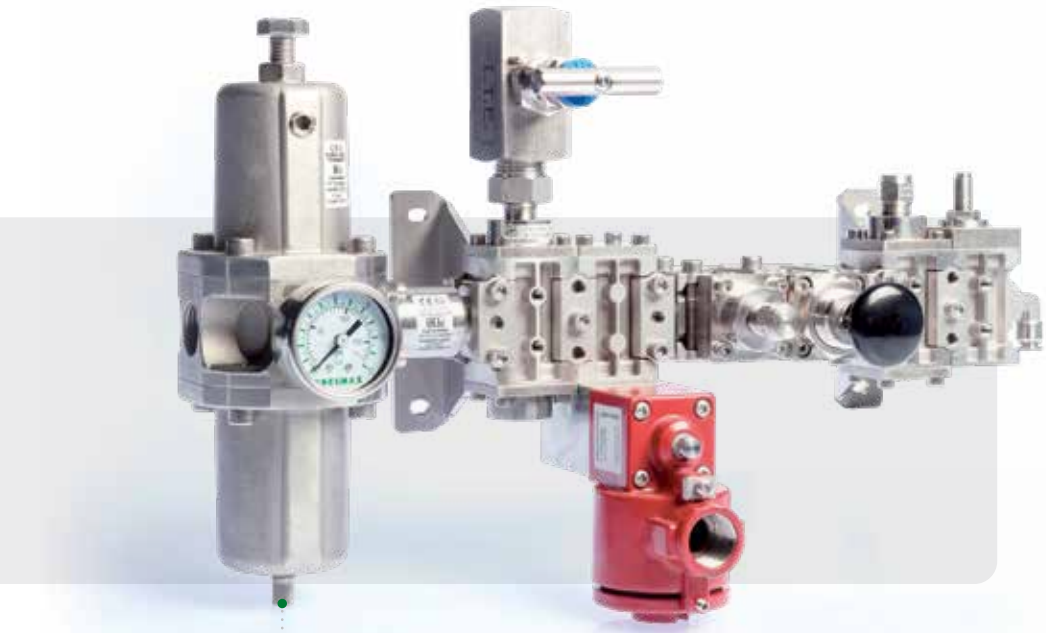
What defines us is the "**Pneumax Business Attitude**", born out of the capacity to combine industry sectors, technology and our application skills via the clients collaboration with our business and product specialists.
The most effective solutions are studied around the TCO (Total cost of ownership) related to the entire life cycle of the product.
This represents the main Pneumax distinguishing factor.

Process automation technology

A wide range of standard components and customized solutions

Pneumax S.p.A. offers a wide range of engineered solutions and components for the process automation industry. These have been designed to meet the latest industry standards and customer specifications.
Long term performance and reliability are never compromised at Pneumax, a trustworthy partner to achieve full customer satisfaction for severe service and harsh environmental applications.

Pneumax products are designed and engineered in compliance with the latest international standards, following sophisticated and reliable prototyping as well as rigorous testing procedures to provide efficient and cost effective solutions. The combination of the latest technology and manufacturing experience allow Pneumax to add more products to their extensive portfolio with a wide range of components and services.



CUSTOMISED SOLUTIONS

Manifold and integrated systems

STANDARD PRODUCTS

Stainless steel and aluminium components

Application sectors

- Petrochemical
- Oil & gas
- Power generation
- Water treatment

Index

Process automation technology

Series Airplus - aluminium

- **Modular system**
- **Compact and linear design**
- **Maximum flexibility and reliability**
- **Plug-n-play connection thru couplig flanges**
- **Available in 3 sizes with connections from 1/4" to 1"**
- **ATEX certification (II 2GD)**

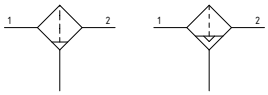
Construction and working characteristics
Pneumax AIRPLUS air treatment units have been designed and developed to increase reliability, modularity and user-friendly operation and installation.
This range of filters, regulators and filter regulators are constructed using a light weight aluminum body which ensures strength whilst at the same time making them suitable for a wide range of applications in temperatures from -40 to +80°C.
The filters operated in pressures up to 12 bar with filtration available from 5 to 50 microns.
Pneumax Airplus air treatment units can be integrated with safety elements that comply with EN-ISO 13849-1 and CE marking according to EU Machinery Directive, Annex V.
AIRPLUS air treatment units are available in 3 different sizes, with connections from 1/4 "to 1" BSP and NPT and flow rates performances up to 8000Nl/min.

Instruction for installation and operation
The FRL unit should be installed as close as possible to the 'point of use'. The air flow direction should follow the direction indicated on the individual modules, following threaded connections (IN and OUT). Units fitted with a with bowl should be mounted vertically with the bowl facing down.
All units should be operated in accordance to the specified pressure and temperature ranges and should never exceed 0.2 Hz max frequency whether pulsing inlet pressure occur.
Fittings shall be mounted according to the maximum torque specified.

Maintenance
To carry out maintenance which involves the removal of the caps or supports above the body and where the retaining screws are present, it is necessary to remove the cover plates beforehand. If you attempt to dis-assemble the caps or supports without removing the cover plates and retaining screws, the integrity and function of the device could be compromised.
Bowls, plugs and supports are assembled with a bayonet type mechanism. In order to remove them, rotate anti-clockwise until the mechanical stop is reached and then remove from the body (for the bowls firstly press down the green safety button).
Bowls and transparent parts can be cleaned with water and neutral soap. Do not use solvents or alcohol.
Filtering elements (present in filters and filter regulators) made of HDPE can be regenerated by washing and blowing them.
In order to remove them it is necessary to remove the bowl unscrew the filter element and replace it with a new one or clean it.
Lubricator oil recharge might be performed during normal operation (apart Size 1) depressurizing the bowl thru dedicated plug.
Pneumax suggest refilling oil directly into the bowl.
No others maintenance operation shall be carried out by client itself, due to complexity of the assembly and Pneumax dedicated post-maintenance testing activities.

PROCESS AUTOMATION TECHNOLOGY

Filters (F)



- Double filter action: air flow centrifugation and filter element
- Available in 3 sizes with flow rates up to 14000 Nl/min and connections from 1/4" to 1"
- Filtering cartridge made of HDPE available in three different filtration grades (5μm, 20μm, 50μm)
- Filter cartridge can be regenerated by washing / blowing it or replaced
- Bowl assembly via bayonet type quick coupling mechanism with safety button
- Semi-automatic, automatic or manual metal drain
- Atex certification (II 2GD)
- Inlet pressures up to 20 bar

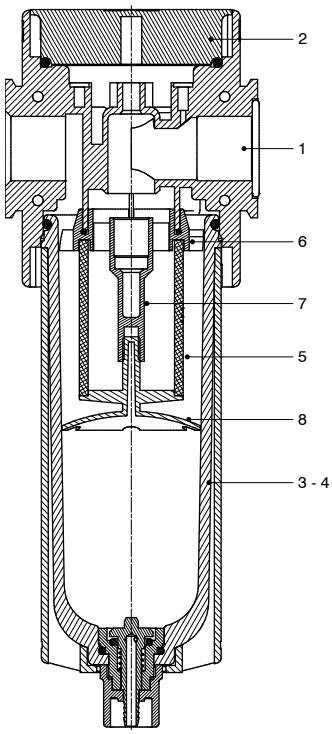
Note
In order to ensure that any fluid discharged by the auto drain assembly is adequately drained away, it is recommended you use a 6mm fitting and tube.

Technical characteristics				
Size		**Size 2**	**Size 3**	**Size 4**
Body and connections type		Aluminium body, integrated aluminium connections		
Protection and bowl type		Metal protection - PC bowl Metal protection - PA bowl Metal bowl (blind metal bowl)		
IN / OUT connections	P and L version	G3/8" - 1/4" NPT	G1/2" - 1/2" NPT	G1" - 1" NPT
Assembly configuration		Stand alone		Panel mounted
Assembly positions		Vertical ±5°		
Filter pore size		5 μm 20 μm 50 μm		
Bowl capacity		34 cm^3	68 cm^3	90 cm^3
Condensation drain		Semi-automatic Automatic Manual metal		
Max. fittings torque IN / OUT connections		G1/4" metal: 20Nm G3/8" metal: 25Nm	G3/8" metal: 25Nm G1/2" metal: 30Nm	G1"metal: 35Nm

Operational characteristics						
Size	**Size 2**	**Size 3**	**Size 4**	**Size 2**	**Size 3**	**Size 4**
Condensation drain	Semi-automatic / Manual metal			Automatic		
Maximum working pressure	20 bar (only with body and metal bowl)			16 bar (only with body and metal bowl)		
Minimum working pressure	0,5 bar			0,5 bar		
Working temperature	-5°C ... +50°C (technopolymer bowl) -30°C ... +80°C (only for P version and metal bowl) -40°C ... +80°C (only for L version and metal bowl)			-5°C ... +50°C		

Weights			
Size	**Size 2**	**Size 3**	**Size 4**
Aluminium body version, aluminium bowl protection and technopolymer bowl	344 g	514 g	1306 g
Aluminium body version and aluminium bowl	389 g	587 g	1330 g

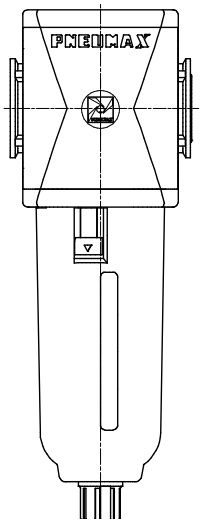
Materials



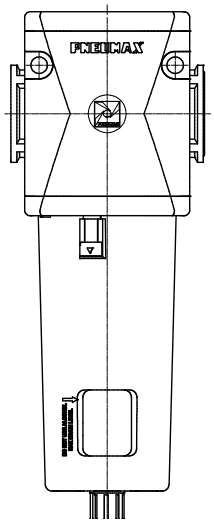
Filter		
1	Body	Polyamide Die-cast aluminium
2	Upper plug	Polyamide
3	Technopolymer bowl	Polycarbonate Polyamide
4	Metal bowl Bowl protection	Die-cast aluminium Die-cast aluminium
5	Filtering element	Polyethylene
6	Baffle	Acetal resin
7	Spool support	Acetal resin
8	Filtering element support	Acetal resin

Design

Size 2 - Size 3
Protection / Metal bowl

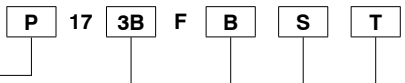


Size 4
All versions



PROCESS AUTOMATION TECHNOLOGY

Order codes



Version	
P	Aluminum body
L	Aluminum body, low temperature

Size and connections	
2B	Size 2 - G3/8”
2C	Size 2 - 1/4” NPT
3B	Size 3 - G1/2”
3C	Size 3 - 1/2” NPT
4B	Size 4 - G1”
4C	Size 4 - 1” NPT

Filter pore size	
A	5 μm
B	20 μm
C	50 μm

Condensation drain	
	Semi-automatic drain
M	Manual metal drain
S	Automatic drain

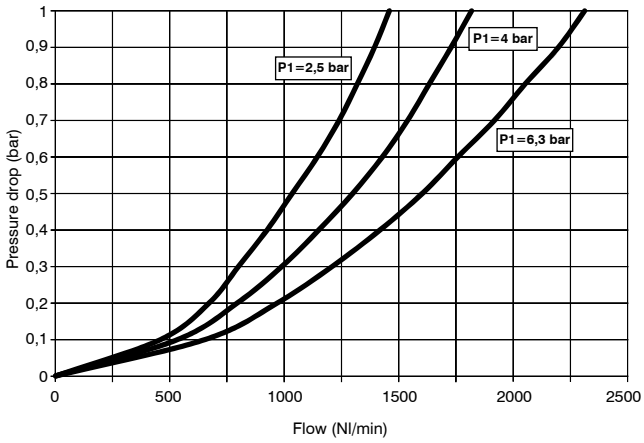
Bowl options	
P	Metal protection - PC bowl
R	Metal protection - PA bowl
T	Metal bowl

Example : P173BFBST : Size 3 filter G1/2” 20 μm, automatic drain and metal bowl

Flow charts

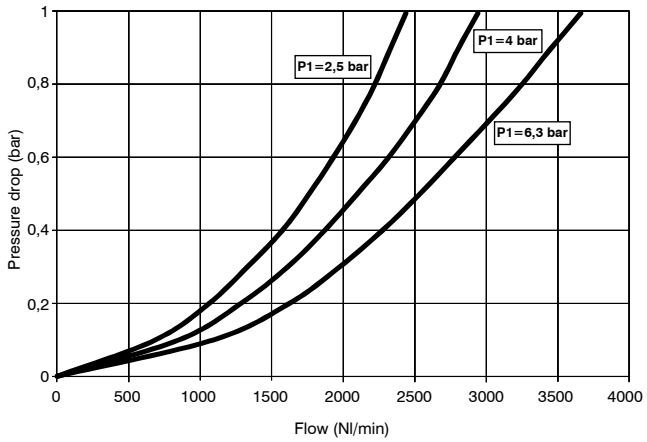
Size 2

Flow rate chart



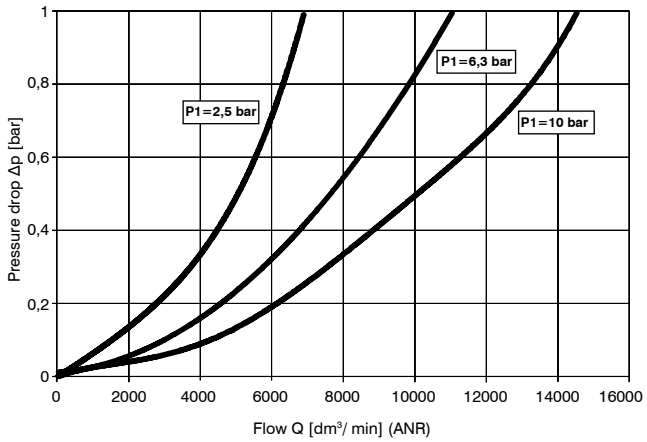
Size 3

Flow rate chart



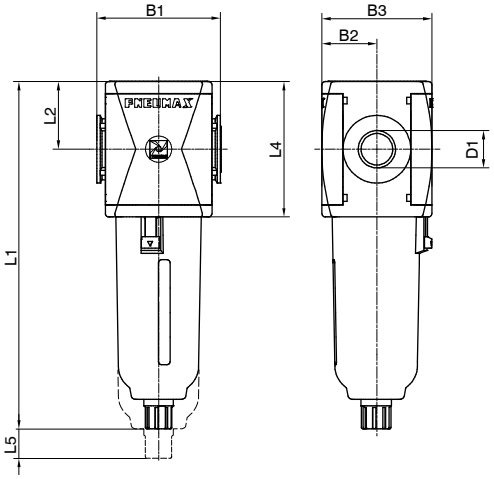
Size 4

Flow rate chart

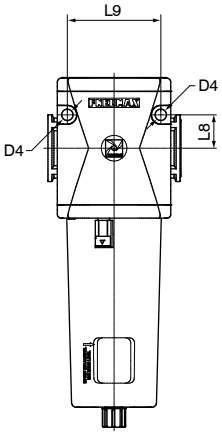


Dimensions

Semi-automatic drain version



Fixing holes dimension detail
(only for size 4)

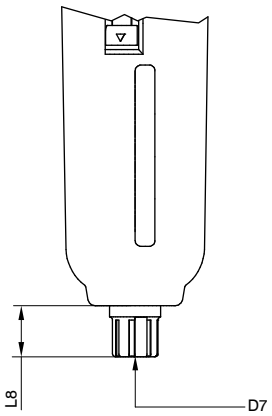


Model	B1	B2	B3	D1	D4	L1 - Bowl material		L2	L4	L5	L8	L9
						Technopolymer	Metal					
#172..	62	28,5	57	G3/8" 1/4" NPT	/	169,5 - 164,5*	171,5 - 166,5*	34	68	50	/	/
#173..	73	32,5	65	G1/2" 1/2" NPT	/	207,5 - 202,5*	209,5 - 204,5*	40	80	65	/	/
#174..	99	44	88	G1" 1" NPT	8,5	262 - 257,5*	264,5 - 259,5*	52,5	105	103	25	70

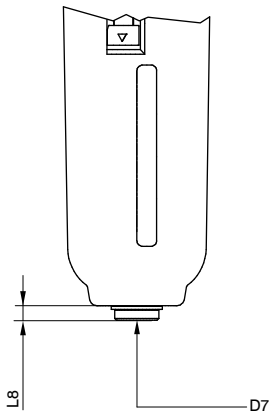
* = With manual metal drain

Variable dimensions

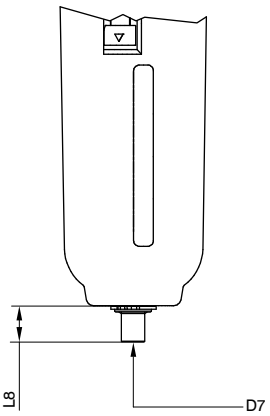
Semi-automatic drain version



Automatic drain version



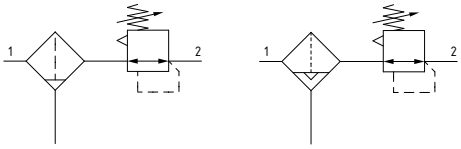
Manual metal drain version



Model	L8 - Bowl material		D7
	Technopolymer	Metal	
Semi-automatic drain	16	18	Plastic hose connector
Automatic drain	2	4,5	G1/8"
Manual metal drain	11	13	⎔ 5

Filter regulators (E)

- Filter - diaphragm pressure regulator with relieving
- Available in 3 sizes with flow rates up to 8000 Nl/min and connections from 1/4" to 1"
- Low histeresis rolling diaphragm and balanced spool
- Filtering element made of HDPE available in 3 different filtration grades (5μm, 20μm and 50μm)
- Bowl assembly via bayonet type quick coupling mechanism with safety button
- Semi-automatic, automatic or manual metal drain
- Available in four pressure ranges up to 12 bar
- Fitted with panel mounting locking ring
- Atex certification (II 2GD)
- Inlet pressures up to 20 bar



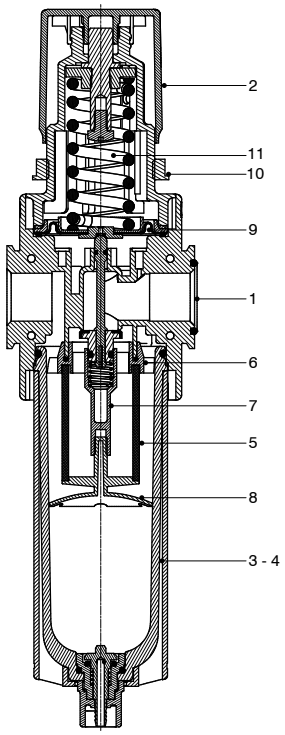
Note
For installations where a more accurate and constant pressure is required, the unit should be installed as close as possible to the point of use. In order to ensure that any fluid discharged by the auto drain assembly is adequately drained away, it is recommended you use a 6mm fitting and tube.

Technical characteristics				
Size		**Size 2**	**Size 3**	**Size 4**
Body and connections type		Aluminium body, integrated aluminium connections		
Protection and bowl type		Metal protection - PC bowl Metal protection - PA bowl Metal bowl (blind metal bowl)		
IN / OUT connections	P and L version	G3/8" - 1/4" NPT	G1/2" - 1/2" NPT	G1" - 1" NPT
Assembly configuration		Stand alone Panel mounting With fixing bracket		Panel mounted
Assembly positions		Vertical ±5°		
Filter pore size		5 μm 20 μm 50 μm		
Pressure range		0-2 bar 0-4 bar 0-8 bar 0-12 bar		
Bowl capacity		34 cm³	68 cm³	90 cm³
Condensation drain		Semi-automatic Automatic Manual metal		
Regulation		Manul push and lock with pressure Manual lockable with accessories		
Pressure measurement		G1/8" - 1/8" NPT pressure gauge connection port (only for versions with IN / OUT NPT connections)		
Max. fittings torque IN / OUT connections		G3/8" metal: 25Nm	G1/2" metal: 30Nm	G1"metal: 35Nm
Max.fitting torque pressure gauge connection port		G1/8" metal: 15Nm		

Operational characteristics						
Size	**Size 2**	**Size 3**	**Size 4**	**Size 2**	**Size 3**	**Size 4**
Condensation drain	Semi-automatic / Manual metal			Automatic		
Maximum working pressure	20 bar (only with body and metal bowl)			16 bar (only with body and metal bowl)		
Minimum working pressure	0,5 bar			0,5 bar		
Working temperature	-5°C ... +50°C (technopolymer bowl) -30°C ... +80°C (only for P version and metal bowl) -40°C ... +80°C (only for L version and metal bowl)			-5°C ... +50°C		

Weights			
Size	**Size 2**	**Size 3**	**Size 4**
Aluminium body version, aluminium bowl protection and technopolymer bowl	510 g	730 g	1600 g
Aluminium body version and aluminium bowl	560 g	790 g	1620 g

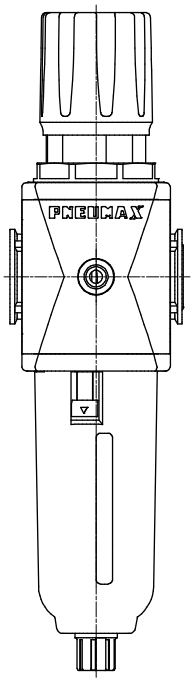
Materials



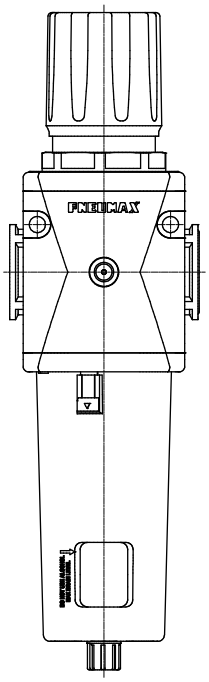
Filter regulator		
1	Body	Die-cast aluminium
2	Adjusting knob	Polyamide
3	Technopolymer bowl	Polycarbonate Polyamide
4	Metal bowl Bowl protection	Die-cast aluminium Die-cast aluminium
5	Filtering element	Polyethylene
6	Baffle	Acetal resin
7	Spool support	Acetal resin
8	Filtering element support	Acetal resin
9	Diaphragm	NBR
10	Panel mounting locking ring	Polyamide
11	Adjusting spring	Steel

Design

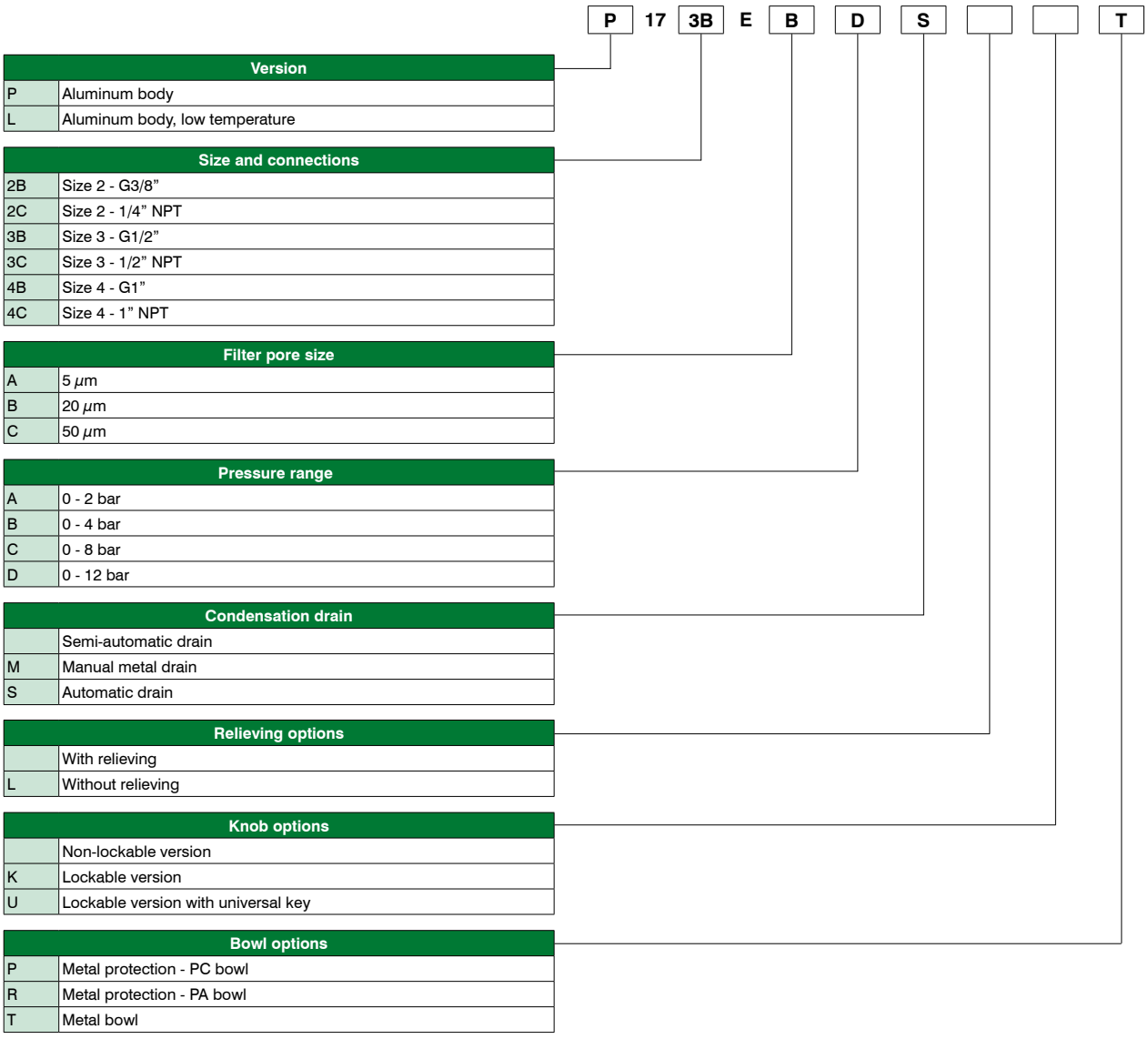
Size 2 - Size 3
Protection / Metal bowl



Size 4
All versions



Order codes



Version	
P	Aluminum body
L	Aluminum body, low temperature

Size and connections	
2B	Size 2 - G3/8”
2C	Size 2 - 1/4” NPT
3B	Size 3 - G1/2”
3C	Size 3 - 1/2” NPT
4B	Size 4 - G1”
4C	Size 4 - 1” NPT

Filter pore size	
A	5 μm
B	20 μm
C	50 μm

Pressure range	
A	0 - 2 bar
B	0 - 4 bar
C	0 - 8 bar
D	0 - 12 bar

Condensation drain	
	Semi-automatic drain
M	Manual metal drain
S	Automatic drain

Relieving options	
	With relieving
L	Without relieving

Knob options	
	Non-lockable version
K	Lockable version
U	Lockable version with universal key

Bowl options	
P	Metal protection - PC bowl
R	Metal protection - PA bowl
T	Metal bowl

Example : P173BEBDST : Size 3 filter regulator G1/2” 20 μm 0 - 12 bar, automatic drain and metal bowl

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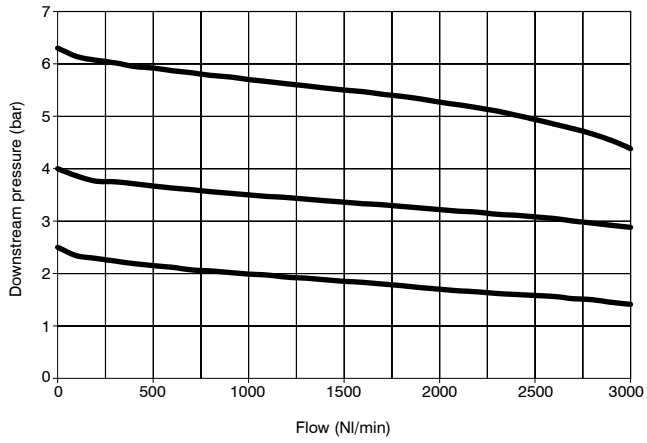
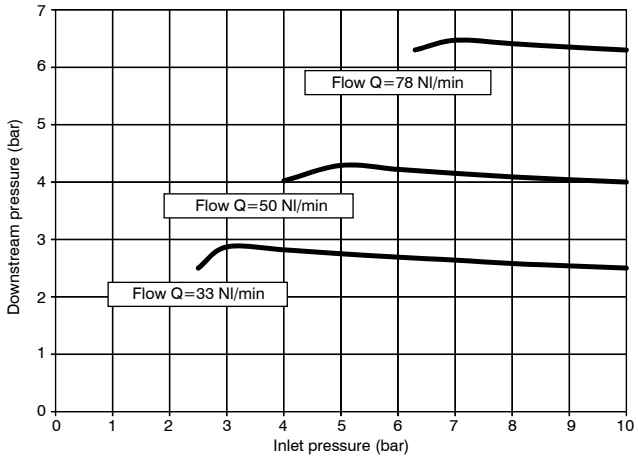
Flow charts

Size 2 - G3/8" 0-8 bar P1=7 bar

Flow rate chart

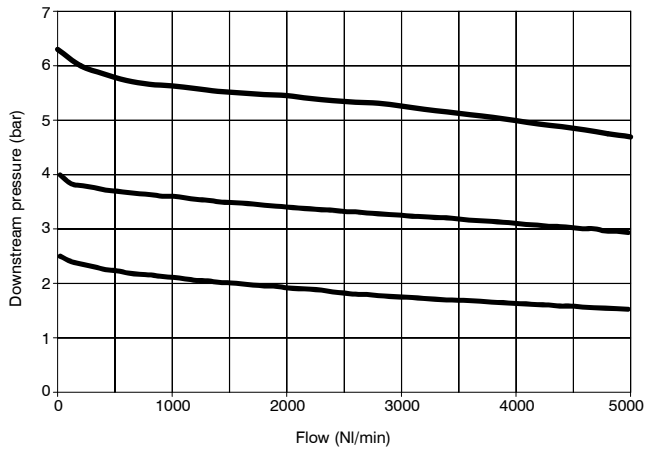


Adjustment characteristic

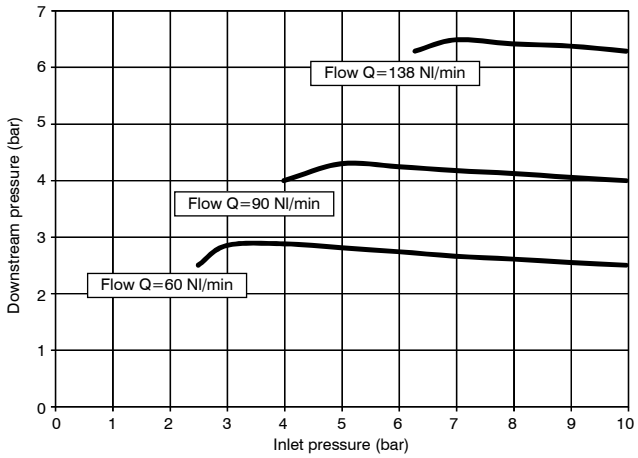


Size 3 - G1/2" 0-8 bar P1=7 bar

Flow rate chart

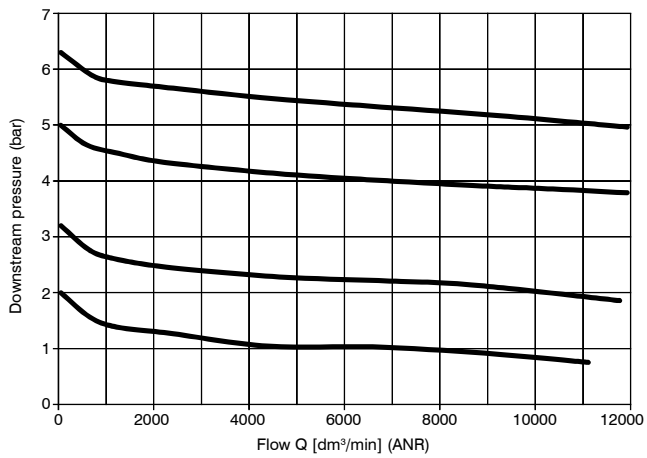


Adjustment characteristic

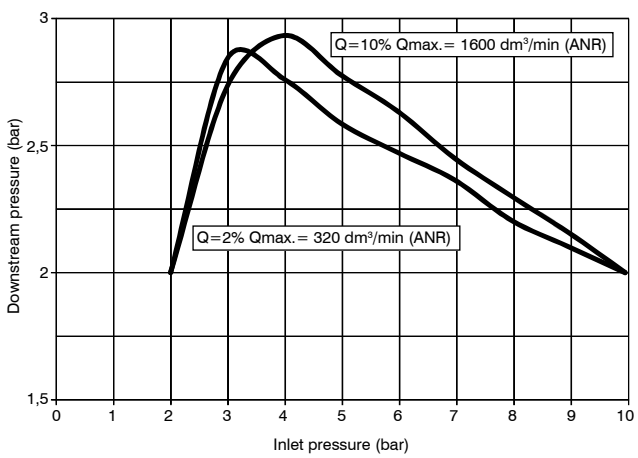


Size 4 - G1" 0-8 bar P1=10 bar

Flow rate chart

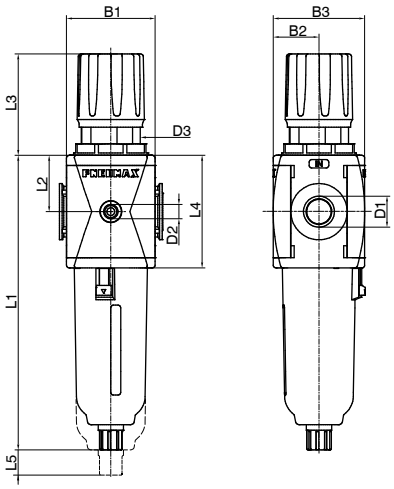


Adjustment characteristic

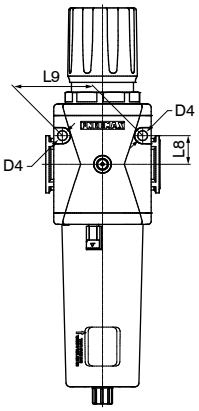


Dimensions

Semi-automatic drain version



Fixing holes dimension detail
(only for size 4)

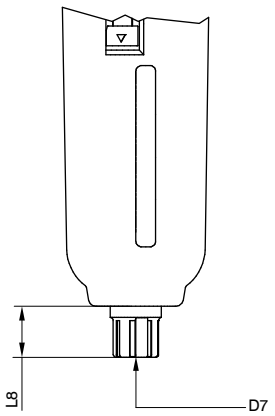


Model	B1	B2	B3	D1	D2	D3	D4	L1 - Bowl material		L2	L3	L4	L5	L8	L9
								Technopolymer	Metal						
#172..	62	28,5	57	G3/8" 1/4" NPT	G1/8" 1/8" NPT	M42x1,5	/	169,5 - 164,5*	171,5 - 166,5*	34	71,8	68	50	/	/
#173..	73	32,5	65	G1/2" 1/2" NPT	G1/8" 1/8" NPT	M42x1,5	/	207,5 - 202,5*	209,5 - 204,5*	40	72,8	80	65	/	/
#174..	99	44	88	G1" 1" NPT	G1/8" 1/8" NPT	M54x1,5	8,5	262 - 257,5*	264,5 - 259,5*	52,5	87,5	105	103	25	70

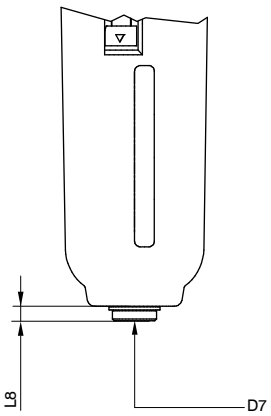
* = With manual metal drain

Variable dimensions

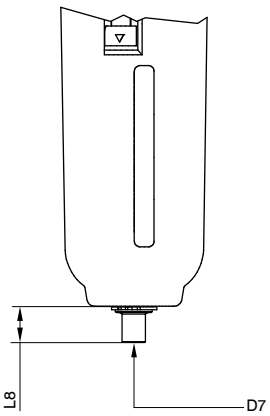
Semi-automatic drain version



Automatic drain version



Manual metal drain version

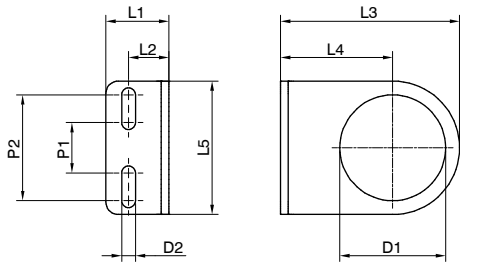


Model	L8 - Bowl material		D7
	Technopolymer	Metal	
Semi-automatic drain	16	18	Plastic hose connector
Automatic drain	2	4,5	G1/8"
Manual metal drain	11	13	⬡ 5

Fixing bracket

T172 **50**

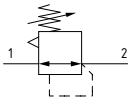
Size	
T172	Size 2 - Size 3



Model	L1	L2	L3	L4	L5	D1	D2	P1	P2
T17250	25	16	71	44,5	53	42	5,5	20	42

Regulators (R)

- Diaphragm pressure regulator with relieving
- Available in 3 sizes with flow rates up to 8000 Nl/min and connections from 1/4” to 1”
- Low histeresis rolling diaphragm and balanced spool
- Available in four pressure ranges up to 12 bar
- Fitted with panel mounting locking ring
- Atex certification (II 2GD)
- Inlet pressures up to 20 bar



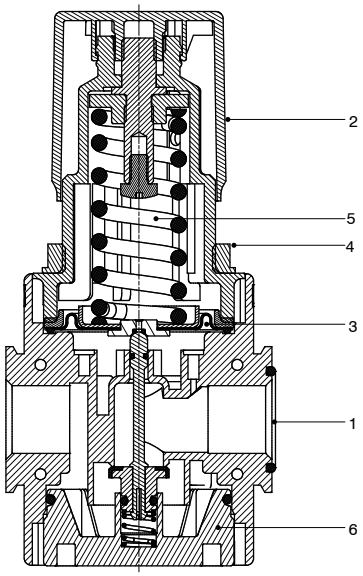
Note
For installations where a more accurate and constant pressure is required, the unit should be installed as close as possible to the point of use.

Technical characteristics				
Size		**Size 2**	**Size 3**	**Size 4**
Body and connections type		Aluminium body, integrated aluminium connections		
IN / OUT connections	P and L version	G3/8” - 1/4” NPT	G1/2” - 1/2” NPT	G1” - 1” NPT
Assembly configuration		Stand alone Panel mounting With fixing bracket		Panel mounted
Assembly positions		Indifferent		
Pressure range		0-2 bar 0-4 bar 0-8 bar 0-12 bar		
Regulation		Manul push and lock with pressure Manual lockable with accessories		
Pressure measurement		G1/8” - 1/8” NPT pressure gauge connection port (only for versions with IN / OUT NPT connections)		
Max. fittings torque IN / OUT connections		G3/8” metal: 25Nm	G1/2” metal: 30Nm	G1”metal: 35Nm
Max.fitting torque pressure gauge connection port		G1/8” metal: 15Nm		

Operational characteristics			
Size	**Size 2**	**Size 3**	**Size 4**
Maximum working pressure	20 bar		
Minimum working pressure	0.5 bar		
Working temperature	-30°C ... +80°C (only for P version) -40°C ... +80°C (only for L version)		

Weights			
Size	**Size 2**	**Size 3**	**Size 4**
Aluminium body version	400 g	560 g	1260 g

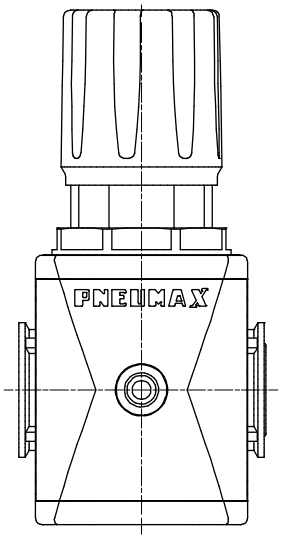
Materials



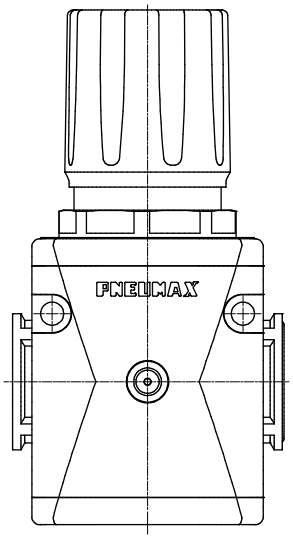
Regulator		
1	Body	Polyamide Die-cast aluminium
2	Adjusting knob	Polyamide
3	Diaphragm	NBR
4	Panel mounting locking ring	Polyamide
5	Adjusting spring	Steel
6	Rear end cap	Polyamide / Die-cast aluminium

Design

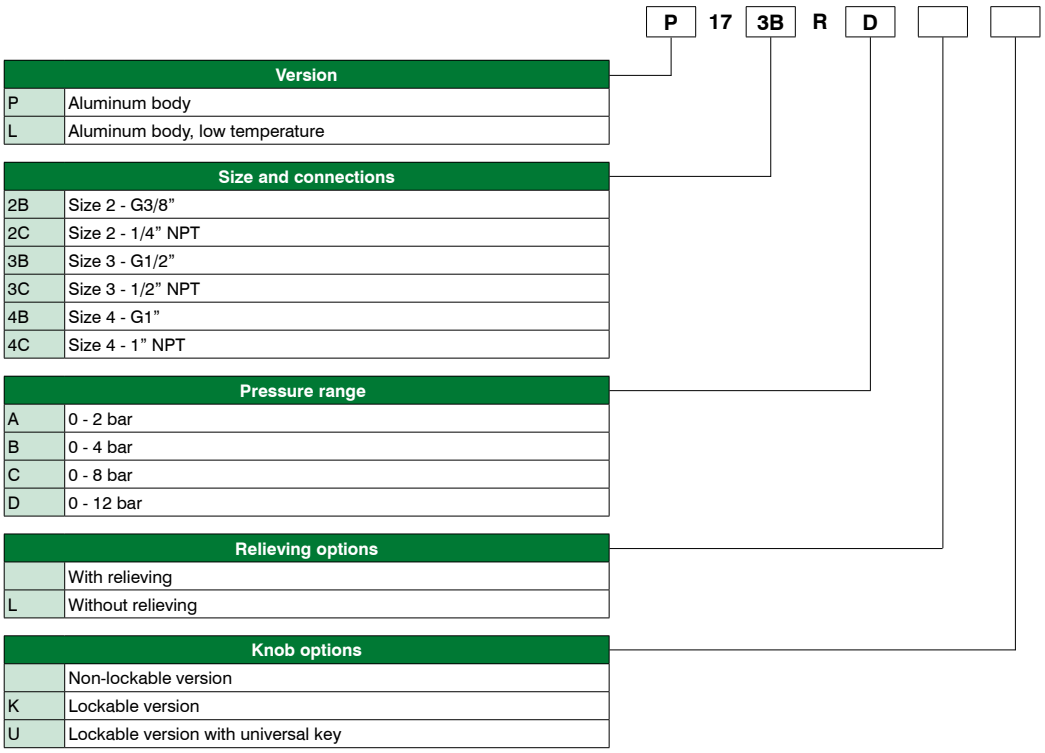
Size 2 - Size 3



Size 4
All versions



Order codes



Version	
P	Aluminum body
L	Aluminum body, low temperature

Size and connections	
2B	Size 2 - G3/8”
2C	Size 2 - 1/4” NPT
3B	Size 3 - G1/2”
3C	Size 3 - 1/2” NPT
4B	Size 4 - G1”
4C	Size 4 - 1” NPT

Pressure range	
A	0 - 2 bar
B	0 - 4 bar
C	0 - 8 bar
D	0 - 12 bar

Relieving options	
	With relieving
L	Without relieving

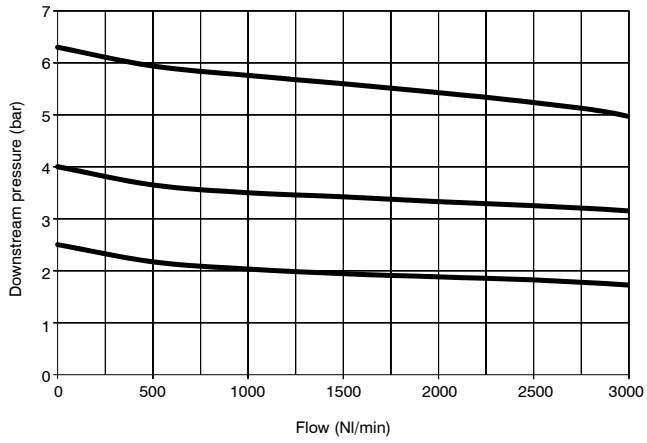
Knob options	
	Non-lockable version
K	Lockable version
U	Lockable version with universal key

Example : P173BRD : Size 3 regulator G1/2” 0 - 12 bar

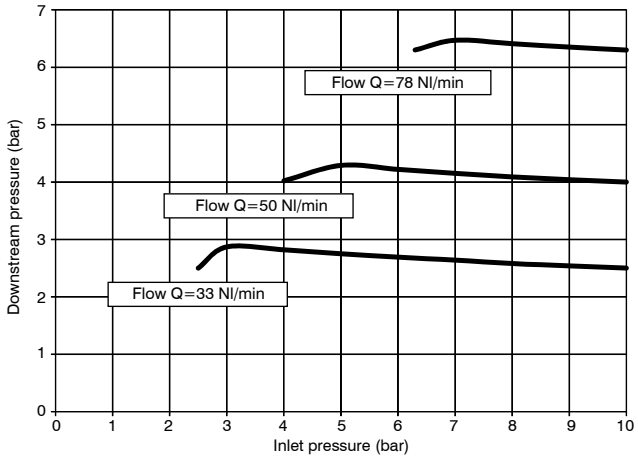
Flow charts

Size 2 - G3/8" 0-8 bar P1=7 bar

Flow rate chart

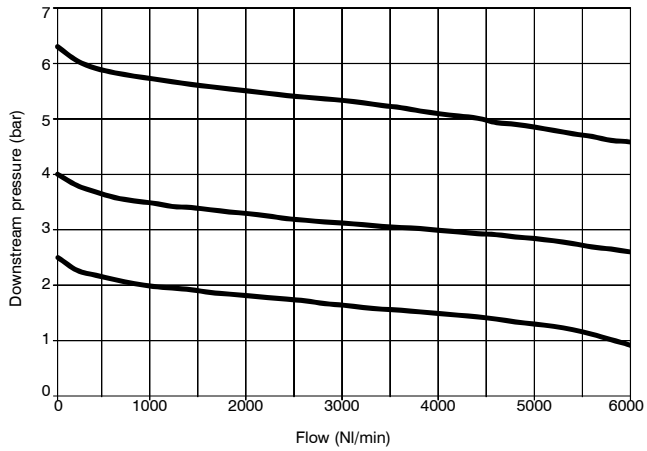


Adjustment characteristic

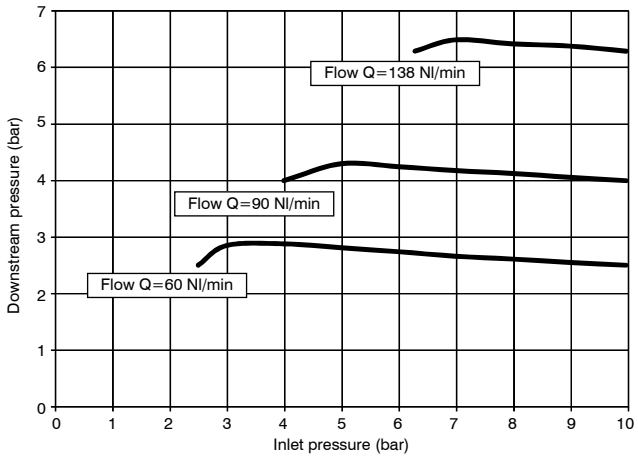


Size 3 - G1/2" 0-8 bar P1=7 bar

Flow rate chart

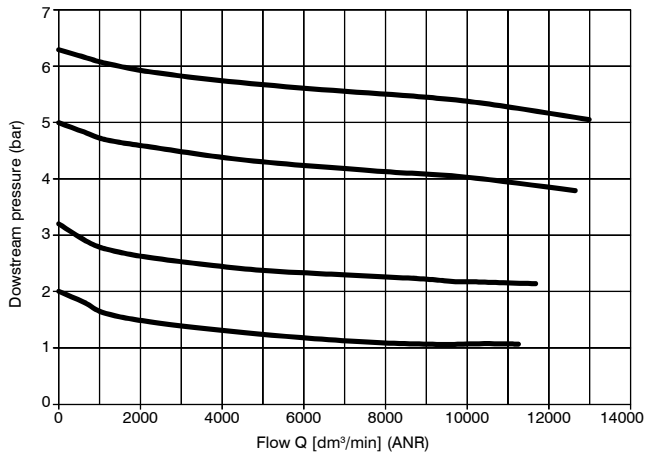


Adjustment characteristic

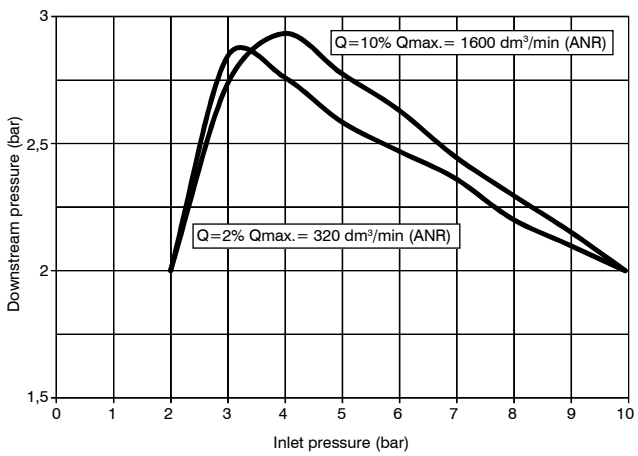


Size 4 - G1" 0-8 bar P1=10 bar

Flow rate chart

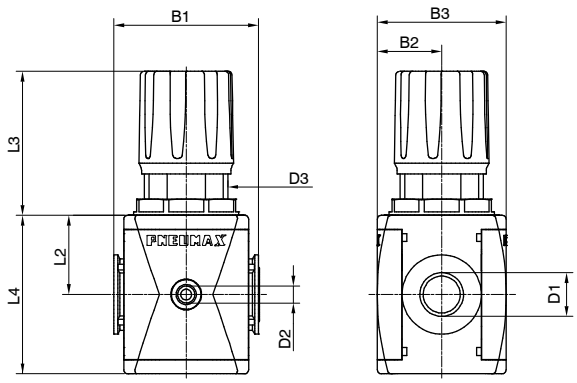


Adjustment characteristic

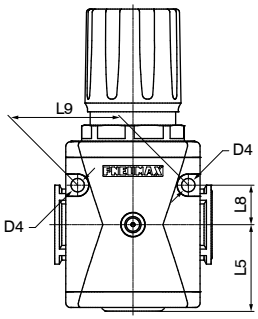


Dimensions

Pressure gauge connection port version



Fixing holes dimension detail
(only for size 4)

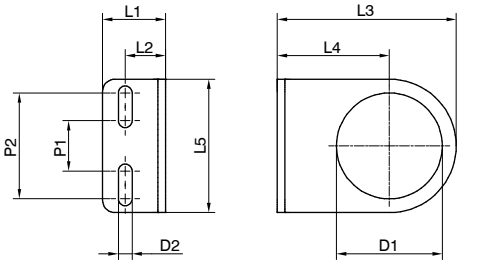


Model	B1	B2	B3	D1	D2	D3	D4	L2	L3	L4	L5	L8	L9
#172..	62	28,5	57	G3/8" 1/4" NPT	G1/8" 1/8" NPT	M42x1,5	/	34	71,8	68	/	/	/
#173..	73	32,5	65	G1/2" 1/2" NPT	G1/8" 1/8" NPT	M42x1,5	/	40	72,8	80	/	/	/
#174..	99	44	88	G1" 1" NPT	G1/8" 1/8" NPT	M54x1,5	8,5	52,5	87,5	105	54,5	25	70

Fixing bracket

T172 **50**

Size	
T172	Size 2 - Size 3



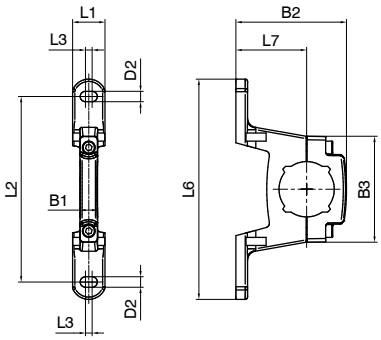
Model	L1	L2	L3	L4	L5	D1	D2	P1	P2
T17250	25	16	71	44,5	53	42	5,5	20	42

Quick coupling flanges

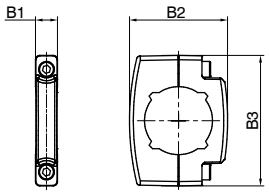
Pneumax Airplus quick coupling flanges series allow both module rapid fixing and panel mounted configuration. Due to its design, Pneumax connection flanges allow user-friendly maintenance activities with no need of entire manifold disassembling procedure.
Two types of flange are available: X type flange for assembling the modules together, and Y type flange suitable for panel mounted also. Both types are made of die-cast aluminum.

Aluminium flanges

Flange Y



Flange X



Model	B1	B2	B3	D2	L1	L2	L3	L4	L5	L6	L7
N172Y	9,7	64,6	55,6	Ø5,2	18	95	6,8	/	86,5	117,9	40,5
N172X		55,6		/	/	/	/	96,5	72,5	/	/
N173Y	9,7	75,5	56	Ø5,2	18	110	6,8	/	98,3	133	44,5
N173X		62		/	/	/	/	112,8	85	/	/
N174Y	13,7	106,5	102	Ø8,5	25	148	6,5	/	133,5	175	64
N174X		85		/	/	/	/	153,5	112	/	/

Series 1700 Steel line

- **Wide working temperature range**
- **Available in 3 sizes with connections from 1/4" to 1"**
- **ATEX certification (II 2G or II 2D), SIL, EAC**
- **Clean profile versions available**

General

The stainless steel SS1700 air treatment series has been engineered and developed to approach specifically the OIL & GAS industry and more widely for all the severe service applications that require excellent corrosion resistance due to chemical and/or harsh environmental condition.
All external and internal parts (except for the automatic drain version) are AISI 316L stainless steel material in compliance with NACE standard MR0175/ISO 15156/1. The product range includes FILTER, with filtration elements up to 3 filtration degree (5μm-20 μm-50 μm), available in AISI316 stainless steel or HDPE (high density polyethylene), and manual or automatic condensed exhaust; The PRESSURE REGULATOR is supplied with low hysteresis rolling diaphragm and an over-pressure exhaust valve (RELIEVING), available in 4 different adjustment ranges from 0 to 12 bar. As a last the FILTER REGULATOR range, which combines the features of a filter and pressure regulator into a one single device. "CLEAN PROFILE" version is available for all the sizes, featuring a glossy finish on the external surface. The over-pressure exhaust hole (RELIEVING) has a 1/8" NPT threading, and it is protected by an AISI 316 sintered filter series. Note: for CLEAN PROFILE series this is a simple unthread hole.

Instructions for installation and use

Product shall be installed reducing the distance from inlet point. Check and install the device following the flow direction (clearly marked with an arrow stamped on the body). Vertical position installation with condensed exhaust tap pointing downward is recommended.
Devices must be used in compliance with pressure and temperature operating range. To set the pressure there is an adjustable knob, located on the top of the device. Pneumax recommend selection of pressure regulator adjusting range option in line with client required performance The condensed exhaust action for the manual drain version shall be performed only in the absence of pressure. To discharge liquid, turn the tap clockwise until the discharge of liquid is triggered, then tighten it all the way.

Construction and operational characteristics	Size		
	Size 2	Size 3	Size 4
Body, bowl and adjustment mechanism	AISI 316L stainless steel		
Caseback regulator	AISI 316L stainless steel		
Adjustment screw, locking nut and fastening screws	AISI 316L stainless steel (stainless steel A4-70)		
Internal components	AISI 316L stainless steel		
Filtering elements	AISI 316L stainless steel or HDPE (High density polyethylene)		
Springs	AISI 316L stainless steel		
Seals	NBR (standard versions and automatic drain) NBR for low temperatures (L versions) FPM - HNBR (H versions) EPDM-FDA (EF versions) Silicone - PU (Z version)		
Automatic drain	Brass, stainless steel AISI 304 and AISI 302, sintered bronze Acetal resin, NBR, FPM		

Operating range	Size		
	Size 2	Size 3	Size 4
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous Inert gases Natural gases		
Working temperature (°C)	-30 ... +80 (standard version) -50 ... +80 (low temperature L version) -60 ... +80 (low temperature version -60 °C Z) -5 ... +150 (high temperature H version) -35 ... +70 (automatic drain S version and reduced orifice automatic drain SR version) -40 ... +100 (EPDM-FDA version)		
Maximum working pressure (bar)	20 (standard, low and high temperature versions) 16 (automatic drain version) 10 (reduced orifice automatic drain version)		

Maintenance

Filtration elements and filter regulator are reusable through blowing and/or washing and is made of stainless steel or HDPE (high density polyethylene). To replace, remove the cup, loosen the set screw of the support and replace the filter element with a new one or refurbished one. Replace the regulator diaphragm whenever the performance is compromised or if there is a continuous discharge from the relieving hole (over-pressure exhaust). Fully discharge the adjustment spring before removing the adjustment mechanism. For other maintenance activities, due to complexity of assembly and requirement for dedicated **PNEUMAX** testing activities, it is strongly recommended to contact the manufacturer.

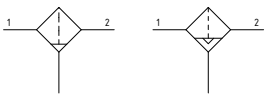
Certifications available

II 2G Ex h IIC Gb
II 2D Ex h IIIC Db

: Suitable up to SIL 3

: CU - TR 012

Filter



- Body, bowl and internal components in AISI 316L stainless steel
- A4 (AISI 316) stainless steel fixing screws
- Manual or automatic drain
- ATEX certification (II 2G or II 2D), SIL, EAC
- Filter cartridge available in AISI 316 stainless steel or HDPE
- Clean profile versions available
- Versions with 1/8" NPT pressure gauge connection available

Technical characteristics	Size		
	Size 2	Size 3	Size 4
Type	Rough finishing Clean profile (bowl)		
IN / OUT connections	G1/4" 1/4" NPT 3/8" NPT	G1/2" 1/2" NPT 1/4" NPT	G1" 1" NPT 3/4" NPT
Assembly configuration	Stand alone		
Assembly position	Vertical		
Filter pore size	5 μm 20 μm 50 μm		
Max. bowl capacity (cm^3)	15	25	78
Condensation drain	Manual Automatic		

Operational characteristics	Size					
	Size 2	Size 3	Size 4	Size 2	Size 3	Size 4
	Manual condensation drain			Automatic condensation drain		
Maximum working pressure (bar)	20 (standard version)			16 (automatic drain version) 10 (reduced orifice automatic drain version)		
Minimum working pressure (bar)	/			0,5		
Working temperature (°C)	-30 ... +80 (standard version) -50 ... +80 (low temperature L version) -60 ... +80 (low temperature version -60 °C Z) -5 ... +150 (lhigh temperature H version) -40 ... +100 (EPDM-FDA version)			-35 ... +70 (automatic drain S version and reduced orifice automatic drain SR version)		

Weights	Size		
	Size 2	Size 3	Size 4
Standard version (g)	1088	1903	4655
Automatic drain version / Reduced orifice automatic drain version (g)	1175	2070	4692

PROCESS AUTOMATION TECHNOLOGY

Order codes

S | S | 17 | 2B | F | B | S | G

Version	
S	Rough finishing
F	Clean profile

Size and connections	
2A	Size 2 - 1/4" NPT
2B	Size 2 - 3/8" NPT
2C	Size 2 - G1/4"
3A	Size 3 - 1/4" NPT
3B	Size 3 - 1/2" NPT
3D	Size 3 - G1/2"
4A	Size 4 - 3/4" NPT
4B	Size 4 - 1" NPT
4D	Size 4 - G1"

Filter pore size	
A	5 μm - 316 stainless steel
B	20 μm - 316 stainless steel
C	50 μm - 316 stainless steel
D	5 μm - HDPE
E	20 μm - HDPE
F	50 μm - HDPE

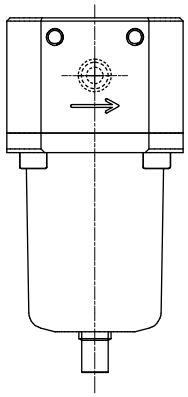
Options	
	Standard
L	Low temperature
Z	Low temperature (-60 °C)
H	High temperature
S	Automatic drain
SR	Reduced orifice automatic drain version
EF	EPDM-FDA

Body options	
	Standard
G	with pressure gauge connection port

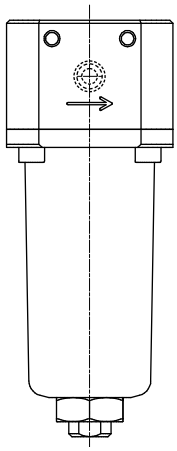
Example: SS172BFBSG
Size 2 filter, rough finishing, 3/8" NPT connection, filter pore size 20 μm - 316 stainless steel, automatic drain with pressure gauge connection port.

Design

Size 2 - Size 3 - Size 4
Manual drain

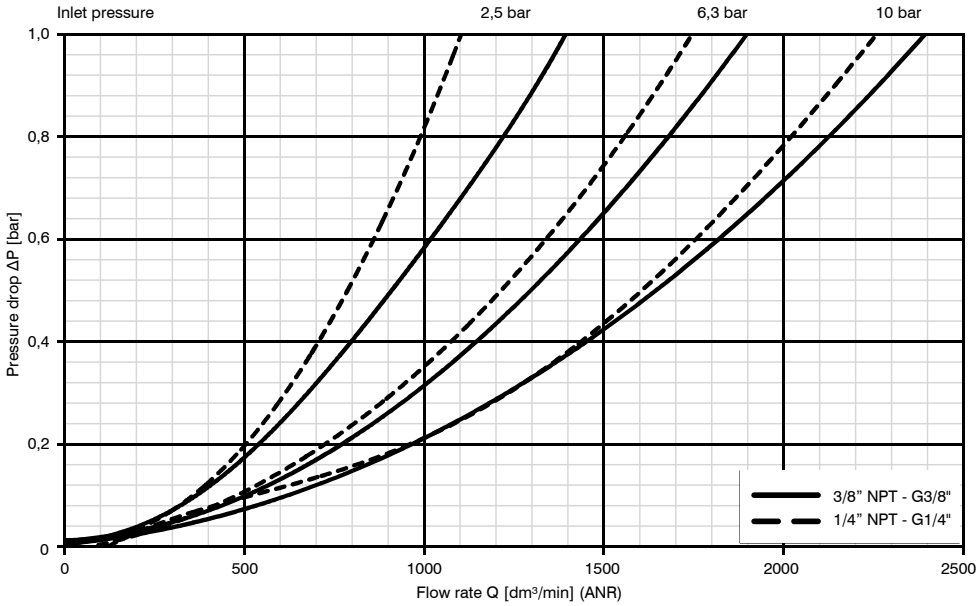


Size 2 - Size 3 - Size 4
Automatic drain



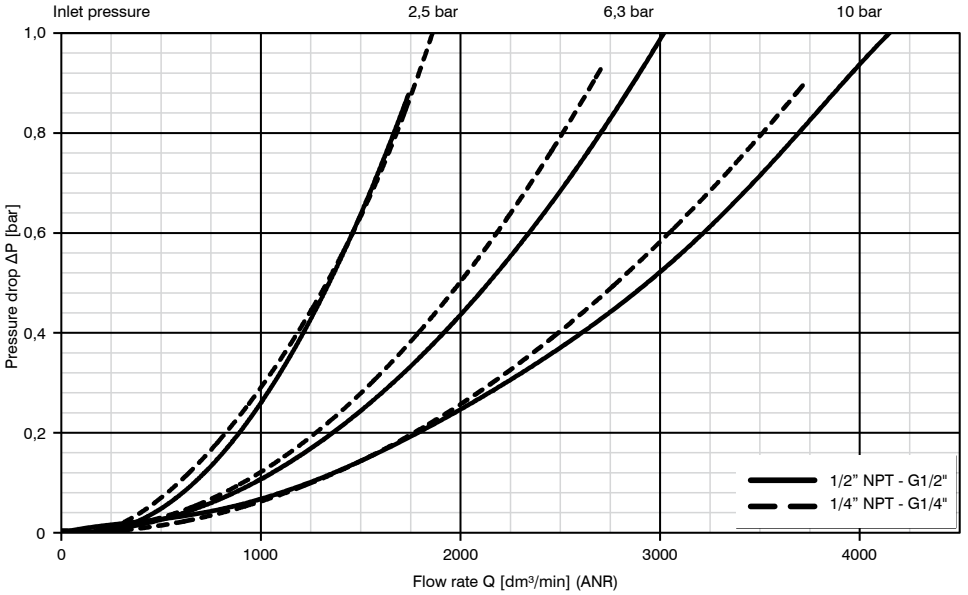
Characteristic curves

Flow rate curves



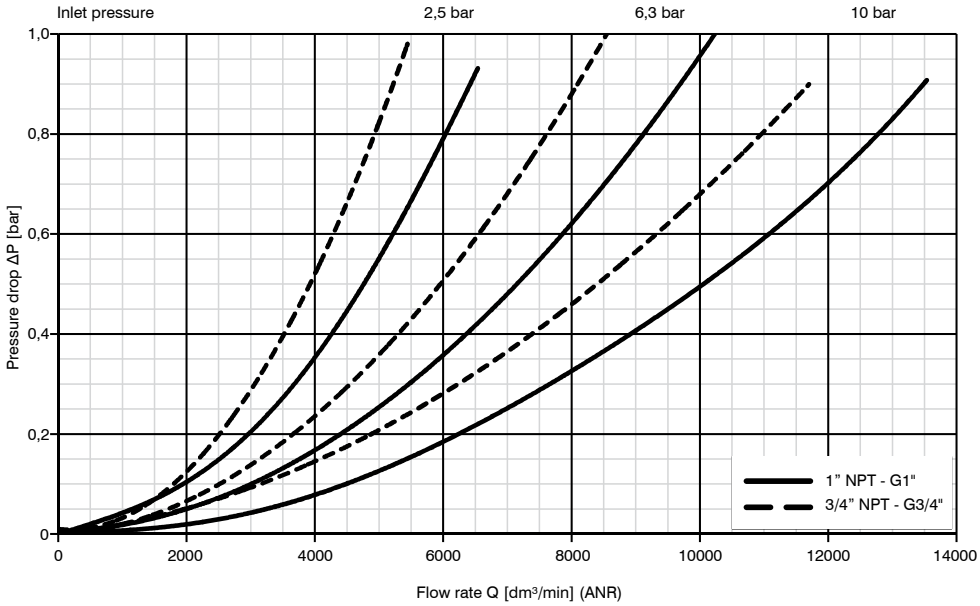
Size 2

Flow rate curves



Size 3

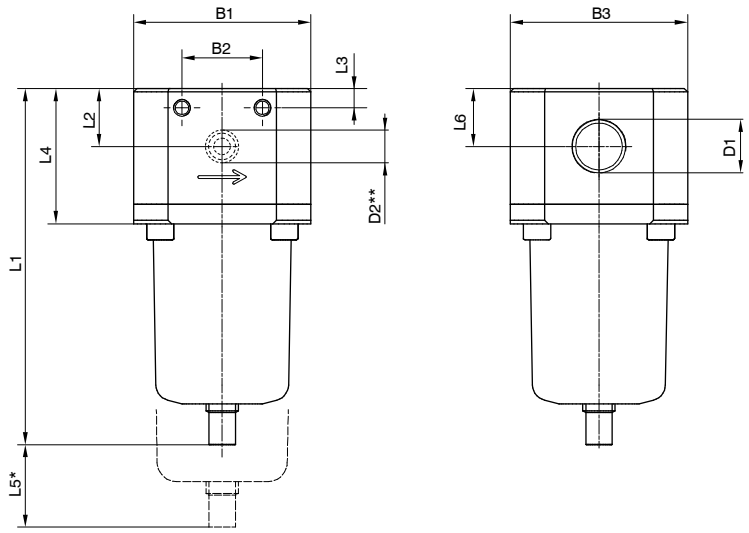
Flow rate curves



Size 4

Dimensions

Overall manual drain version



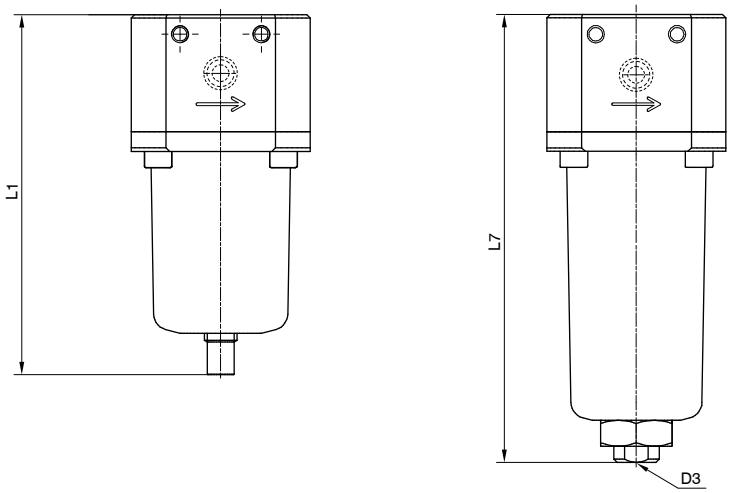
* = BOWL REMOVAL MAXIMUM HEIGHT
** = ONLY FOR VERSION WITH PRESSURE GAUGE CONNECTION PORT

Model	B1	B2	B3	D1	D2	L1	L2	L3	L4	L5	L6
#172...	55	25	55	G1/4" 1/4" NPT 3/8" NPT	1/8" NPT	111	18	6	42	45	18
#173...	71	22	71	G1/2" 1/2" NPT 1/4" NPT	1/8" NPT	124	20	5,5	48	65	20
#174...	92	36	92	G1" 1" NPT 3/4" NPT	1/8" NPT	198,5	32,5	10	73,5	80	32,5

Variable dimensions

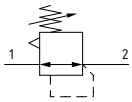
Manual drain version

Automatic drain version (A.D.)



Model	L1	L7	D3
#172...	111	138	1/8" NPT
#173...	124	160	1/8" NPT
#174...	198,5	207,5	1/8" NPT

Regulators



- Pressure regulator diaphragm with over-pressure drain (Relieving)
- Body, adjustment mechanism, back plate and caseback internal components in AISI 316L stainless steel
- AISI 316 stainless steel adjustment springs
- Fixing screws, adjustment screw and locking nut in inox A4 (AISI 316)
- Clean profile versions available
- Low hysteresis rolling diaphragm
- Balanced system
- ATEX certification (II 2G or II 2D), SIL, EAC

Note
The pressure must be always regulating while increasing. For a more precise regulation and higher sensibility, the use of a regulator with a pressure range as close as possible to the regulated pressure is recommended.

Technical characteristics	Size		
	Size 2	Size 3	Size 4
Type	Rough finishing Clean profile (Back plate and adjustment mechanism)		
IN / OUT connections	1/4" NPT 3/8" NPT G1/4"	1/4" NPT 1/2" NPT G1/2"	3/4" NPT 1" NPT G1"
Assembly configuration	Stand alone		
Assembly position	Indifferent		
Pressure range (bar)	0-2 0-4 0-8 0-12		
Regulation	Manual		
Pressure measurement	1/8" NPT pressure gauge connection port		

Operational characteristics	Size		
	Size 2	Size 3	Size 4
Maximum working pressure (bar)	20		
Minimum working pressure (bar)	0,5		
Working temperature (C°)	-30 ... +80 (standard version) -50 ... +80 (low temperature L version) -60 ... +80 (low temperature version -60 °C Z) -5 ... +150 (lhigh temperature H version) -40 ... +100 (EPDM-FDA version)		

Weights	Size		
	Size 2	Size 3	Size 4
Weight (g)	1283	2270	5400

PROCESS AUTOMATION TECHNOLOGY

Order codes

S | S | 17 | 3B | R | B | N | L

Version	
S	Rough finishing
F	Clean profile

Size and connections	
2A	Size 2 - 1/4" NPT
2B	Size 2 - 3/8" NPT
2C	Size 2 - G1/4"
3A	Size 3 - 1/4" NPT
3B	Size 3 - 1/2" NPT
3D	Size 3 - G1/2"
4A	Size 4 - 3/4" NPT
4B	Size 4 - 1" NPT
4D	Size 4 - G1"

Pressure range	
A	0 - 2 bar
B	0 - 4 bar
C	0 - 8 bar (0 - 7 bar for size 4)
D	0 - 12 bar (0 - 10 bar for size 4)

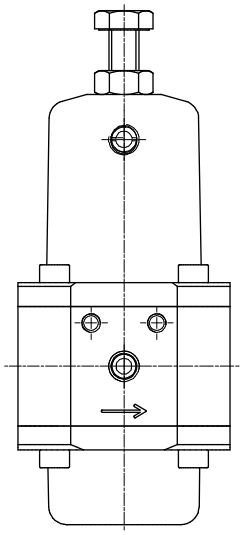
Type	
	Standard
N	without relieving

Options	
	Standard
L	Low temperature
Z	Low temperature (-60 °C)
H	High temperature
EF	EPDM-FDA

Example: SS173BRBNL
Size 3 regulator, rough finishing, 1/2" NPT connection, pressure range 0 - 4 bar, without relieving, low temperature version.

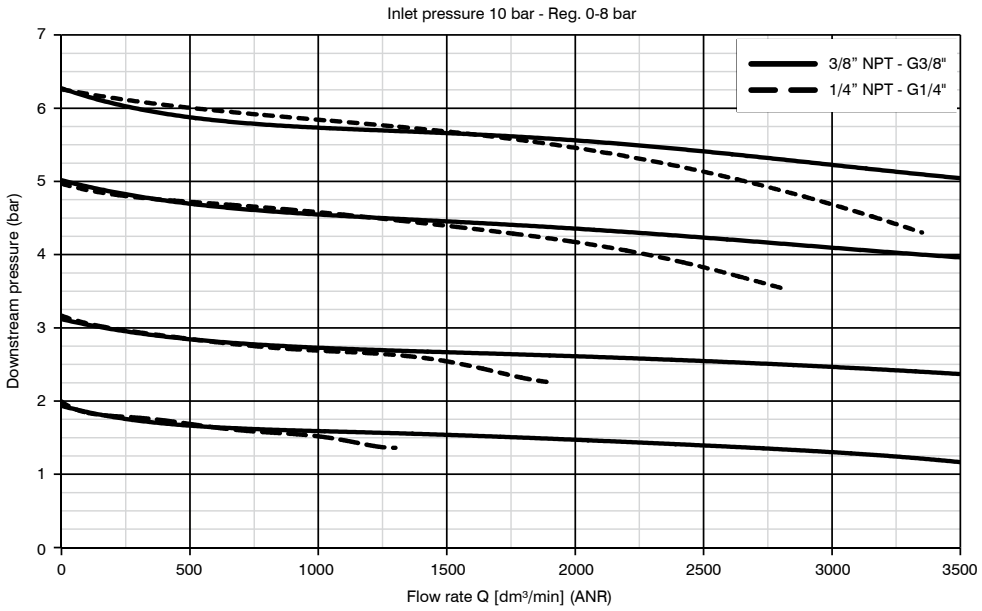
Design

Size 2 - Size 3 - Size 4



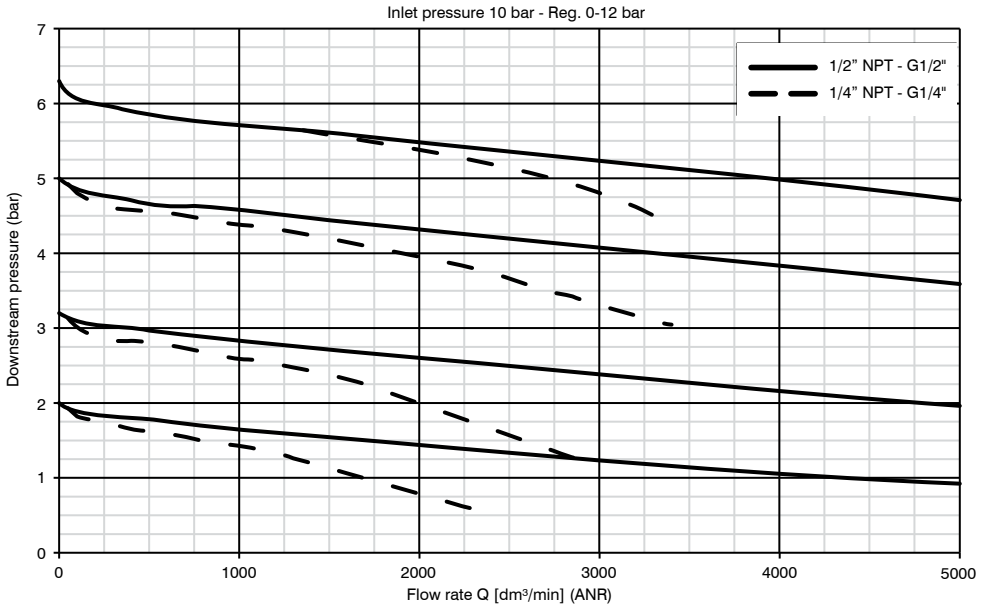
Characteristic curves

Flow rate curves



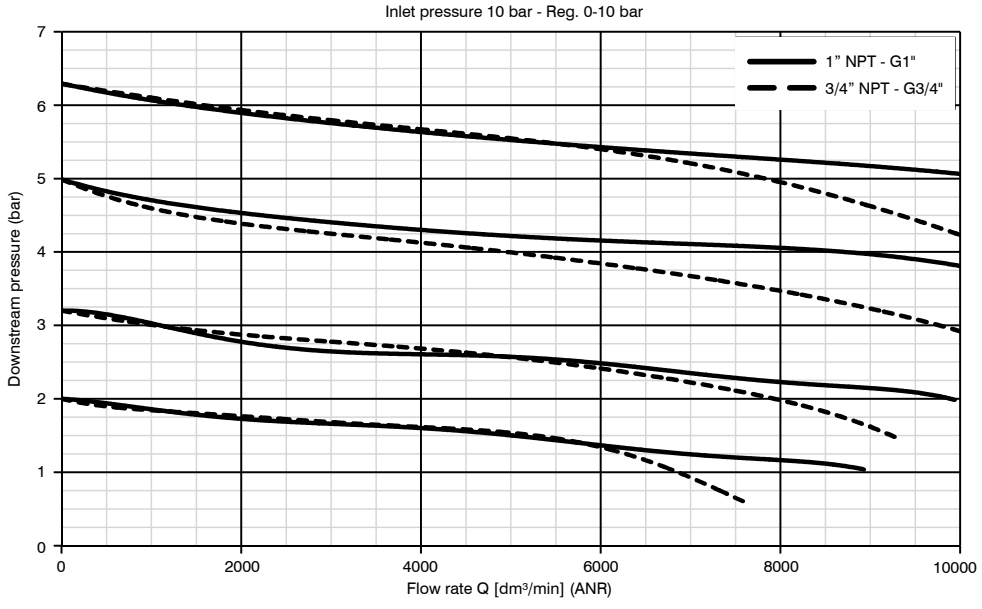
Size 2

Flow rate curves



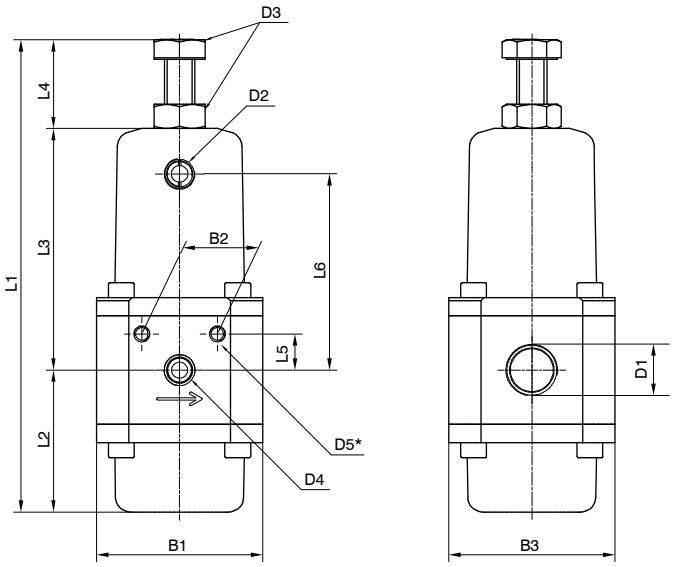
Size 3

Flow rate curves



Size 4

Dimensions

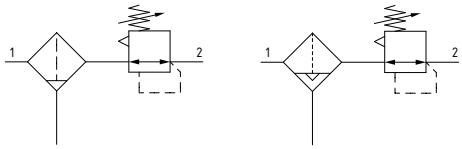


*THREADED HOLES ON BOTH SIDES

Model	B1	B2	B3	D1	D2	D3	D4	D5	L1	L2	L3	L4	L5	L6
#172...	55	25	55	1/4" NPT 3/8" NPT G1/4"	1/8" NPT	Ch.17	1/8" NPT	M5 2 front holes 2 rear holes	156,5	47	80	29,5	12	65
#173...	71	22	71	1/4" NPT 1/2" NPT G1/2"	1/8" NPT	Ch.17	1/8" NPT	M6 2 front holes 2 rear holes	172,5	53	91	28,5	14,5	76,5
#174...	92	36	92	3/4" NPT 1" NPT G1"	1/8" NPT	Ch.19	1/8" NPT	M8 2 front holes 2 rear holes	260,5	74	147	39,5	22,5	128

Filter regulators

- Filter-pressure regulator diaphragm with over-pressure drain (Relieving)
- Body, adjustment mechanism, back plate and caseback internal components in AISI 316L stainless steel
- AISI 316 stainless steel adjustment springs
- Fixing screws, adjustment screw and locking nut in inox A4 (AISI 316)
- Clean profile versions available
- Filter cartridge available in AISI 316 stainless steel or HDPE
- Low hysteresis rolling diaphragm
- Balanced system
- Manual or automatic drain
- ATEX certification (II 2G or II 2D), SIL, EAC



Note
The pressure must be always regulating while increasing. For a more precise regulation and higher sensibility, the use of a regulator with a pressure range as close as possible to the regulated pressure is recommended.

Technical characteristics	Size		
	Size 2	Size 3	Size 4
Type	Rough finishing Clean profile (Bowl and adjustment mechanism)		
IN / OUT connections	1/4" NPT 3/8" NPT G1/4"	1/4" NPT 1/2" NPT G1/2"	3/4" NPT 1" NPT G1"
Assembly configuration	Stand alone		
Assembly position	Vertical		
Filter pore size	5 µm 20 µm 50 µm		
Pressure range (bar)	0-2 0-4 0-8 0-12		0-2 0-4 0-7 0-10
Max. bowl capacity (cm^3)	34	68	90
Condensation drain	Manual Automatic		
Regulation	Manual		
Pressure measurement	1/8" NPT pressure gauge connection port		

Operational characteristics	Size					
	Size 2	Size 3	Size 4	Size 2	Size 3	Size 4
	Manual condensation drain			Automatic condensation drain		
Maximum working pressure (bar)	20 (standard version)			16 (automatic drain version) 10 (reduced orifice automatic drain version)		
Minimum working pressure (bar)	/			0,5		
Working temperature (C°)	-30 ... +80 (standard version) -50 ... +80 (low temperature L version) -60 ... +80 (low temperature version -60 °C Z) -5 ... +150 (Ihigh temperature H version) -40 ... +100 (EPDM-FDA version)			-35 ... +70 (automatic drain S version and reduced orifice automatic drain SR version)		

Weight	Size		
	Size 2	Size 3	Size 4
Standard version (g)	1492	2557	6253
Automatic drain version / Reduced orifice automatic drain version (g)	1579	2723	6290

PROCESS AUTOMATION TECHNOLOGY

Order codes

S | S | 17 | 3B | E | B | B | N | L

Version	
S	Rough finishing
F	Clean profile
M	Modular assembly version (only for size 2 and size 3)

Size and connections	
2A	Size 2 - 1/4" NPT
2B	Size 2 - 3/8" NPT
2C	Size 2 - G1/4"
3A	Size 3 - 1/4" NPT
3B	Size 3 - 1/2" NPT
3D	Size 3 - G1/2"
4A	Size 4 - 3/4" NPT
4B	Size 4 - 1" NPT
4D	Size 4 - G1"

Filter pore size	
A	5 μm - 316 stainless steel
B	20 μm - 316 stainless steel
C	50 μm - 316 stainless steel
D	5 μm - HDPE
E	20 μm - HDPE
F	50 μm - HDPE

Pressure range	
A	0 - 2 bar
B	0 - 4 bar
C	0 - 8 bar (0 - 7 bar for size 4)
D	0 - 12 bar (0 - 10 bar for size 4)

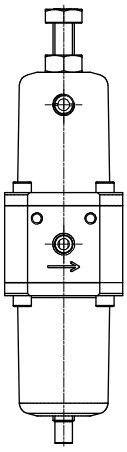
Type	
	Standard
N	Without relieving

Options	
	Standard
L	Low temperature
Z	Low temperature (-60 °C)
H	High temperature
S	Automatic drain
SR	Reduced orifice automatic drain version
EF	EPDM-FDA

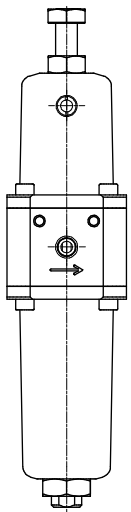
Example: SS173BEBBNL
Size 3 filter regulator, rough finishing, 1/2" NPT connection, filter pore size 20 μm - 316 stainless steel, pressure range 0 - 4 bar, without relieving, low temperature version.

Design

Size 2 - Size 3 - Size 4
Manual drain

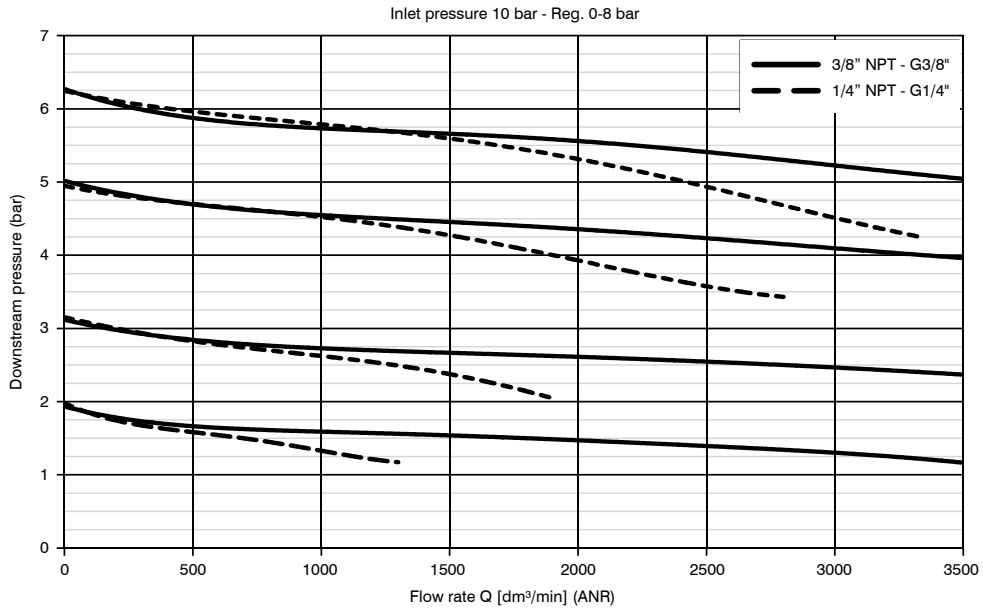


Size 2 - Size 3 - Size 4
Automatic drain



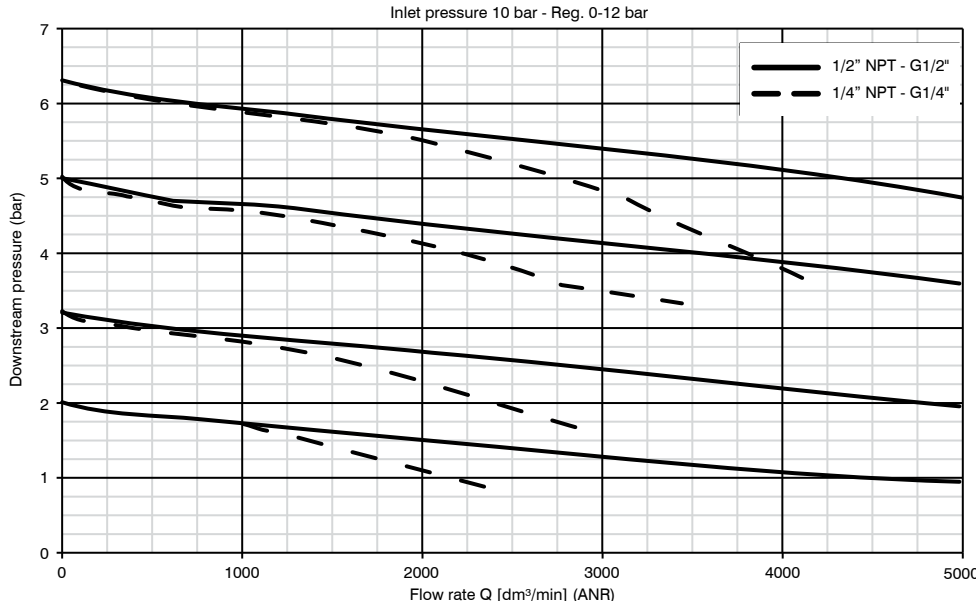
Characteristic curves

Flow rate curves



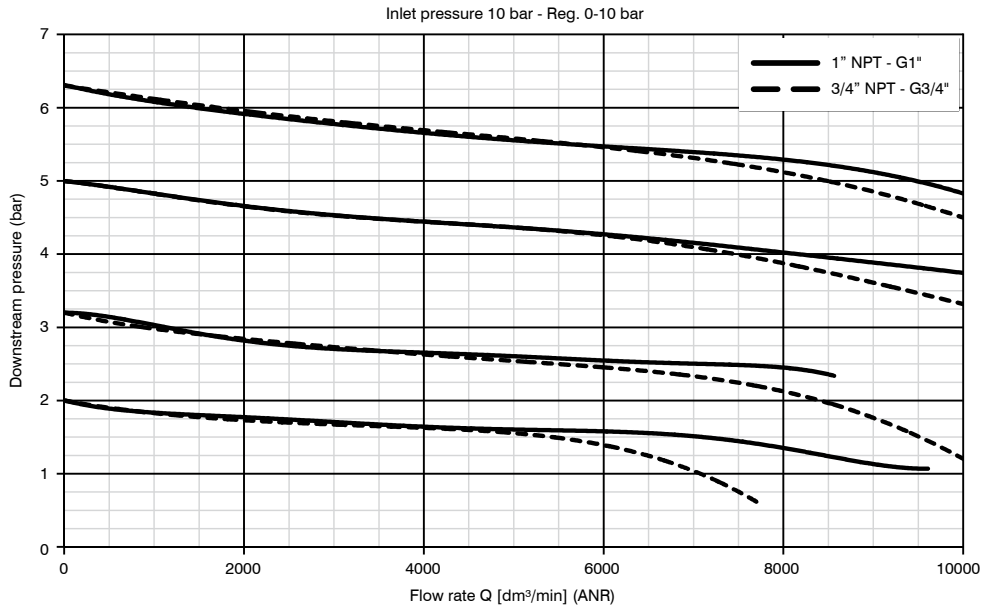
Size 2

Flow rate curves



Size 3

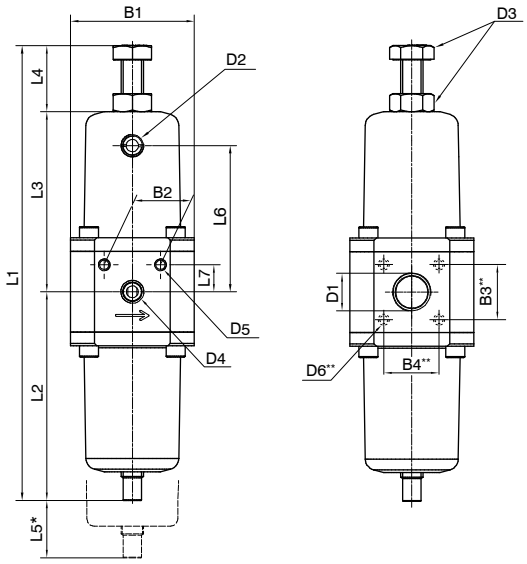
Flow rate curves



Size 4

Dimensions

Overall manual drain version



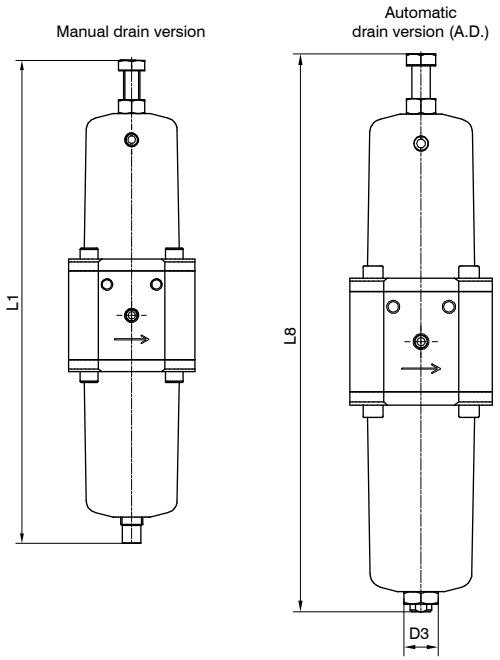
* = BOWL REMOVAL MAXIMUM HEIGHT
** = ONLY FOR M VERSION

Model	B1	B2	B3	B4	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
#172...	55	25	25	25	1/4" NPT 3/8" NPT G1/4"	1/8" NPT	Ch.17	1/8" NPT	M5 2 front holes 2 rear holes	M4 4 holes IN side 4 holes OUT side	202,5	93	80	29,5	45	65	12
#173...	71	22	31,5	31,5	1/4" NPT 1/2" NPT G1/2"	1/8" NPT	Ch.17	1/8" NPT	M6 2 front holes 2 rear holes	M5 4 holes IN side 4 holes OUT side	223,5	104	91	28,5	65	76	14,5
#174...	92	36	/	/	3/4" NPT 1" NPT G1"	1/8" NPT	Ch.19	1/8" NPT	M8 2 front holes 2 rear holes	/	352,5	166	147	39,5	80	128	22,5

Variable dimensions

Manual drain version

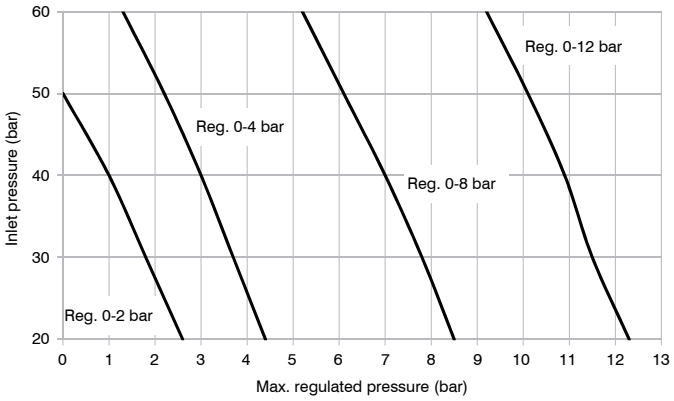
Automatic drain version (A.D.)



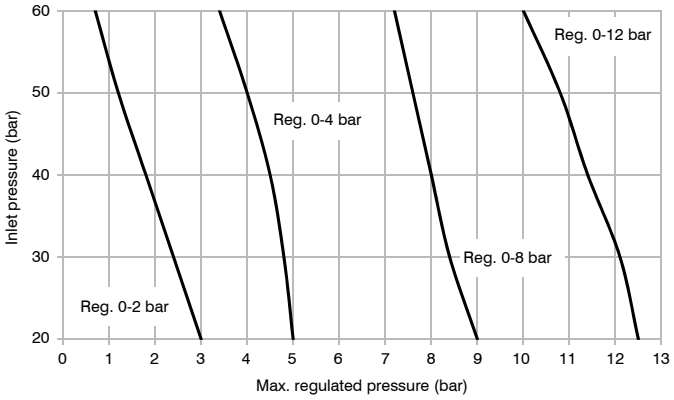
Model	L1	L8	D3
#172...	202,5	229,5	1/8" NPT
#173...	223,5	259,5	1/8" NPT
#174...	352,5	361	1/8" NPT

Inlet pressure notes

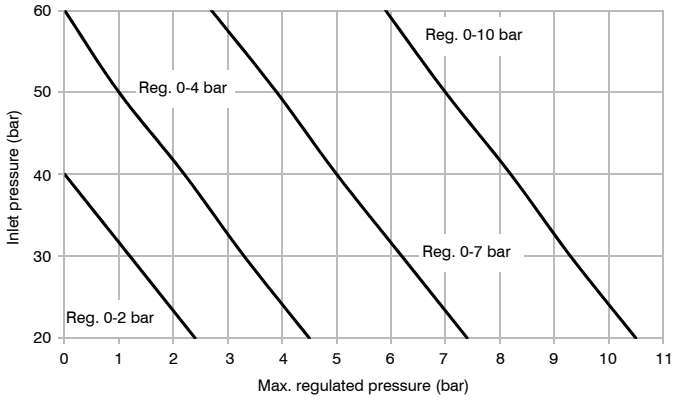
Pressure regulator Stainless steel line have been designed to withstand **a 60 bar** maximum inlet pressure. **Maximum regulated outlet pressure is 20 bar**. For performance details please refer to diagram alongside.



Size 2



Size 3

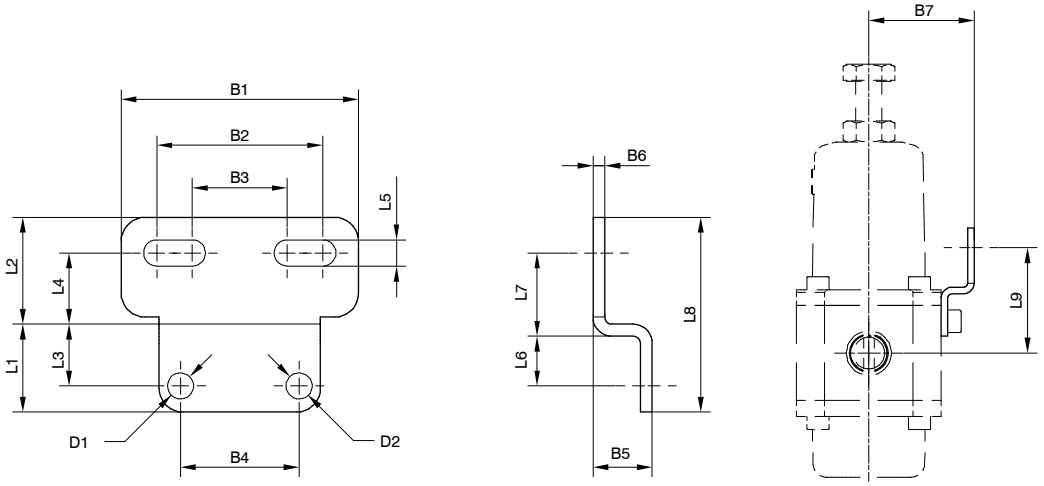


Size 4

Fixing bracket

SS174 **50**

Size	
SS172	Size 2
SS173	Size 3
SS174	Size 4

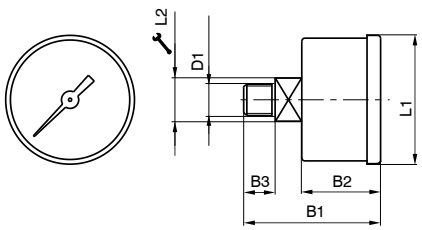


Model	B1	B2	B3	B4	B5	B6	B7	D1	D2	L1	L2	L3	L4	L5	L6	L7	L8	L9
SS17250	50	35	20	25	12,5	2,5	40	Ø5,5	Ø5,5	18,5	22,5	13	15	5,5	10,5	17,5	41	40
SS17350	60	45	20	22	14,5	3	50	Ø6,5	Ø6,5	14	24,5	/	16,5	6,5	11	19,5	44,5	45
SS17450	80	60	40	36	16	4	62	Ø8,5	Ø8,5	24	31	/	/	8,5	11	25	55	58,5

Pressure gauge

SS17070A **A**

Scale	
A	0 - 4 bar
B	0 - 12 bar

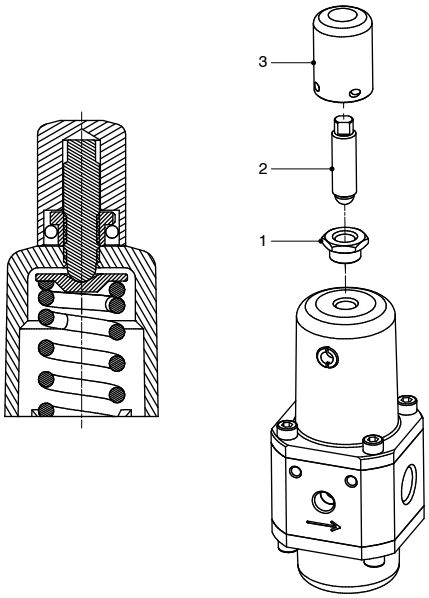


Model	B1	B2	B3	D1	L1	L2
SS17070AA SS17070AB	40	25	10	1/8" NPT	42,5	11

Tamper-proof kit

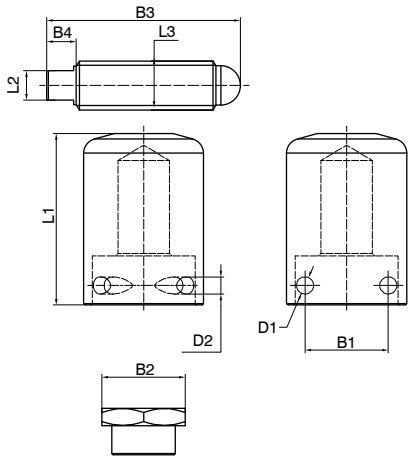
SS174 **55**

Size	
SS172	Size 2 - Size 3
SS174	Size 4



To use, replace the standard adjustment screw and nut with the screw and nut supplied in the kit. Assemble the screw and nut as shown (see adjacent drawing), adjust until the desired P_2 value is reached, lock the nut and insert the cap that can be locked with wire or padlock.

Tamper-proof kit	
1	Adjustment screw
2	Locking nut
3	Tamper-proof cap



Model	B1	B2	B3	B4	D1	D2	L1	L2	L3
SS17255	17	Ch.17	39,5	6	Ø3,5	Ø3,5	35	Ch. 6	M10x1,5
SS17455	19	Ch. 20	56,5	6,5	Ø3,5	Ø3,5	45	Ch. 7	M12x1,75

Series Flowplus

General

The **Pneumax** Flowplus range of high-capacity volume boosters are available in both Aluminium or Stainless Steel with the option of a standard version or a version with a built in filter (stainless steel). The Flowplus range has been designed to meet the needs of those more demanding applications within the Oil & Gas industry, applications which require high performance in tough environment conditions. With a high flow exhaust ratio, the **Pneumax** Flowplus volume boosters offer high performance and reliability for process and industrial automation applications..

Both stainless steel and aluminum versions are corrosion and wear resistant, due to the same stainless steel trim type selection, with a wide range of sealing materials for extended operating temperature applications (to extreme low temperature up to high temperature application).

The **Pneumax** booster operates with a 1:1 signal to output relay, capable to provide fast response, delivering high air volume for fast actuator movement and increased stroking speed for both control and on/off valves actuators.

As a standard, an adjustable integrated by-pass valve device is available, to reduce or avoid (thru fully closed position in case of on-off application) excessive actuator overshoot or over-damping.

In addition, in order to precisely adjust actuator travel speed, the **Pneumax** booster can be supplied with integral flow regulators, controlling the air supply, exhaust or both. The stainless steel version is also available with a built in filter (5, 20 & 50 μm) with either HDPE or stainless steel filter element. These filter elements can be regenerated by cleaning with a suitable detergent.

Operating principle

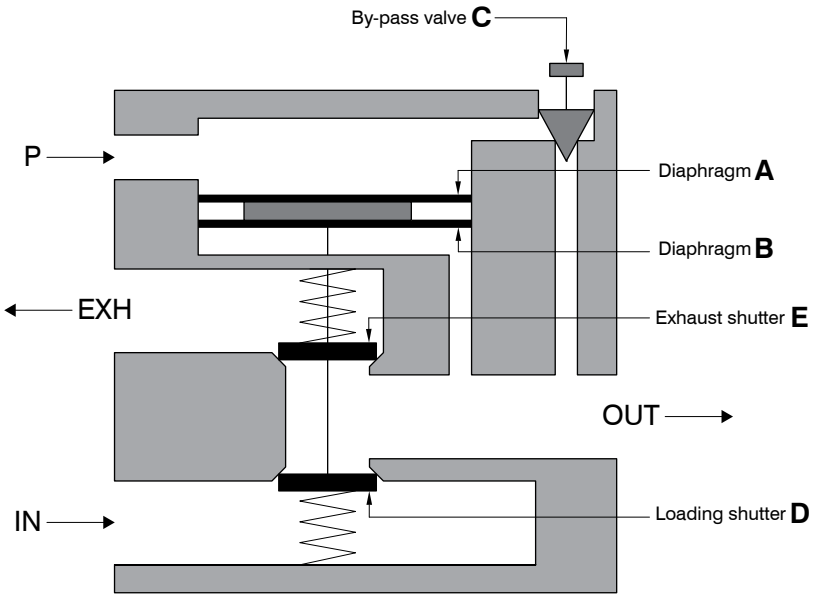
The device is pneumatic operated thru inlet port. When a pressure signal from 2 to 8 bar is applied to the pilot port **P**, the main valve assembly opens the loading shutter **D** to allow the passage of a high volumetric flow from the inlet port to the outlet port. When the system detects that the outlet pressure is equal to the pilot signal pressure, and consequently the forces acting on the membranes **A** and **B** are equivalent, the main valve moves to the de-energized position, i.e. with the shutters **D** and **E** closed.

This condition is maintained until there is a change in signal pressure or a change in outlet pressure value. If the outlet pressure figure is higher than the pilot signal pressure, the main valve group opens the shutter of drain **E** to exhaust. If the system detects an outlet pressure lower than the pilot signal, the main valve opens to restore the outlet at correct pressure.

The signal input and output ports are connected by an integrated and adjustable by-pass valve **C**.

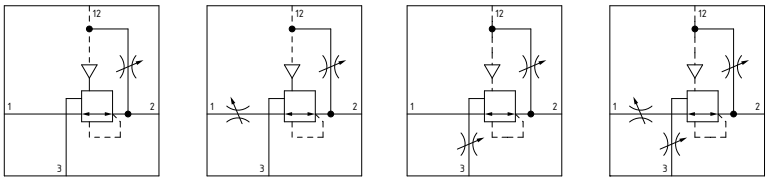
The adjustment, in addition to control the sensitivity of the system to changes in the pilot signal, ensures the exact equalization between the input signal and the supply occurs output.

This allows that low volume signal provide a output high volume with a signal to output pressure ratio of 1:1.



Volume booster

- Available in 2 sizes with connections from 1/4” NPT to 1” NPT
- Available in aluminium with epoxy coating paint or in stainless steel AISI 316L
- Stainless steel AISI 316L versions according to NACE MR0175 - ISO15156/1
- Compact and linear design
- Robust and reliable construction
- Double hysteresis rolling membrane system
- High stability and repeatability
- High flow rate performances
- Wide temperature range application
- 1:1 ratio between pilot pressure and outlet pressure
- Integrated by-pass valve for reliable adjustment of the system sensitivity
- Uni and bi-directional flow regulators available
- Atex certification II 2GD, SIL3 and CU-TR 012



Technical characteristics	Size	
	Size 3	Size 4
Type	Aluminium with epoxy coating paint Stainless steel AISI 316L	
IN / OUT / EXH connections	1/4” NPT - 1/2” NPT	3/4” NPT - 1” NPT
Pilot connection	1/4” NPT	

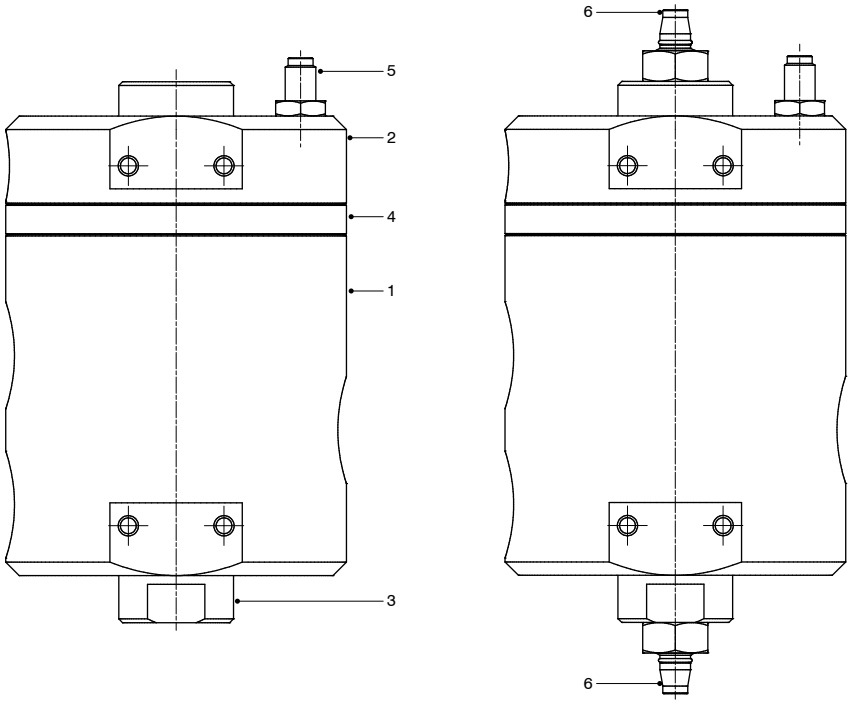
Operational characteristics	Size	
	Size 3	Size 4
Fluid	Dry and clean air Inert gas Natural gas	
Maximum working pressure	13 bar	
Minimum working pressure	2 bar	
Maximum signal pressure	8 bar	
Minimum signal pressure	2 bar	
Working temperature and seals	-30°C ... +80°C - NBR seals (**Standard** version) -50°C ... +80°C - NBR LT seals (**L** version) -60°C ... +80°C - PUR - SILICONE seals (**Z** version) -5°C ... +150°C - FPM - HNBR seals (**H** version) -40°C ... +100°C - EPDM-FDA seals (**EF** version)	
Signal pressure / outlet pressure ratio	1:1 ± 5%	
Assembly configuration	Stand alone With fixing bracket	
Assembly positions	Indifferent	

Flow capacity Cv table	Size			
	Size 3		Size 4	
	1/4” NPT	1/2” NPT	3/4” NPT	1” NPT
Output	2,5	4,2	7	9,4
Exhaust	2,5	4,2	7	9,4

Weights	Size			
	Size 3		Size 4	
	1/4” NPT	1/2” NPT	3/4” NPT	1” NPT
Aluminium version without flow regulators	2040 g	2010 g	4470 g	4380 g
Aluminium version with uni-directional flow control regulator	2098 g	2070 g	4478 g	4394 g
Aluminium version with bi-directional flow control regulators	2122 g	2094 g	4515 g	4433 g
Stainless steel AISI 316L version without flow regulators	5460 g	5344 g	11532 g	11308 g
Stainless steel AISI 316L with uni-directional flow control regulator	5476 g	5360 g	11560 g	11336 g
Stainless steel AISI 316L with bi-directional flow control regulators	5491 g	5375 g	11574 g	11350 g

Materials

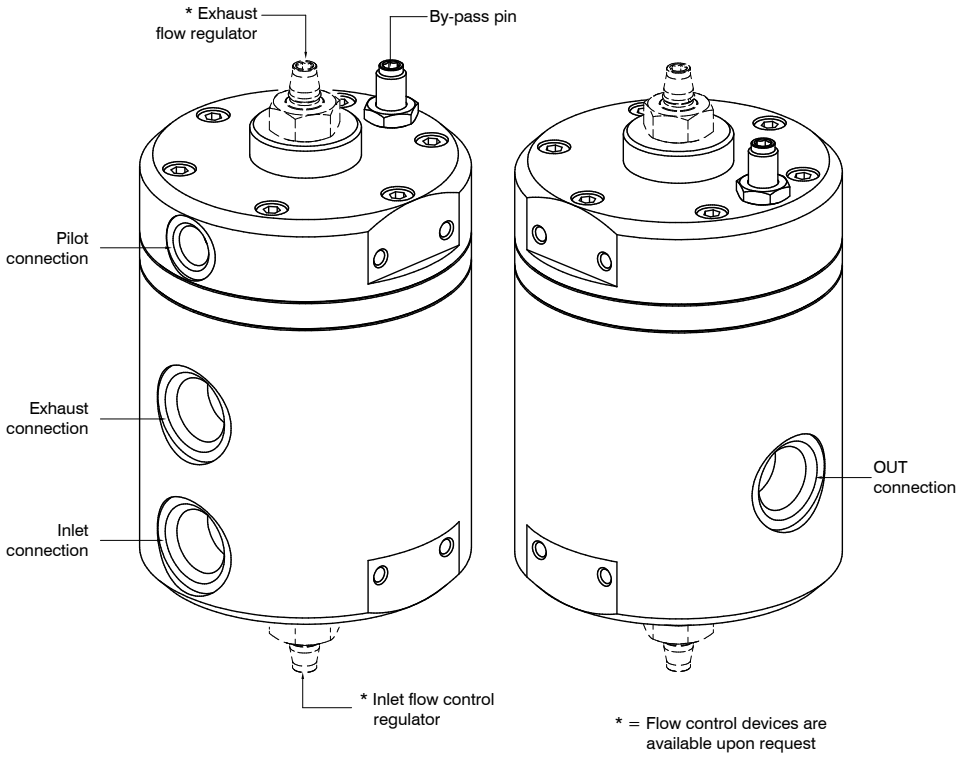
The Pneumax volume booster is manufactured in two versions, one being aluminium, which is epoxy coated and the other being AISI 316L stainless steel. Both are highly restistant to corrosion and wear. The integral components which come into contact with the media are manufactured in 316L stainless steel.



Volume booster		
1	Body	Aluminium with epoxy coating paint Stainless steel AISI 316L
2	Piloting operator	Aluminium with epoxy coating paint Stainless steel AISI 316L
3	Rear end cap	Aluminium with epoxy coating paint Stainless steel AISI 316L
4	Intermediate body	Aluminium with epoxy coating paint Stainless steel AISI 316L
5	By-pass valve	Stainless steel AISI 316L
6	Adjusting pins	Stainless steel AISI 316L
7	Springs	Stainless steel AISI 316
8	Fixing screws and nuts	Stainless steel A4-70
9	Diaphragm and seals	NBR NBR-LT HNBR FPM SILICONE

Design

The Pneumax volume booster is fitted with a by-pass valve as standard and can be supplied with or without a flow regulator. The flow regulator can be either Uni-directional or Bi-directional.



Order codes

SA 17 **3B** VB **R2** **L**

Version	
SA	Aluminium with epoxy coating paint
SS	Stainless steel AISI 316L

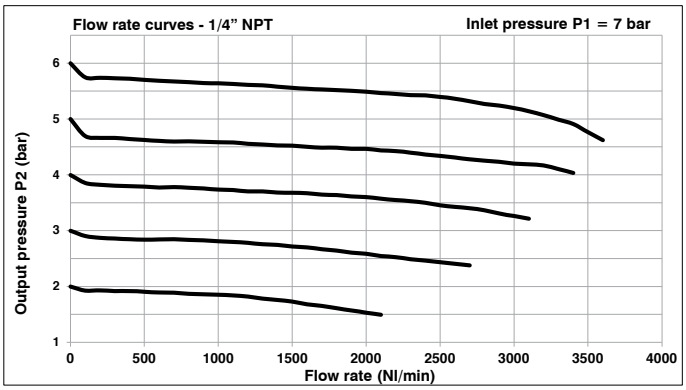
Size and connections	
3A	Size 3 - 1/4" NPT
3B	Size 3 - 1/2" NPT
4A	Size 4 - 3/4" NPT
4B	Size 4 - 1" NPT

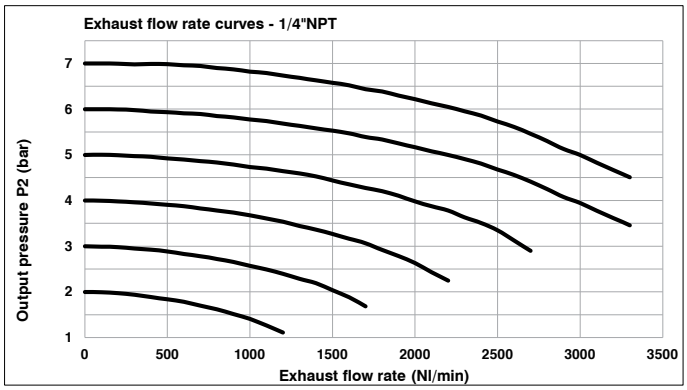
Flow regulators options	
	without flow regulators
RS	with exhaust flow regulator
RM	with inlet flow control regulator
R2	with bi-directional flow control regulators

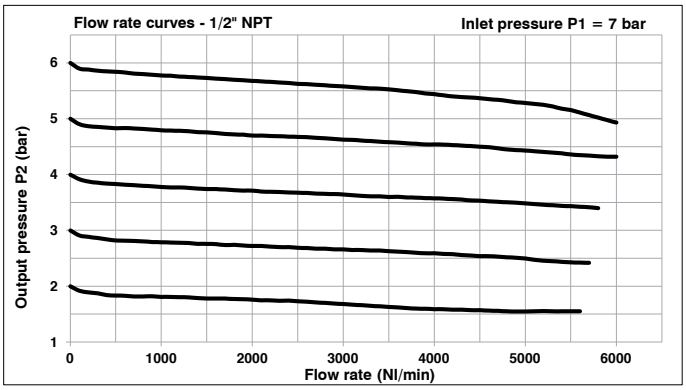
Temperature options	
	Standard (-30°C ... +80°C)
L	Low temperature (-50°C ... +80°C)
Z	Low temperature (-60°C ... +80°C)
H	High temperature (-5°C ... +150°C)
EF	EPDM-FDA (-40°C ... +100°C)

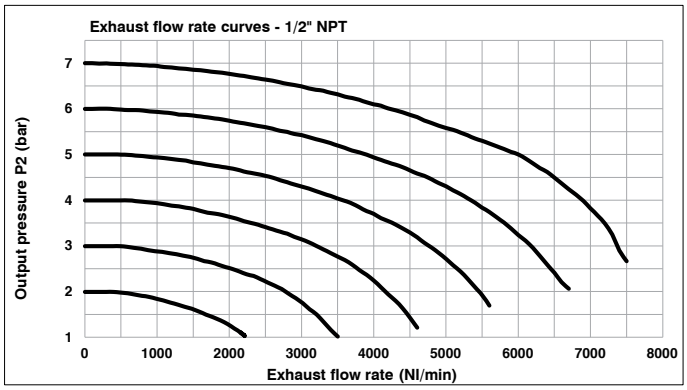
Example : SA173BVBR2L : Size 3 Volume booster, 1/2"NPT ports, Bi-directional flow control regulator, suitable for low temperature.

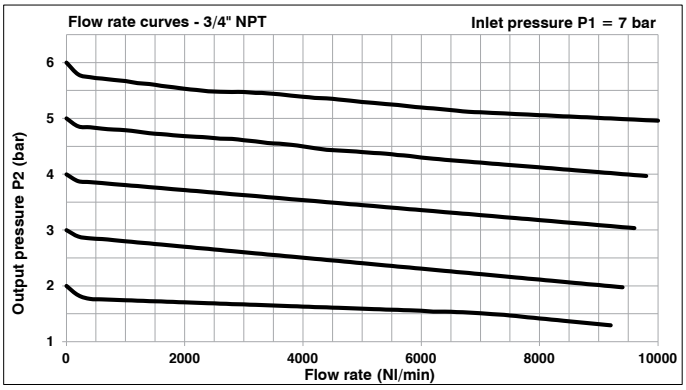
Characteristic curves (without flow regulators)

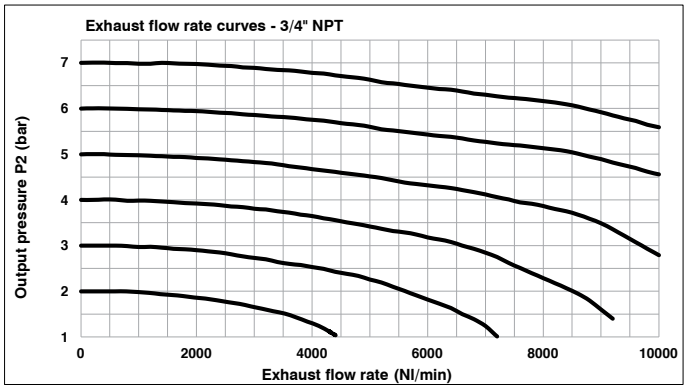


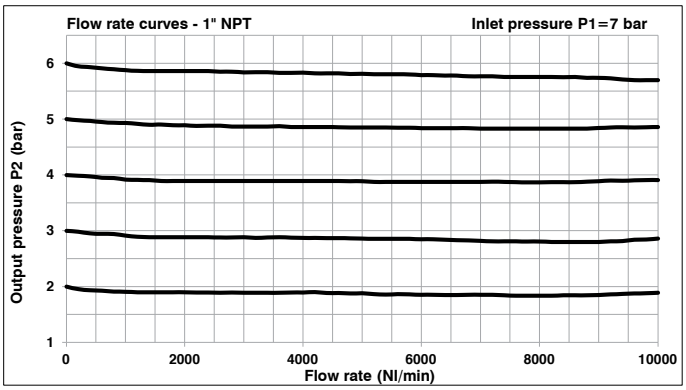


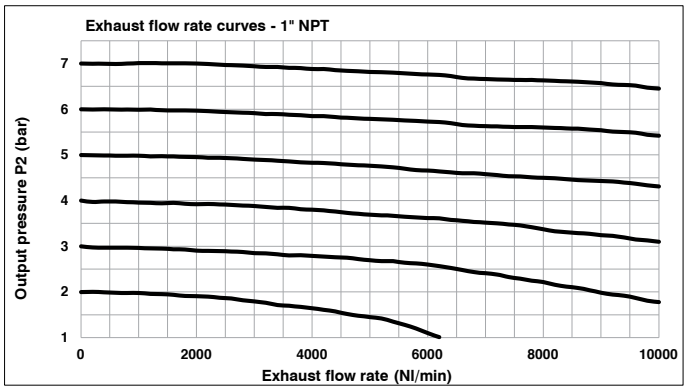




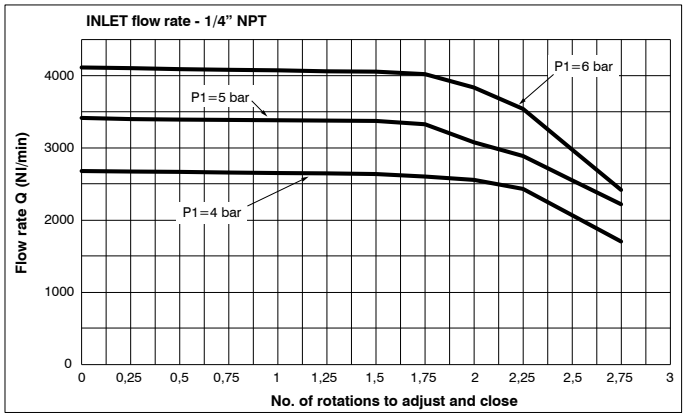


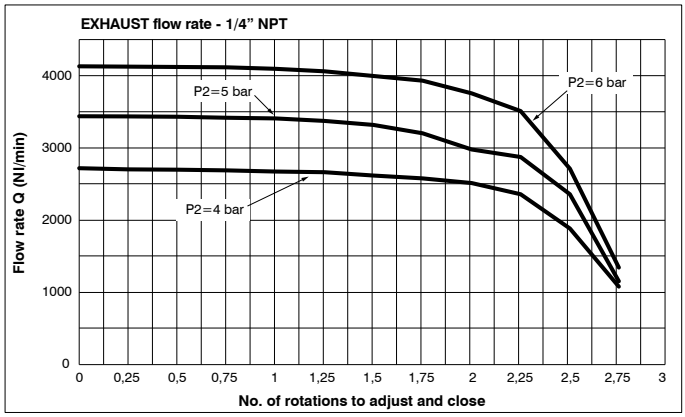


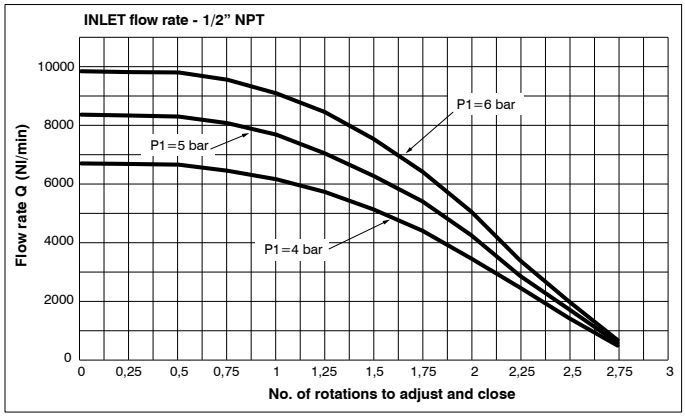


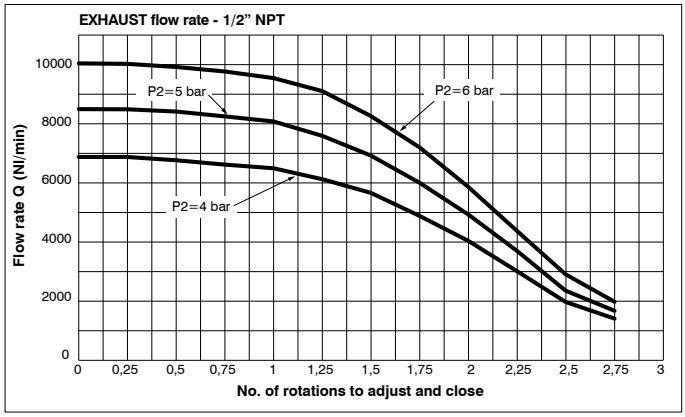


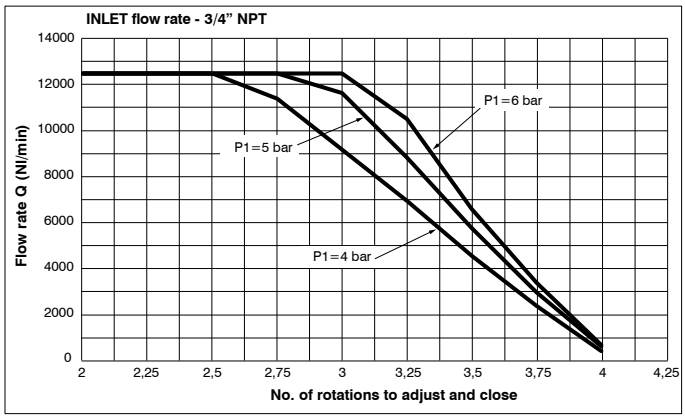
Characteristic curves (with flow regulators)

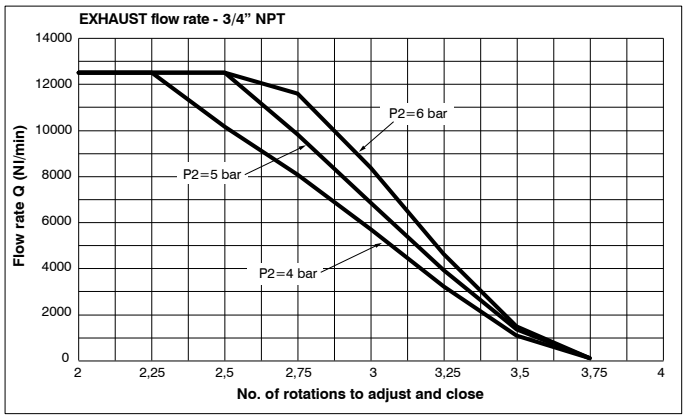


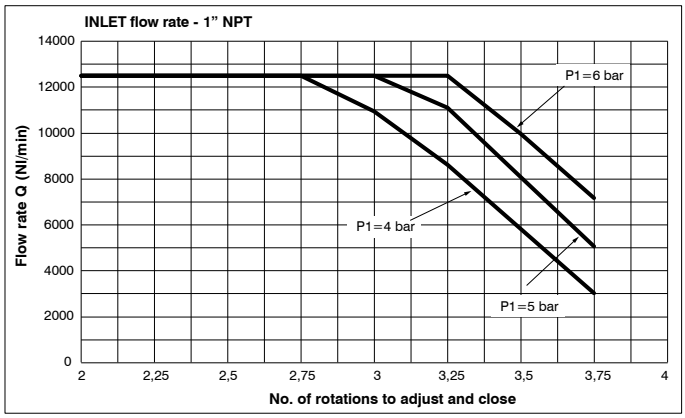


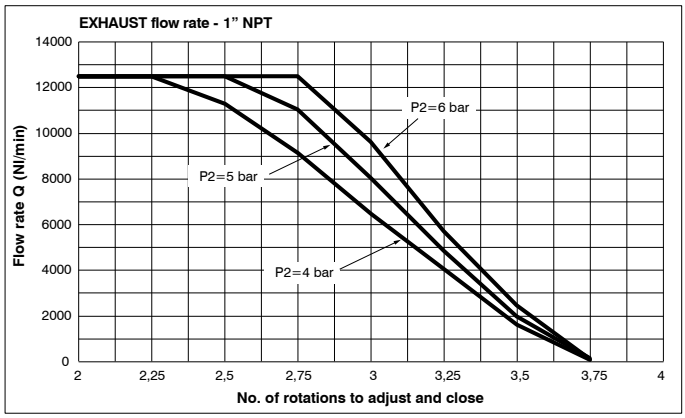




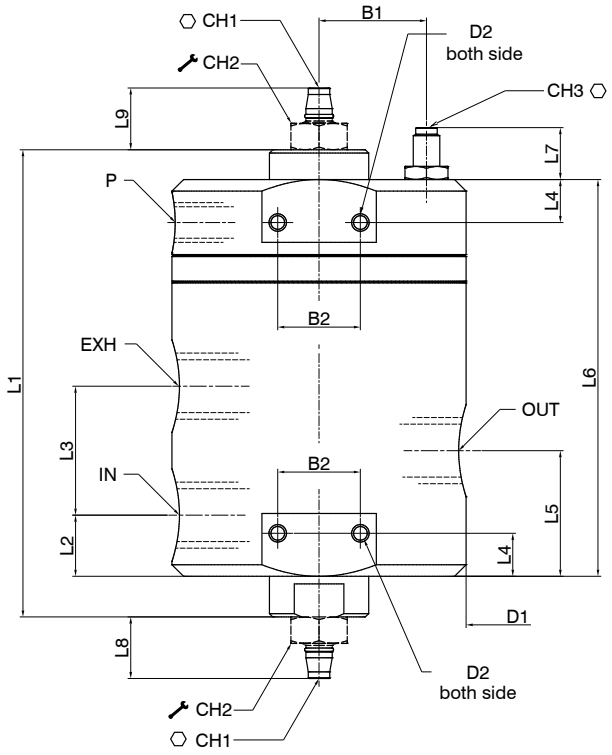








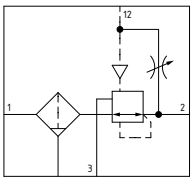
Dimensions

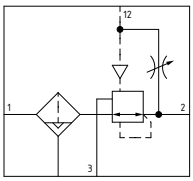


Model	B1	B2	D1	D2 (both side)	L1	L2	L3	L4	L5	L6	L7	L8	L9	IN - OUT - EXH	P	CH1 ⬡	CH2 🔧	CH3 ⬡
SA173...	32,5	25	89	M5	141,5	18,5	39	13	38	120	15,5	/	/	1/4" NPT 1/2" NPT	1/4" NPT	4	17	4
SS173...	33,5																	
SA173...R#	32,5											19	19					
SS173...R#	33,5																	
SA174...	41	22	109	M6	205	27,5	63,5	14	59,5	175	15,5	/	/	3/4" NPT 1" NPT			19	
SS174...	43																	
SA174...R#	41											24,5	26,5					
SS174...R#	43																	

Volume filter booster

- Available in 2 sizes with connections from 1/4” NPT to 1” NPT
- Available in stainless steel AISI 316
- In compliance with NACE standard MR0175 - ISO15156/1
- Compact and linear design
- Robust and reliable construction
- Double hysteresis rolling membrane system
- High stability and repeatability
- High flow rate performances
- Wide temperature range application
- 1:1 ratio between pilot pressure and outlet pressure
- Integrated by-pass valve for reliable adjustment of the system sensitivity
- 5 - 20 - 50 μm filter cartridge available in AISI 316 stainless steel or HDPE
- Manual or automatic drain
- Atex certification II 2GD, SIL3 and CU-TR 012





Technical characteristics	Size	
	Size 3	Size 4
Type	Stainless steel AISI 316L	
IN / OUT / EXH connections	1/4” NPT - 1/2” NPT	3/4” NPT - 1” NPT
Pilot connection	1/4” NPT	

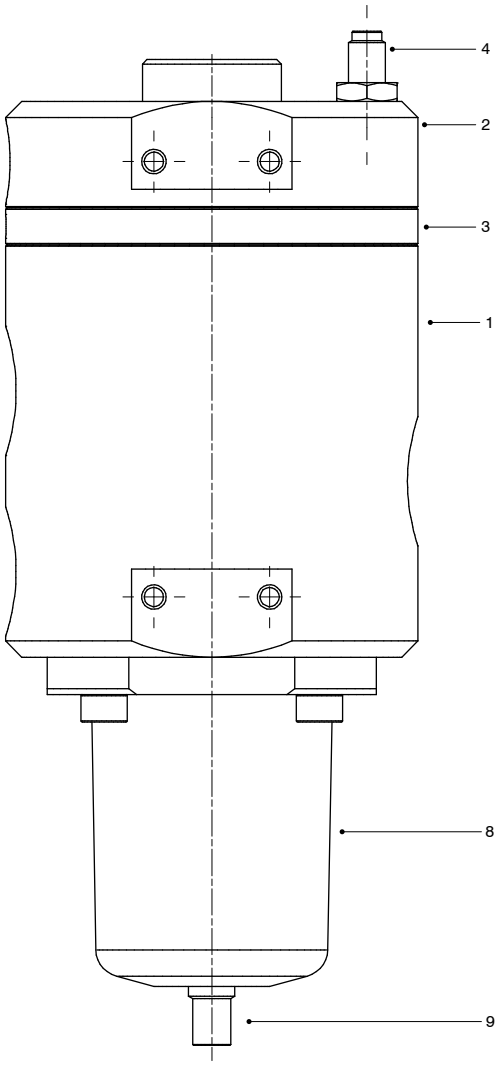
Operational characteristics	Size	
	Size 3	Size 4
Fluid	Compressed air Inert gases Natural gases	
Maximum working pressure	13 bar	
Minimum working pressure	2 bar	
Maximum pressure range	8 bar	
Minimum pressure range	2 bar	
Operating temperature and seals	-30°C ... +80°C - Seals NBR (**Standard** Version) -50°C ... +80°C - Seals NBR LT (**L** Version) -60°C ... +80°C - Seals PUR - SILICONE (**Z** Version) -5°C ... +150°C - Seals FPM - HNBR (**H** Version) -5°C ... +70°C Automatic drain (**S** Version) -40°C ... +100°C - EPDM-FDA seals (**EF** Version)	
Signal pressure / outlet pressure ratio	1:1 ± 5%	
Assembly configuration	Stand alone With fixing bracket	
Assembly positions	Vertical ± 5°	
Filter pore size	5 μm Stainless steel AISI 316 or HDPE (High density polyethylene) 20 μm Stainless steel AISI 316 or HDPE (High density polyethylene) 50 μm Stainless steel AISI 316 or HDPE (High density polyethylene)	
Max. bowl capacity	25 cm³	78 cm³
Condensation drain	Manual Automatic	

Flow capacity Cv table	Filter pore size	Size			
		Size 3		Size 4	
		1/4” NPT	1/2” NPT	3/4” NPT	1” NPT
Output	5 μm	2,12	3,6	5,9	8
	20 μm	2,18	3,75	6,15	8,3
	50 μm	2,25	3,83	6,3	8,5
Exhaust	5 μm	2,5	4,2	7	9,4
	20 μm				
	50 μm				

Weights	Size			
	Size 3		Size 4	
	1/4” NPT	1/2” NPT	3/4” NPT	1” NPT
AISI 316L stainless steel version without flow regulators	6460 g	6344 g	12532 g	12308 g

Materials

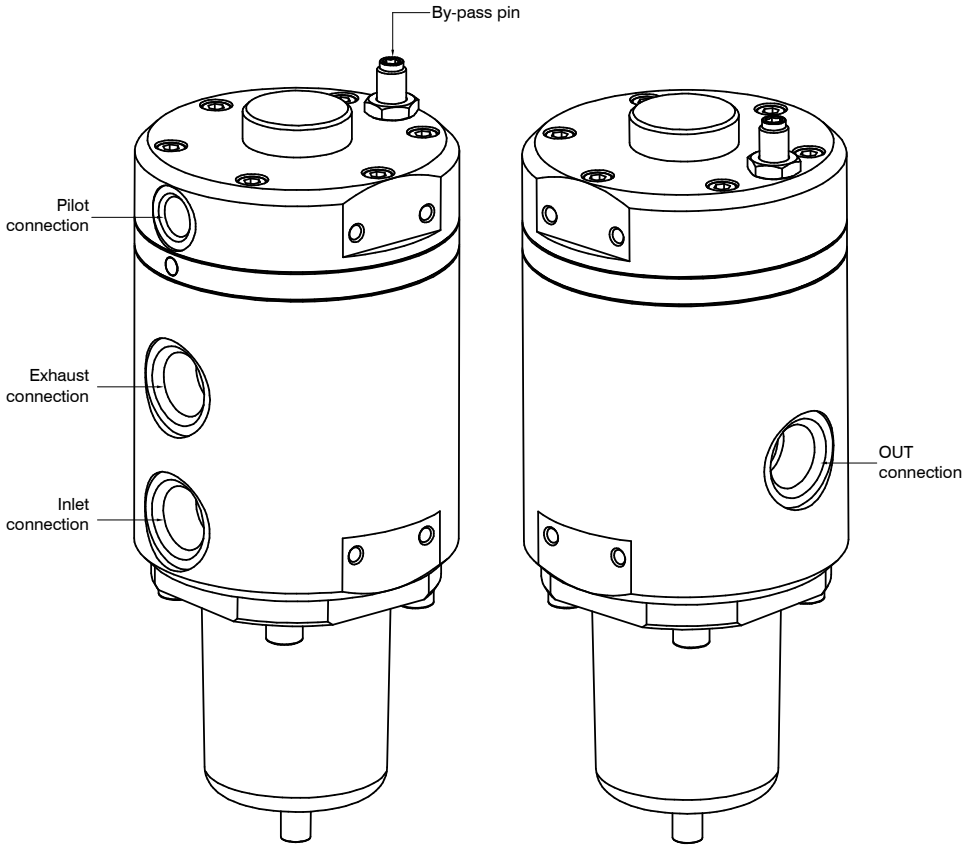
The Volume filter booster is only available in 316L stainless steel. The integral components which come into contact with the media are manufactured in 316L stainless steel. The filter elements are available in both HDPE and 316 stainless steel.



Volume filter booster		
1	Body	Stainless steel AISI 316L
2	Piloting operator	Stainless steel AISI 316L
3	Intermediate body	Stainless steel AISI 316L
4	By-pass valve	Stainless steel AISI 316L
5	Springs	Stainless steel AISI 316
6	Fixing screws and nuts	Stainless steel A4-70
7	Diaphragm and seals	NBR NBR-LT HNBR FPM SILICONE
8	Bowl	Stainless steel AISI 316L
9	Manual drain	Stainless steel AISI 316L
	Automatic drain	POM NBR Brass Stainless steel AISI 316L

Design

The Volume filter booster is fitted with the by-pass valve as standard. Flow regulators are not available.



Order codes

SS 17 3B VFB A L

Version	
SS	Stainless steel AISI 316L

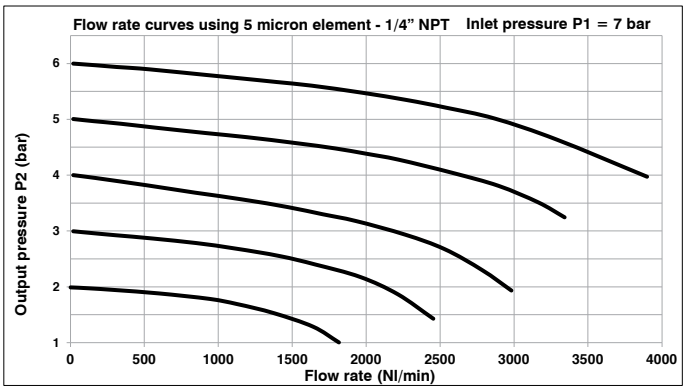
Size and connections	
3A	Size 3 - 1/4" NPT
3B	Size 3 - 1/2" NPT
4A	Size 4 - 3/4" NPT
4B	Size 4 - 1" NPT

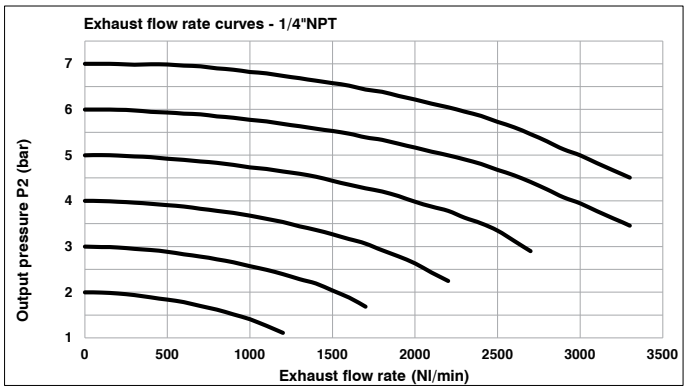
Filter pore size	
A	5 µm - Stainless steel AISI 316
B	20 µm - Stainless steel AISI 316
C	50 µm - Stainless steel AISI 316
D	5 µm - HDPE
E	20 µm - HDPE
F	50 µm - HDPE

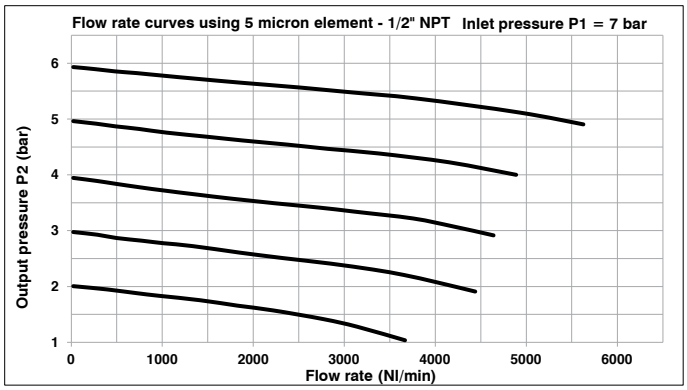
Temperature options	
	Standard (-30°C ... +80°C)
L	Low temperature (-50°C ... +80°C)
Z	Low temperature (-60°C ... +80°C)
H	Low temperature (-5°C ... +150°C)
S	Automatic drain (-5°C ... +70°C)
EF	EPDM-FDA (-40°C ... +100°C)

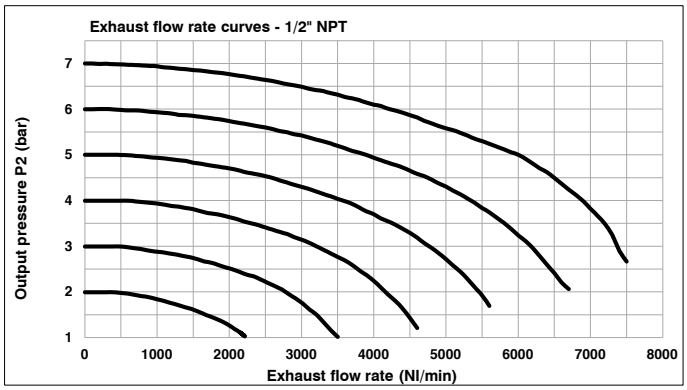
Example : SS173BVFBAL : Size 3 Volume filter booster, 1/2"NPT, 5 µm element, low temperature and manual drain.

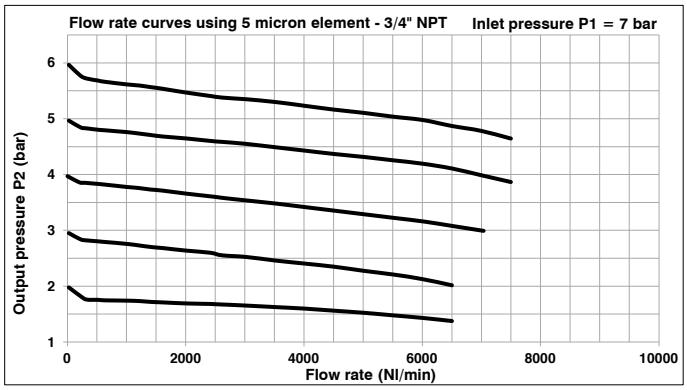
Characteristic curves (without flow regulators)

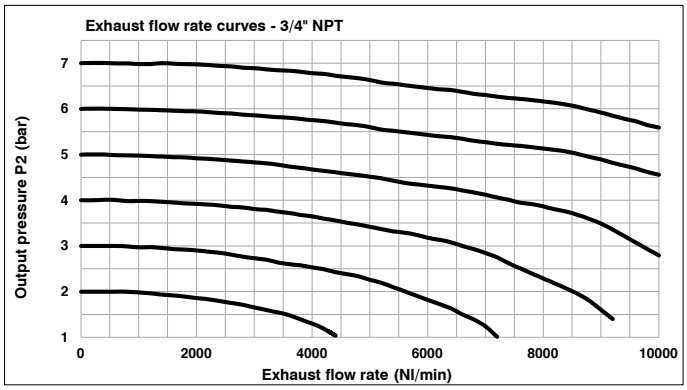


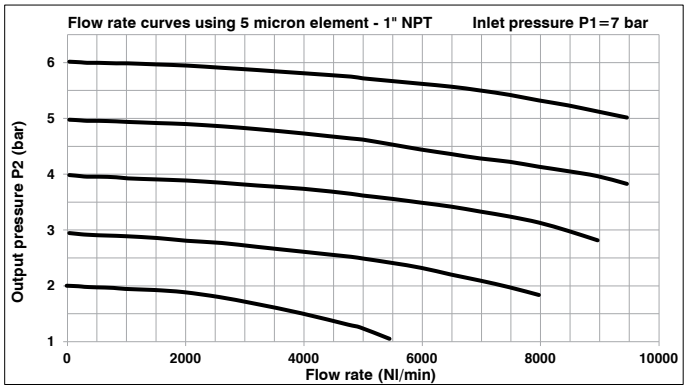


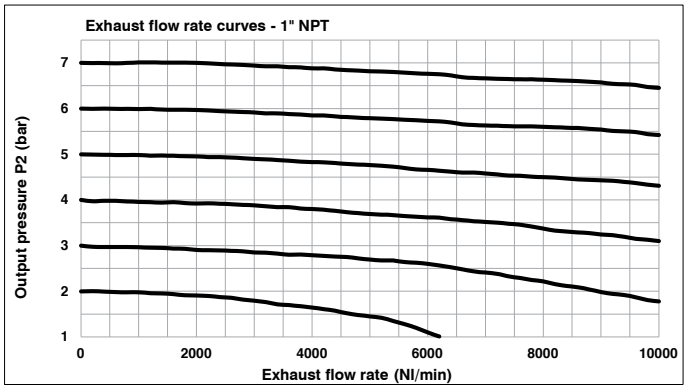




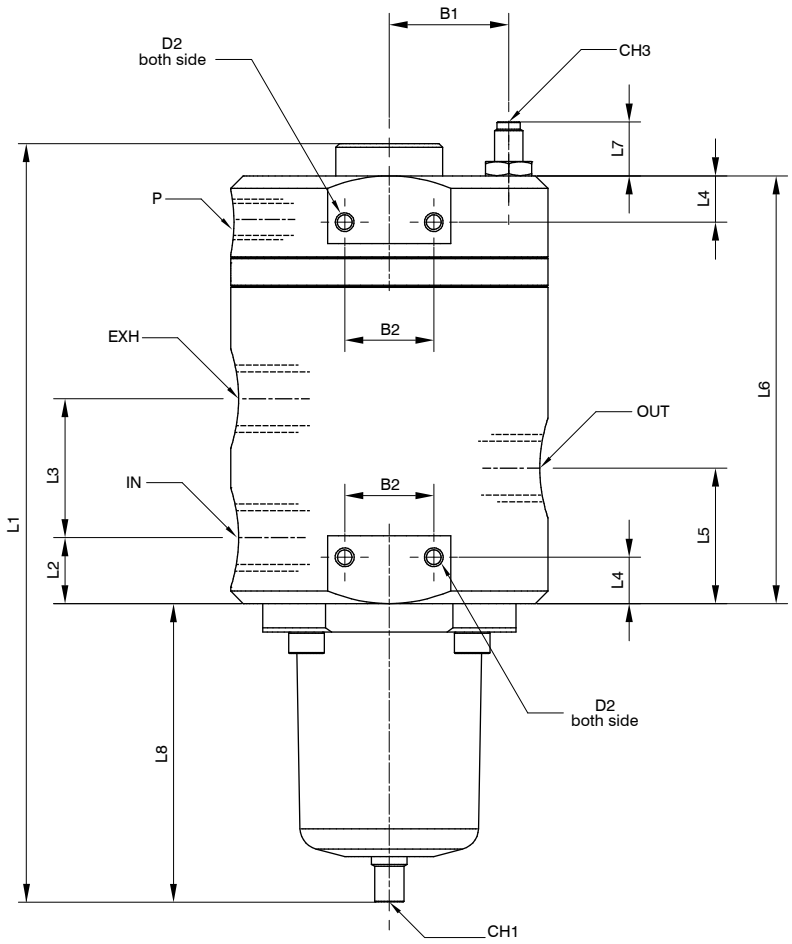






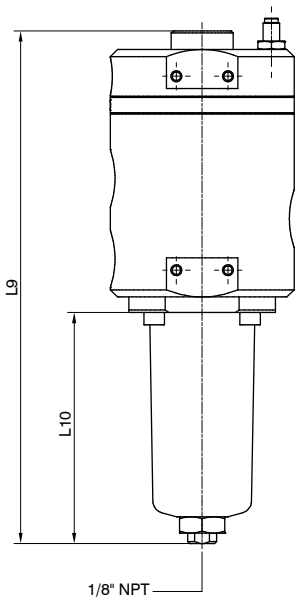


Dimensions



Model	B1	B2	D1	D2 (both side)	L1	L2	L3	L4	L5	L6	L7	L8	IN - OUT - EXH	P	CH1	CH3
SS173...	33,5	25	89	M5	213	18,5	39	13	38	120	15,5	84	1/4" NPT 1/2" NPT	1/4" NPT	5	4
SS174...	43	22	109	M6	323,5	27,5	63,5	14	59,5	175	15,5	133,5	3/4" NPT 1" NPT		8	4

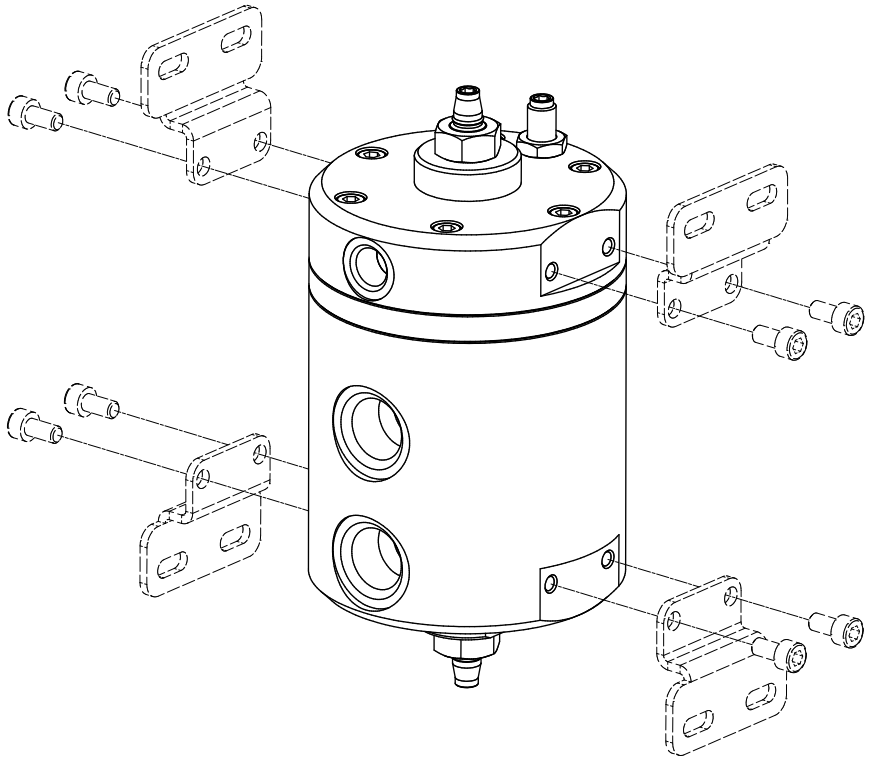
Automatic
drain version (A.D.)



Model	L9	L10
SS173...	248,5	119,5
SS174...	332,5	142,5

Accessories and fixing

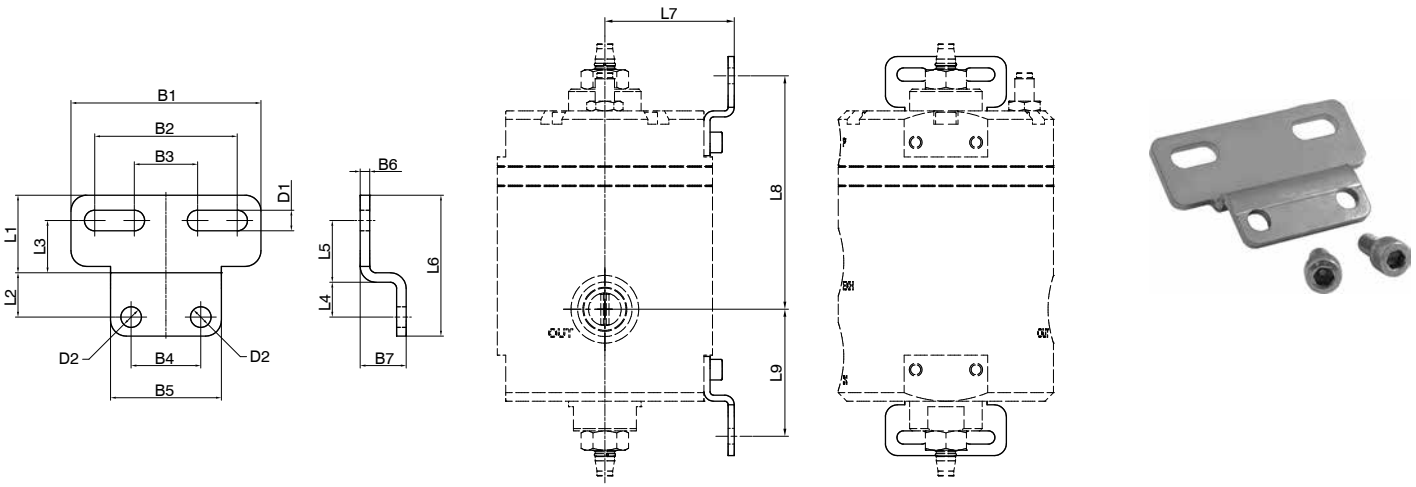
Special fixing brackets made of AISI 316L stainless steel are provided upon request.
Fixing position for every need is confirmed by using one or two brackets.



Fixing bracket

SS17250

Model	
SS17250	applicable to model SS173... and SA173...
SS17350	applicable to model SS174... and SA174...



Model	L1	L2	L3	L4	L5	L6	L7	L8	L9	B1	B2	B3	B4	B5	B6	B7	D1	D2	Weight (g)
SS17250	22,5	13	15	10,5	17,5	41	53,5	96,5	52,5	50	35	20	25	34	2,5	12,5	5,5	5,5	39
SS17350	24,5	14	16,5	11	19,5	44,5	65,5	132	76	60	45	20	22	35	3	14,5	6,5	6,5	57

Valves 1/4" NPT series Steel line

PNEUMAX has wide experience and know-how to develop application-oriented solutions for the process industry, as well as a range of highperformance products aimed to improve the effciency, productivity and quality of the process itself. Each item passed thru internal long-ride severe test procedure and after validated through years of experience. All certifications and relevant approvals are available.
Thanks to a global presence worldwide **PNEUMAX** can provide prompt assistance to any customer's specific needs. Our complete product range includes large number of products for day-by-day business. At Pneumax the focus is always on customer satisfaction.

General
Stainless steel brand series have been engineered and developed to meet process automation and Oil & Gas severe service requirements, where material performances, product reliability and health and safety issues are critical elements. As a result, Pneumax products are perfectly suitable to work with sweet gas media and corrosive / aggressive gases.

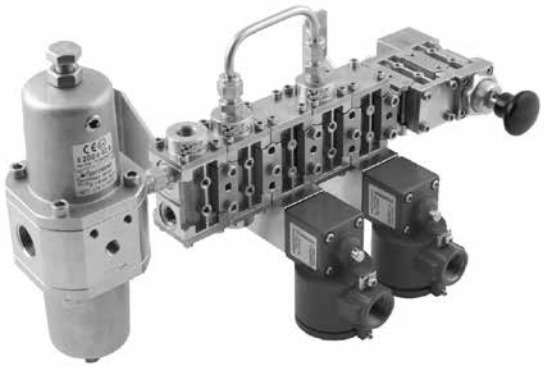
Applications for actuation:
- ESDV (emergency shut-down valve)
- HIPPS (high-integrity pressure protection system)
- High pressure turbine control
- Water service application
- Control for gas/fluid
- On-Off valve and control valve

Applications:
- Severe service operations
- Low and high temperature application
- Fire control system
- Hazardous area
- Offshore
- Refineries

All external and internal parts are AISI 316L stainless steel material in compliance with NACE standard MR0175/ISO 15156-1.

The range includes 3 and 5 way function valves, with the following functions available: pneumatic-spring valve, pneumatic-pneumatic valve, 2 position push-pull valve, push button-spring valve, push button-pneumatic return valve, tappet-spring valve, roller lever-spring valve, pneumatic valve with self-locking manual reset, pneumatic valve with self-locking manual reset inverted, key-spring valve.
Accessories which include: non return valve, uni/bidirectional flow regulator and quick exhaust valve.
Blocks dividers or shunts.

Modularity
1/4" size connection components minimum flow rate from 1000Nl/min. Thanks to customized body design configuration, Pneumax can provide pneumatic manifold solution, with compact design and easy installation operation.



Example: Module with redundants solenoids valves

Construction characteristics

Body	AISI 316L stainless steel
Operators	AISI 316L stainless steel
Spool	AISI 316L stainless steel
Spring	AISI 316 stainless steel
Screws	AISI 316 stainless steel (A4-70 stainless steel)
Seals	FPM (Fluoroelastomer) NBR for low temperatures (-50°C) standard

Operating range

Fluid	Filtered air. No lubrication needed, if applied it shall be continuous. Inert Gas. Sweet gas (natural).
Operating temperature (for low temperature version L)	-50°C ... +70°C
Operating temperature (for high temperature version H)	-10°C ... +150°C
Maximum operating pressure	12 bar

Certifications available:

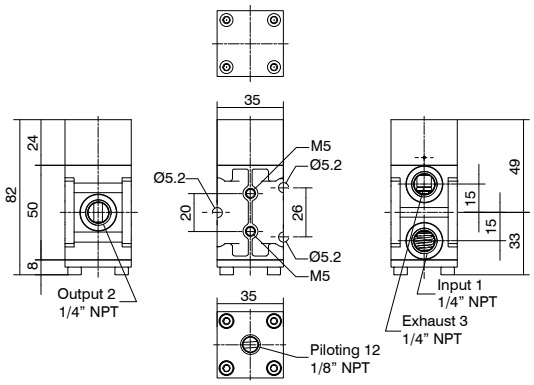
ATEX CE Ex II 2 GD c IIC

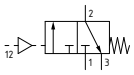
Ex : CE Ex **II 2G Ex h IIC Gb**
CE Ex **II 2D Ex h IIIC Db**

SIL : Suitable up to SIL 3

EAC Ex : CU - TR 012

Pneumatic-spring valve



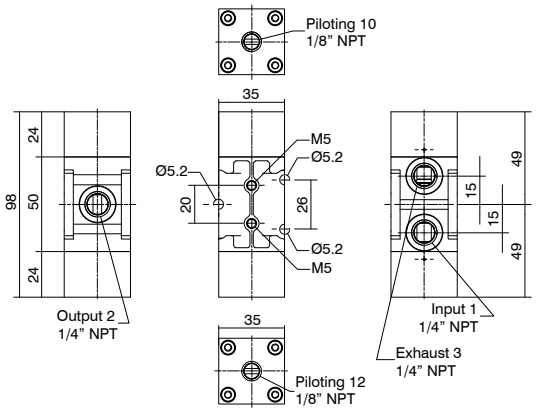


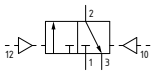
Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Ordering code
SS1432C1101T
TYPE
T L= Low temperature version
H= High temperature version

Operational characteristics						
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Pilot connections	Weight (g)	Cv	kv
12	1000	1/4" NPT	1/8" NPT	500	1,02	15,15

Pneumatic-pneumatic valve



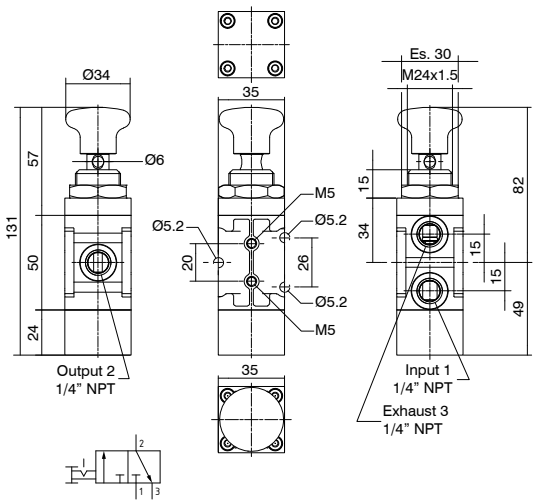


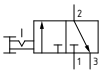
Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Ordering code
SS1432C1111T
TYPE
T L= Low temperature version
H= High temperature version

Operational characteristics						
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Pilot connections	Weight (g)	Cv	kv
12	1000	1/4" NPT	1/8" NPT	660	1,02	15,15

2 position push-pull valve



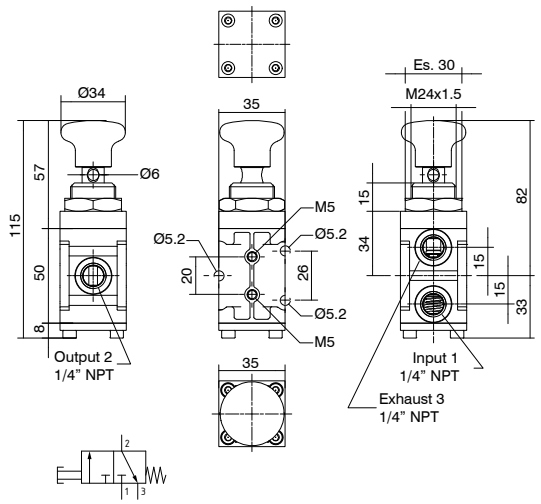


Operating force 55N.
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Ordering code
SS1432C0802T
TYPE
T L= Low temperature version
H= High temperature version

Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	1000	1/4" NPT	620	1,02	15,15

Push button-spring valve



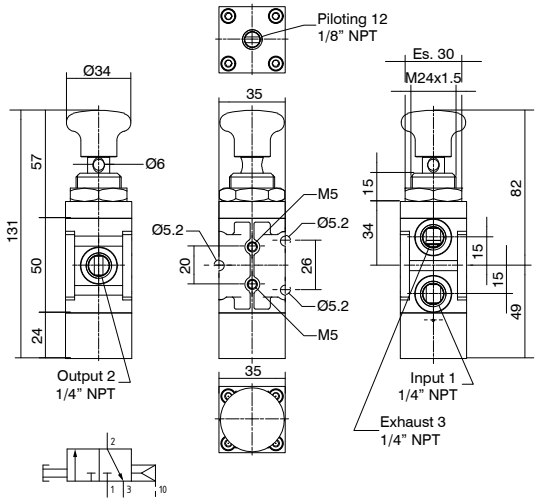
Ordering code	
SS1432C0801T	
T	TYPE
	L= Low temperature version
	H= High temperature version

Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Operating force at 2 bar= 55N
Operating force at 12 bar= 105N

Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	1000	1/4" NPT	470	1,02	15,15

Push button-pneumatic return valve

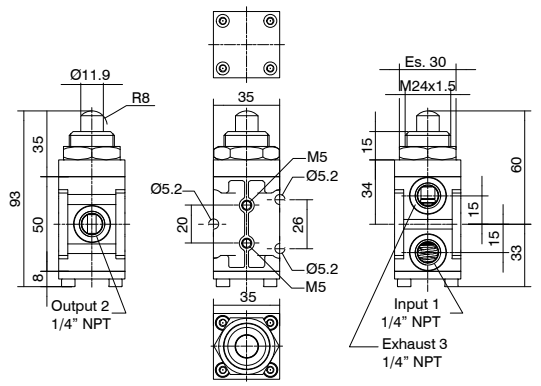


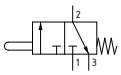
Ordering code	
SS1432C0811T	
T	TYPE
	L= Low temperature version
	H= High temperature version

Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Operational characteristics						
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Pilot connections	Weight (g)	Cv	kv
12	1000	1/4" NPT	1/8" NPT	600	1,02	15,15

Tappet-spring valve





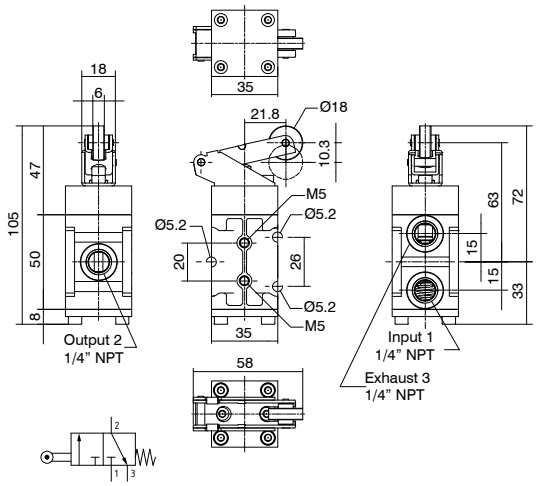
Ordering code	
SS1432C0001T	
T	TYPE
	L= Low temperature version
	H= High temperature version

Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Operating force at 2 bar= 55N
Operating force at 12 bar= 105N

Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	1000	1/4" NPT	450	1,02	15,15

Roller lever-spring valve



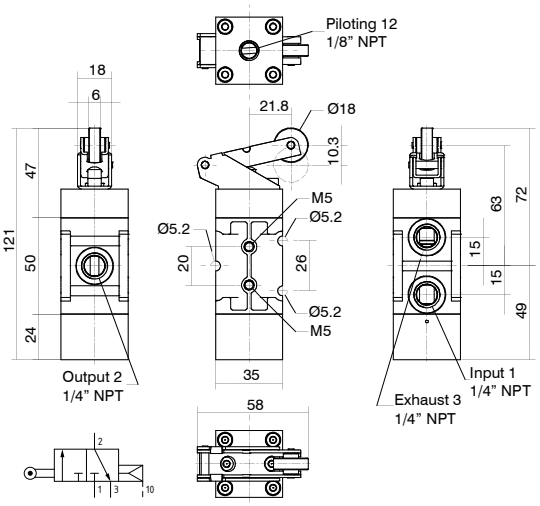
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Operating force at 2 bar= 55N
Operating force at 12 bar= 105N

Ordering code	
SS1432C0401T	
T	TYPE
	L= Low temperature version
	H= High temperature version

Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	1000	1/4" NPT	480	1,02	15,15

Roller lever-pneumatic valve



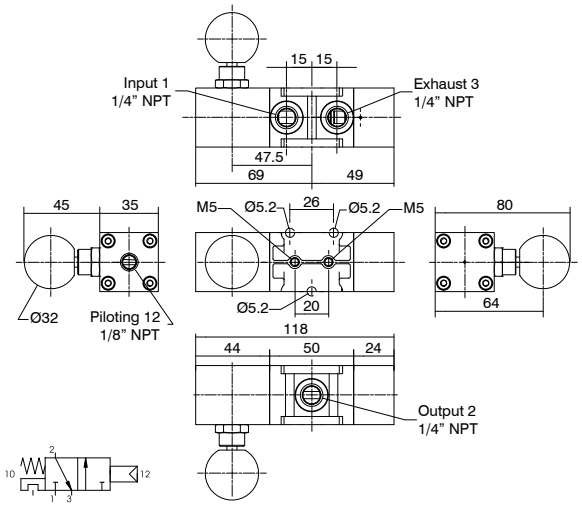
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Minimum piloting pressure 2,5 bar

Ordering code	
SS1432C0411T	
T	TYPE
	L= Low temperature version
	H= High temperature version

Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	1000	1/4" NPT	480	1,02	15,15

Pneumatic valve with self-locking manual reset

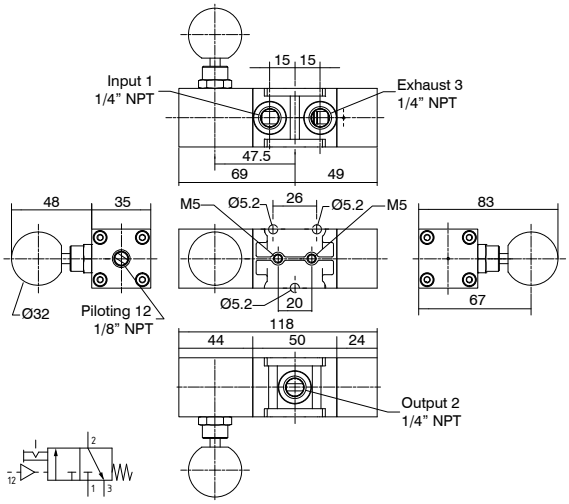


Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Ordering code	
SS1432C1114T	
T	TYPE
	L= Low temperature version
	H= High temperature version

Operational characteristics						
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Pilot connections	Weight (g)	Cv	kv
12	1000	1/4" NPT	1/8" NPT	860	1,02	15,15

Pneumatic valve with self-locking manual reset inverted

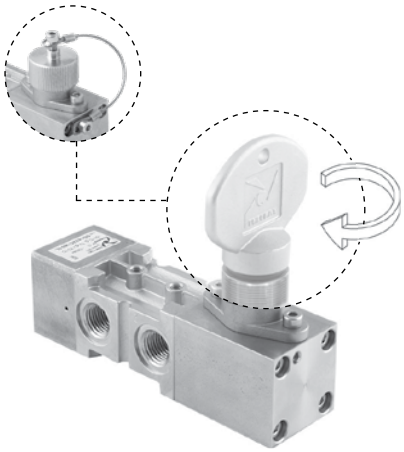


Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

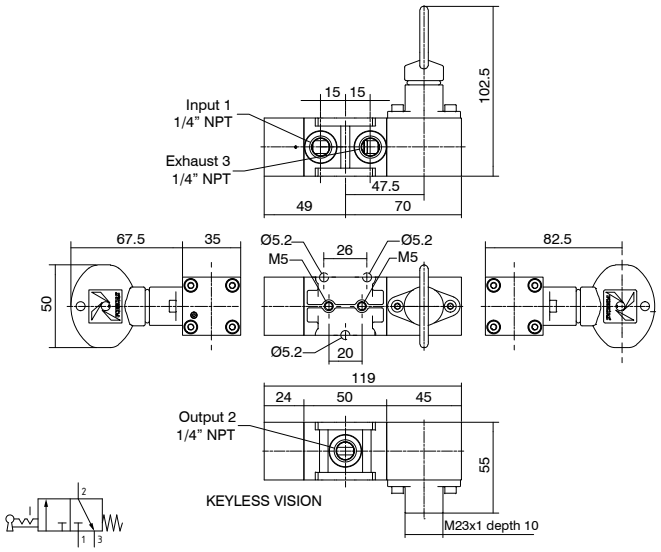
Ordering code	
SS1432C1115T	
T	TYPE L= Low temperature version H= High temperature version

Operational characteristics						
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Pilot connections	Weight (g)	Cv	kv
12	1000	1/4" NPT	1/8" NPT	860	1,02	15,15

Key-spring valve stable



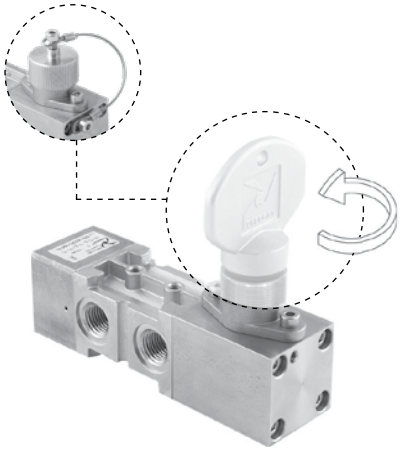
Available with key selector cap



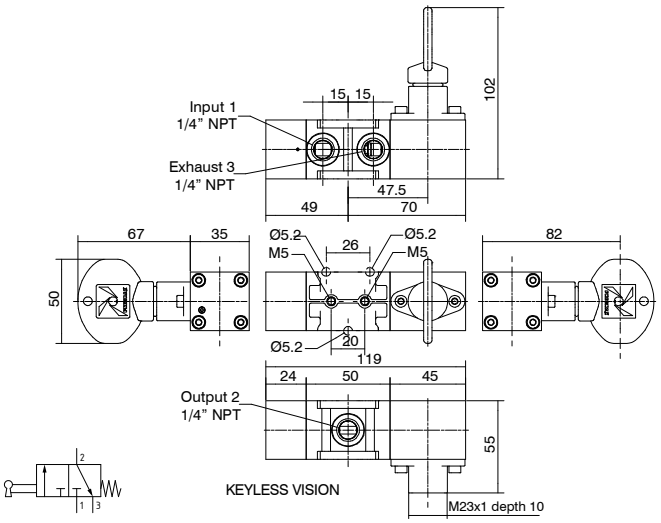
Ordering code	
SS1432C1601T	
T	TYPE L= Low temperature version H= High temperature version

Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	1000	1/4" NPT	1020	1,02	15,15

Key-spring valve instable



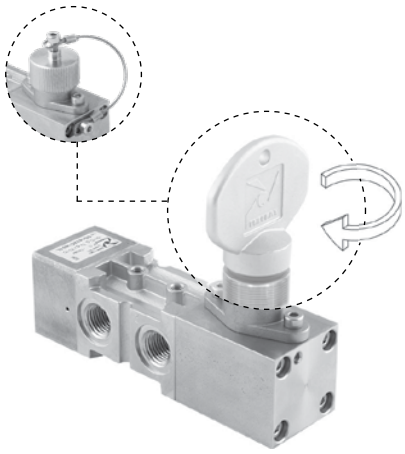
Available with key selector cap

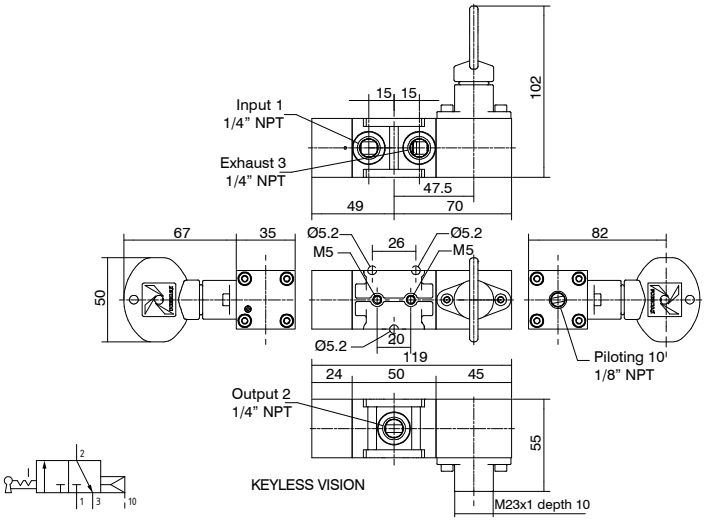


Ordering code	
SS1432C2601T	
T	TYPE L= Low temperature version H= High temperature version

Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	1000	1/4" NPT	1020	1,02	15,15

Pneumatic-key valve stable



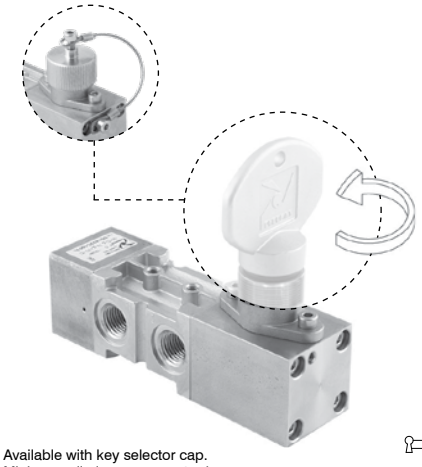


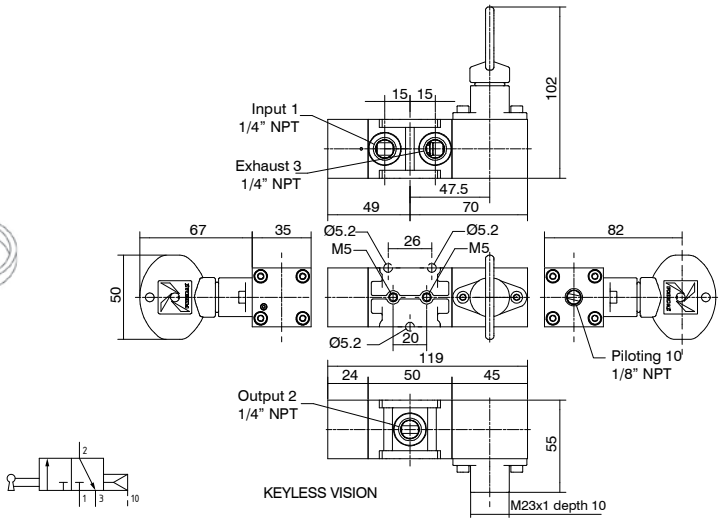
Available with key selector cap.
Minimum piloting pressure 2,5 bar, after the valve unlock.

Ordering code	
SS1432C1611T	
	TYPE
T	L= Low temperature version
	H= High temperature version

Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	1000	1/4" NPT	1020	1,02	15,15

Pneumatic-key valve instable



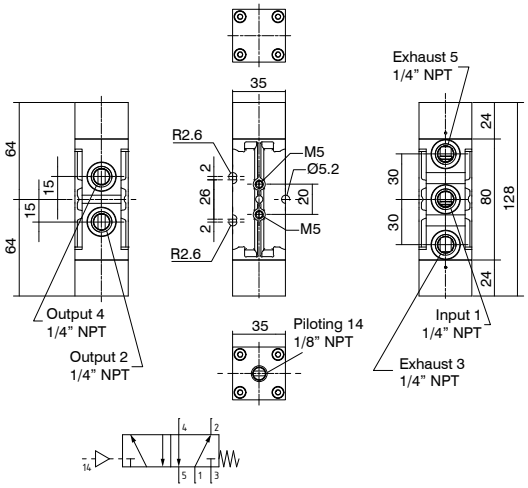


Available with key selector cap.
Minimum piloting pressure 2,5 bar.

Ordering code	
SS1432C2611T	
	TYPE
T	L= Low temperature version
	H= High temperature version

Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	1000	1/4" NPT	1020	1,02	15,15

Pneumatic-spring valve

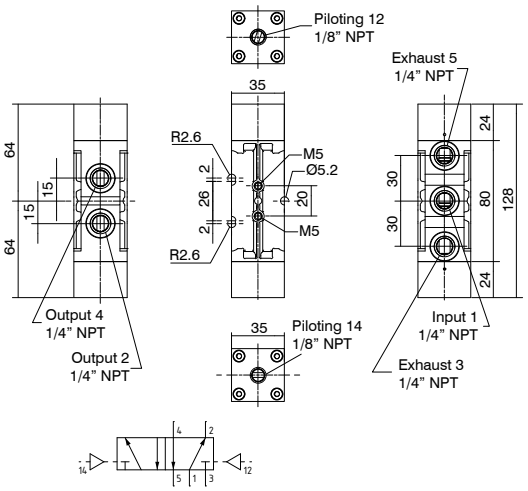


Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Ordering code	
SS145201101T	
T	TYPE
	L= Low temperature version
	H= High temperature version

Operational characteristics						
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Pilot connections	Weight (g)	Cv	kv
12	1000	1/4" NPT	1/8" NPT	820	1,02	15,15

Pneumatic-pneumatic valve

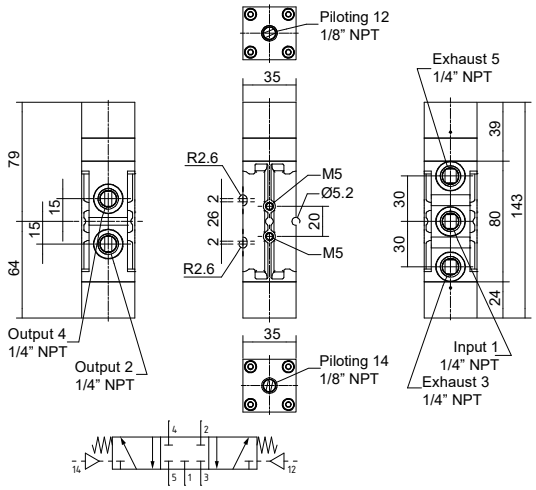


Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Ordering code	
SS145201111T	
T	TYPE
	L= Low temperature version
	H= High temperature version

Operational characteristics						
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Pilot connections	Weight (g)	Cv	kv
12	1000	1/4" NPT	1/8" NPT	820	1,02	15,15

Pneumatic-pneumatic closed centers valve

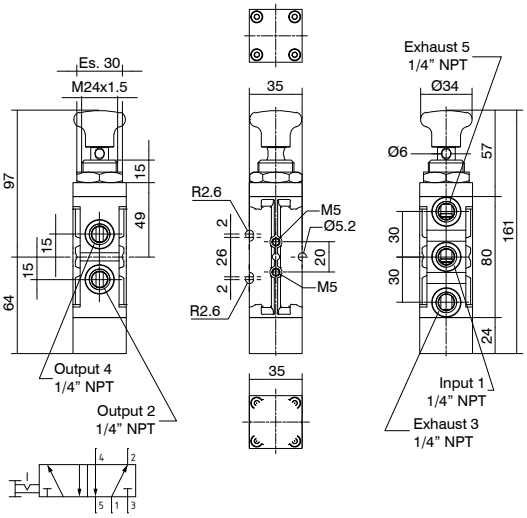


Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Ordering code	
SS145311111T	
T	TYPE
	L= Low temperature version
	H= High temperature version

Operational characteristics						
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Pilot connections	Weight (g)	Cv	kv
12	1000	1/4" NPT	1/8" NPT	931	1,02	15,15

2 position push-pull valve

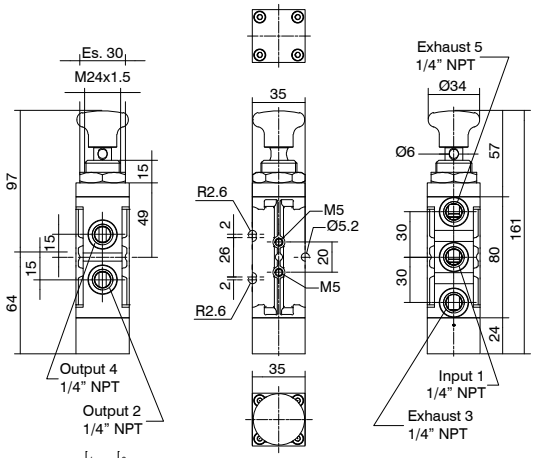


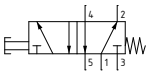
Operating force 55N.
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Ordering code
SS145200802T
TYPE
T = L= Low temperature version
H= High temperature version

Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	1000	1/4" NPT	770	1,02	15,15

Push button-spring valve



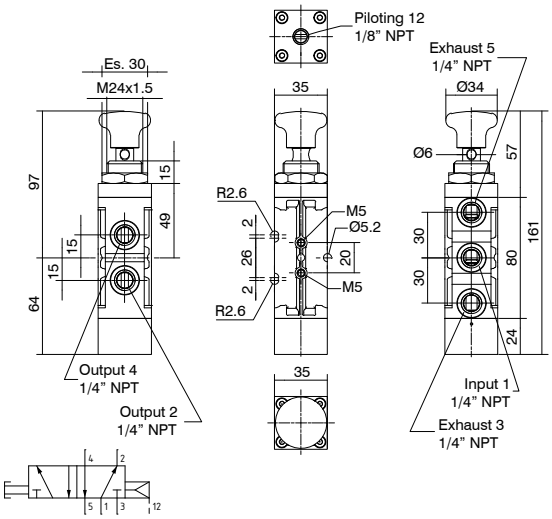


Operating force 90N
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Ordering code
SS145200801T
TYPE
T = L= Low temperature version
H= High temperature version

Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	1000	1/4" NPT	780	1,02	15,15

Push button-pneumatic return valve

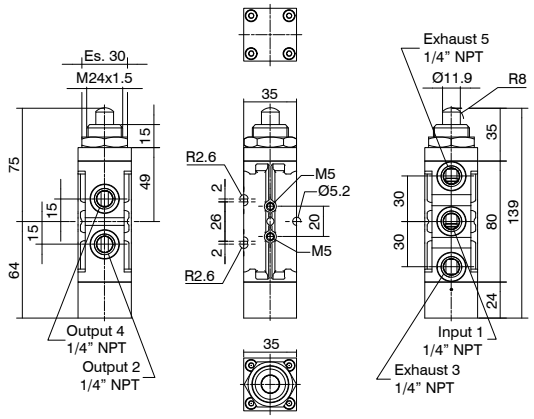


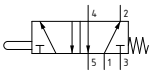
Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Ordering code
SS145200811T
TYPE
T = L= Low temperature version
H= High temperature version

Operational characteristics						
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Pilot connections	Weight (g)	Cv	kv
12	1000	1/4" NPT	1/8" NPT	780	1,02	15,15

Tappet-spring valve



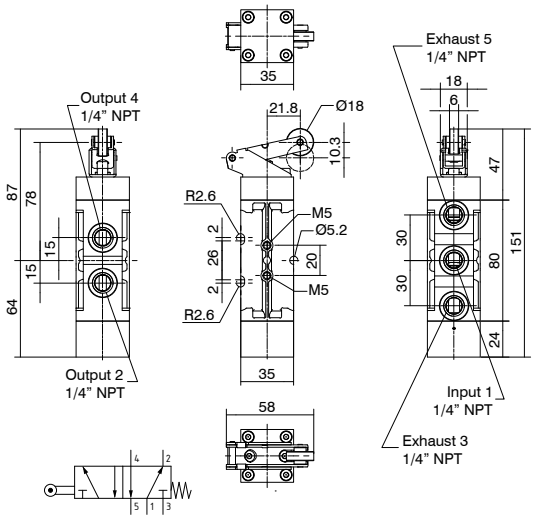


Operating force 90N
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Ordering code	
SS145200001T	
	TYPE
T	L= Low temperature version
	H= High temperature version

Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	1000	1/4" NPT	770	1,02	15,15

Roller lever-spring valve

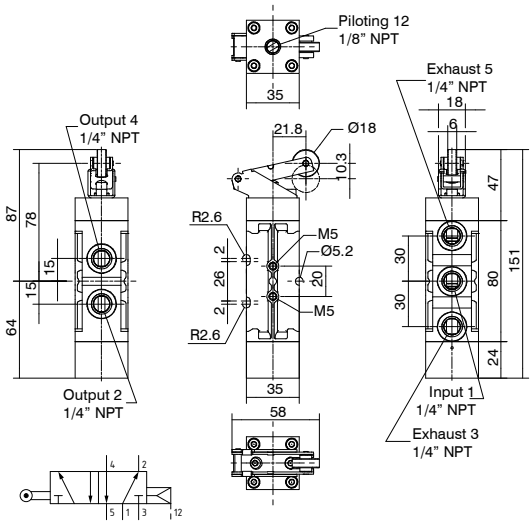


Operating force 90N
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Ordering code	
SS145200401T	
	TYPE
T	L= Low temperature version
	H= High temperature version

Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	1000	1/4" NPT	800	1,02	15,15

Roller lever-pneumatic valve

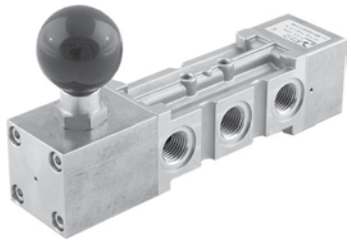


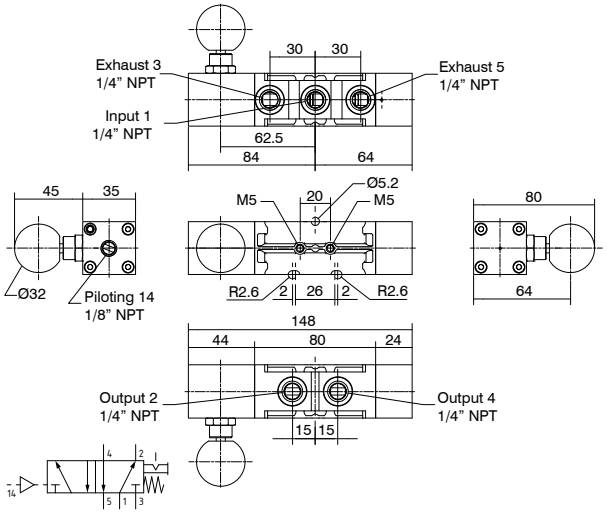
Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Ordering code	
SS145200411T	
	TYPE
T	L= Low temperature version
	H= High temperature version

Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	1000	1/4" NPT	800	1,02	15,15

Pneumatic valve with self-locking manual reset



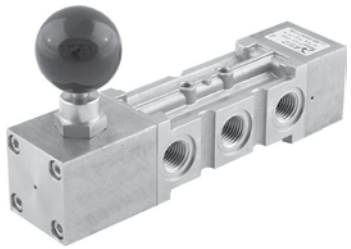


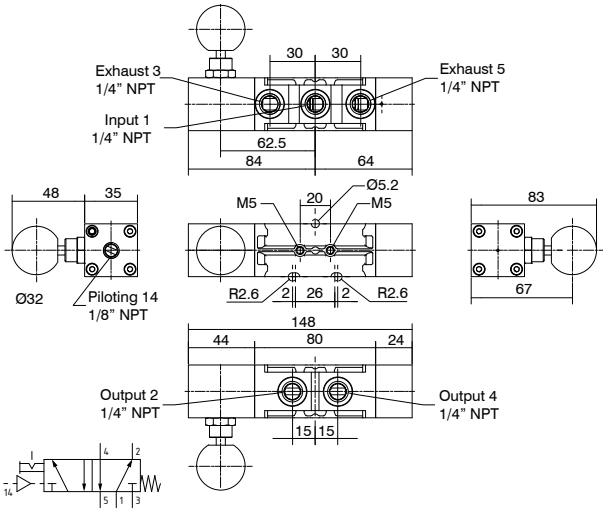
Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Ordering code
SS145201114T
TYPE
T = L= Low temperature version
H= High temperature version

Operational characteristics						
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Pilot connections	Weight (g)	Cv	kv
12	1000	1/4" NPT	1/8" NPT	1020	1,02	15,15

Pneumatic valve with self-locking manual reset inverted



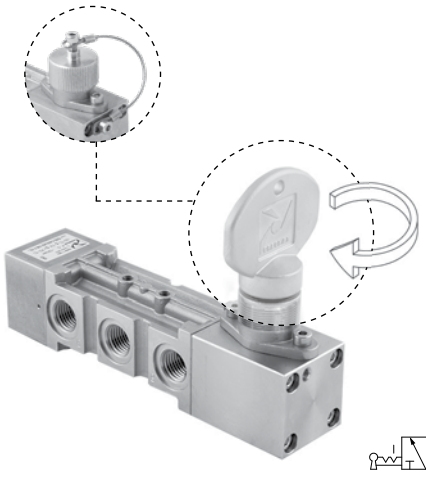


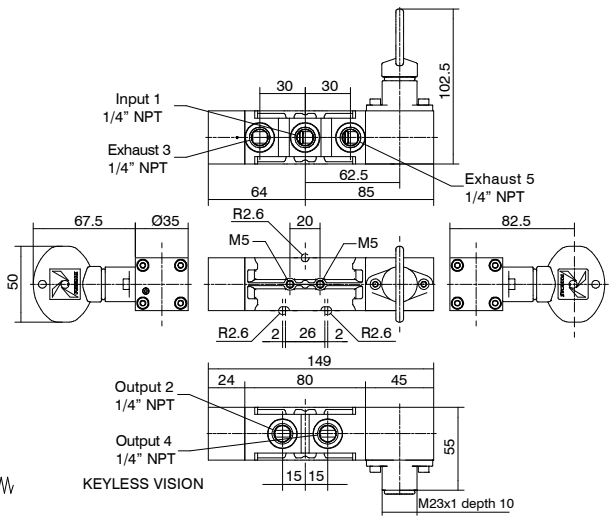
Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Ordering code
SS145201115T
TYPE
T = L= Low temperature version
H= High temperature version

Operational characteristics						
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Pilot connections	Weight (g)	Cv	kv
12	1000	1/4" NPT	1/8" NPT	1020	1,02	15,15

Key-spring valve stable



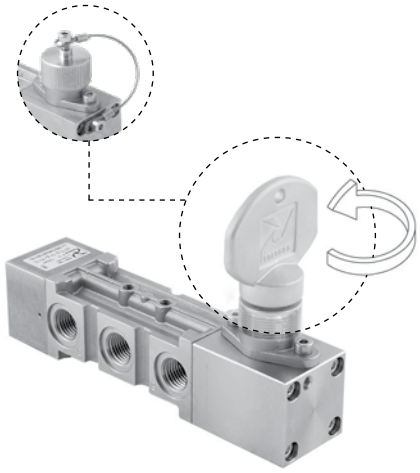


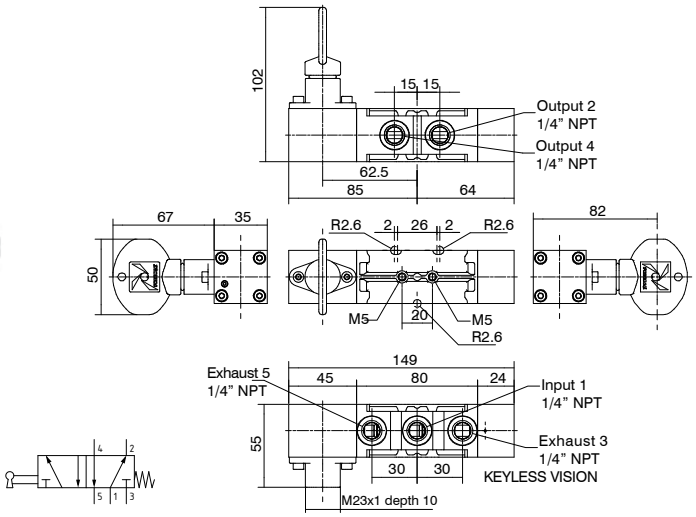
Available with key selector cap.

Ordering code
SS145201601T
TYPE
T = L= Low temperature version
H= High temperature version

Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	1000	1/4" NPT	1180	1,02	15,15

Key-spring valve instable



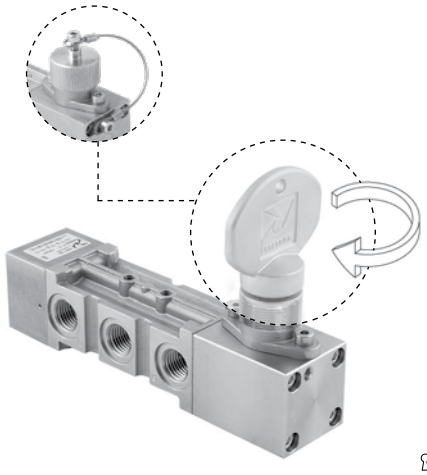


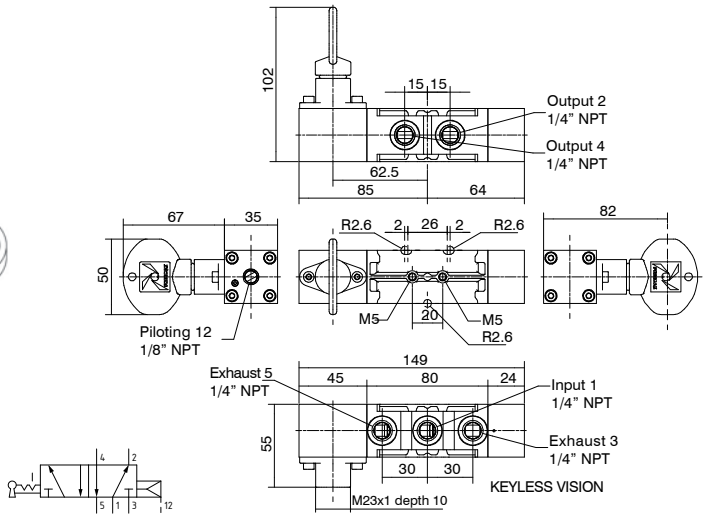
Available with key selector cap.

Ordering code	
SS145202601T	
T	TYPE
	L= Low temperature version
	H= High temperature version

Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	1000	1/4" NPT	1180	1,02	15,15

Pneumatic-key valve stable



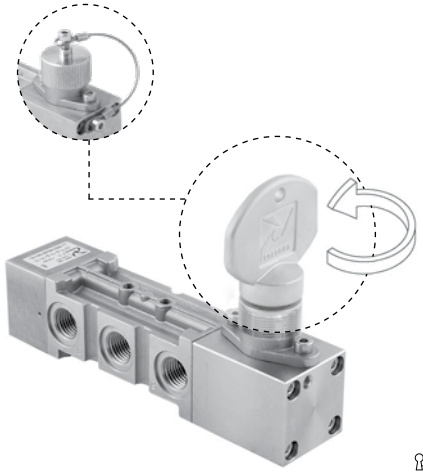


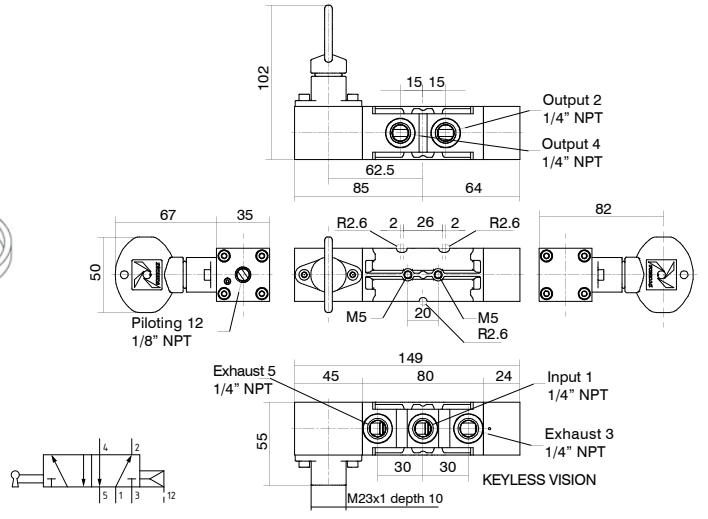
Available with key selector cap.

Ordering code	
SS145201611T	
T	TYPE
	L= Low temperature version
	H= High temperature version

Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	1000	1/4" NPT	1180	1,02	15,15

Pneumatic-key valve instable





Available with key selector cap.

Ordering code	
SS145202611T	
T	TYPE
	L= Low temperature version
	H= High temperature version

Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	1000	1/4" NPT	1180	1,02	15,15

Solenoid valves 1/4” NPT series Steel line

Stainless steel solenoid valves, complete with 30mm solenoid coil and CE marked have been engineered and developed to meet process automation and Oil & Gas severe service requirements, where material performances, product reliability and health and safety issues are critical elements. As a result, Pneumax products are perfectly suitable to work with sweet gas media and corrosive / aggressive gases.

All external and internal parts are AISI 316L stainless steel material in compliance with NACE standard MR0175/ISO 15156-1.

The range includes solenoid valves with 3 and 5 ways functions, complete with self feeding solenoids, designed according to the following configuration: solenoid-spring valve, solenoid-solenoid valve.

Pneumax solenoid valves have 1/4” NPT connections with 1000Nl/min maximum flowrate.
Pneumax solenoid valve utmost adaptability represent one of the main features to provide customized solution and module assembly solution, since both single mounting and integrated module design are available; thanks to distinctive Pneumax valve body design.

Construction characteristics

Body	AISI 316L stainless steel
Operators	AISI 316L stainless steel
Spool	AISI 316L stainless steel
Spring	AISI 316 stainless steel
Screws	AISI 316 stainless steel (A4-70 stainless steel)
Seals	FPM (Fluoroelastomer) NBR for low temperatures (**available on request**)

Operating range

Fluid	Filtered air. No lubrication needed, if applied it shall be continuous. Inert Gas. Sweet gas (natural).
Operating temperature	-10°C ... +130°C
Note: The suitable operating temperature is limited by the most restrictive component, which is the pilot, regardless of the type of seals used in the valve spool.	
Maximum operating pressure	10 bar

Electrical (Electropilot) construction characteristics

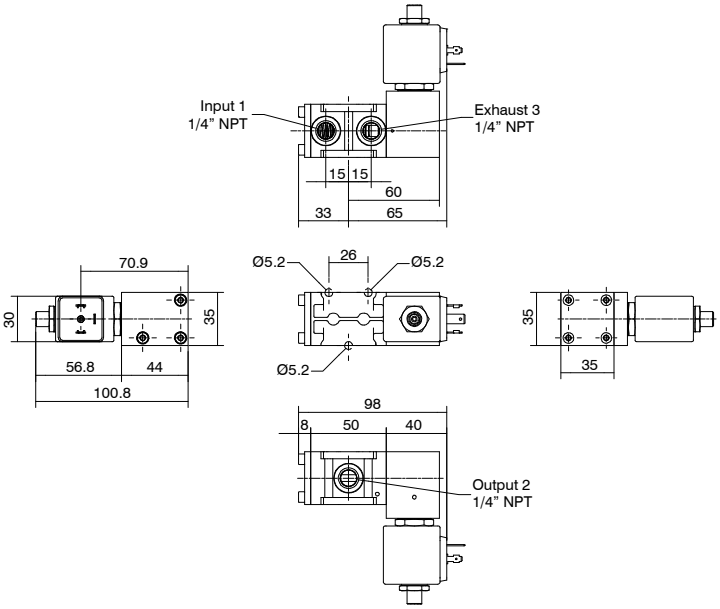
Cores	Ferromagnetic stainless steel
Guide tube	Stainless steel
Springs	Stainless steel
Seals	FPM (Fluoroelastomer) NBR (**available on request**)
Incorporation	PA reiforced fibreglass
Wire insulation	F (Class H **available on request**)
Nominal voltage	24 V DC 24, 110, 220/230 V AC
Power consumption DC	10W
Power consumption AC	15VA
Electrical connection	According to DIN43650 A
IP Rating	IP65
Tolerance on voltage supply	±10%
ED continuous service	100%

Certifications available:

Non ATEX marked product

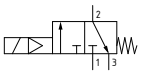
SIL: Suitable up to SIL 3

Solenoid-spring valve



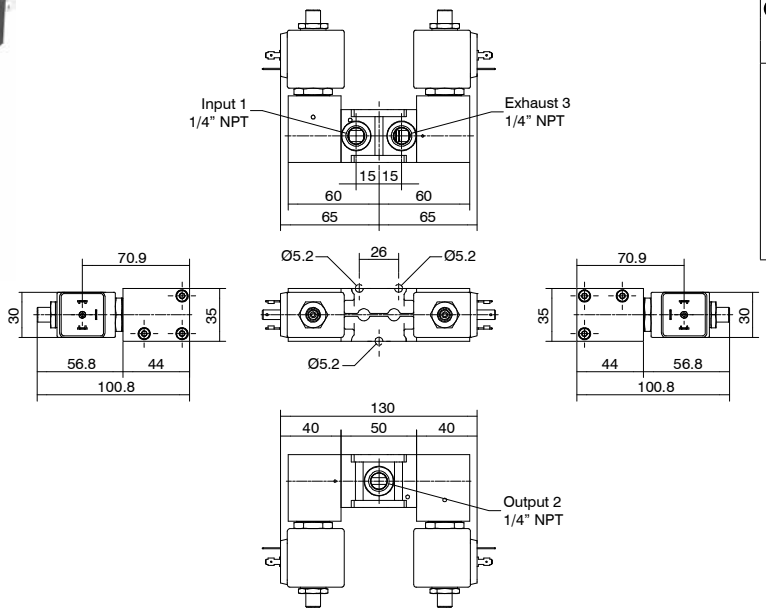
Ordering code	
SS1432C2Ⓣ01H	
Ⓣ	TENSION
	0= 12 V DC
	1= 24 V DC
	B= 24 V AC (50/60 Hz)
	E= 230 V AC (50/60 Hz)

Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



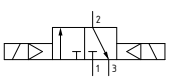
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	900	1,02	15,15

Solenoid-solenoid valve



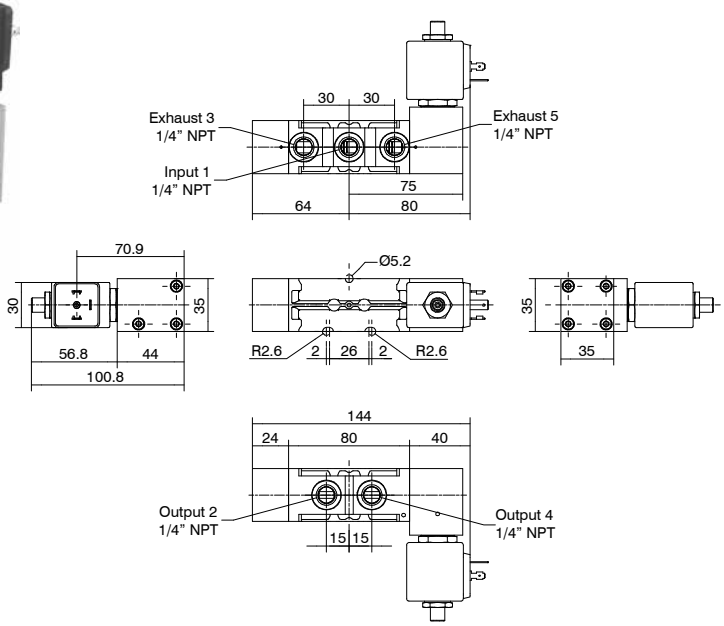
Ordering code	
SS1432C2Ⓣ2ⓉH	
Ⓣ	TENSION
	0= 12 V DC
	1= 24 V DC
	B= 24 V AC (50/60 Hz)
	E= 230 V AC (50/60 Hz)

Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



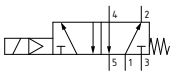
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	1400	1,02	15,15

Solenoid-spring valve



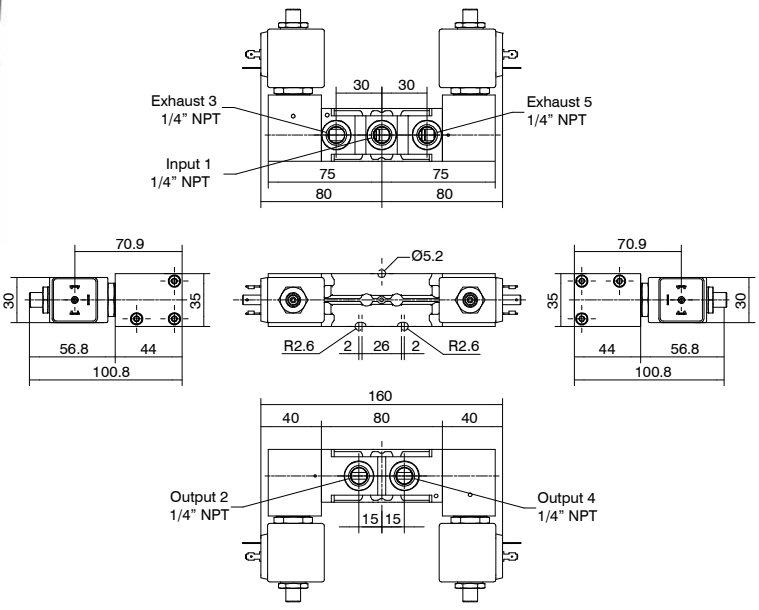
Ordering code	
SS145202T01H	
	TENSION
	0= 12 V DC
T	1= 24 V DC
	B= 24 V AC (50/60 Hz)
	E= 230 V AC (50/60 Hz)

Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



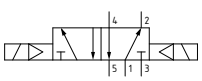
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	1200	1,02	15,15

Solenoid-solenoid valve



Ordering code	
SS145202T2TH	
	TENSION
	0= 12 V DC
T	1= 24 V DC
	B= 24 V AC (50/60 Hz)
	E= 230 V AC (50/60 Hz)

Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	1600	1,02	15,15

Solenoid valves 1/4” NPT series Steel line - For safe area with IP66 stainless steel housing

Stainless steel solenoid valves, complete with IP66 rated solenoid coil in a stainless steel housing and CE marked have been engineered and developed to meet process automation and Oil & Gas severe service requirements, where material performances, product reliability and health and safety issues are critical elements. As a result, Pneumax products are perfectly suitable to work with sweet gas media and corrosive / aggressive gases.

All external and internal parts are AISI 316L stainless steel material in compliance with NACE standard MR0175/ISO 15156-1.

The range includes solenoid valves with 3 and 5 ways functions, complete with self feeding solenoids, designed according to the following configuration: solenoid-spring valve, solenoid-solenoid valve, solenoid valve with self-locking manual reset, solenoid valve with self-locking manual reset inverted.

Pneumax solenoid valves have 1/4” NPT connections with 1000Nl/min maximum flow rate.
Pneumax solenoid valve utmost adaptability represent one of the main features to provide customized solution and module assembly solution, since both single mounting and integrated module design are available; thanks to distinctive Pneumax valve body design.

Construction characteristics

Body	AISI 316L stainless steel
Operators	AISI 316L stainless steel
Spool	AISI 316L stainless steel
Spring	AISI 316 stainless steel
Screws	AISI 316 stainless steel (A4-70 stainless steel)
Seals	NBR for low temperatures FPM (Fluoroelastomer) (**available on request**)

Operating range

Fluid	Filtered air. No lubrication needed, if applied it shall be continuous. Inert Gas. Sweet gas (natural).
Operating temperature	-20°C ... +70°C
Note: The suitable operating temperature is limited by the most restrictive component, which is the pilot, regardless of the type of seals used in the valve spool.	
Maximum operating pressure	10 bar

Electrical (Electropilot) construction characteristics

Housing	304 stainless steel with epoxy paint
Armour / Cores	Ferromagnetic stainless steel
Springs	Stainless steel
Seals	FPM (Fluoroelastomer)
Incorporation	PBT 30% glass load
Wire insulation	H
Nominal voltage	24 V DC 24, 110, 220 V AC
Power consumption DC	2,4W
Power consumption AC	10VA (Inrush), 5VA (Running)
Connection for cable entry	M20x1.5 (1/2” NPT **available on request**)
Electrical connection	Screw terminals 2 Poles 2.5 mm
IP Rating	IP66
Tolerance on voltage supply	±10%
ED continuous service	100%

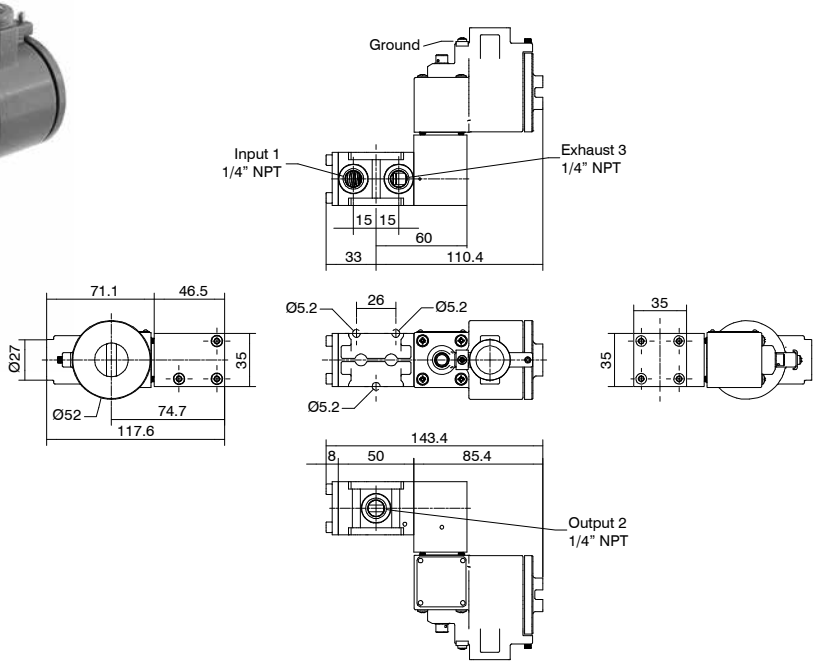
Certifications available:

Non ATEX marked product

SIL Suitable up to SIL 3

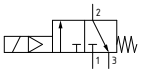
EAC

Solenoid-spring valve



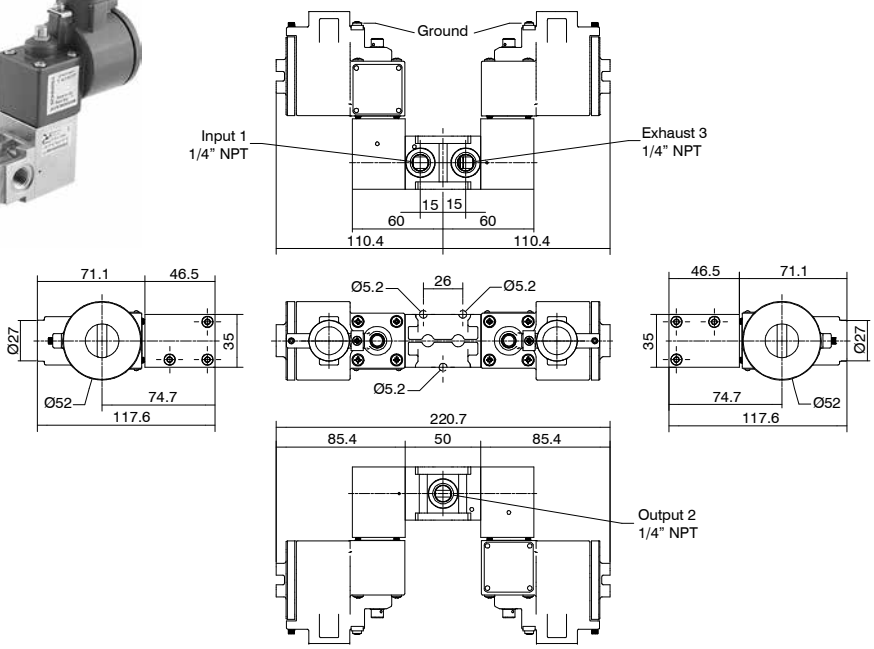
Ordering code	
SS1432CA(T)01L	
	TENSION
	1= 24 V DC
(T)	2= 24 V AC (50/60 Hz)
	3= 110 V AC (50/60 Hz)
	4= 220 V AC (50/60 Hz)

Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



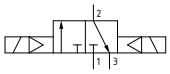
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	1500	1,02	15,15

Solenoid-solenoid valve



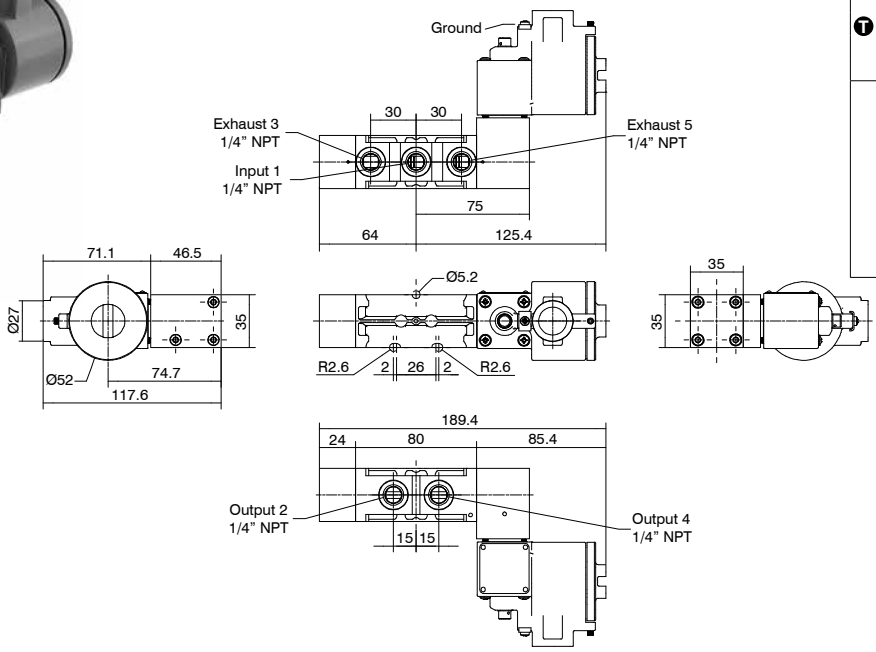
Ordering code	
SS1432CA(T)A(T)L	
	TENSION
	1= 24 V DC
(T)	2= 24 V AC (50/60 Hz)
	3= 110 V AC (50/60 Hz)
	4= 220 V AC (50/60 Hz)

Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



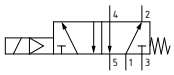
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	2600	1,02	15,15

Solenoid-spring valve



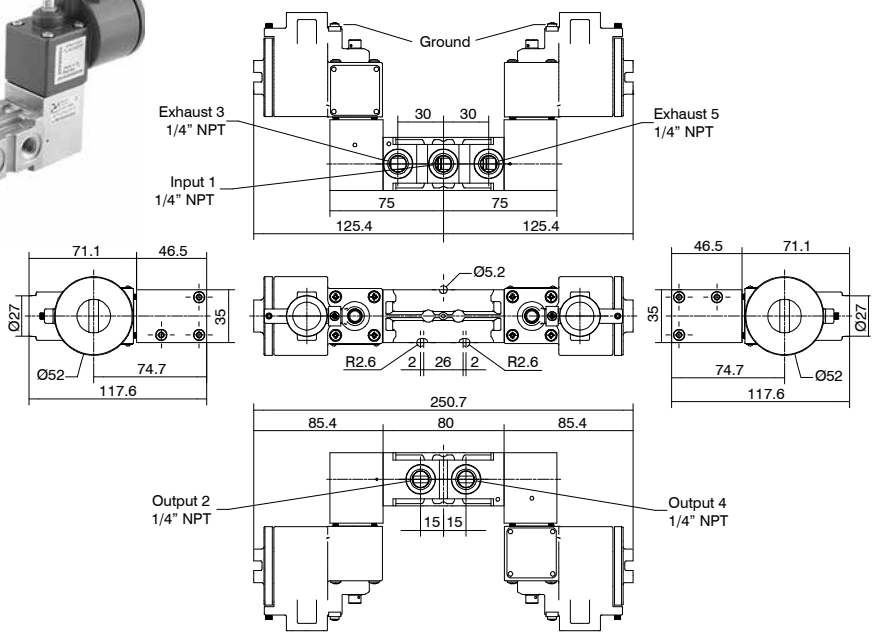
Ordering code	
SS14520AⓉ01L	
Ⓣ	TENSION
	1= 24 V DC
	2= 24 V AC (50/60 Hz)
	3= 110 V AC (50/60 Hz)
	4= 220 V AC (50/60 Hz)

Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



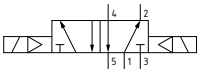
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	1800	1,02	15,15

Solenoid-solenoid valve



Ordering code	
SS14520AⓉAⓉL	
Ⓣ	TENSION
	1= 24 V DC
	2= 24 V AC (50/60 Hz)
	3= 110 V AC (50/60 Hz)
	4= 220 V AC (50/60 Hz)

Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

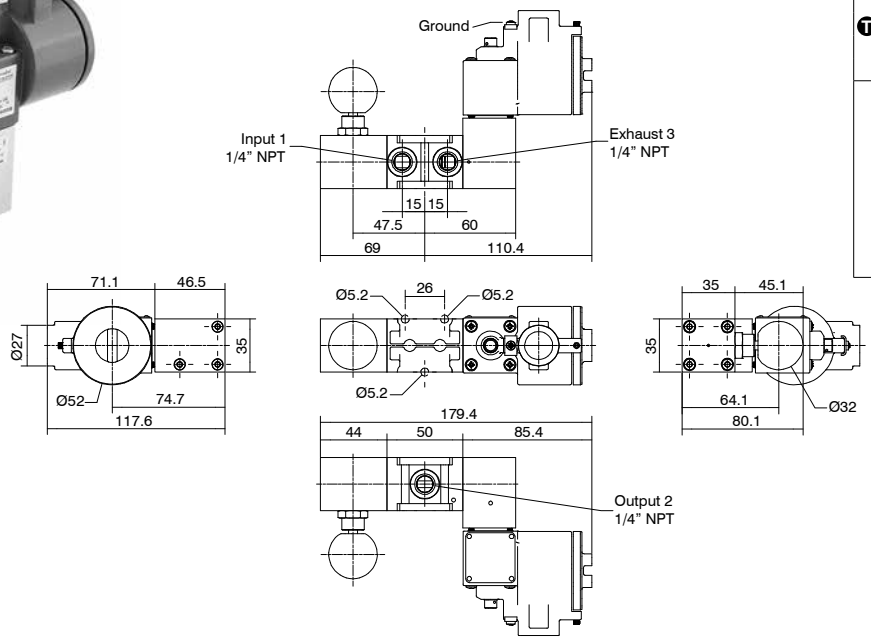


Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	2750	1,02	15,15

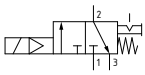
Solenoid valve with self-locking manual reset

Ordering code
SS1432CA(T)14L

	TENSION
	1= 24 V DC
(T)	2= 24 V AC (50/60 Hz)
	3= 110 V AC (50/60 Hz)
	4= 220 V AC (50/60 Hz)



Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

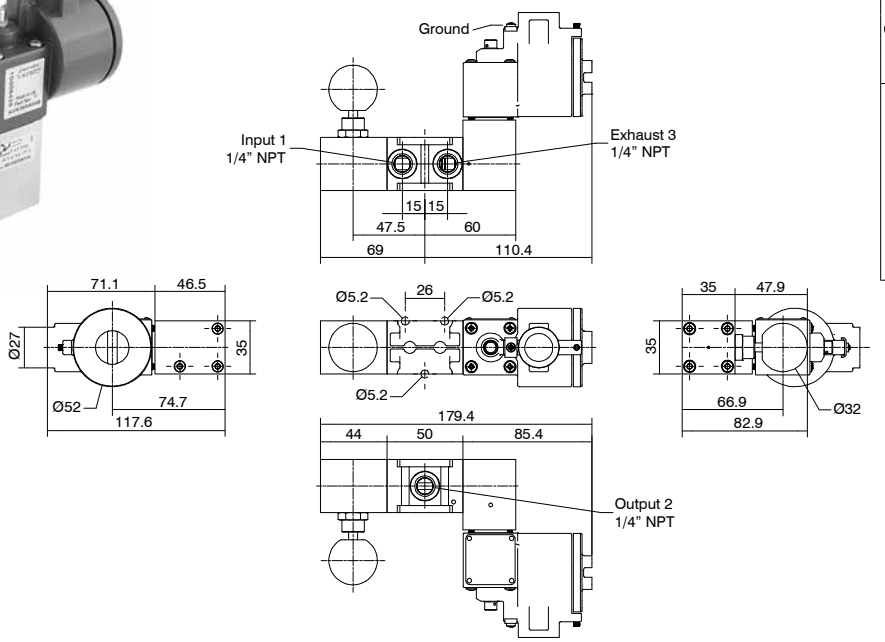


Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	1850	1,02	15,15

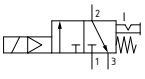
Solenoid valve with self-locking manual reset inverted

Ordering code
SS1432CA(T)15L

	TENSION
	1= 24 V DC
(T)	2= 24 V AC (50/60 Hz)
	3= 110 V AC (50/60 Hz)
	4= 220 V AC (50/60 Hz)



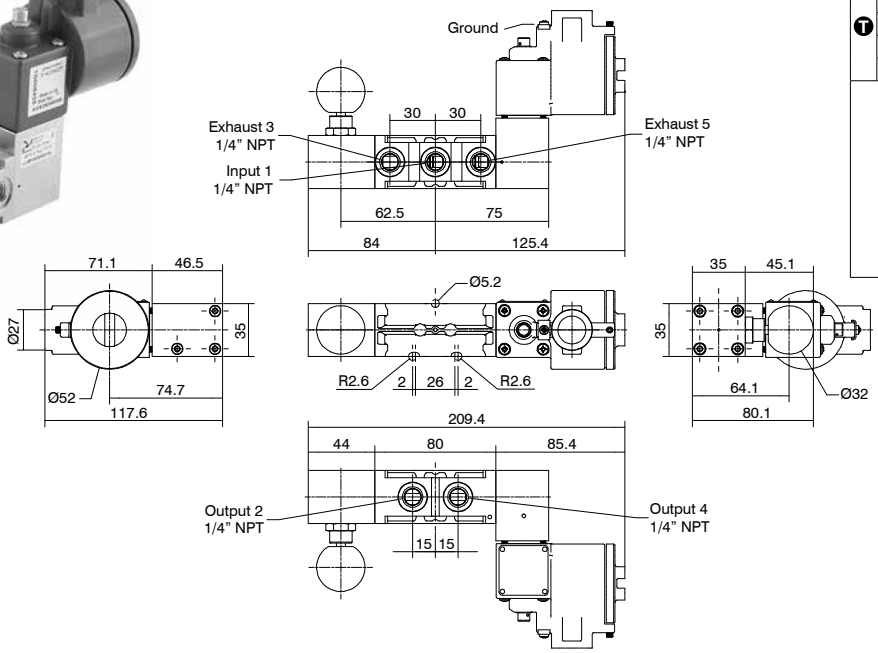
Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



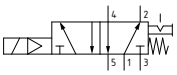
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	1850	1,02	15,15

Solenoid valve with self-locking manual reset

Ordering code	
SS14520AT14L	
T	TENSION
	1= 24 V DC
	2= 24 V AC (50/60 Hz)
	3= 110 V AC (50/60 Hz)
	4= 220 V AC (50/60 Hz)



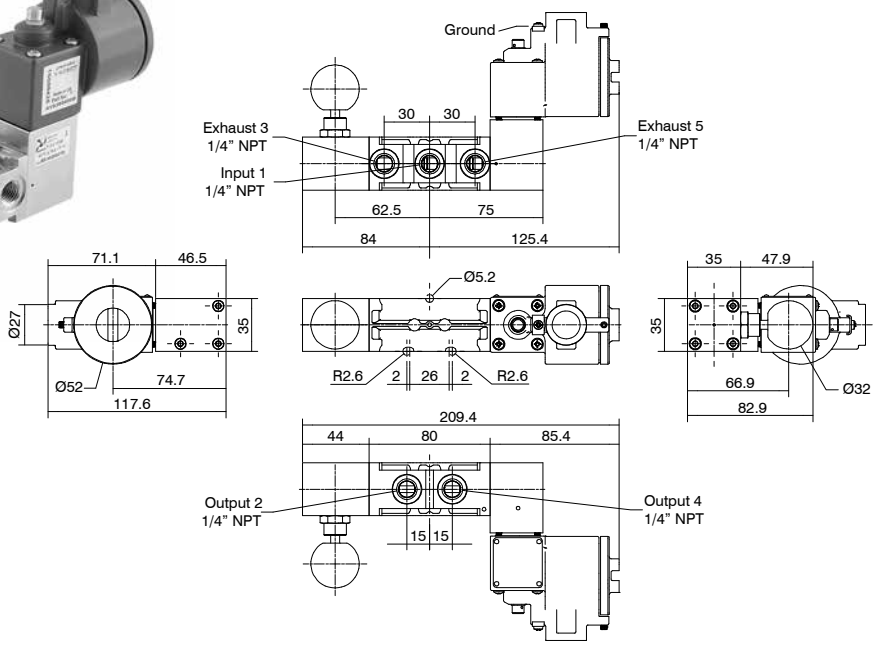
Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



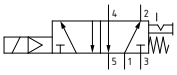
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	2000	1,02	15,15

Solenoid valve with self-locking manual reset inverted

Ordering code	
SS14520AT15L	
T	TENSION
	1= 24 V DC
	2= 24 V AC (50/60 Hz)
	3= 110 V AC (50/60 Hz)
	4= 220 V AC (50/60 Hz)



Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	2000	1,02	15,15

Solenoid valves 1/4" NPT series Steel line - IP66 Exd Explosion protection

Stainless steel solenoid valves, complete with IP66 Exd Explosion protection rated solenoid coil in a stainless steel housing and CE marked have been engineered and developed to meet process automation and Oil & Gas severe service requirements, where material performances, product reliability and health and safety issues are critical elements. As a result, Pneumax products are perfectly suitable to work with sweet gas media and corrosive / aggressive gases.

All external and internal parts are AISI 316L stainless steel material in compliance with NACE standard MR0175/ISO 15156-1.

The range includes solenoid valves with 3 and 5 ways functions, complete with self feeding solenoids, designed according to the following configuration: solenoid-spring valve, solenoid-solenoid valve, solenoid valve with self-locking manual reset, solenoid valve with self-locking manual reset inverted.

Pneumax solenoid valves have 1/4" NPT connections with 1000Nl/min maximum flow rate.
Pneumax solenoid valve utmost adaptability represent one of the main features to provide customized solution and module assembly solution, since both single mounting and integrated module design are available; thanks to distinctive Pneumax valve body design.

Construction characteristics

Body	AISI 316L stainless steel
Operators	AISI 316L stainless steel
Spool	AISI 316L stainless steel
Spring	AISI 316 stainless steel
Screws	AISI 316 stainless steel (A4-70 stainless steel)
Seals	NBR for low temperatures FPM (Fluoroelastomer) (**available on request**)

Operating range

Fluid	Filtered air. No lubrication needed, if applied it shall be continuous. Inert Gas. Sweet gas (natural).
Operating temperature for DC version	-50°C ... +70°C
Operating temperature for AC version	-50°C ... +55°C
Maximum operating pressure	10 bar

Electrical (Electropilot) construction characteristics

Housing	304 stainless steel with epoxy paint
Armour / Cores	Ferromagnetic stainless steel
Springs	Stainless steel
Seals	FPM (Fluoroelastomer)
Incorporation	PBT 30% glass load
Wire insulation	H
Nominal voltage	24 V DC 24, 110, 220/230 V AC
Power consumption DC	3W
Power consumption AC	10VA (Inrush), 5VA (Running)
Connection for cable entry	M20x1.5 (1/2" NPT **available on request**)
Electrical connection	Screw terminals 2 Poles 2.5 mm
IP Rating	IP66
Tolerance on voltage supply	±10%
ED continuous service	100%

Certifications available:

ATEX CE Ex II 2 GD c IIC

Ex : CE Ex **II 2G Ex h IIC Gb**
CE Ex **II 2D Ex h IIIC Db**

IECEx : International certification for explosive atmospheres

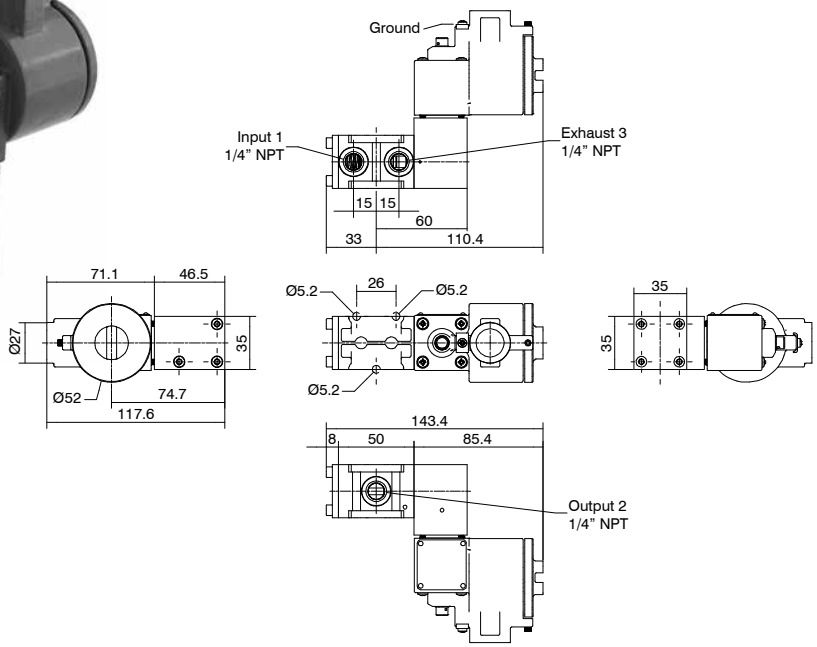
SIL : Suitable up to SIL 3

EAC Ex : CU - TR 012

Ex NEPSI : Nepsy approval - China

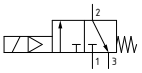
ATEX, SIL and EAC Ex: refer to products in the various sections to the catalogues.
IECEx and NEPSI: refer to Pneumatrol pilots installed upon each valve.

Solenoid-spring valve



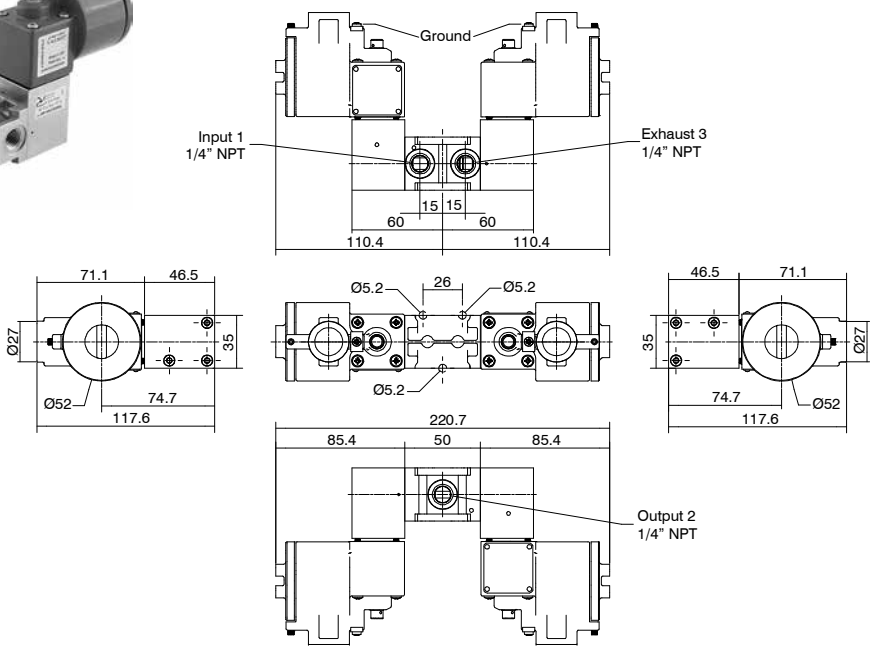
Ordering code	
SS1432CBⓉ01L	
Ⓣ	TENSION
	1= 24 V DC
	2= 24 V AC (50/60 Hz)
	3= 110 V AC (50/60 Hz)
	4= 220 V AC (50/60 Hz)

Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



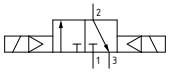
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	1500	1,02	15,15

Solenoid-solenoid valve



Ordering code	
SS1432CBⓉBⓉL	
Ⓣ	TENSION
	1= 24 V DC
	2= 24 V AC (50/60 Hz)
	3= 110 V AC (50/60 Hz)
	4= 220 V AC (50/60 Hz)

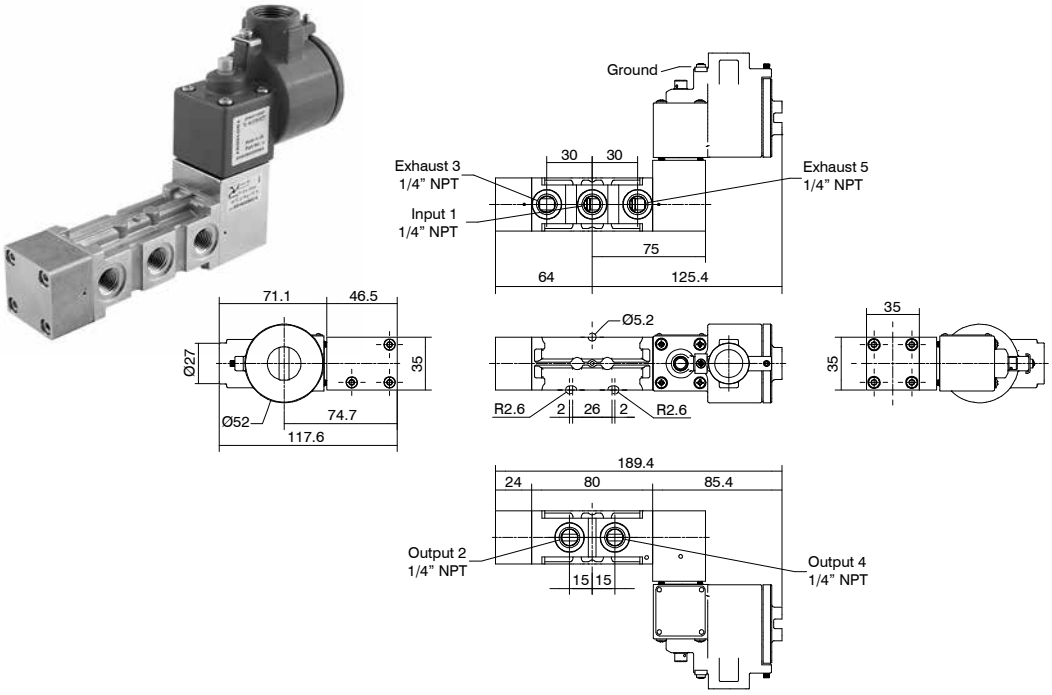
Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



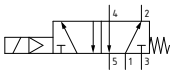
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	2600	1,02	15,15

Solenoid-spring valve

Ordering code
SS14520BT01L
TENSION
1= 24 V DC
T 2= 24 V AC (50/60 Hz)
3= 110 V AC (50/60 Hz)
4= 220 V AC (50/60 Hz)



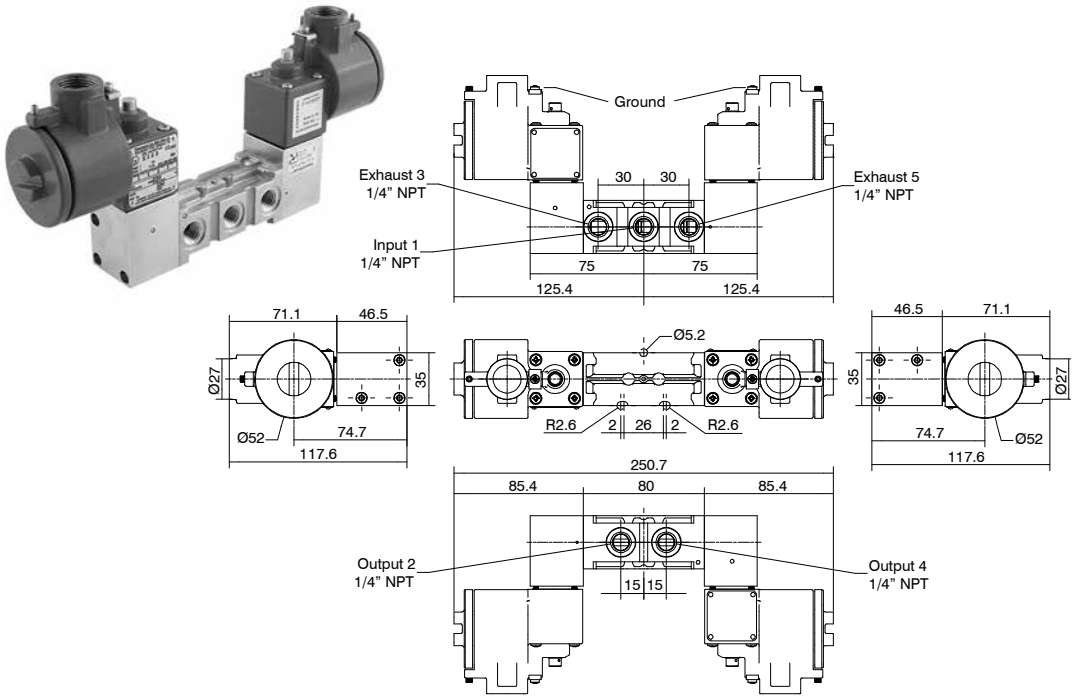
Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



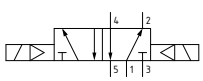
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	1800	1,02	15,15

Solenoid-solenoid valve

Ordering code
SS14520BTBTL
TENSION
1= 24 V DC
T 2= 24 V AC (50/60 Hz)
3= 110 V AC (50/60 Hz)
4= 220 V AC (50/60 Hz)

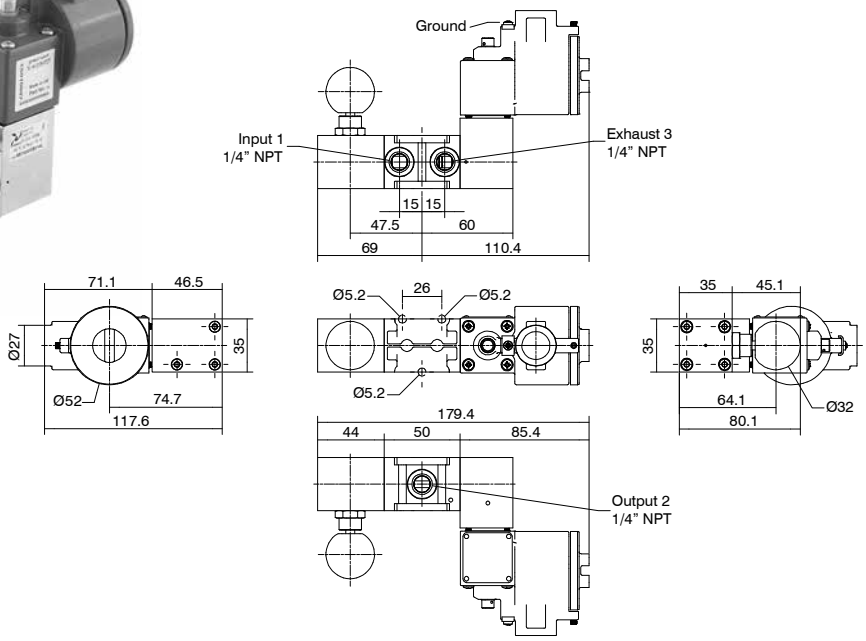


Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



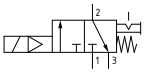
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	2750	1,02	15,15

Solenoid valve with self-locking manual reset



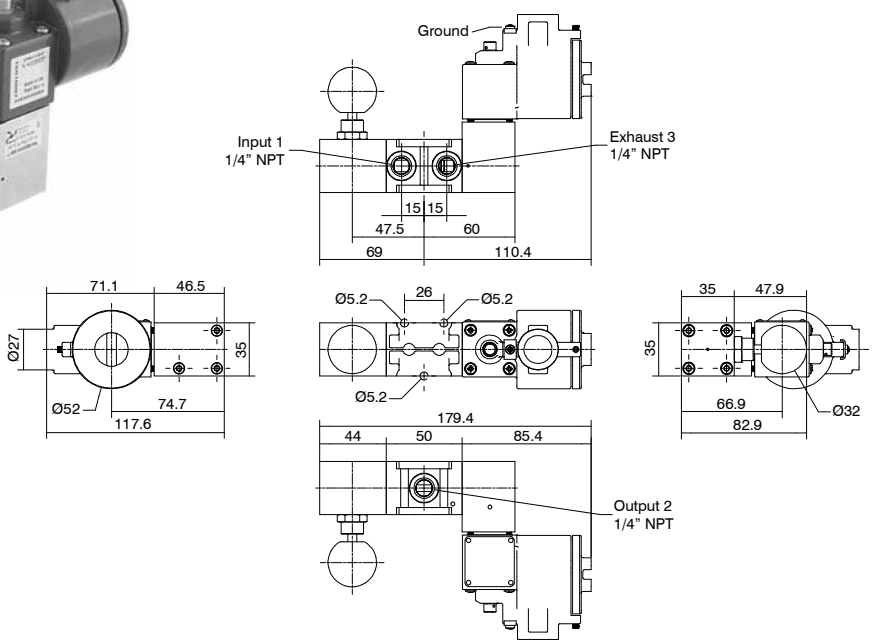
Ordering code	
SS1432CBT14L	
T	TENSION
	1= 24 V DC
	2= 24 V AC (50/60 Hz)
	3= 110 V AC (50/60 Hz)
	4= 220 V AC (50/60 Hz)

Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



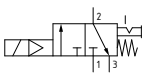
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	1850	1,02	15,15

Solenoid valve with self-locking manual reset inverted



Ordering code	
SS1432CBT15L	
T	TENSION
	1= 24 V DC
	2= 24 V AC (50/60 Hz)
	3= 110 V AC (50/60 Hz)
	4= 220 V AC (50/60 Hz)

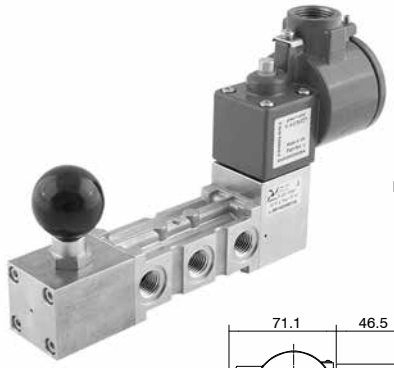
Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

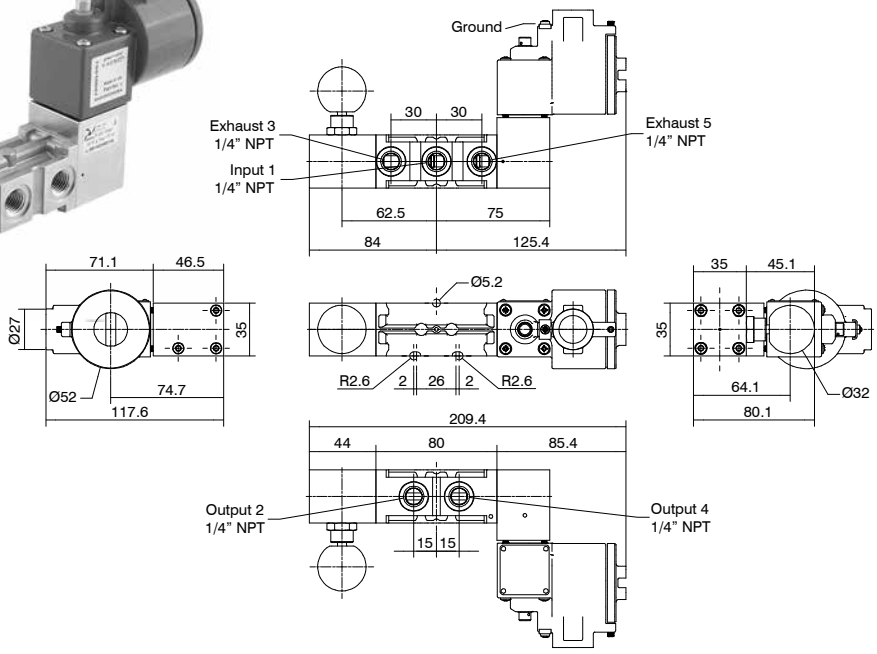


Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	1850	1,02	15,15

PROCESS AUTOMATION TECHNOLOGY

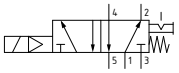
Solenoid valve with self-locking manual reset





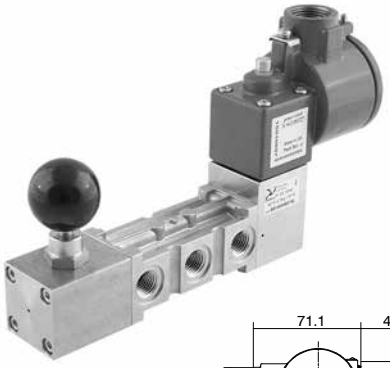
Ordering code	
SS14520BT14L	
	TENSION
	1= 24 V DC
T	2= 24 V AC (50/60 Hz)
	3= 110 V AC (50/60 Hz)
	4= 220 V AC (50/60 Hz)

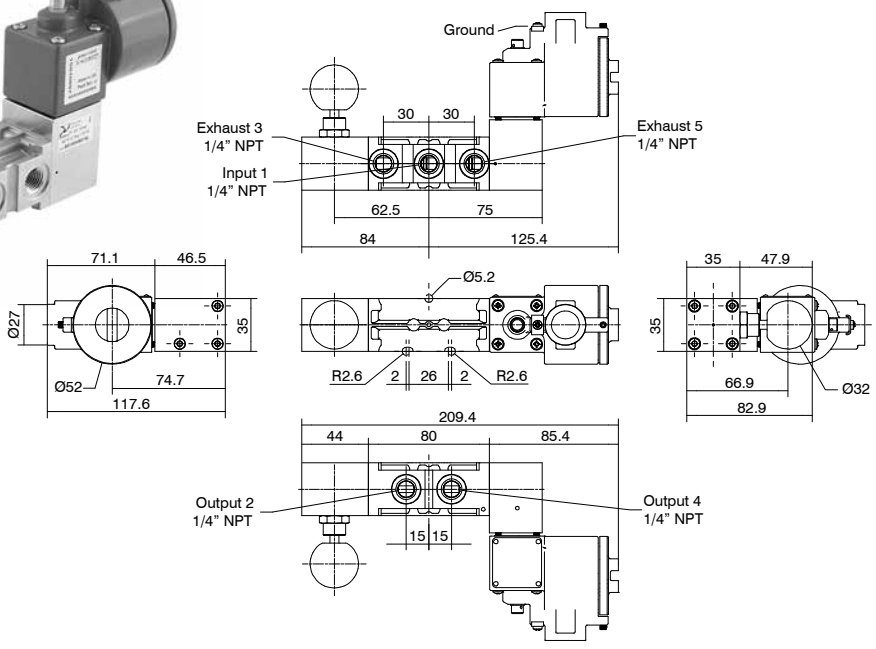
Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	2000	1,02	15,15

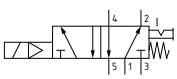
Solenoid valve with self-locking manual reset inverted





Ordering code	
SS14520BT15L	
	TENSION
	1= 24 V DC
T	2= 24 V AC (50/60 Hz)
	3= 110 V AC (50/60 Hz)
	4= 220 V AC (50/60 Hz)

Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	2000	1,02	15,15

Solenoid valves 1/4" NPT series Steel line - Intrinsically safe Exia

Stainless steel solenoid valves, complete with intrinsically safe Exia rated solenoid coil in and CE marked have been engineered and developed to meet process automation and Oil & Gas severe service requirements, where material performances, product reliability and health and safety issues are critical elements. As a result, Pneumax products are perfectly suitable to work with sweet gas media and corrosive / aggressive gases.

All external and internal parts are AISI 316L stainless steel material in compliance with NACE standard MR0175/ISO 15156-1.

The range includes solenoid valves with 3 and 5 ways functions, complete with self feeding solenoids, designed according to the following configuration: solenoid-spring valve, solenoid-solenoid valve, solenoid valve with self-locking manual reset, solenoid valve with self-locking manual reset inverted.

Pneumax solenoid valves have 1/4" NPT connections with 1000Nl/min maximum flow rate.
Pneumax solenoid valve utmost adaptability represent one of the main features to provide customized solution and module assembly solution, since both single mounting and integrated module design are available; thanks to distinctive Pneumax valve body design.

Construction characteristics

Body	AISI 316L stainless steel
Operators	AISI 316L stainless steel
Spool	AISI 316L stainless steel
Spring	AISI 316 stainless steel
Screws	AISI 316 stainless steel (A4-70 stainless steel)
Seals	NBR for low temperatures FPM (Fluoroelastomer) (**available on request**)

Operating range

Fluid	Filtered air. No lubrication needed, if applied it shall be continuous. Inert Gas. Sweet gas (natural).
Operating temperature	-40°C ... +65°C
Note: The suitable operating temperature is limited by the most restrictive component, which is the pilot, regardless of the type of seals used in the valve spool.	
Maximum operating pressure	10 bar

Electrical (Electropilot) construction characteristics

Housing	Zinc alloy with epoxy paint
Armour / Cores	Ferromagnetic stainless steel
Springs	Stainless steel
Seals	FPM (Fluoroelastomer)
Incorporation	PBT 30% glass load
Wire insulation	H
Guide tube	Stainless steel
Resistance	370 Ohms
Nominal voltage	24 V DC
Power consumption DC	0,4 W (Running)
Connection for cable entry	M20x1.5
Electrical connection	Screw terminals 2 Poles 2.5 mm
IP Rating	IP65
Tolerance on voltage supply	±10%
ED continuous service	100%

Electrical specifications for intrinsically safe

Umax: in	31 V DC
Imax:	0,67 A
Wmax: in	2,98 W

Certifications available:

ATEX CE Ex II 2 GD c IIC

Ex : **CE Ex II 2G Ex h IIC Gb**
CE Ex II 2D Ex h IIIC Db

IECEx : International certification for explosive atmospheres

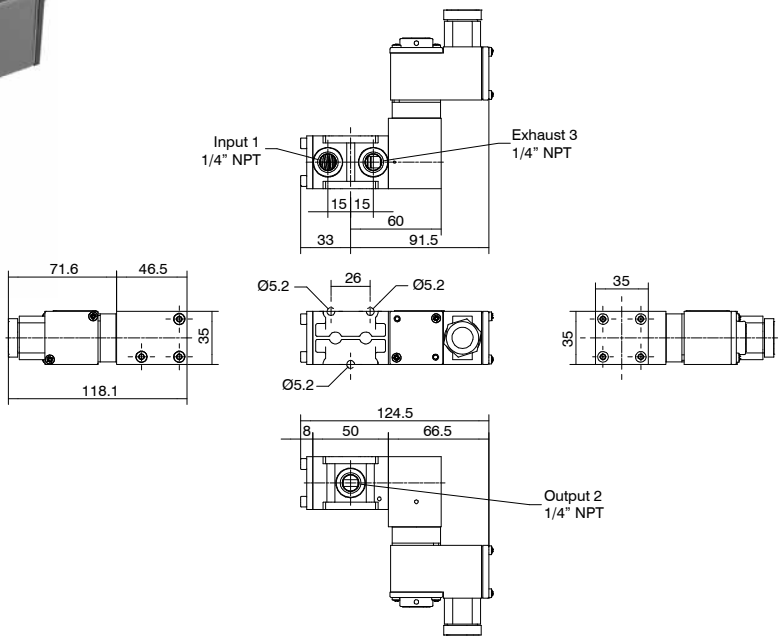
SIL : Suitable up to SIL 3

EAC Ex : CU - TR 012

FM APPROVED : UL / CSA factory mutual approval

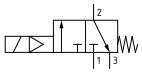
ATEX, SIL and EAC Ex: refer to products in the various sections to the catalogues.
IECEx and FM: refer to Pneumatrol pilots installed upon each valve.

Solenoid-spring valve



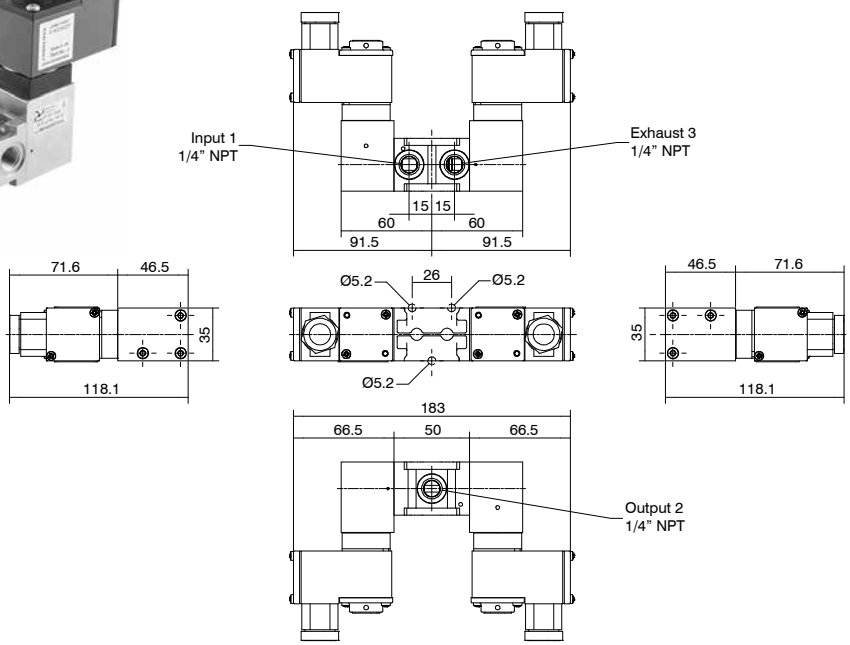
Ordering code
SS1432CCⓉ01L
Ⓣ TENSION 1= 24 V DC 33 mA

Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



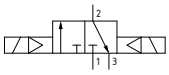
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	1200	1,02	15,15

Solenoid-solenoid valve



Ordering code
SS1432CCⓉCⓉL
Ⓣ TENSION 1= 24 V DC 33 mA

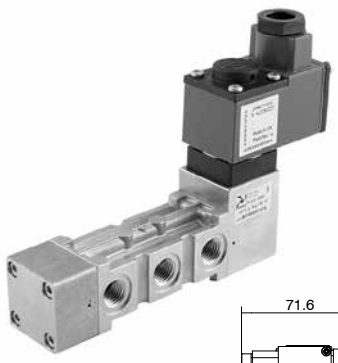
Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

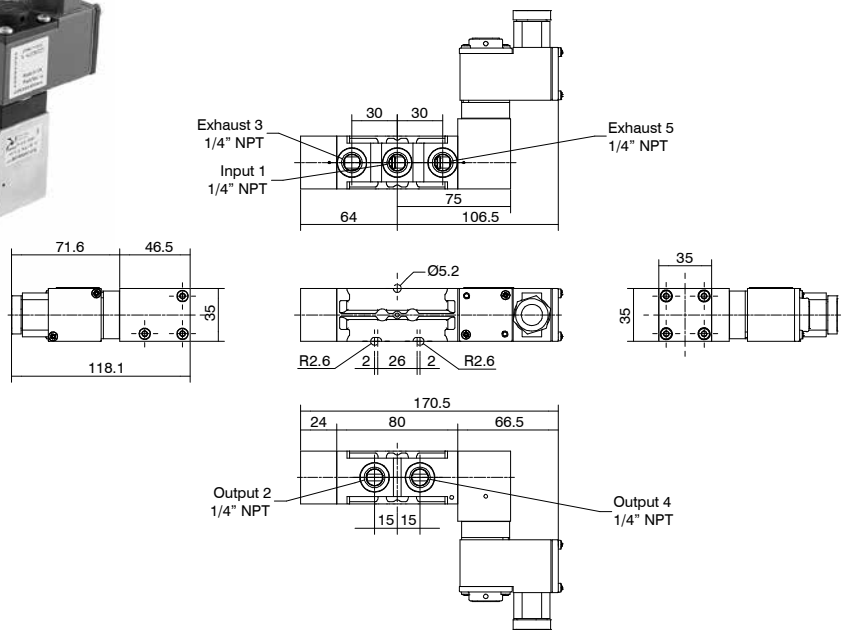


Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	2300	1,02	15,15

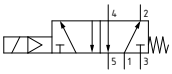
Solenoid-spring valve

Ordering code
SS14520CT01L
T TENSION
1 = 24 V DC 33 mA





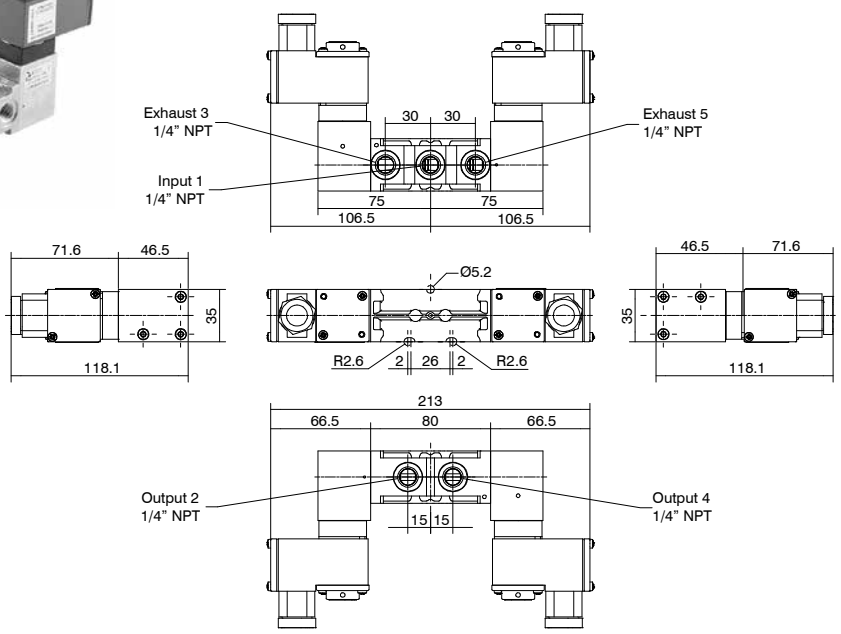
Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



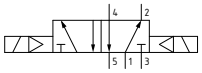
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	1500	1,02	15,15

Solenoid-solenoid valve

Ordering code
SS14520CTCTL
T TENSION
1 = 24 V DC 33 mA



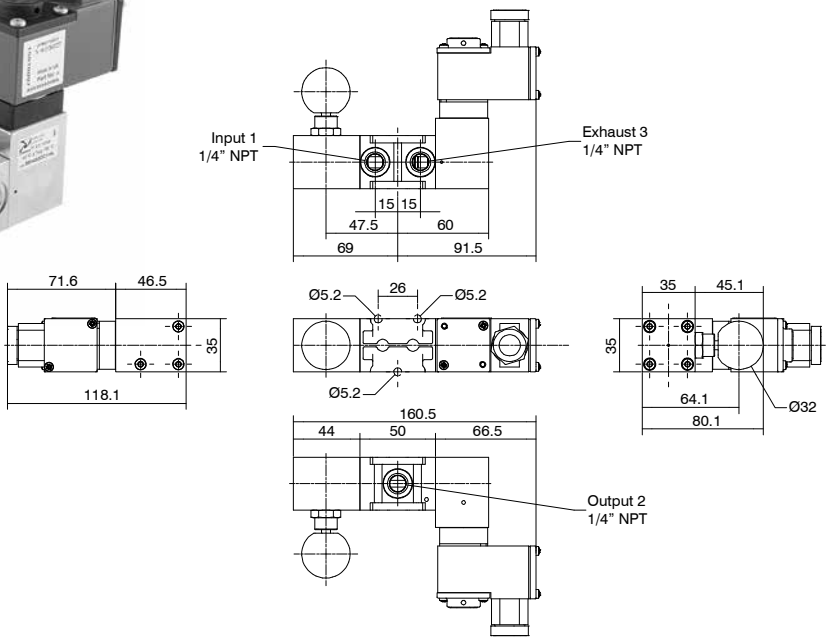
Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	2150	1,02	15,15

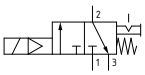
PROCESS AUTOMATION TECHNOLOGY

Solenoid valve with self-locking manual reset



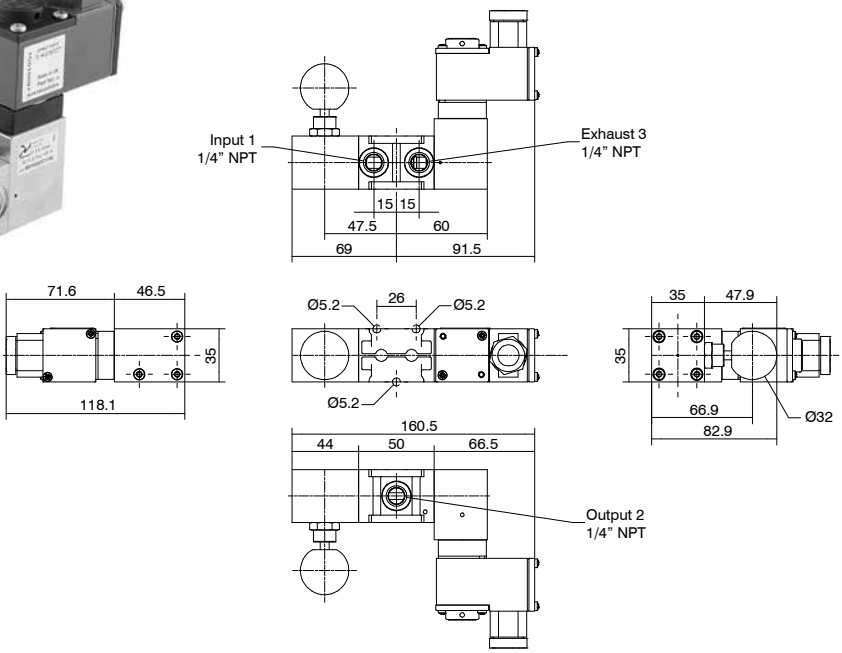
Ordering code
SS1432CC(T)14L
(T) TENSION
1= 24 V DC 33 mA

Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



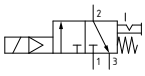
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	1550	1,02	15,15

Solenoid valve with self-locking manual reset inverted



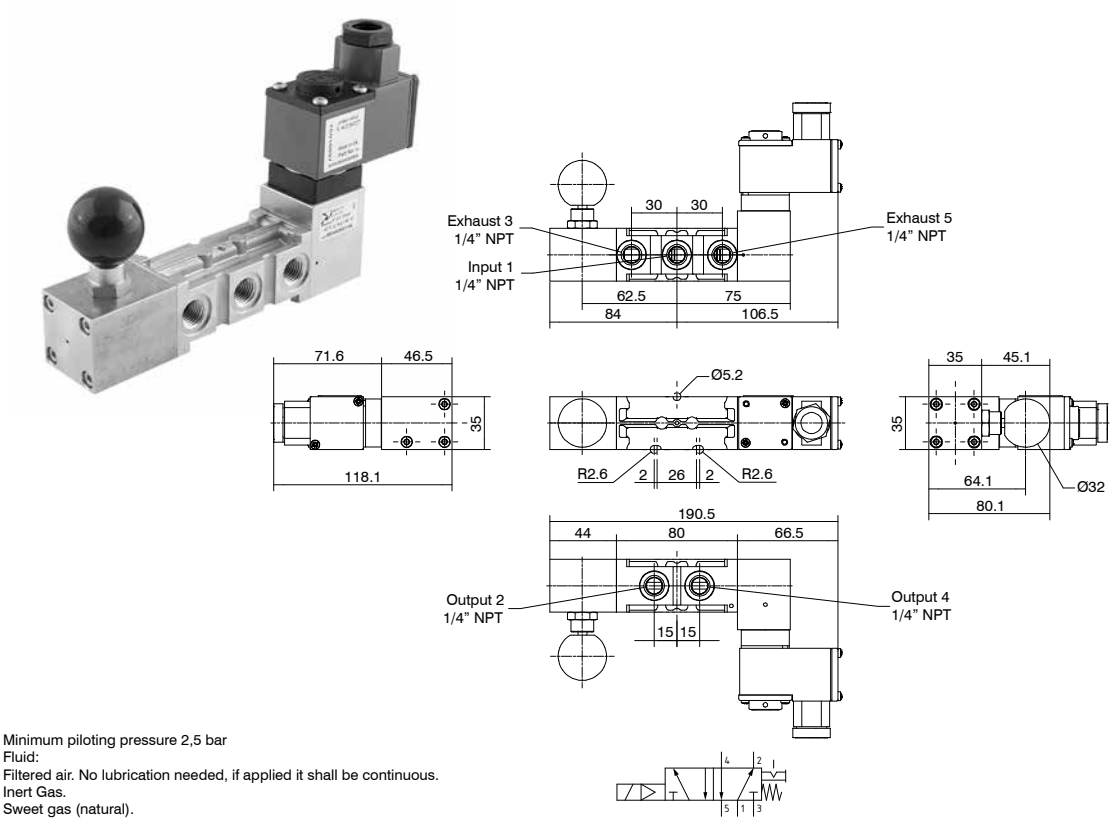
Ordering code
SS1432CC(T)15L
(T) TENSION
1= 24 V DC 33 mA

Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	1550	1,02	15,15

Solenoid valve with self-locking manual reset

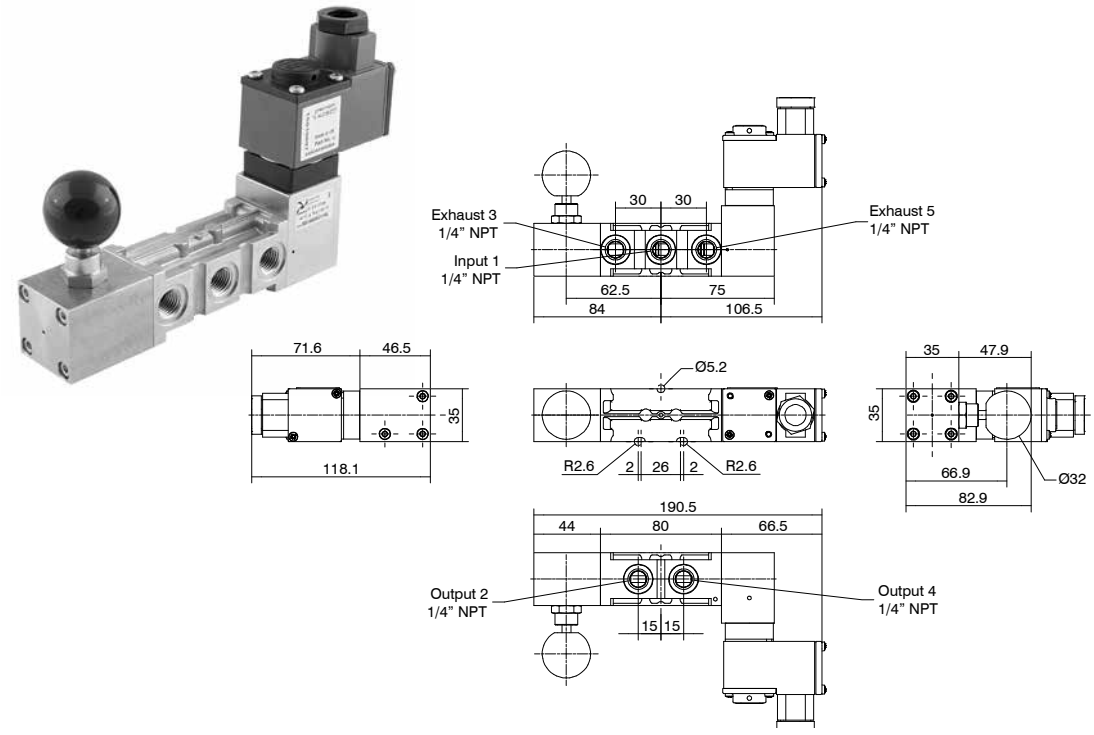


Ordering code
SS14520CT14L
T TENSION
1 = 24 V DC 33 mA

Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

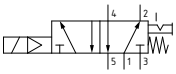
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	1700	1,02	15,15

Solenoid valve with self-locking manual reset inverted



Ordering code
SS14520CT15L
T TENSION
1 = 24 V DC 33 mA

Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	1700	1,02	15,15

Solenoid valves 1/4” NPT series Steel line - Intrinsically safe Exia with IP66 steel housing

Stainless steel solenoid valves, complete with intrinsically safe Exia rated solenoid coil in and CE marked have been engineered and developed to meet process automation and Oil & Gas severe service requirements, where material performances, product reliability and health and safety issues are critical elements. As a result, Pneumax products are perfectly suitable to work with sweet gas media and corrosive / aggressive gases.

All external and internal parts are AISI 316L stainless steel material in compliance with NACE standard MR0175/ISO 15156-1.

The range includes solenoid valves with 3 and 5 ways functions, complete with self feeding solenoids, designed according to the following configuration: solenoid-spring valve, solenoid-solenoid valve, solenoid valve with self-locking manual reset, solenoid valve with self-locking manual reset inverted.

Pneumax solenoid valves have 1/4” NPT connections with 1000Nl/min maximum flow rate.
Pneumax solenoid valve utmost adaptability represent one of the main features to provide customized solution and module assembly solution, since both single mounting and integrated module design are available; thanks to distinctive Pneumax valve body design.

Construction characteristics

Body	AISI 316L stainless steel
Operators	AISI 316L stainless steel
Spool	AISI 316L stainless steel
Spring	AISI 316 stainless steel
Screws	AISI 316 stainless steel (A4-70 stainless steel)
Seals	NBR for low temperatures FPM (Fluoroelastomer) (**available on request**)

Operating range

Fluid	Filtered air. No lubrication needed, if applied it shall be continuous. Inert Gas. Sweet gas (natural).
Operating temperature	-40°C ... +65°C
Note: The suitable operating temperature is limited by the most restrictive component, which is the pilot, regardless of the type of seals used in the valve spool.	
Maximum operating pressure	10 bar

Electrical (Electropilot) construction characteristics

Housing	304 stainless steel with epoxy paint
Armour / Cores	Ferromagnetic stainless steel
Springs	Stainless steel
Seals	FPM (Fluoroelastomer)
Incorporation	PBT 30% glass load
Wire insulation	H
Guide tube	Stainless steel
Resistance	370 Ohms
Nominal voltage	24 V DC
Power consumption DC	0,4 W (Running)
Connection for cable entry	M20x1.5
Electrical connection	Screw terminals 2 Poles 2.5 mm
IP Rating	IP66
Tolerance on voltage supply	±10%
ED continuous service	100%

Electrical specifications for intrinsically safe

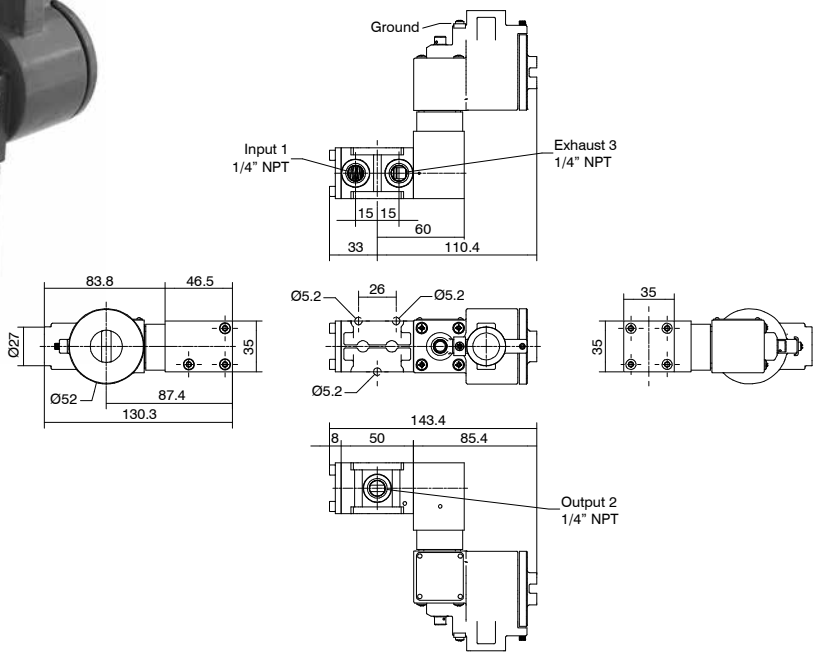
Umax: in	31 V DC
Imax:	0,67 A
Wmax: in	2,98 W

Certifications available:

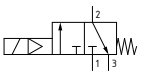
II 2G Ex h IIC T6...T4 Gb X
II 2D Ex h IIIB T135°C Db X

Solenoid-spring valve

Ordering code
SS1432CM101L



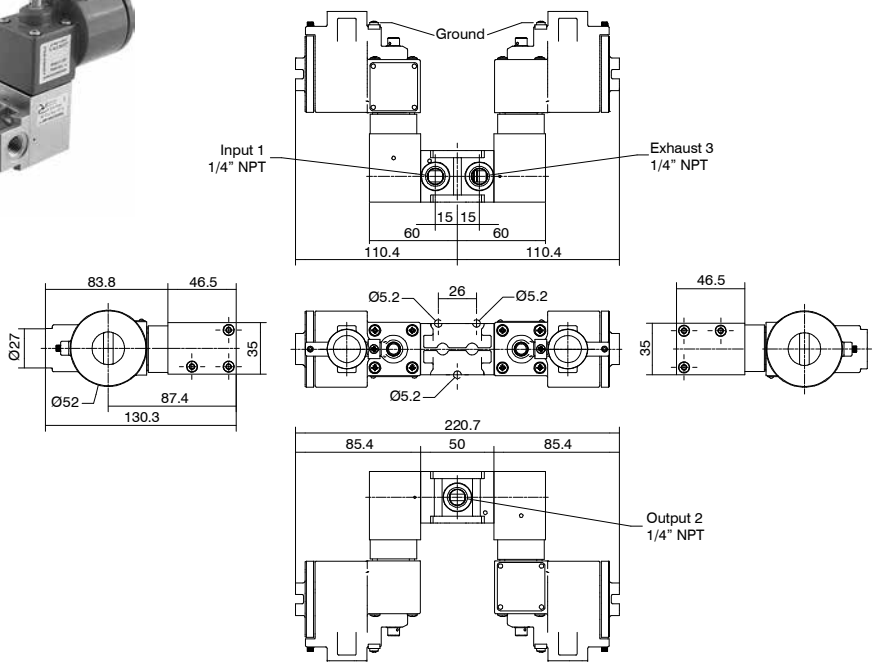
Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



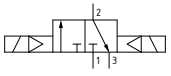
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	1500	1,02	15,15

Solenoid-solenoid valve

Ordering code
SS1432CM1M1L



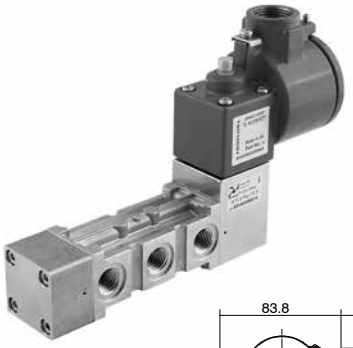
Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

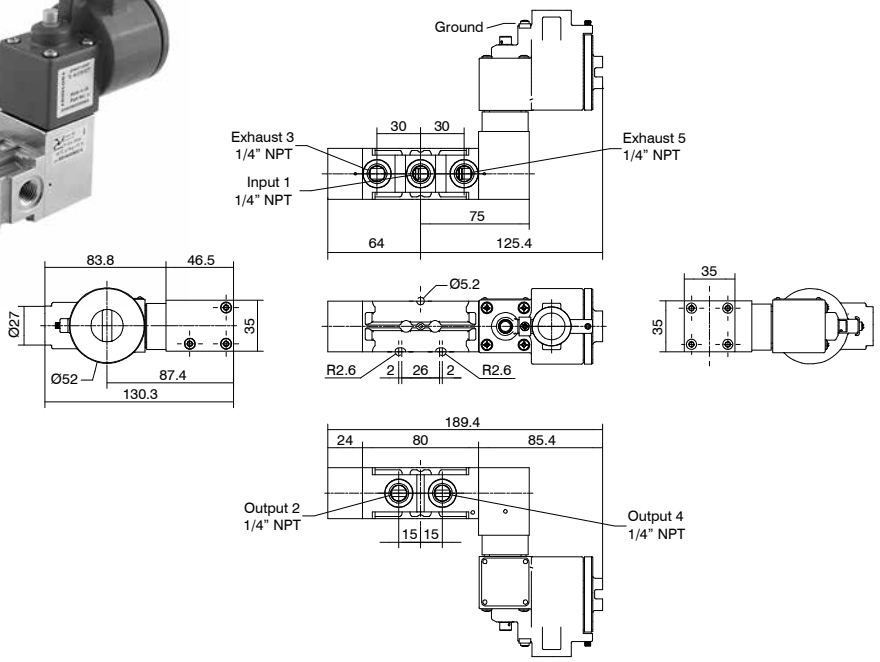


Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	2600	1,02	15,15

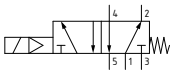
Solenoid-spring valve

Ordering code
SS14520M101L





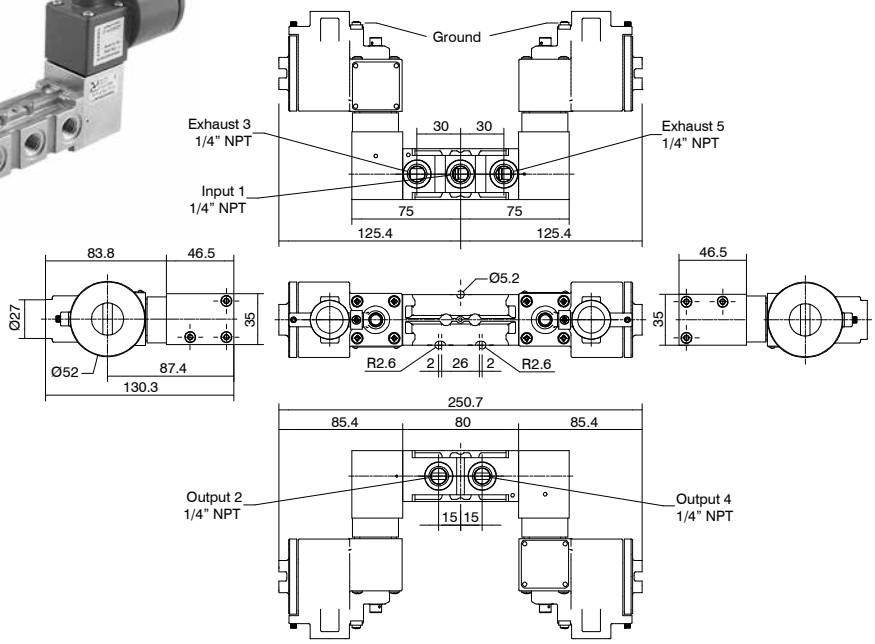
Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



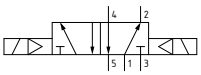
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	1800	1,02	15,15

Solenoid-solenoid valve

Ordering code
SS14520M1M1L



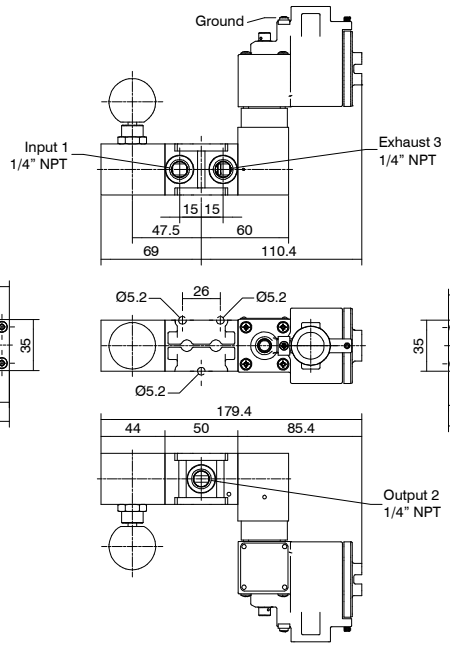
Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



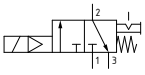
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	2750	1,02	15,15

Solenoid valve with self-locking manual reset

Ordering code
SS1432CM114L



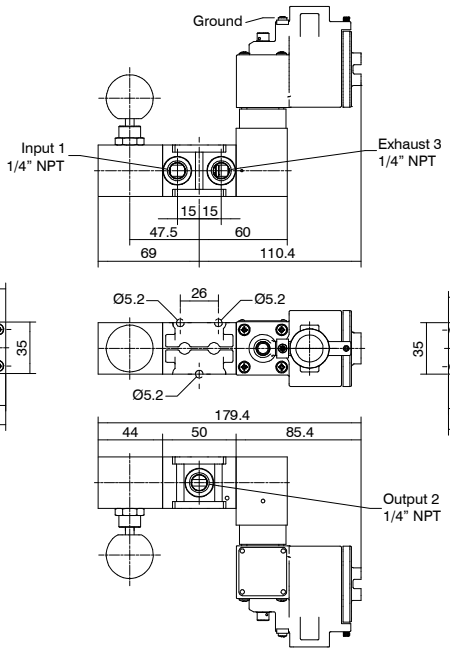
Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



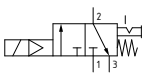
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	1850	1,02	15,15

Solenoid valve with self-locking manual reset inverted

Ordering code
SS1432CM115L



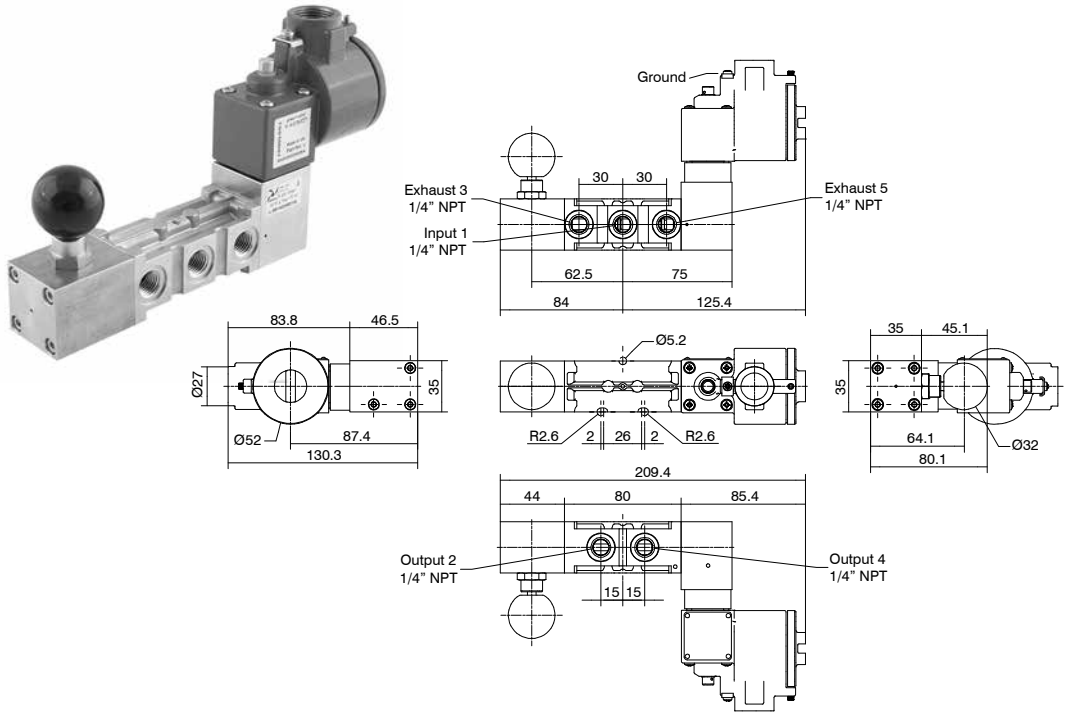
Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



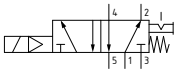
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	1850	1,02	15,15

Solenoid valve with self-locking manual reset

Ordering code
SS14520M114L



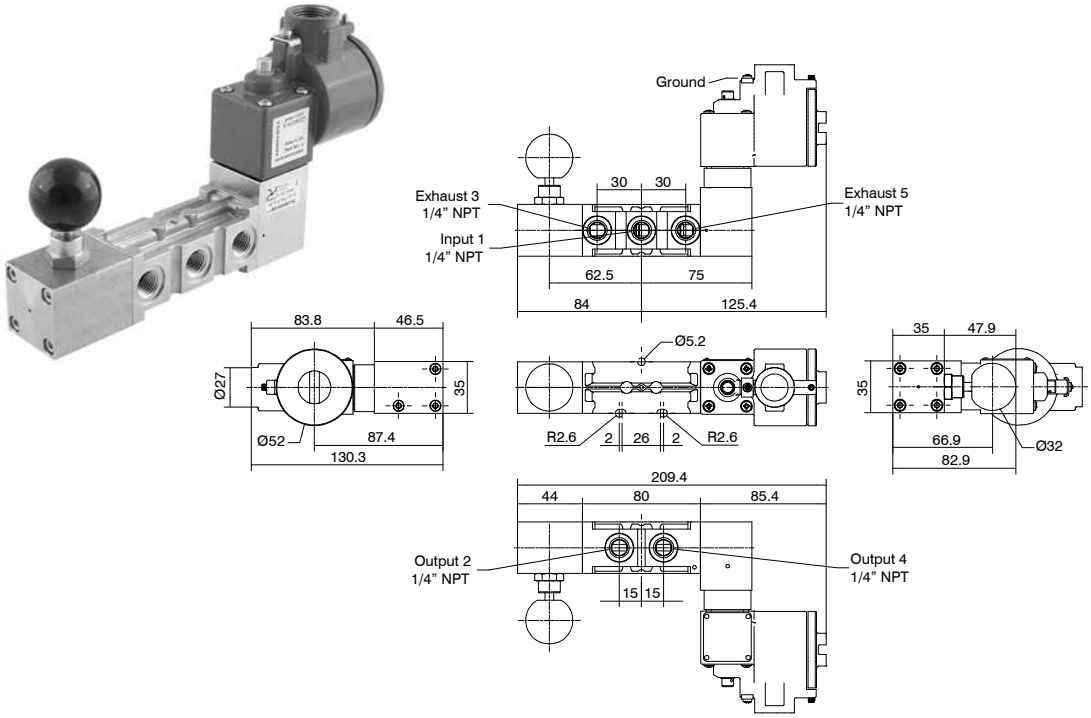
Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



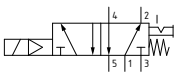
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	2000	1,02	15,15

Solenoid valve with self-locking manual reset inverted

Ordering code
SS14520M115L



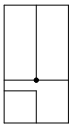
Minimum piloting pressure 2,5 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

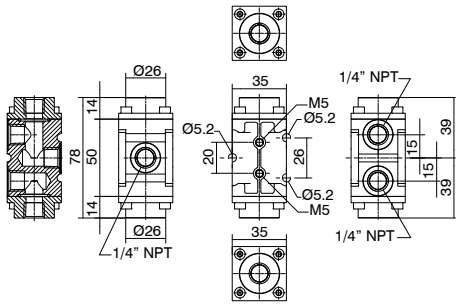


Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	1000	1/4" NPT	2000	1,02	15,15

Flow divider, 2 outputs

Different types of dividers available on request.

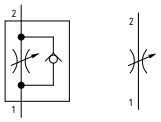


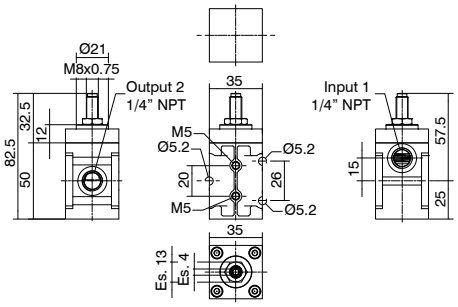


Ordering code	
SS14T200T	
T	TYPE
	L= Low temperature version
	H= High temperature version

Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	1700	1/4" NPT	390	1,73	25,75

Flow regulator 1/4" NPT

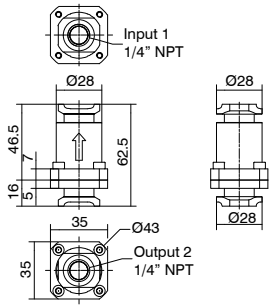




Ordering code	
SS14RFFT	
F	FUNCTION
	U= Unidirectional
	B= Bidirectional
T	TYPE
	L= Low temperature version
	H= High temperature version

Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	1000	1/4" NPT	500	1,02	15,15

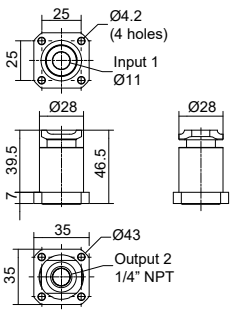
Double seal non return valve



Ordering code	
SS14VUST	
T	TYPE
	L= Low temperature version
	H= High temperature version

Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	1400	1/4" NPT	220	1,42	21,21

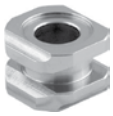
Double seal non return valve for group



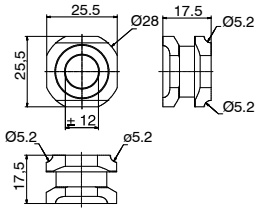
Ordering code	
SS14VUGT	
T	TYPE
	L= Low temperature version
	H= High temperature version

Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	1400	1/4" NPT	150	1,42	21,21

Adapter for 90°



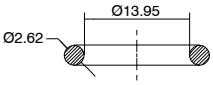
Weight 0,45 g



Ordering code
SS1490

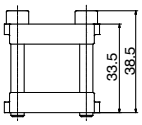
Seal OR 2,62 x 13,95

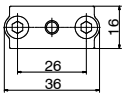
Weight 0,38 g
100-pieces pack.



Ordering code	
SS14DⓉ	
Ⓣ	TYPE
	L= Low temperature version
	H= High temperature version

Mounting kit "A"

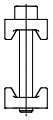


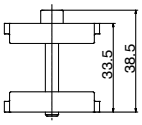


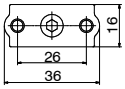
Weight 55 g
Kit includes:
Nr. 1 Front flange
Nr. 1 Thareaded rear flange
Nr. 2 Screw M5x35 AISI 316

Ordering code
SS14A

Mounting kit "B"



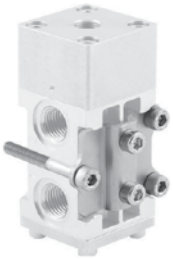




Weight 48 g
Kit includes:
Nr. 1 Front flange
Nr. 1 Thareaded rear flange
Nr. 1 Screw M5x35 AISI 316

Ordering code
SS14B

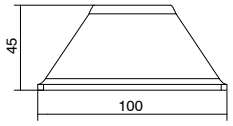
Single deployment flange

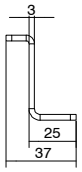


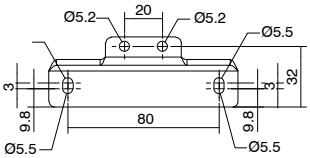
Weight 55 g
Kit includes:
Nr. 1 Single deployement flange
Nr. 3 Screws M5x40 AISI 316
Nr. 2 Screws M5x8 AISI 316

Ordering code
SS14C

Fixing bracket



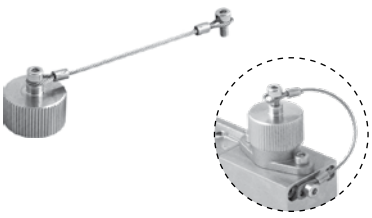


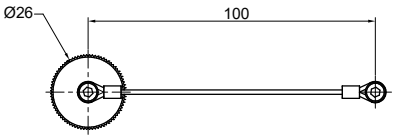


Weight 125 g
Kit includes:
Nr. 2 Screws M5x8 AISI 316
Nr. 1 Flange

Ordering code
SS14M5

Key selector cap

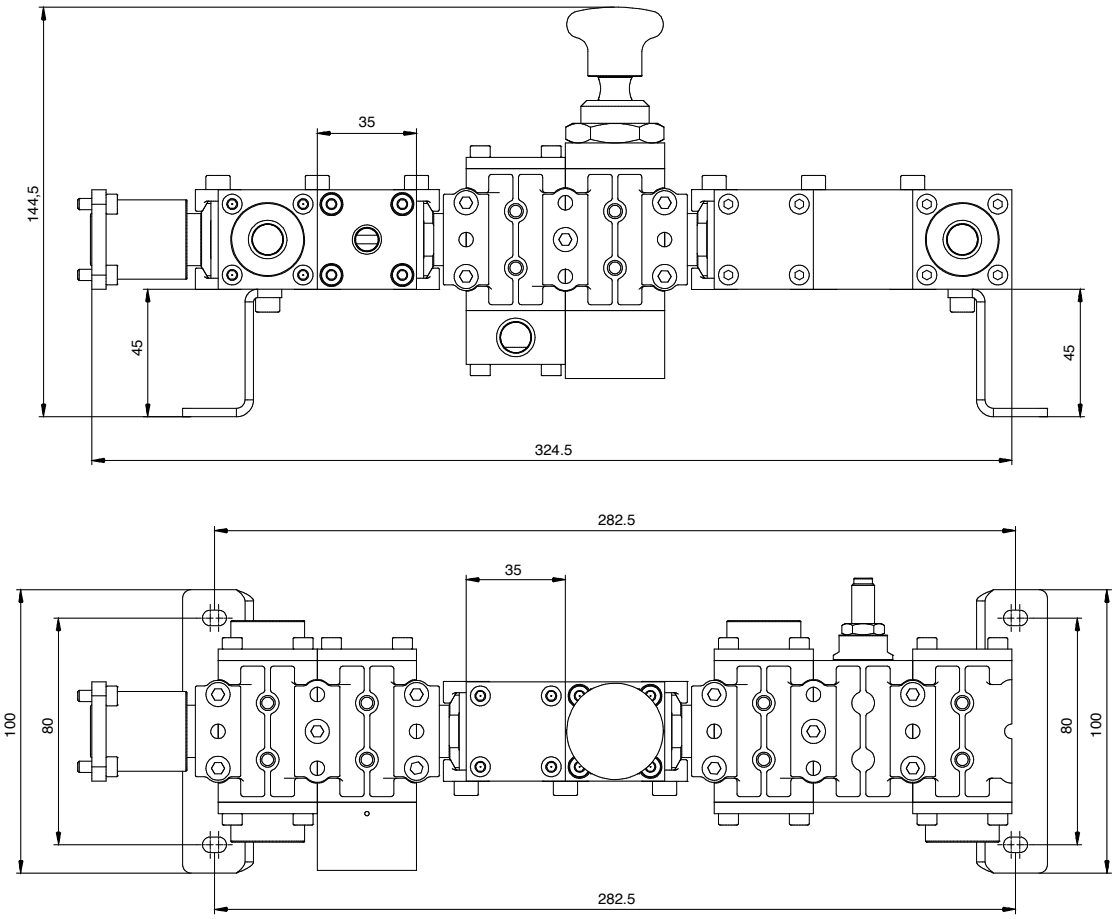




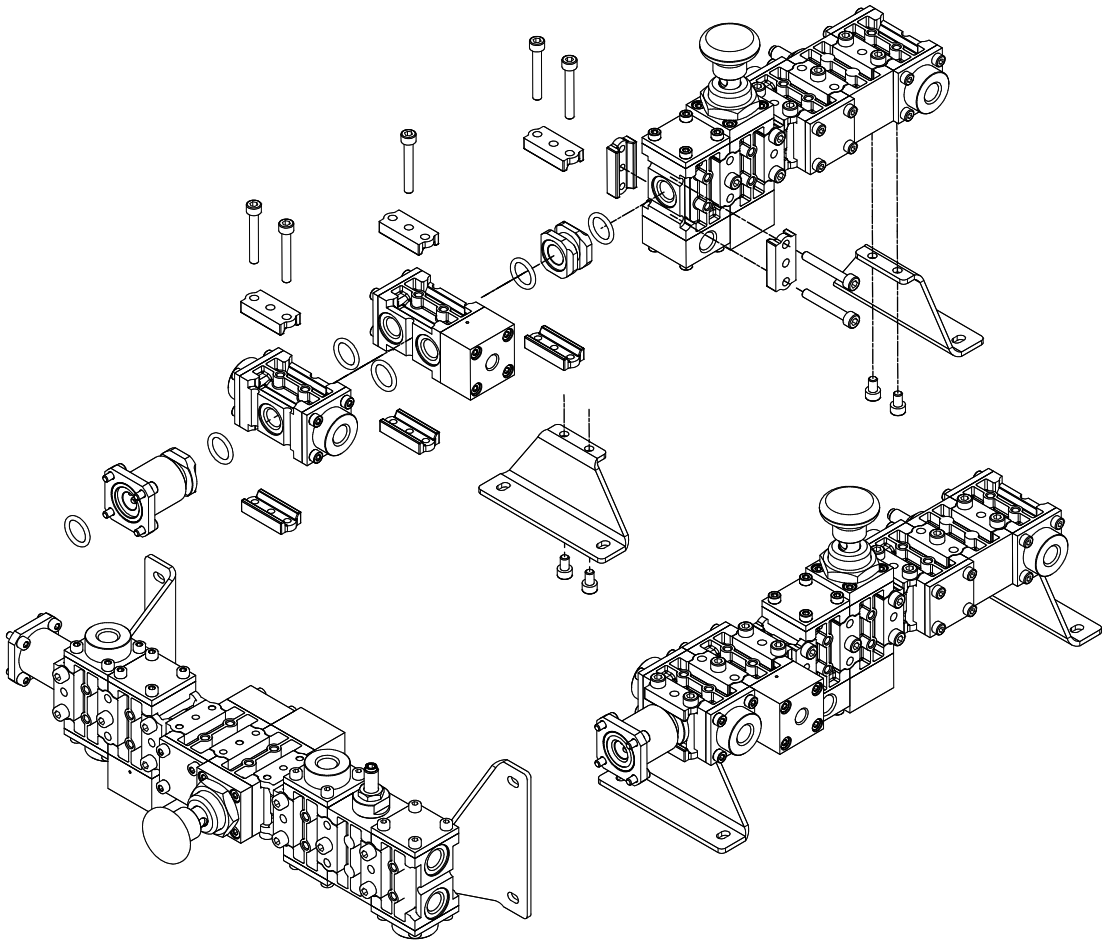
Weight 32 g
Kit includes:
Nr. 1 Screw M4x8 AISI 316

Ordering code
SS14TC

Example: manifold system



Example: group assembly scheme



Valves 1/2” NPT series Steel line

Stainless steel brand series have been engineered and developed to meet process automation and Oil & Gas severe service requirements, where material performances, product reliability and health and safety issues are critical elements. As a result, Pneumax products are perfectly suitable to work with sweet gas media and corrosive / aggressive gases.

All external and internal parts are AISI 316L stainless steel material in compliance with NACE standard MR0175/ISO 15156-1.

The range includes 3 and 5 ways valves, designed according to the following configuration: pneumatic-spring valve, pneumatic-pneumatic valve, 2 position push-pull valve, push button-spring valve, push button-pneumatic return valve, pneumatic valve with self-locking manual reset **(only in a 3 way function)**, pneumatic valve with self-locking manual reset inverted **(only in a 3 way function)**.
Accessories: non return valve, uni/bidirectional flow regulator and quick exhaust valve.

Pneumax valves have 1/2” NPT connections with 3500 Nl/min maximum flow rate.

This version only provides single mounting.

Construction characteristics

Body	AISI 316L stainless steel
Operators	AISI 316L stainless steel
Spool	AISI 316L stainless steel
Spring	AISI 316 stainless steel
Screws	AISI 316 stainless steel (A4-70 stainless steel)
Seals	FPM (Fluoroelastomer) NBR and PU (Polyurethane) for low temperatures (-50°C) standard

Operating range

Fluid	Filtered air. No lubrication needed, if applied it shall be continuous. Inert Gas. Sweet gas (natural).
Operating temperature (for low temperature version L)	-50°C ... +70°C
Operating temperature (for high temperature version H)	-10°C ... +150°C
Maximum operating pressure	12 bar

Certifications available:

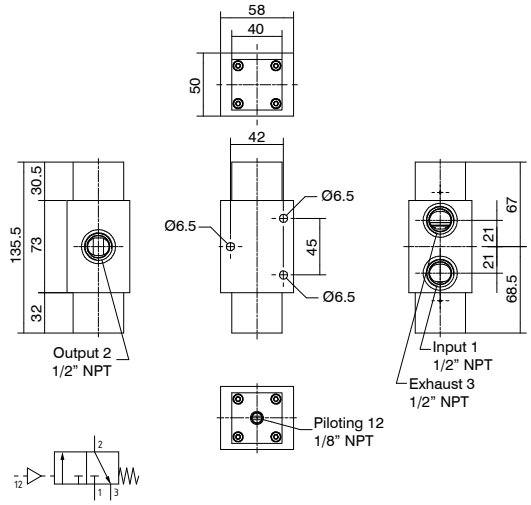
ATEX CE Ex II 2 GD c IIC

Ex : CE Ex **II 2G Ex h IIC Gb**
CE Ex **II 2D Ex h IIIC Db**

SIL : Suitable up to SIL 3

EAC Ex : CU - TR 012

Pneumatic-spring valve

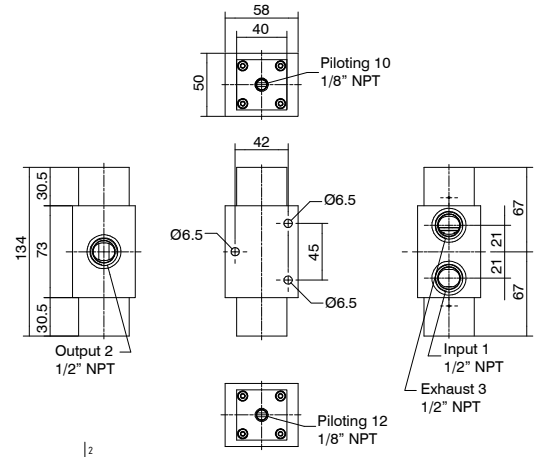


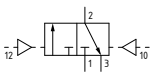
Minimum piloting pressure 3 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Ordering code	
SS1232C1101T	
T	TYPE
	L= Low temperature version
	H= High temperature version

Operational characteristics						
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Pilot connections	Weight (g)	Cv	kv
12	3500	1/2" NPT	1/8" NPT	1992	3,55	53,03

Pneumatic-pneumatic valve



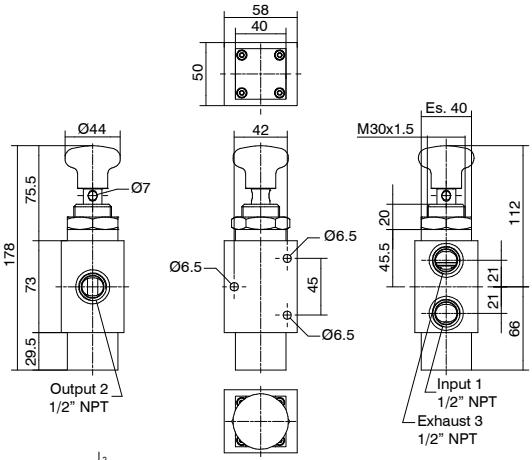


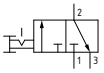
Minimum piloting pressure 3 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Ordering code	
SS1232C1111T	
T	TYPE
	L= Low temperature version
	H= High temperature version

Operational characteristics						
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Pilot connections	Weight (g)	Cv	kv
12	3500	1/2" NPT	1/8" NPT	2001	3,55	53,03

2 position push-pull valve



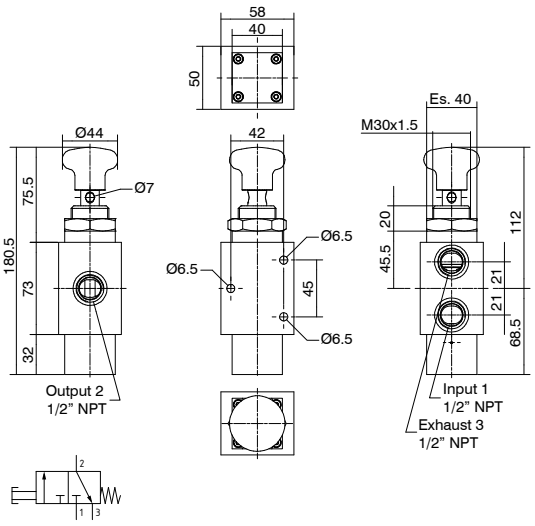


Operating force 55N.
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Ordering code	
SS1232C0802T	
T	TYPE
	L= Low temperature version
	H= High temperature version

Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	3500	1/2" NPT	2027	3,55	53,03

Push button-spring valve



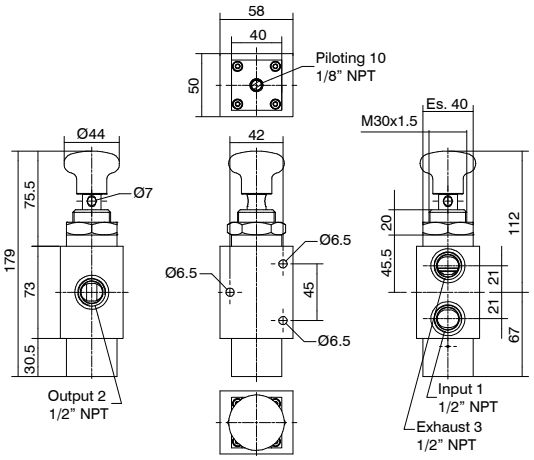
Operating force 200N
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

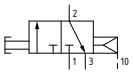
Ordering code
SS1232C0801T
TYPE
T= L= Low temperature version
H= High temperature version

Operational characteristics

Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	3500	1/2" NPT	2000	3,55	53,03

Push button-pneumatic return valve





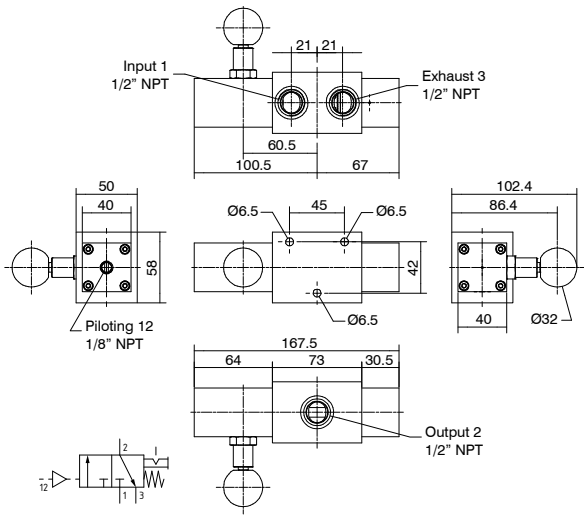
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Ordering code
SS1232C0811T
TYPE
T= L= Low temperature version
H= High temperature version

Operational characteristics

Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Pilot connections	Weight (g)	Cv	kv
12	3500	1/2" NPT	1/8" NPT	2012	3,55	53,03

Pneumatic valve with self-locking manual reset



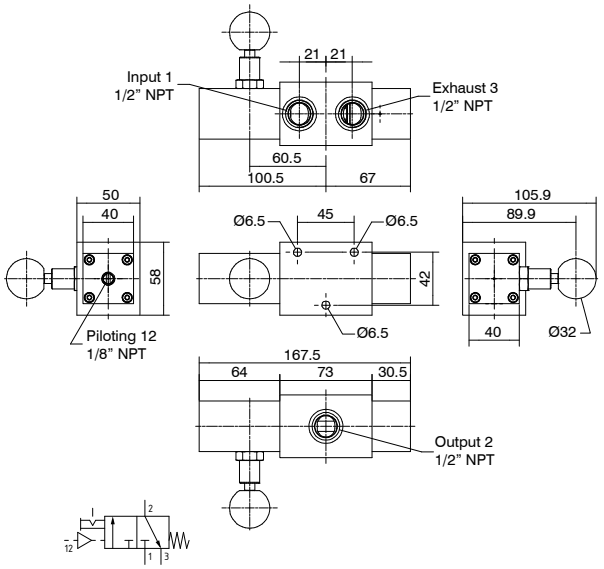
Minimum piloting pressure 3 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Ordering code
SS1232C1114T
TYPE
T= L= Low temperature version
H= High temperature version

Operational characteristics

Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Pilot connections	Weight (g)	Cv	kv
12	3500	1/2" NPT	1/8" NPT	2409	3,55	53,03

Pneumatic valve with self-locking manual reset inverted

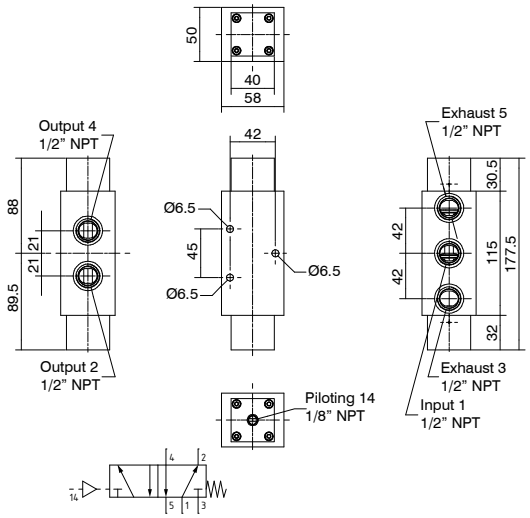


Ordering code
SS1232C1115T
TYPE
T = L= Low temperature version
H= High temperature version

Minimum piloting pressure 3 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Operational characteristics						
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Pilot connections	Weight (g)	Cv	kv
12	3500	1/2” NPT	1/8” NPT	2408	3,55	53,03

Pneumatic-spring valve



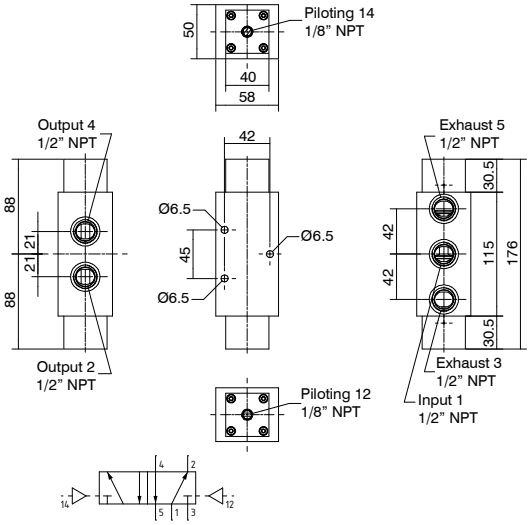
Minimum piloting pressure 3 bar
Fluid: Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Ordering code
SS125201101T
TYPE
T= L= Low temperature version
H= High temperature version

Operational characteristics

Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	3500	1/2" NPT	2744	3,55	53,03

Pneumatic-pneumatic valve



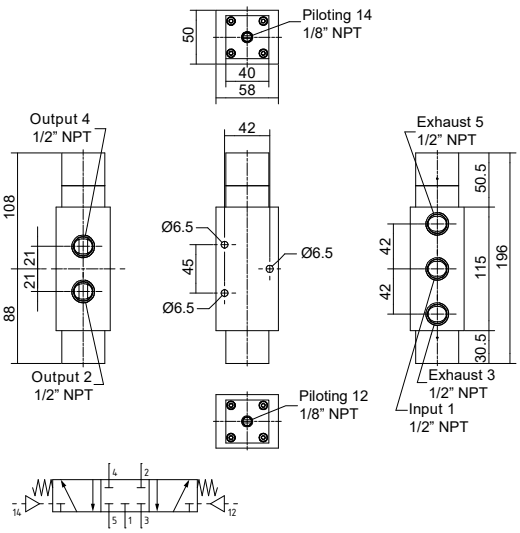
Minimum piloting pressure 3 bar
Fluid: Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Ordering code
SS125201111T
TYPE
T= L= Low temperature version
H= High temperature version

Operational characteristics

Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Pilot connections	Weight (g)	Cv	kv
12	3500	1/2" NPT	1/8" NPT	2790	3,55	53,03

Pneumatic-pneumatic closed centers valve



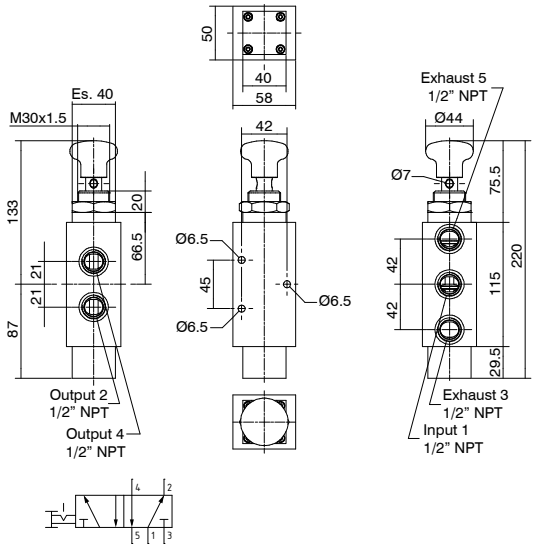
Minimum piloting pressure 3 bar
Fluid: Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Ordering code
SS125311111T
TYPE
T= L= Low temperature version
H= High temperature version

Operational characteristics

Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Pilot connections	Weight (g)	Cv	kv
12	3500	1/2" NPT	1/8" NPT	3019	3,55	53,03

2 position push-pull valve

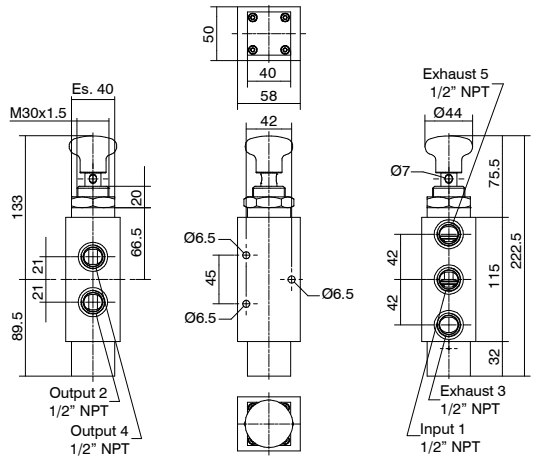


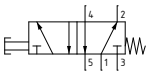
Operating force 55N.
Fluid: Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Ordering code	
SS125200802T	
	TYPE
T	L= Low temperature version
	H= High temperature version

Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	3500	1/2" NPT	2757	3,55	53,03

Push button-spring valve



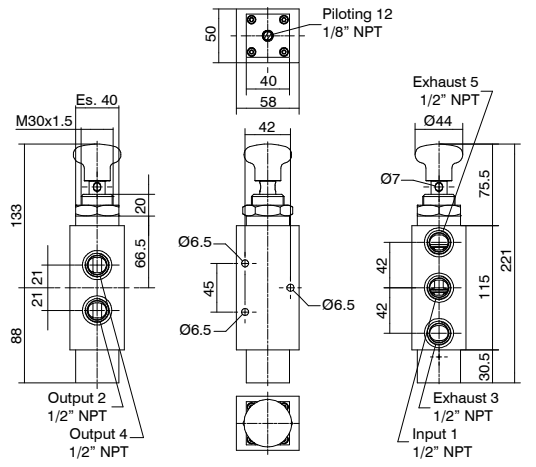


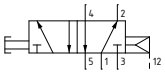
Operating force 200N
Fluid: Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Ordering code	
SS125200801T	
	TYPE
T	L= Low temperature version
	H= High temperature version

Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	3500	1/2" NPT	2730	3,55	53,03

Push button-pneumatic return valve





Minimum piloting pressure 3 bar
Fluid: Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Ordering code	
SS125200811T	
	TYPE
T	L= Low temperature version
	H= High temperature version

Operational characteristics						
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Pilot connections	Weight (g)	Cv	kv
12	3500	1/2" NPT	1/8" NPT	2780	3,55	53,03

Solenoid valves 1/2” NPT series Steel line - For safe area with IP66 stainless steel housing

Stainless steel solenoid valves, complete with IP66 rated solenoid coil in a stainless steel housing and CE marked have been engineered and developed to meet process automation and Oil & Gas severe service requirements, where material performances, product reliability and health and safety issues are critical elements. As a result, Pneumax products are perfectly suitable to work with sweet gas media and corrosive / aggressive gases.

All external and internal parts are AISI 316L stainless steel material in compliance with NACE standard MR0175/ISO 15156-1.

The range includes solenoid valves with 3 and 5 ways functions, complete with self feeding solenoids, designed according to the following configuration: solenoid-spring valve, solenoid-solenoid valve, solenoid valve with self-locking manual reset **(only in a 3 way function)**, solenoid valve with self-locking manual reset inverted **(only in a 3 way function)**.

Pneumax solenoid valves have 1/2” NPT connections with 3500 Nl/min maximum flow rate.

This version only provides single mounting.

Construction characteristics

Body	AISI 316L stainless steel
Operators	AISI 316L stainless steel
Spool	AISI 316L stainless steel
Spring	AISI 316 stainless steel
Screws	AISI 316 stainless steel (A4-70 stainless steel)
Seals	NBR for low temperatures FPM (Fluoroelastomer) (**available on request**)

Operating range

Fluid	Filtered air. No lubrication needed, if applied it shall be continuous. Inert Gas. Sweet gas (natural).
Operating temperature	-20°C ... +70°C
Note: The suitable operating temperature is limited by the most restrictive component, which is the pilot, regardless of the type of seals used in the valve spool.	
Maximum operating pressure	10 bar

Electrical (Electropilot) construction characteristics

Housing	304 stainless steel with epoxy paint
Armour / Cores	Ferromagnetic stainless steel
Springs	Stainless steel
Seals	FPM (Fluoroelastomer)
Incorporation	PBT 30% glass load
Wire insulation	H
Nominal voltage	24 V DC 24, 110, 220 V AC
Power consumption DC	2,4W
Power consumption AC	10VA (Inrush), 5VA (Running)
Connection for cable entry	M20x1.5 (1/2” NPT **available on request**)
Electrical connection	Screw terminals 2 Poles 2.5 mm
IP Rating	IP66
Tolerance on voltage supply	±10%
ED continuous service	100%

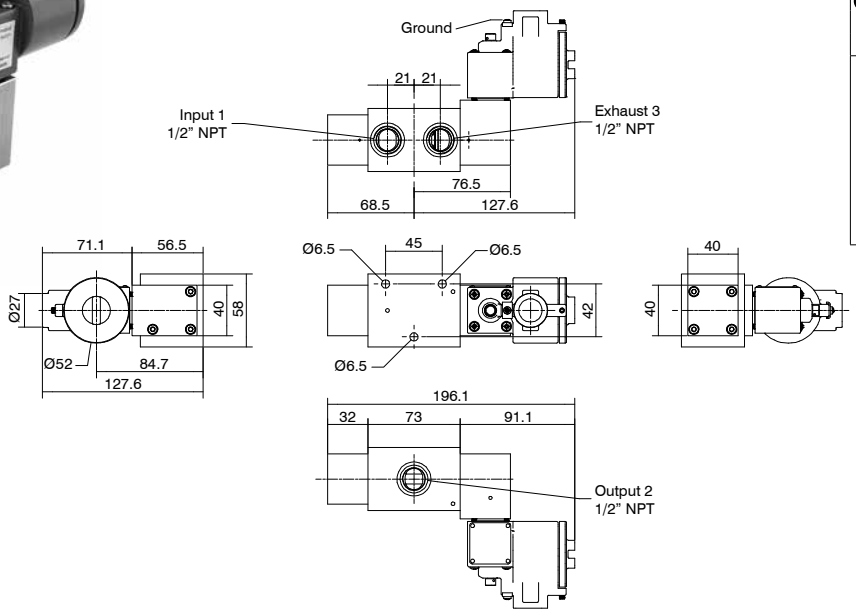
Certifications available:

Non ATEX marked product

SIL: Suitable up to SIL 3

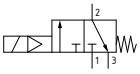
EAC

Solenoid-spring valve



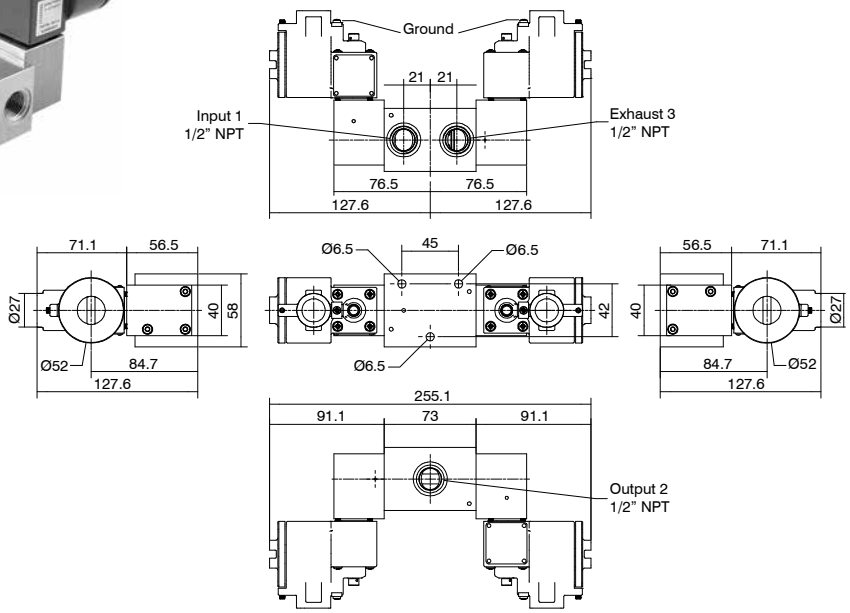
Ordering code	
SS1232CA(T)01L	
(T)	TENSION
	1 = 24 V DC
	2 = 24 V AC (50/60 Hz)
	3 = 110 V AC (50/60 Hz)
	4 = 220 V AC (50/60 Hz)

Minimum piloting pressure 3 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



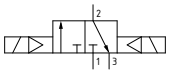
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	3500	1/2" NPT	2776	3,55	53,03

Solenoid-solenoid valve



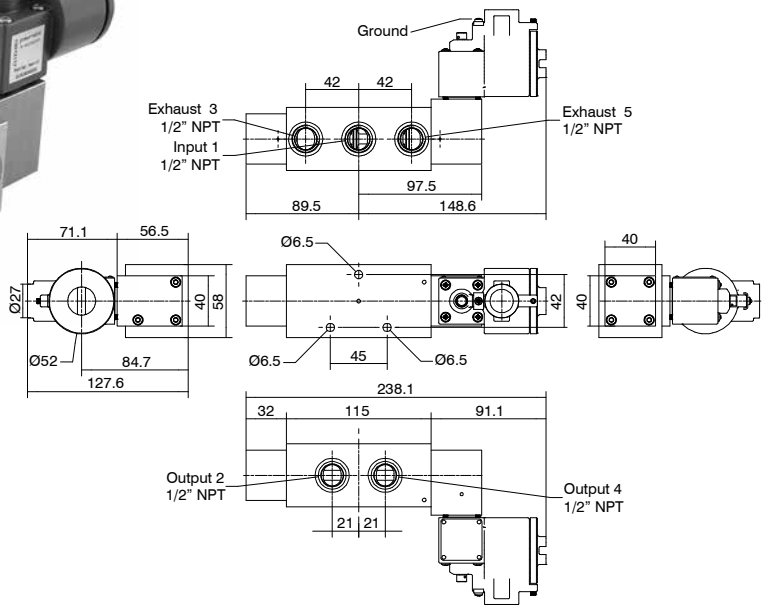
Ordering code	
SS1232CA(T)A(T)L	
(T)	TENSION
	1 = 24 V DC
	2 = 24 V AC (50/60 Hz)
	3 = 110 V AC (50/60 Hz)
	4 = 220 V AC (50/60 Hz)

Minimum piloting pressure 3 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



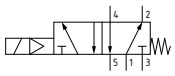
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	3500	1/2" NPT	3909	3,55	53,03

Solenoid-spring valve



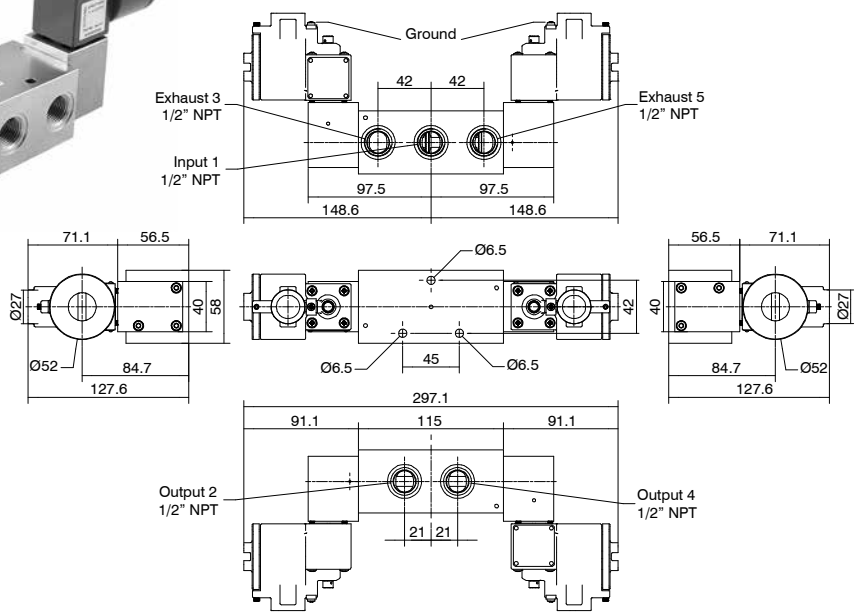
Ordering code	
SS12520AⓉ01L	
	TENSION
	1= 24 V DC
Ⓣ	2= 24 V AC (50/60 Hz)
	3= 110 V AC (50/60 Hz)
	4= 220 V AC (50/60 Hz)

Minimum piloting pressure 3 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



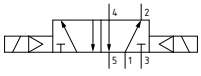
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	3500	1/2" NPT	3679	3,55	53,03

Solenoid-solenoid valve



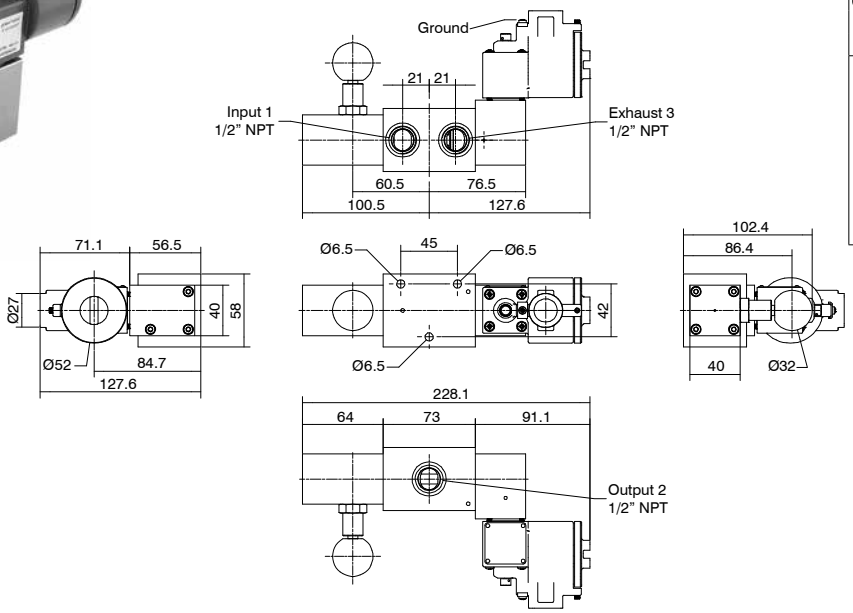
Ordering code	
SS12520AⓉAⓉL	
	TENSION
	1= 24 V DC
Ⓣ	2= 24 V AC (50/60 Hz)
	3= 110 V AC (50/60 Hz)
	4= 220 V AC (50/60 Hz)

Minimum piloting pressure 3 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



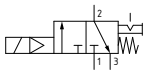
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	3500	1/2" NPT	4678	3,55	53,03

Solenoid valve with self-locking manual reset



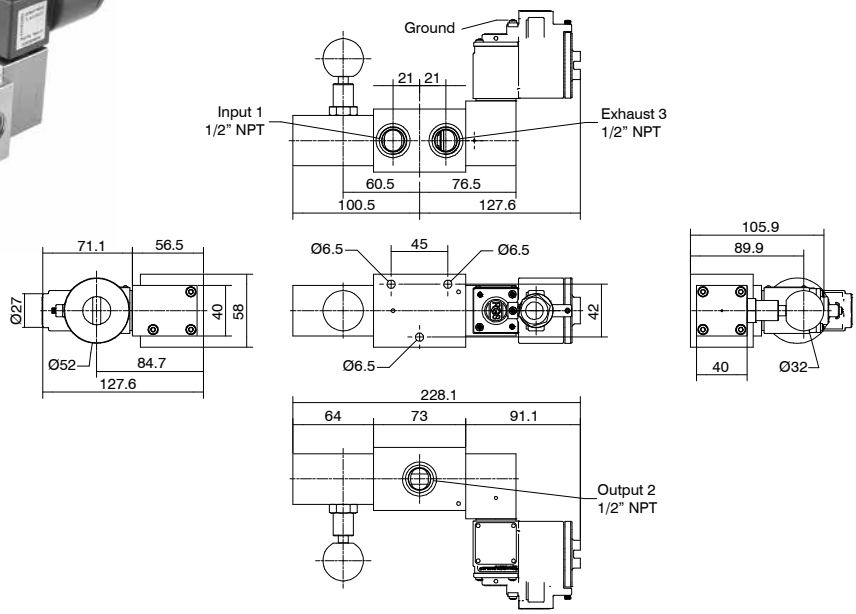
Ordering code	
SS1232CA(T)14L	
	TENSION
	1= 24 V DC
(T)	2= 24 V AC (50/60 Hz)
	3= 110 V AC (50/60 Hz)
	4= 220 V AC (50/60 Hz)

Minimum piloting pressure 3 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



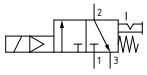
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	3500	1/2" NPT	3358	3,55	53,03

Solenoid valve with self-locking manual reset inverted



Ordering code	
SS1232CA(T)15L	
	TENSION
	1= 24 V DC
(T)	2= 24 V AC (50/60 Hz)
	3= 110 V AC (50/60 Hz)
	4= 220 V AC (50/60 Hz)

Minimum piloting pressure 3 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	3500	1/2" NPT	3360	3,55	53,03

Solenoid valves 1/2” NPT series Steel line - IP66 Exd Explosion protection

Stainless steel solenoid valves, complete with IP66 Exd Explosion protection rated solenoid coil in a stainless steel housing and CE marked have been engineered and developed to meet process automation and Oil & Gas severe service requirements, where material performances, product reliability and health and safety issues are critical elements. As a result, Pneumax products are perfectly suitable to work with sweet gas media and corrosive / aggressive gases.

All external and internal parts are AISI 316L stainless steel material in compliance with NACE standard MR0175/ISO 15156-1.

The range includes solenoid valves with 3 and 5 ways functions, complete with self feeding solenoids, designed according to the following configuration: solenoid-spring valve, solenoid-solenoid valve, solenoid valve with self-locking manual reset **(only in a 3 way function)**, solenoid valve with self-locking manual reset inverted **(only in a 3 way function)**.

Pneumax solenoid valves have 1/2” NPT connections with 3500 Nl/min maximum flow rate.

This version only provides single mounting.

Construction characteristics

Body	AISI 316L stainless steel
Operators	AISI 316L stainless steel
Spool	AISI 316L stainless steel
Spring	AISI 316 stainless steel
Screws	AISI 316 stainless steel (A4-70 stainless steel)
Seals	NBR for low temperatures FPM (Fluoroelastomer) (**available on request**)

Operating range

Fluid	Filtered air. No lubrication needed, if applied it shall be continuous. Inert Gas. Sweet gas (natural).
Operating temperature for DC version	-50°C ... +70°C
Operating temperature for AC version	-50°C ... +55°C
Maximum operating pressure	10 bar

Electrical (Electropilot) construction characteristics

Housing	304 stainless steel with epoxy paint
Armour / Cores	Ferromagnetic stainless steel
Springs	Stainless steel
Seals	FPM (Fluoroelastomer)
Incorporation	PBT 30% glass load
Wire insulation	H
Nominal voltage	24 V DC 24, 110, 220/230 V AC
Power consumption DC	3W
Power consumption AC	10VA (Inrush), 5VA (Running)
Connection for cable entry	M20x1.5 (1/2” NPT **available on request**)
Electrical connection	Screw terminals 2 Poles 2.5 mm
IP Rating	IP66
Tolerance on voltage supply	±10%
ED continuous service	100%

Certifications available:

ATEX CE Ex II 2 GD c IIC

Ex: **CE Ex II 2G Ex h IIC Gb**
CE Ex II 2D Ex h IIIC Db

IECEx: International certification for explosive atmospheres

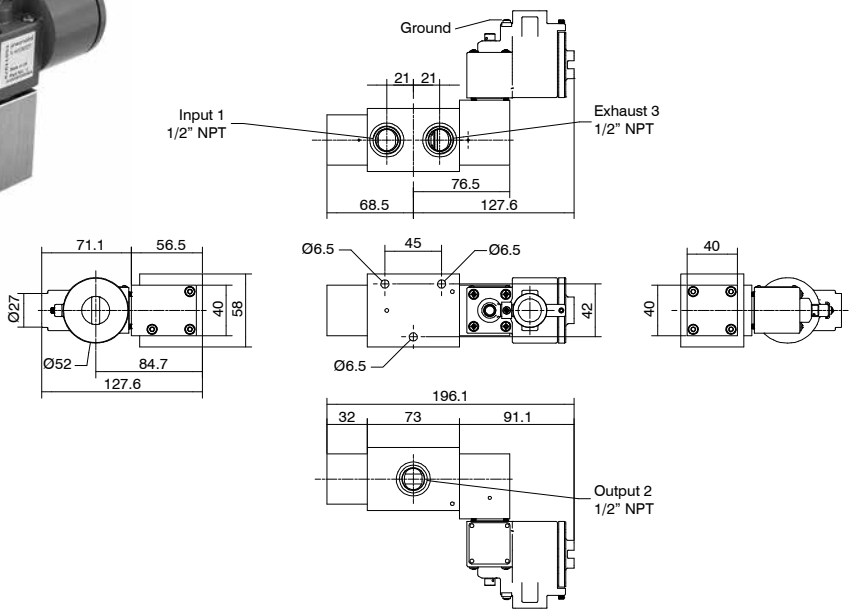
SIL: Suitable up to SIL 3

EAC Ex: CU - TR 012

Ex NEPSI: Nepsy approval - China

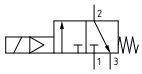
ATEX, SIL and EAC Ex: refer to products in the various sections to the catalogues.
IECEx and NEPSI: refer to Pneumatrol pilots installed upon each valve.

Solenoid-spring valve



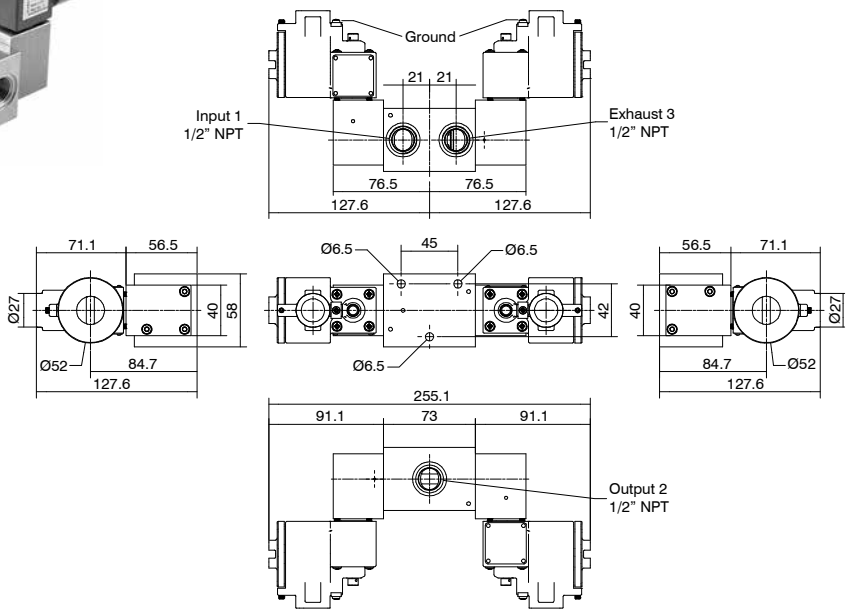
Ordering code	
SS1232CB(T)01L	
(T)	TENSION
	1= 24 V DC
	2= 24 V AC (50/60 Hz)
	3= 110 V AC (50/60 Hz)
	4= 220 V AC (50/60 Hz)

Minimum piloting pressure 3 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



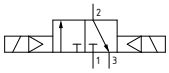
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	3500	1/2” NPT	2776	3,55	53,03

Solenoid-solenoid valve



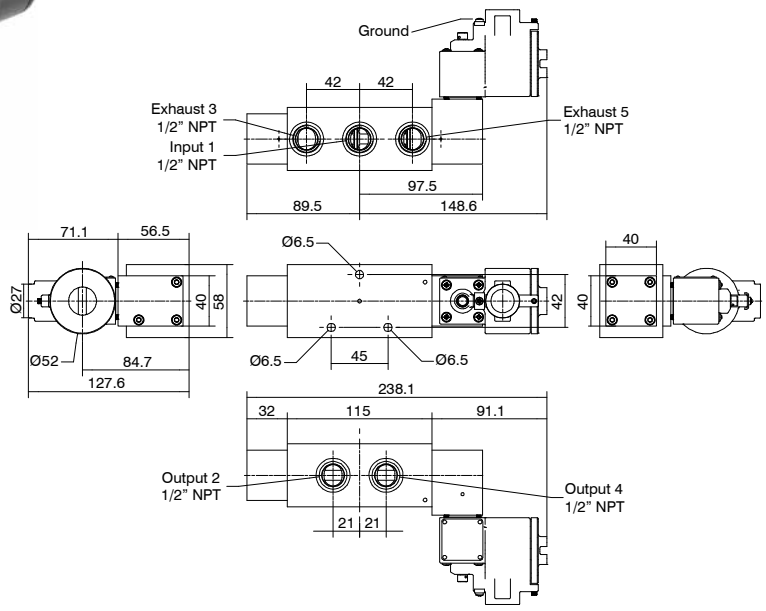
Ordering code	
SS1232CB(T)B(T)L	
(T)	TENSION
	1= 24 V DC
	2= 24 V AC (50/60 Hz)
	3= 110 V AC (50/60 Hz)
	4= 220 V AC (50/60 Hz)

Minimum piloting pressure 3 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



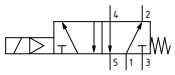
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	3500	1/2” NPT	3909	3,55	53,03

Solenoid-spring valve



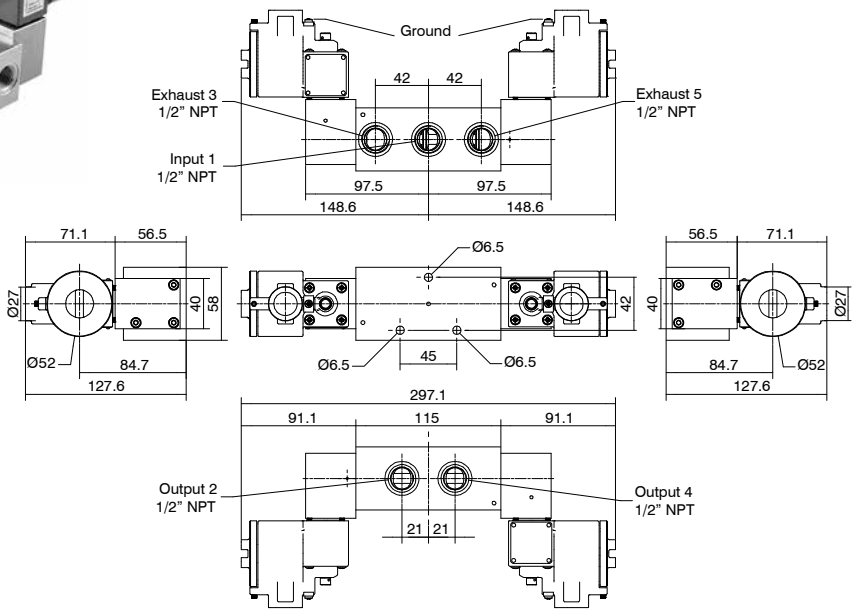
Ordering code	
SS12520BⓉ01L	
	TENSION
	1= 24 V DC
Ⓣ	2= 24 V AC (50/60 Hz)
	3= 110 V AC (50/60 Hz)
	4= 220 V AC (50/60 Hz)

Minimum piloting pressure 3 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



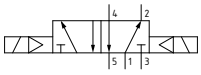
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	3500	1/2" NPT	3679	3,55	53,03

Solenoid-solenoid valve



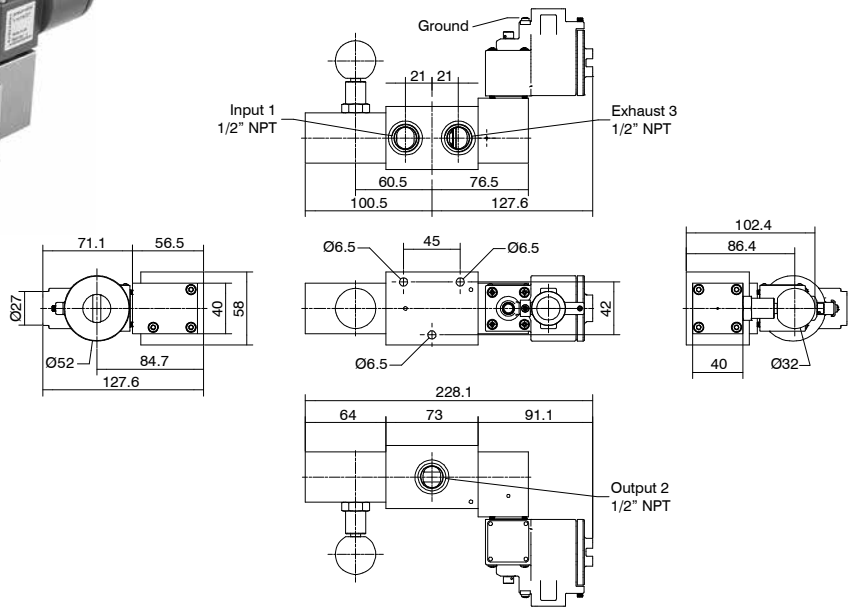
Ordering code	
SS12520BⓉBⓉL	
	TENSION
	1= 24 V DC
Ⓣ	2= 24 V AC (50/60 Hz)
	3= 110 V AC (50/60 Hz)
	4= 220 V AC (50/60 Hz)

Minimum piloting pressure 3 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



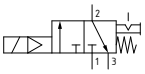
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	3500	1/2" NPT	4678	3,55	53,03

Solenoid valve with self-locking manual reset



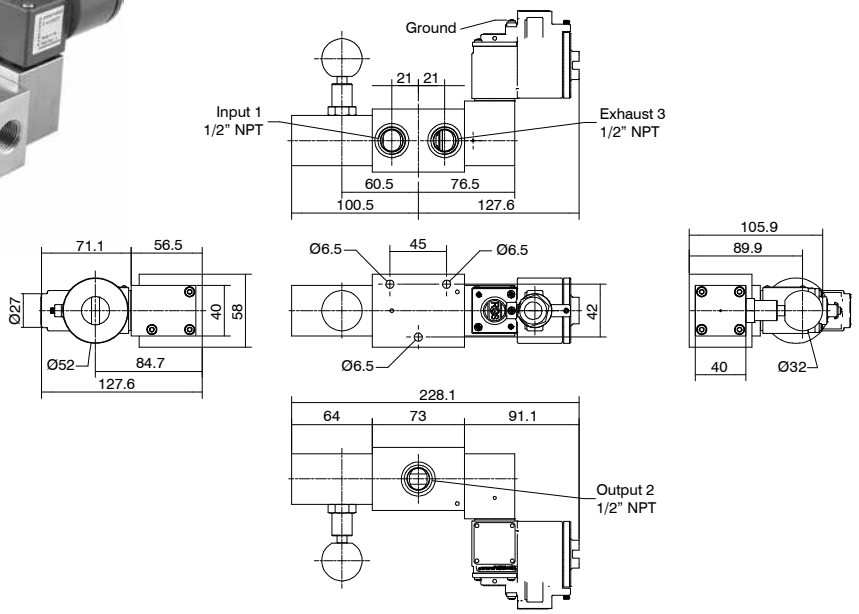
Ordering code	
SS1232CBT14L	
T	TENSION
	1= 24 V DC
	2= 24 V AC (50/60 Hz)
	3= 110 V AC (50/60 Hz)
	4= 220 V AC (50/60 Hz)

Minimum piloting pressure 3 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



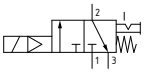
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	3500	1/2” NPT	3358	3,55	53,03

Solenoid valve with self-locking manual reset inverted



Ordering code	
SS1232CBT15L	
T	TENSION
	1= 24 V DC
	2= 24 V AC (50/60 Hz)
	3= 110 V AC (50/60 Hz)
	4= 220 V AC (50/60 Hz)

Minimum piloting pressure 3 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	3500	1/2” NPT	3360	3,55	53,03

Solenoid valves 1/2” NPT series Steel line - Intrinsically safe Exia

Stainless steel solenoid valves, complete with intrinsically safe Exia rated solenoid coil in and CE marked have been engineered and developed to meet process automation and Oil & Gas severe service requirements, where material performances, product reliability and health and safety issues are critical elements. As a result, Pneumax products are perfectly suitable to work with sweet gas media and corrosive / aggressive gases.

All external and internal parts are AISI 316L stainless steel material in compliance with NACE standard MR0175/ISO 15156-1.

The range includes solenoid valves with 3 and 5 ways functions, complete with self feeding solenoids, designed according to the following configuration: solenoid-spring valve, solenoid-solenoid valve, solenoid valve with self-locking manual reset, solenoid valve with self-locking manual reset inverted.

Pneumax solenoid valves have 1/2” NPT connections with 3500 Nl/min maximum flow rate.

This version only provides single mounting.

Construction characteristics

Body	AISI 316L stainless steel
Operators	AISI 316L stainless steel
Spool	AISI 316L stainless steel
Spring	AISI 316 stainless steel
Screws	AISI 316 stainless steel (A4-70 stainless steel)
Seals	NBR for low temperatures FPM (Fluoroelastomer) (**available on request**)

Operating range

Fluid	Filtered air. No lubrication needed, if applied it shall be continuous. Inert Gas. Sweet gas (natural).
Operating temperature	-40°C ... +65°C
Note: The suitable operating temperature is limited by the most restrictive component, which is the pilot, regardless of the type of seals used in the valve spool.	
Maximum operating pressure	10 bar

Electrical (Electropilot) construction characteristics

Housing	Zinc alloy with epoxy paint
Armour / Cores	Ferromagnetic stainless steel
Springs	Stainless steel
Seals	FPM (Fluoroelastomer)
Incorporation	PBT 30% glass load
Wire insulation	H
Guide tube	Stainless steel
Resistance	370 Ohms
Nominal voltage	24 V DC
Power consumption DC	0,4 W (Running)
Connection for cable entry	M20x1.5
Electrical connection	Screw terminals 2 Poles 2.5 mm
IP Rating	IP65
Tolerance on voltage supply	±10%
ED continuous service	100%

Electrical specifications for intrinsically safe

Umax: in	31 V DC
Imax:	0,67 A
Wmax: in	2,98 W

Certifications available:

ATEX CE Ex II 2 GD c IIC

Ex : CE Ex **II 2G Ex h IIC Gb**
CE Ex **II 2D Ex h IIIC Db**

IECEx : International certification for explosive atmospheres

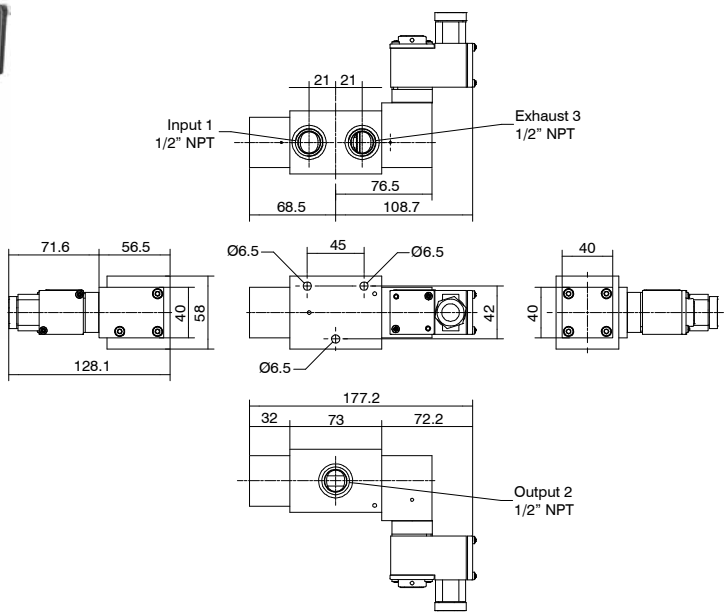
SIL : Suitable up to SIL 3

EAC Ex : CU - TR 012

FM APPROVED : UL / CSA factory mutual approval

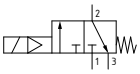
ATEX, SIL and EAC Ex: refer to products in the various sections to the catalogues.
IECEx and FM: refer to Pneumatrol pilots installed upon each valve.

Solenoid-spring valve



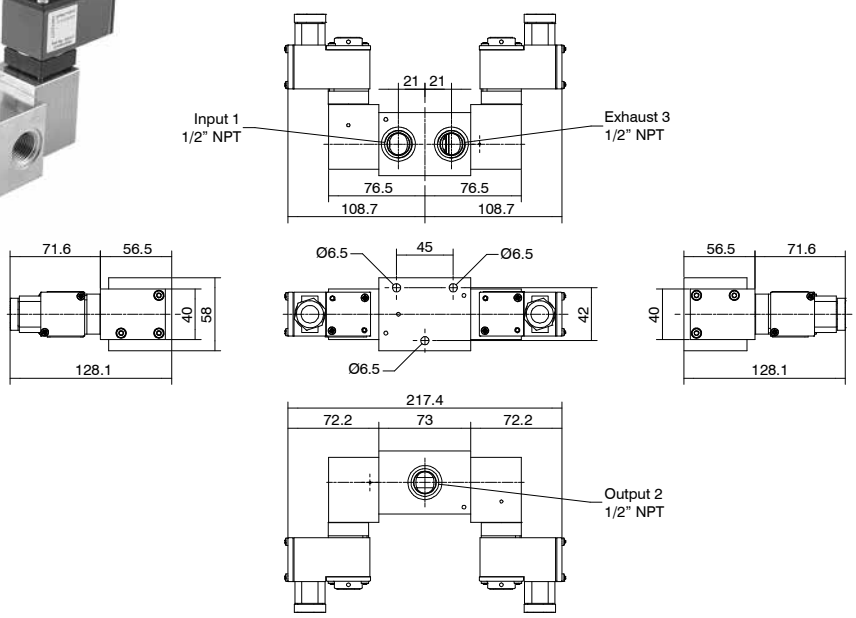
Ordering code
SS1232CC(T)01L
(T) TENSION
1= 24 V DC 33 mA

Minimum piloting pressure 3 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



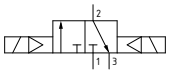
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	3500	1/2” NPT	2437	3,55	53,03

Solenoid-solenoid valve



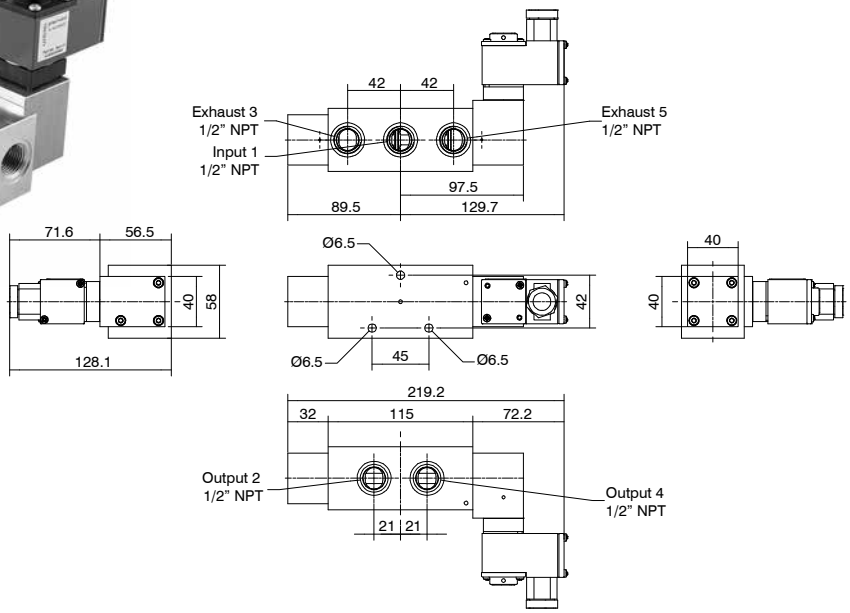
Ordering code
SS1232CC(T)C(T)L
(T) TENSION
1= 24 V DC 33 mA

Minimum piloting pressure 3 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



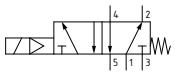
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	3500	1/2” NPT	3228	3,55	53,03

Solenoid-spring valve



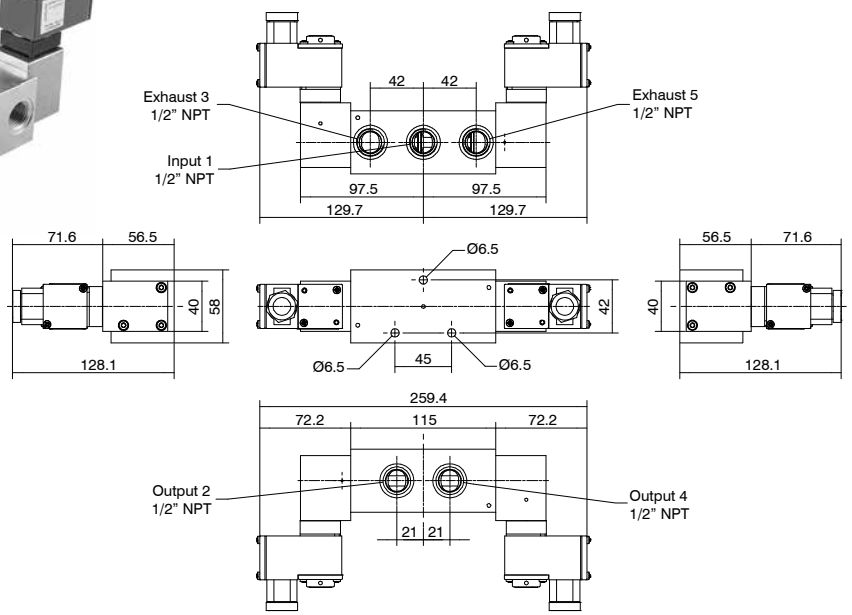
Ordering code
SS12520CⓉ01L
Ⓣ TENSION
1= 24 V DC 33 mA

Minimum piloting pressure 3 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



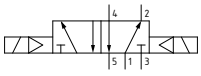
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	3500	1/2" NPT	3349	3,55	53,03

Solenoid-solenoid valve



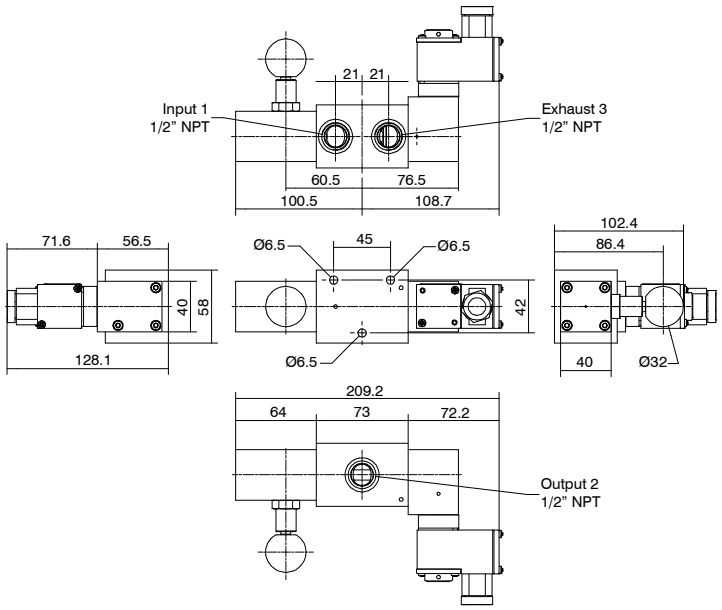
Ordering code
SS12520CⓉCⓉL
Ⓣ TENSION
1= 24 V DC 33 mA

Minimum piloting pressure 3 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



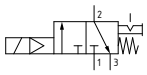
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	3500	1/2" NPT	3749	3,55	53,03

Solenoid valve with self-locking manual reset



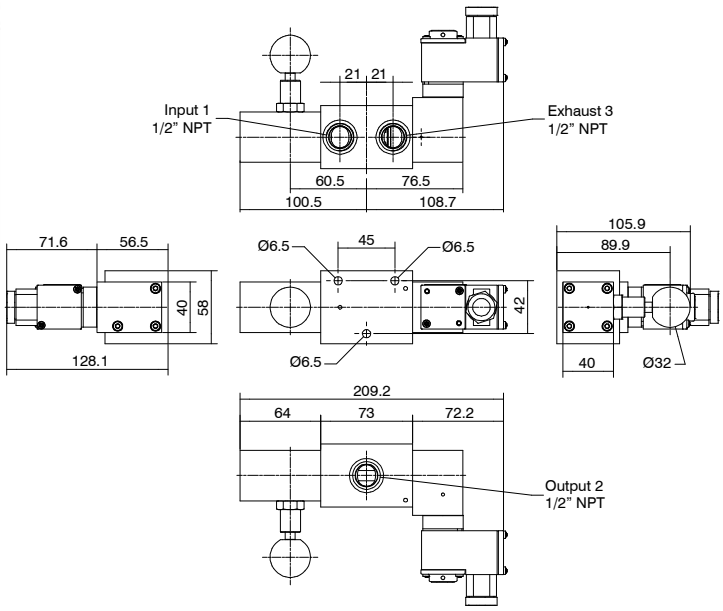
Ordering code
SS1232CC⓽14L
⓽ TENSION
1= 24 V DC 33 mA

Minimum piloting pressure 3 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



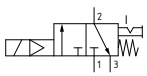
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	3500	1/2” NPT	3020	3,55	53,03

Solenoid valve with self-locking manual reset inverted



Ordering code
SS1232CC⓽15L
⓽ TENSION
1= 24 V DC 33 mA

Minimum piloting pressure 3 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	3500	1/2” NPT	3015	3,55	53,03

Solenoid valves 1/2” NPT series Steel line - Intrinsically safe Exia with IP66 steel housing

Stainless steel solenoid valves, complete with IP66 intrinsically safe Exia protection rated solenoid coil in a stainless steel housing and CE marked have been engineered and developed to meet process automation and Oil & Gas severe service requirements, where material performances, product reliability and health and safety issues are critical elements. As a result, Pneumax products are perfectly suitable to work with sweet gas media and corrosive / aggressive gases.

All external and internal parts are AISI 316L stainless steel material in compliance with NACE standard MR0175/ISO 15156-1.

The range includes solenoid valves with 3 and 5 ways functions, complete with self feeding solenoids, designed according to the following configuration: solenoid-spring valve, solenoid-solenoid valve, solenoid valve with self-locking manual reset **(only in a 3 way function)**, solenoid valve with self-locking manual reset inverted **(only in a 3 way function)**.

Pneumax solenoid valves have 1/2” NPT connections with 3500 Nl/min maximum flow rate.

This version only provides single mounting.

Construction characteristics

Body	AISI 316L stainless steel
Operators	AISI 316L stainless steel
Spool	AISI 316L stainless steel
Spring	AISI 316 stainless steel
Screws	AISI 316 stainless steel (A4-70 stainless steel)
Seals	NBR for low temperatures FPM (Fluoroelastomer) (**available on request**)

Operating range

Fluid	Filtered air. No lubrication needed, if applied it shall be continuous. Inert Gas. Sweet gas (natural).
Operating temperature for DC version	-50°C ... +70°C
Operating temperature for AC version	-50°C ... +55°C
Maximum operating pressure	10 bar

Electrical (Electropilot) construction characteristics

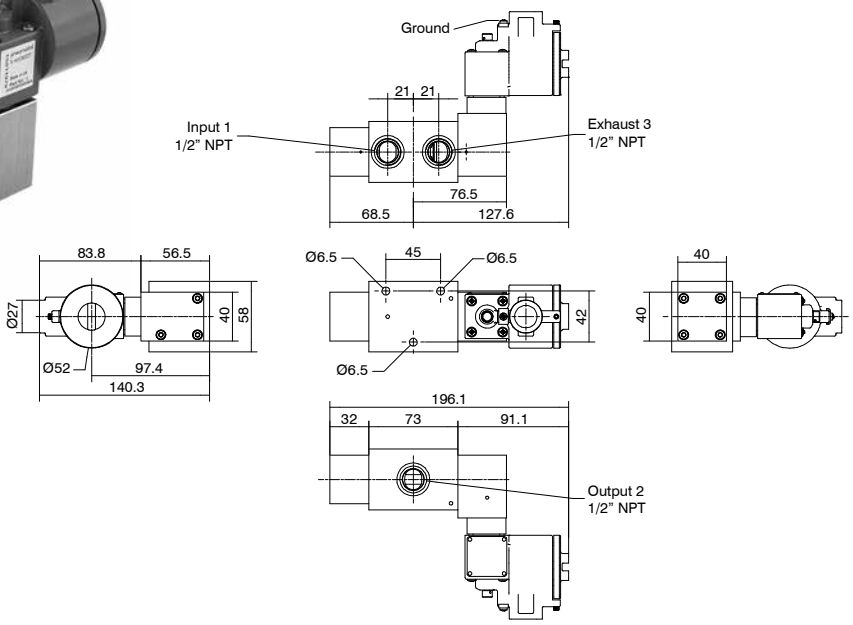
Housing	304 stainless steel with epoxy paint
Armour / Cores	Ferromagnetic stainless steel
Springs	Stainless steel
Seals	FPM (Fluoroelastomer)
Incorporation	PBT 30% glass load
Wire insulation	H
Nominal voltage	24 V DC 24, 110, 220/230 V AC
Power consumption DC	3W
Power consumption AC	10VA (Inrush), 5VA (Running)
Connection for cable entry	M20x1.5 (1/2” NPT **available on request**)
Electrical connection	Screw terminals 2 Poles 2.5 mm
IP Rating	IP66
Tolerance on voltage supply	±10%
ED continuous service	100%

Certifications available:

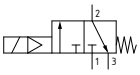
II 2G Ex h IIC T6...T4 Gb X
II 2D Ex h IIIB T135°C Db X

Solenoid-spring valve

Ordering code
SS1232CM101L



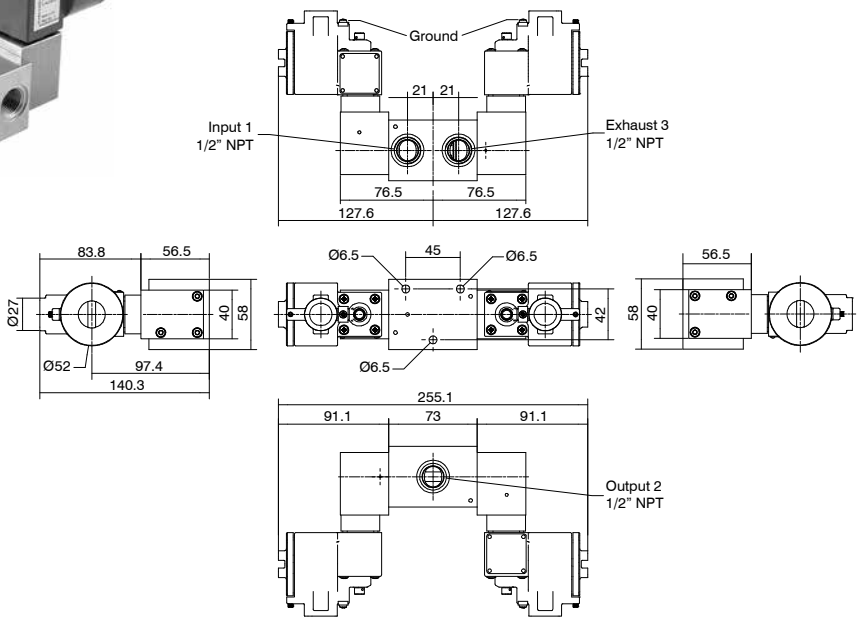
Minimum piloting pressure 3 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



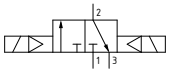
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	3500	1/2” NPT	2776	3,55	53,03

Solenoid-solenoid valve

Ordering code
SS1232CM1M1L



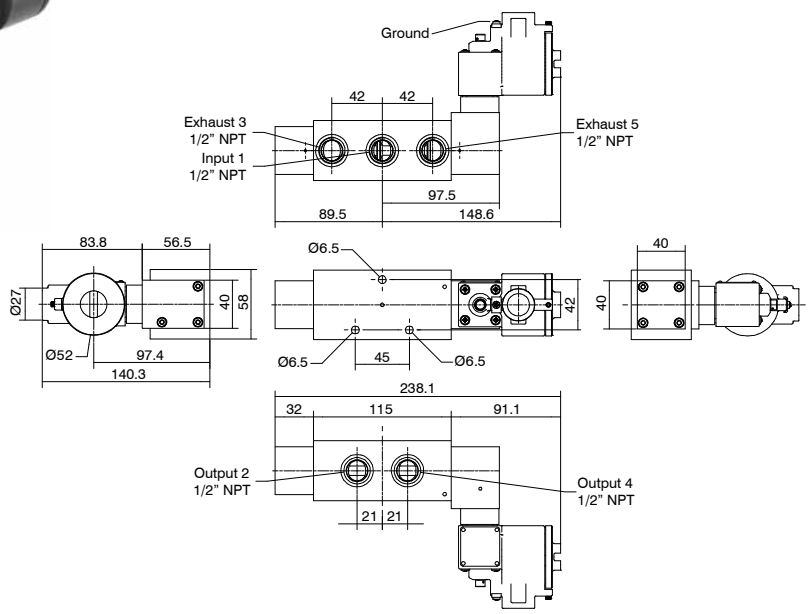
Minimum piloting pressure 3 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



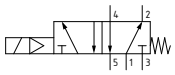
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	3500	1/2” NPT	3909	3,55	53,03

Solenoid-spring valve

Ordering code
SS12520M101L



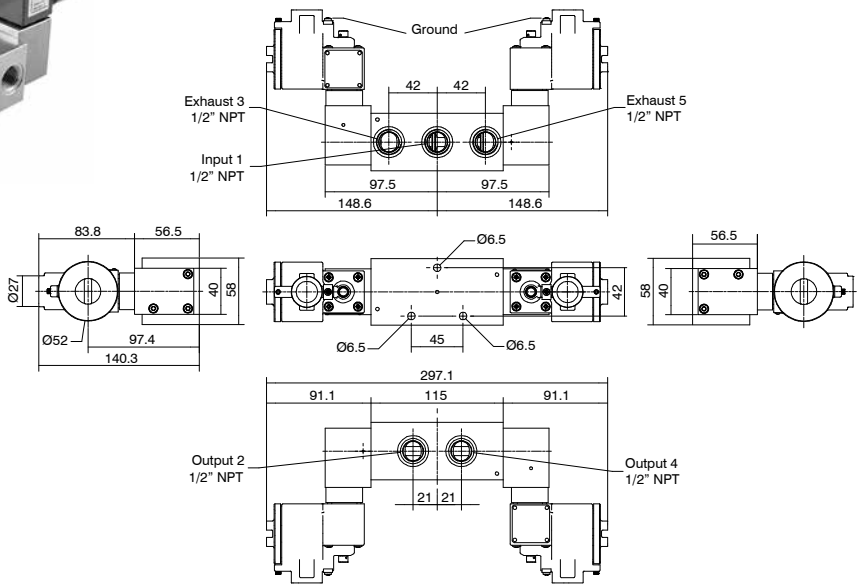
Minimum piloting pressure 3 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



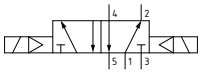
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	3500	1/2" NPT	3679	3,55	53,03

Solenoid-solenoid valve

Ordering code
SS12520M1M1L



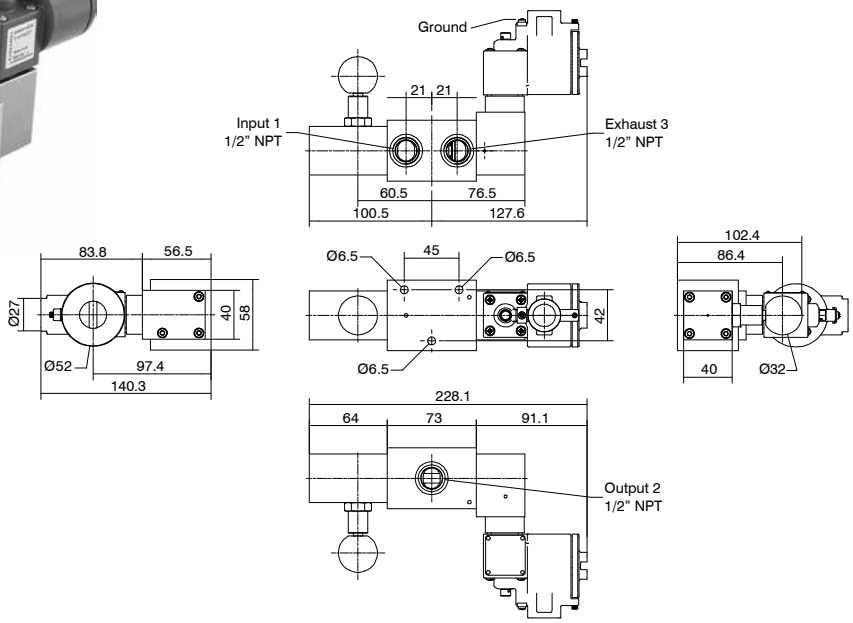
Minimum piloting pressure 3 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



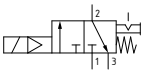
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	3500	1/2" NPT	4678	3,55	53,03

Solenoid valve with self-locking manual reset

Ordering code
SS1232CM114L



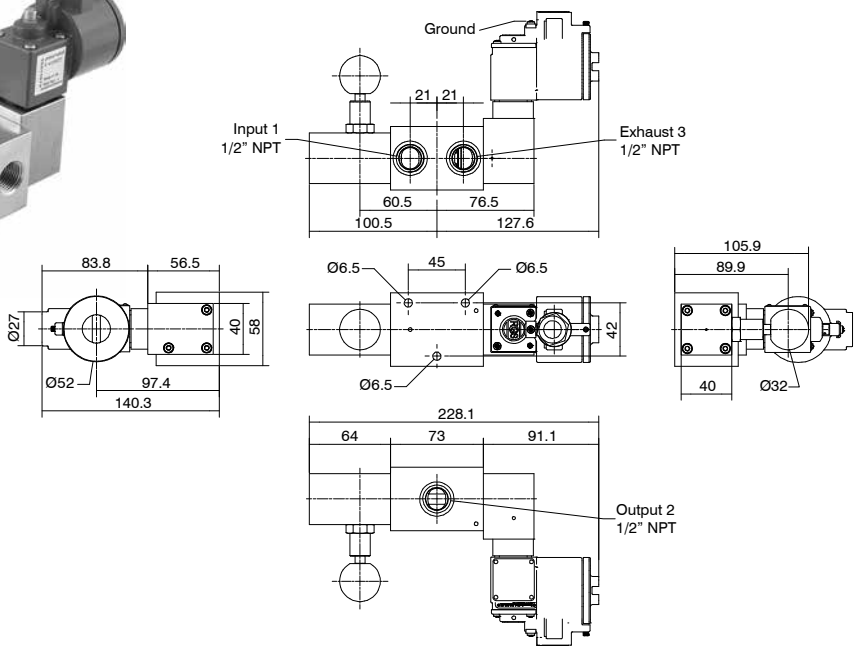
Minimum piloting pressure 3 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



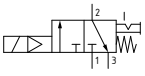
Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	3500	1/2” NPT	3358	3,55	53,03

Solenoid valve with self-locking manual reset inverted

Ordering code
SS1232CM115L



Minimum piloting pressure 3 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
10	3500	1/2” NPT	3360	3,55	53,03

Valves 3/4” NPT series Steel line

Stainless steel brand series have been engineered and developed to meet process automation and Oil & Gas severe service requirements, where material performances, product reliability and health and safety issues are critical elements. As a result, Pneumax products are perfectly suitable to work with sweet gas media and corrosive / aggressive gases.

All external and internal parts are AISI 316L stainless steel material in compliance with NACE standard MR0175/ISO 15156-1.

The range includes 3 and 5 ways valves, designed according to the following configuration: pneumatic-spring valve, pneumatic-pneumatic valve. Accessories: non return valve, uni/bidirectional flow regulator and quick exhaust valve.

Pneumax valves have 3/4” NPT connections with 10000 Nl/min maximum flow rate.

This version only provides single mounting.

Construction characteristics

Body	AISI 316L stainless steel
Operators	AISI 316L stainless steel
Spool	AISI 316L stainless steel
Spring	AISI 316 stainless steel
Screws	AISI 316 stainless steel (A4-70 stainless steel)
Seals	FPM (Fluoroelastomer) NBR and PU (Polyurethane) for low temperatures (-50°C) standard

Operating range

Fluid	Filtered air. No lubrication needed, if applied it shall be continuous. Inert Gas. Sweet gas (natural).
Operating temperature (for low temperature version L)	-50°C ... +70°C
Operating temperature (for high temperature version H)	-10°C ... +150°C
Maximum operating pressure	12 bar

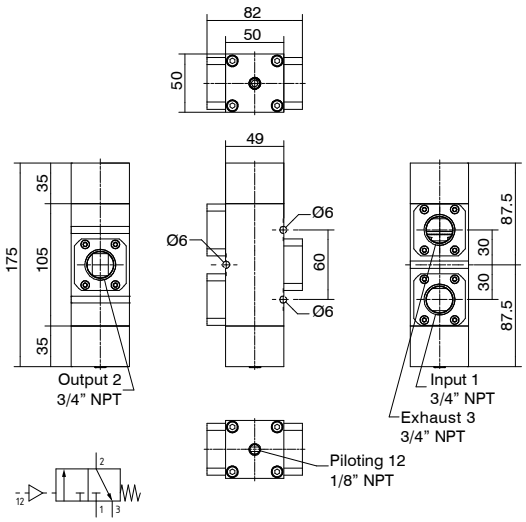
Certifications available:

ATEX CE Ex II 2 GD c IIC

Ex : CE Ex **II 2G Ex h IIC Gb**
CE Ex **II 2D Ex h IIIC Db**

SIL : Suitable up to SIL 3

Pneumatic-spring valve



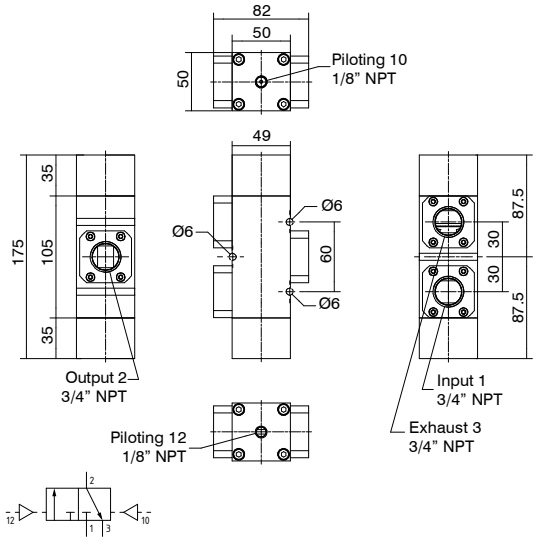
Ordering code	
SS3432C1101T	
T	TYPE
	L= Low temperature version
	H= High temperature version

Minimum piloting pressure 3 bar
Maximum piloting pressure 8 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Operational characteristics

Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Pilot connections	Weight (g)	Cv	kv
12	10000	3/4" NPT	1/8" NPT	3190	10,16	151,51

Pneumatic-pneumatic valve



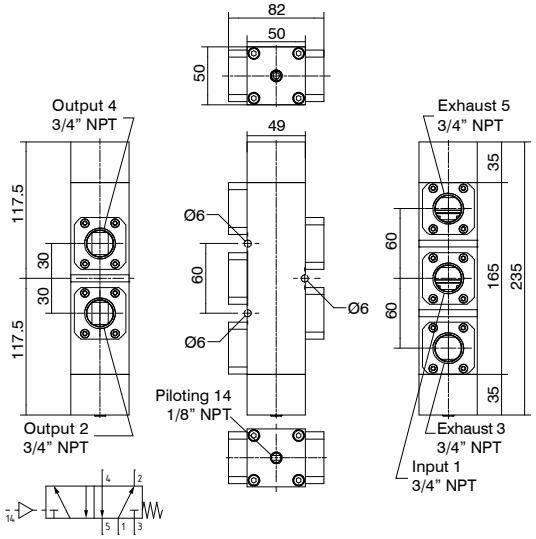
Ordering code	
SS3432C1111T	
T	TYPE
	L= Low temperature version
	H= High temperature version

Minimum piloting pressure 3 bar
Maximum piloting pressure 8 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Operational characteristics

Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Pilot connections	Weight (g)	Cv	kv
12	10000	3/4" NPT	1/8" NPT	3165	10,16	151,51

Pneumatic-spring valve



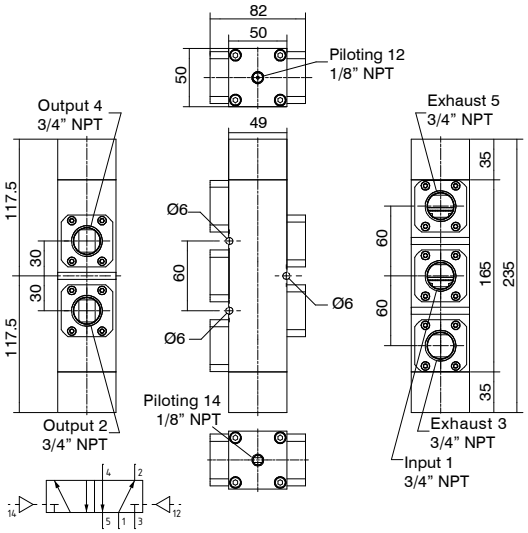
Ordering code	
SS345201101T	
T	TYPE
	L= Low temperature version
	H= High temperature version

Minimum piloting pressure 3 bar
Maximum piloting pressure 8 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Operational characteristics

Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Pilot connections	Weight (g)	Cv	kv
12	10000	3/4" NPT	1/8" NPT	4345	10,16	151,51

Pneumatic-pneumatic valve



Minimum piloting pressure 3 bar
Maximum piloting pressure 8 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Ordering code	
SS345201111T	
T	TYPE
	L= Low temperature version
	H= High temperature version

Operational characteristics						
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Pilot connections	Weight (g)	Cv	kv
12	10000	3/4" NPT	1/8" NPT	4325	10,16	151,51

Valves 1” NPT series Steel line

Stainless steel brand series have been engineered and developed to meet process automation and Oil & Gas severe service requirements, where material performances, product reliability and health and safety issues are critical elements. As a result, Pneumax products are perfectly suitable to work with sweet gas media and corrosive / aggressive gases.

All external and internal parts are AISI 316L stainless steel material in compliance with NACE standard MR0175/ISO 15156-1.

The range includes 3 and 5 ways valves, designed according to the following configuration: pneumatic-spring valve, pneumatic-pneumatic valve. Accessories: non return valve, uni/bidirectional flow regulator and quick exhaust valve.

Pneumax valves have 1” NPT connections with 13500 Nl/min maximum flow rate.

This version only provides single mounting.

Construction characteristics

Body	AISI 316L stainless steel
Operators	AISI 316L stainless steel
Spool	AISI 316L stainless steel
Spring	AISI 316 stainless steel
Screws	AISI 316 stainless steel (A4-70 stainless steel)
Seals	FPM (Fluoroelastomer) NBR and PU (Polyurethane) for low temperatures (-50°C) standard

Operating range

Fluid	Filtered air. No lubrication needed, if applied it shall be continuous. Inert Gas. Sweet gas (natural).
Operating temperature (for low temperature version L)	-50°C ... +70°C
Operating temperature (for high temperature version H)	-10°C ... +150°C
Maximum operating pressure	12 bar

Certifications available:

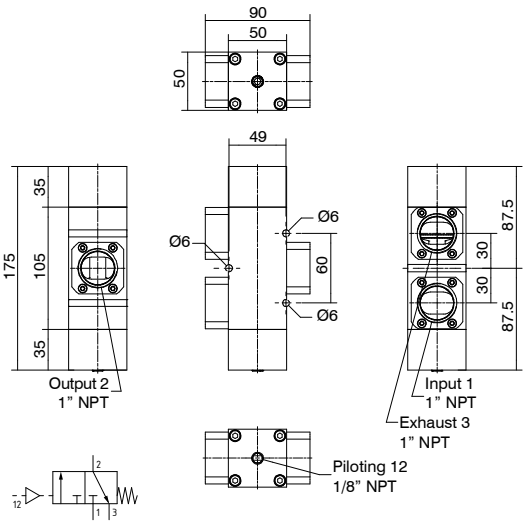
ATEX CE Ex II 2 GD c IIC

Ex : CE Ex **II 2G Ex h IIC Gb**
CE Ex **II 2D Ex h IIIC Db**

SIL : Suitable up to SIL 3

PROCESS AUTOMATION TECHNOLOGY

Pneumatic-spring valve



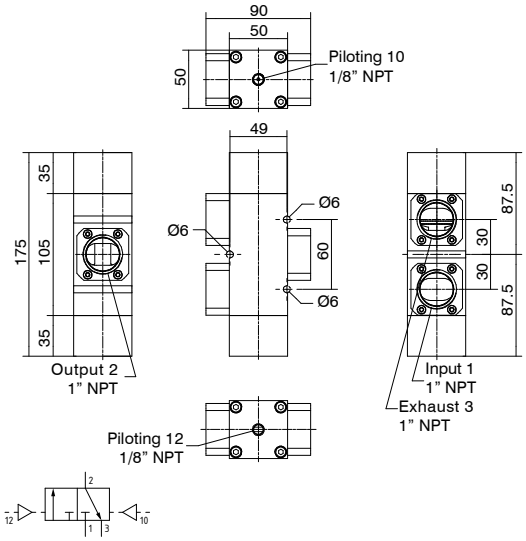
Ordering code
SS1132C1101T
TYPE
T= L= Low temperature version
H= High temperature version

Minimum piloting pressure 3 bar
Maximum piloting pressure 8 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Operational characteristics

Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Pilot connections	Weight (g)	Cv	kv
12	13500	1" NPT	1/8" NPT	3180	13,72	204,54

Pneumatic-pneumatic valve



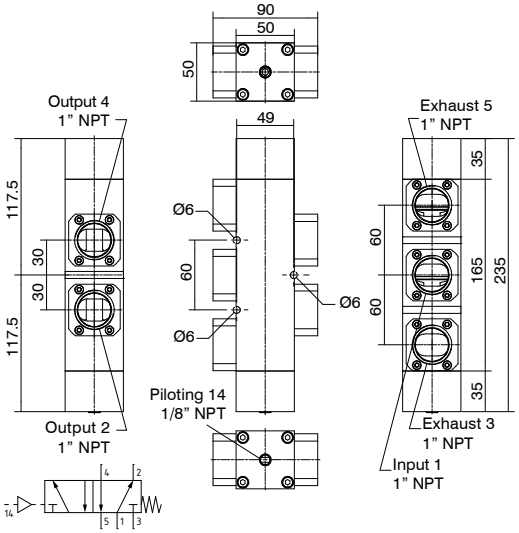
Ordering code
SS1132C1111T
TYPE
T= L= Low temperature version
H= High temperature version

Minimum piloting pressure 3 bar
Maximum piloting pressure 8 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Operational characteristics

Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Pilot connections	Weight (g)	Cv	kv
12	13500	1" NPT	1/8" NPT	3155	13,72	204,54

Pneumatic-spring valve



Ordering code
SS115201101T
TYPE
T= L= Low temperature version
H= High temperature version

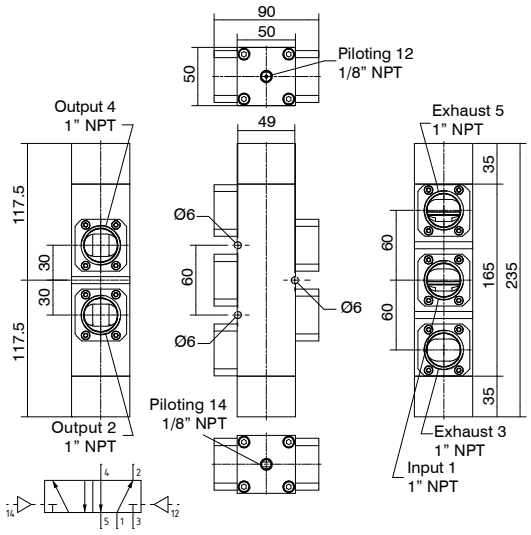
Minimum piloting pressure 3 bar
Maximum piloting pressure 8 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).

Operational characteristics

Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Pilot connections	Weight (g)	Cv	kv
12	13500	1" NPT	1/8" NPT	4325	13,72	204,54

Pneumatic-pneumatic valve

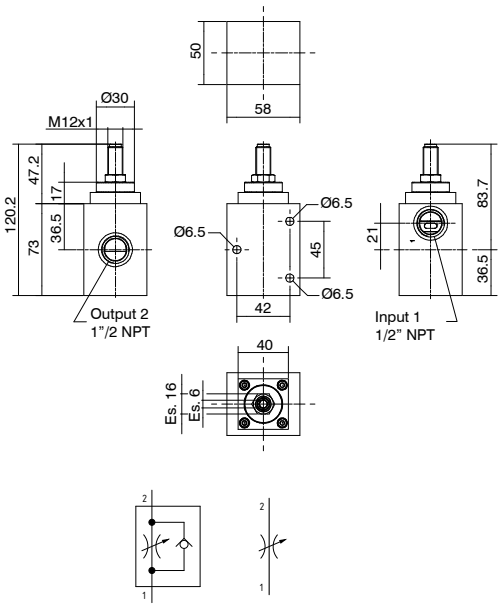
Minimum piloting pressure 3 bar
Maximum piloting pressure 8 bar
Fluid:
Filtered air. No lubrication needed, if applied it shall be continuous.
Inert Gas.
Sweet gas (natural).



Ordering code	
SS115201111Ⓣ	
Ⓣ	TYPE
	L= Low temperature version
	H= High temperature version

Operational characteristics						
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Pilot connections	Weight (g)	Cv	kv
12	13500	1" NPT	1/8" NPT	4305	13,72	204,54

Flow regulator 1/2" NPT

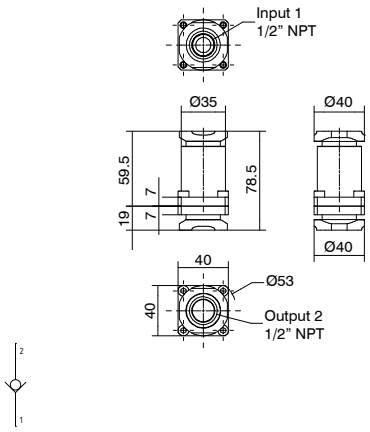


Fluid: Air, Inert Gas, Sweet gas (natural) - Filtered air.
No lubrication needed, if applied it shall be continuous.

Ordering code	
SS12RF(F)(T)	
	FUNCTION
(F)	U= Unidirectional
	B= Bidirectional
	TYPE
(T)	L= Low temperature version
	H= High temperature version

Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	3500	1/2" NPT	1641	3,55	53,03

Double seal non return valve

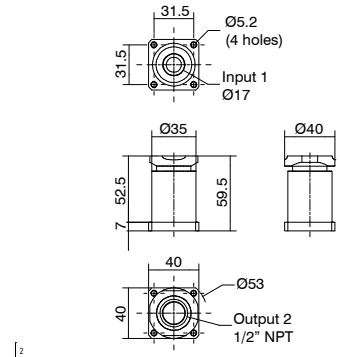


Fluid: Air, Inert Gas, Sweet gas (natural) - Filtered air.
No lubrication needed, if applied it shall be continuous.

Ordering code	
SS12VUS(T)	
	TYPE
(T)	L= Low temperature version
	H= High temperature version

Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	3500	1/2" NPT	444	3,55	53,03

Double seal non return valve for group



Fluid: Air, Inert Gas, Sweet gas (natural) - Filtered air.
No lubrication needed, if applied it shall be continuous.

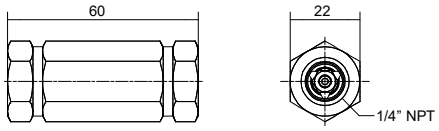
Ordering code	
SS12VUG(T)	
	TYPE
(T)	L= Low temperature version
	H= High temperature version

Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	3500	1/2" NPT	296	3,55	53,03

Non return valve 1/4" NPT-F/F AISI 316L HT

Ordering code
SS14VU03SV4N

On request are available versions with temperature range: -55°C ... +150°C

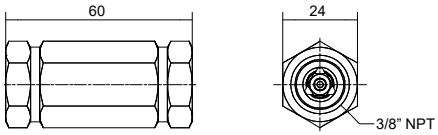


Operational characteristics							
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Minimum operating pressure differential (bar)	Leak-tight with pressure differential (bar)	Temperature °C	Weight (g)	Cv	kv
210	680	0,2	0,2	-25 ... +205	107	0,69	10,30

Non return valve 3/8" NPT-F/F AISI 316L HT

Ordering code
SS38VU03SV6N

On request are available versions with temperature range: -55°C ... +150°C

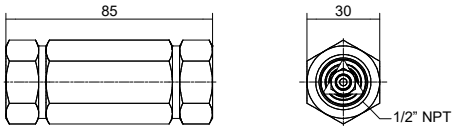


Operational characteristics							
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Minimum operating pressure differential (bar)	Leak-tight with pressure differential (bar)	Temperature °C	Weight (g)	Cv	kv
210	2020	0,2	0,2	-25 ... +205	253	2,05	30,60

Non return valve 1/2" NPT-F/F AISI 316L HT

Ordering code
SS12VU03SV8N

On request are available versions with temperature range: -55°C ... +150°C

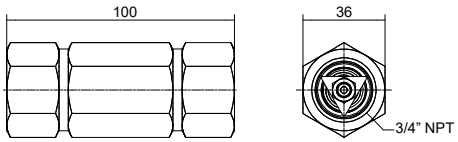


Operational characteristics							
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Minimum operating pressure differential (bar)	Leak-tight with pressure differential (bar)	Temperature °C	Weight (g)	Cv	kv
210	2650	0,2	0,2	-25 ... +205	380	2,69	40,15

Non return valve 3/4" NPT-F/F AISI 316L HT

Ordering code
SS34VU03SV12N

On request are available versions with temperature range: -55°C ... +150°C

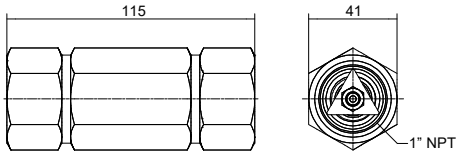


Operational characteristics							
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Minimum operating pressure differential (bar)	Leak-tight with pressure differential (bar)	Temperature °C	Weight (g)	Cv	kv
210	4030	0,2	0,2	-25 ... +205	577	4,09	61,06

Non return valve 1" NPT-F/F AISI 316L HT

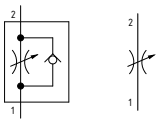
Ordering code
SS11VU03SV16N

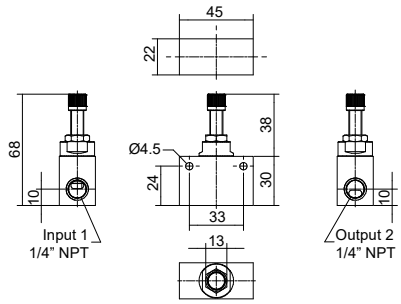
On request are available versions with temperature range: -55°C ... +150°C



Operational characteristics							
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Minimum operating pressure differential (bar)	Leak-tight with pressure differential (bar)	Temperature °C	Weight (g)	Cv	kv
210	5500	0,2	0,2	-25 ... +205	774	5,59	83,33

Flow regulator 1/4" NPT single use



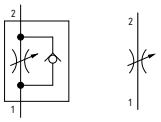


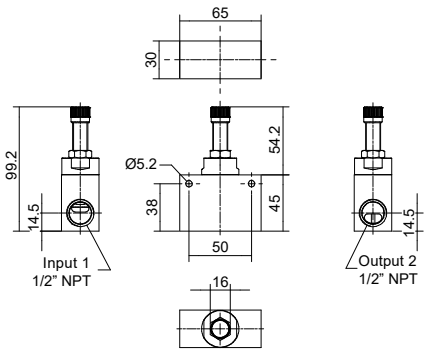
Ordering code	
SS1401RFⒻⓉ	
Ⓕ	FUNCTION
	U= Unidirectional
	B= Bidirectional
Ⓣ	TYPE
	L= Low temperature version
	H= High temperature version

Operational characteristics

Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Temperature °C		Cv	kv
12	700	1/4" NPT	219	-50 ... +70 (version L)	-10 ... +150 (version H)	0,71	10,60

Flow regulator 1/2" NPT single use



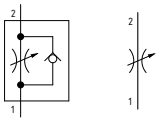


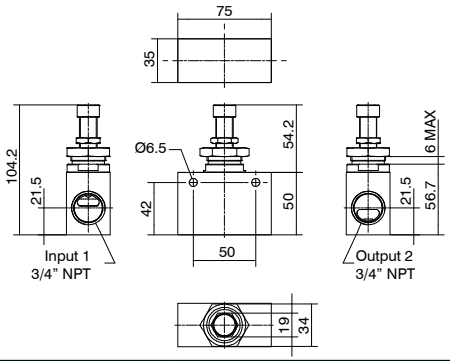
Ordering code	
SS1201RFⒻⓉ	
Ⓕ	FUNCTION
	U= Unidirectional
	B= Bidirectional
Ⓣ	TYPE
	L= Low temperature version
	H= High temperature version

Operational characteristics

Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Temperature °C		Cv	kv
12	2000	1/2" NPT	634,5	-50 ... +70 (version L)	-10 ... +150 (version H)	2,03	30,30

Flow regulator 3/4" NPT single use



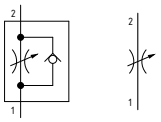


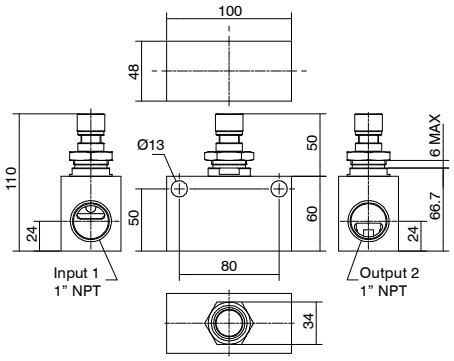
Ordering code	
SS3401RFⒻⓉ	
Ⓕ	FUNCTION
	U= Unidirectional
	B= Bidirectional
Ⓣ	TYPE
	L= Low temperature version
	H= High temperature version

Operational characteristics

Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Temperature °C		Cv	kv
12	2800	3/4" NPT	925	-50 ... +70 (version L)	-10 ... +150 (version H)	2,84	42,42

Flow regulator 1" NPT single use





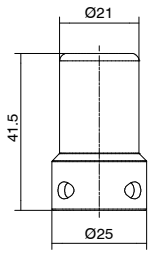
Ordering code	
SS1101RFⒻⓉ	
Ⓕ	FUNCTION
	U= Unidirectional
	B= Bidirectional
Ⓣ	TYPE
	L= Low temperature version
	H= High temperature version

Operational characteristics

Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Temperature °C		Cv	kv
12	3300	1" NPT	2000	-50 ... +70 (version L)	-10 ... +150 (version H)	3,35	50

Flow regulator system 1/4" NPT tamper-proof system

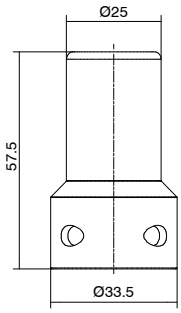
Ordering code
SS14RFK



Note: Available for 1/4" NPT flow regulator
We suggest using a long shackle padlock: Shackle diameter ≤ 4mm
The padlock is not supplied with the product.
Weight 40 g

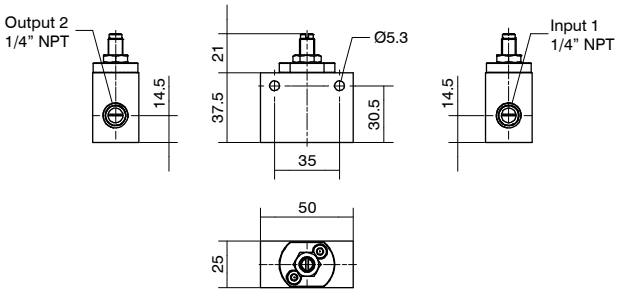
Flow regulator system 1/2" NPT tamper-proof system

Ordering code
SS12RFK



Note: Available for 1/2" NPT flow regulator
We suggest using a long shackle padlock: Shackle diameter ≤ 5mm
The padlock is not supplied with the product.
Weight 75 g

Bidirectional flow regulator 1/4" NPT high flow rate

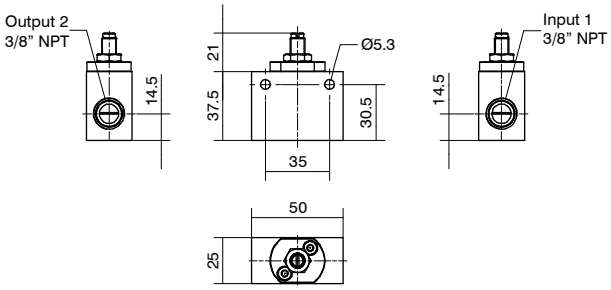


Ordering code
SS14A1RFB(T)
TYPE
(T) L= Low temperature version
H= High temperature version

Flow rate with the needle in the fully closed position ~ 20 Nl/min

Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	2200	1/4" NPT	400	2,23	33,33

Bidirectional flow regulator 3/8" NPT high flow rate

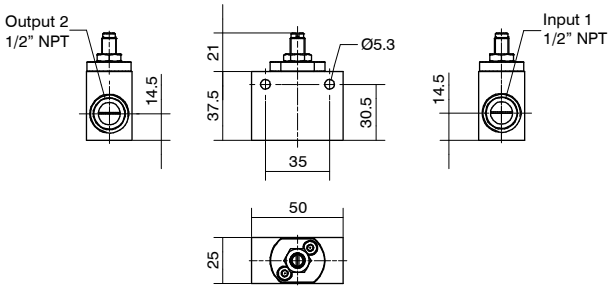


Ordering code
SS38A1RFB(T)
TYPE
(T) L= Low temperature version
H= High temperature version

Flow rate with the needle in the fully closed position ~ 20 Nl/min

Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	3200	3/8" NPT	380	3,25	48,48

Bidirectional flow regulator 1/2" NPT high flow rate

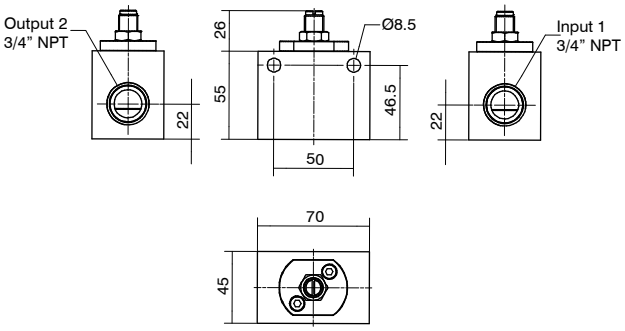


Ordering code
SS12A1RFB(T)
TYPE
(T) L= Low temperature version
H= High temperature version

Flow rate with the needle in the fully closed position ~ 20 Nl/min

Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	6500	1/2" NPT	360	6,60	98,48

Bidirectional flow regulator 3/4" NPT high flow rate

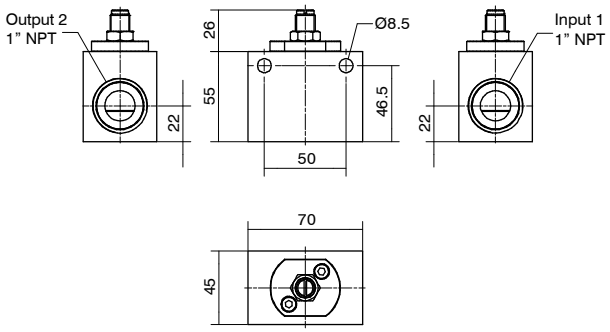


Ordering code	
SS34A1RFBⓉ	
Ⓣ	TYPE
	L= Low temperature version
	H= High temperature version

Flow rate with the needle in the fully closed position ~ 40 Nl/min

Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	15000	3/4" NPT	1300	15,24	227,27

Bidirectional Flow regulator 1" NPT high flow rate

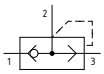


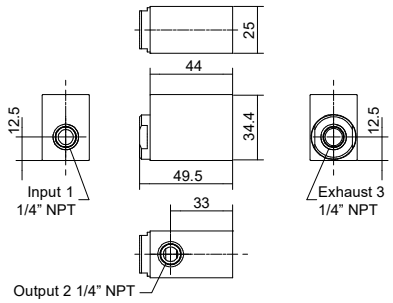
Ordering code	
SS11A1RFBⓉ	
Ⓣ	TYPE
	L= Low temperature version
	H= High temperature version

Flow rate with the needle in the fully closed position~ 70 Nl/min

Operational characteristics					
Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Connections	Weight (g)	Cv	kv
12	16500	1" NPT	1150	16,76	250

Quick exhaust valve 1/4" NPT

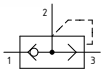


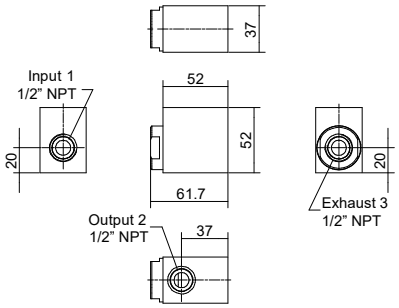


Ordering code	
SS1402SR(T)	
(T)	TYPE
	L= Low temperature version
	H= High temperature version

Operational characteristics										
Maximum working pressure (bar)	Inlet flow rate at 6 bar with Δp=1 (Nl/min)	Cv	kv	Flow rate from 2 to 3 at 6 bar on free exhaust (Nl/min)	Cv	kv	Connections	Temperature °C		Weight (g)
12	700	0,71	10,60	2700	2,74	40,9	1/4" NPT	-50 ... +70 (version L)	-10 ... +150 (version H)	250

Quick exhaust valve 1/2" NPT

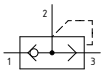


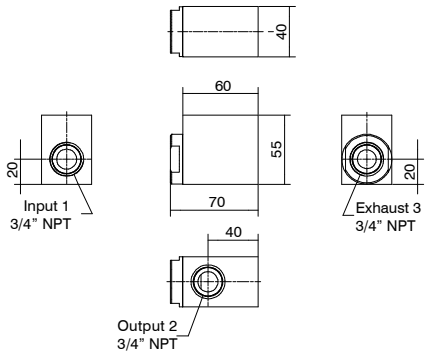


Ordering code	
SS1202SR(T)	
(T)	TYPE
	L= Low temperature version
	H= High temperature version

Operational characteristics										
Maximum working pressure (bar)	Inlet flow rate at 6 bar with Δp=1 (Nl/min)	Cv	kv	Flow rate from 2 to 3 at 6 bar on free exhaust (Nl/min)	Cv	kv	Connections	Temperature °C		Weight (g)
12	2000	2,03	30,30	7150	7,26	108,33	1/2" NPT	-50 ... +70 (version L)	-10 ... +150 (version H)	617,5

Quick exhaust valve 3/4" NPT

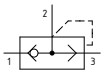


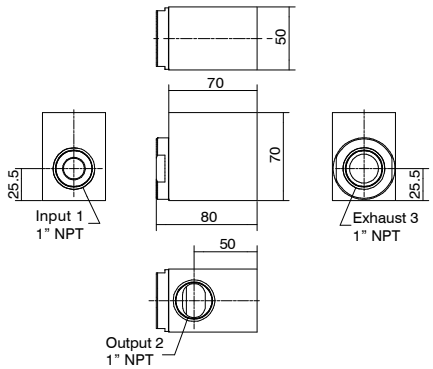


Ordering code	
SS3402SR(T)	
(T)	TYPE
	L= Low temperature version
	H= High temperature version

Operational characteristics										
Maximum working pressure (bar)	Inlet flow rate at 6 bar with Δp=1 (Nl/min)	Cv	kv	Flow rate from 2 to 3 at 6 bar on free exhaust (Nl/min)	Cv	kv	Connections	Temperature °C		Weight (g)
12	3000	3,04	45,45	10000	10,16	151,51	3/4" NPT	-50 ... +70 (version L)	-10 ... +150 (version H)	745

Quick exhaust valve 1" NPT





Ordering code	
SS1102SR(T)	
(T)	TYPE
	L= Low temperature version
	H= High temperature version

Operational characteristics										
Maximum working pressure (bar)	Inlet flow rate at 6 bar with Δp=1 (Nl/min)	Cv	kv	Flow rate from 2 to 3 at 6 bar on free exhaust (Nl/min)	Cv	kv	Connections	Temperature °C		Weight (g)
12	5000	5,08	75,75	18000	18,29	272,72	1" NPT	-50 ... +70 (version L)	-10 ... +150 (version H)	1365

Series SA - aluminium

PNEUMAX, worldwide recognized leader in industrial automation, provide a wide range of solutions and components for the process automation industry. Application oriented production and long-term experience in wide range applications makes Pneumax a reliable partner capable to assist the customers since the very beginning of project execution.

General

Brand aluminum valve series has been developed in compliance with the latest and most technologically advance testing and prototyping methodologies, to secure top performances and reliability. The widest product selection and configuration makes Pneumax aluminum valve a proper selection for both Grass Roots Plants execution and Plant retrofiting / upgrading.
Main industries served are Chemical, Petrochemical, Power Generation and Oil & Gas.

All external and internal parts are aluminum material.

The range includes balanced spool valves with 3 and 5 way function valves, with the following functions available: pneumatic-spring valve, pneumatic-pneumatic valve, 2 position push-pull valve **(only for 1/4" NPT version)**, push button-spring valve **(only for 1/4" NPT version)**, push button-pneumatic return valve **(only for 1/4" NPT version)**.
Accessories which include: non return valve, uni/bidirectional flow regulator and quick exhaust valve.

1/8" NPT pilot connection.

Working port size	Flow at 6 bar with Δp=1 (Nl/min)
1/4" NPT	1360
1/2" NPT	2500
1" NPT	6500

Construction characteristics	
Body	Aluminium
Operators	Aluminium
Spacers	Aluminium
Spool	AISI 303 stainless steel
Spring	AISI 302 stainless steel
Screws	Stainless steel
Seals	NBR for low temperature (-30°C)

Operating range	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous. Inert Gas. Sweet gas (natural).
Operating temperature	-30°C ... +70°C
Maximum operating pressure	12 bar

Certifications available:

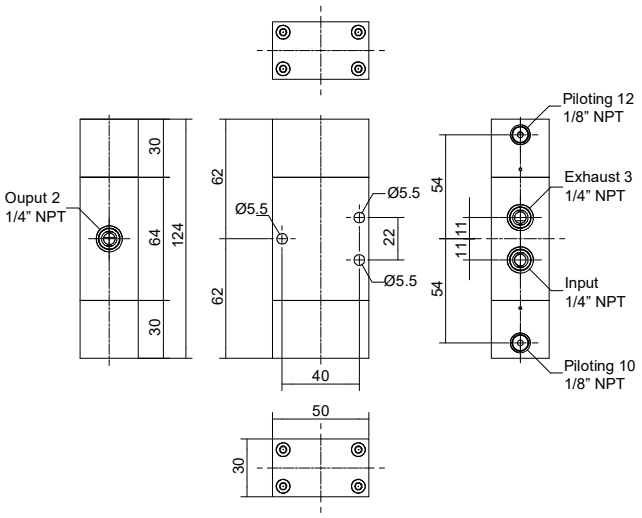
ATEX CE Ex II 2 GD c IIC T5 T100°C

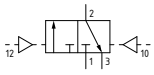
Ex : **CE Ex II 2G Ex h IIC T5 Gb**
CE Ex II 2D Ex h IIIC T100°C Db

SIL : Suitable up to SIL 3

Pneumatic-Pneumatic

Ordering code
SA1432C1111L



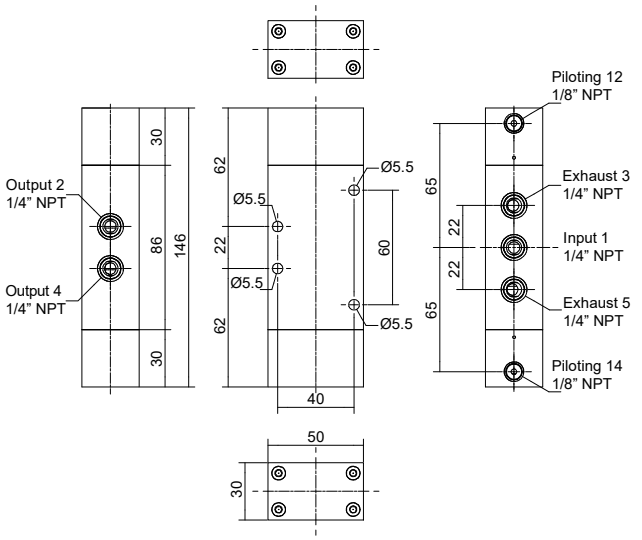


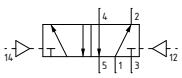
Minimum piloting pressure 2 bar

Operational characteristics									
Fluid	Maximum working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working port size	Pilot connections	Weight (g)	Cv	kv
Filtered and lubricated air	12	-30 ... +70	1360	8	1/4" NPT	1/8" NPT	470	1,38	20,60

Pneumatic-Pneumatic

Ordering code
SA145201111L



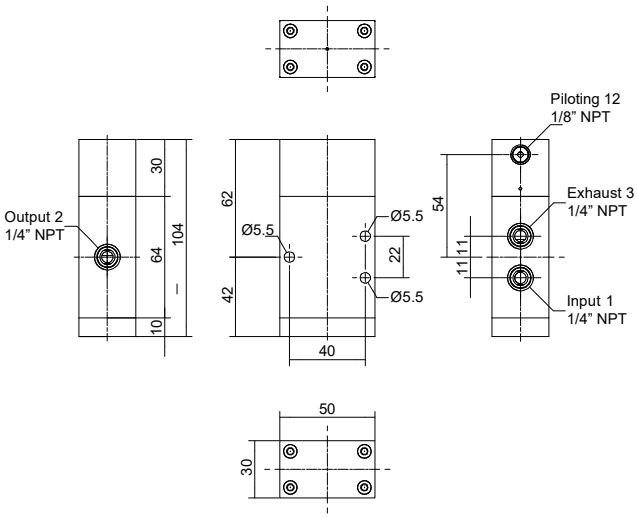


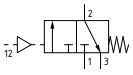
Minimum piloting pressure 2 bar

Operational characteristics									
Fluid	Maximum working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working port size	Pilot connections	Weight (g)	Cv	kv
Filtered and lubricated air	12	-30 ... +70	1360	8	1/4" NPT	1/8" NPT	550	1,38	20,60

Pneumatic-Spring

Ordering code
SA1432C1101L



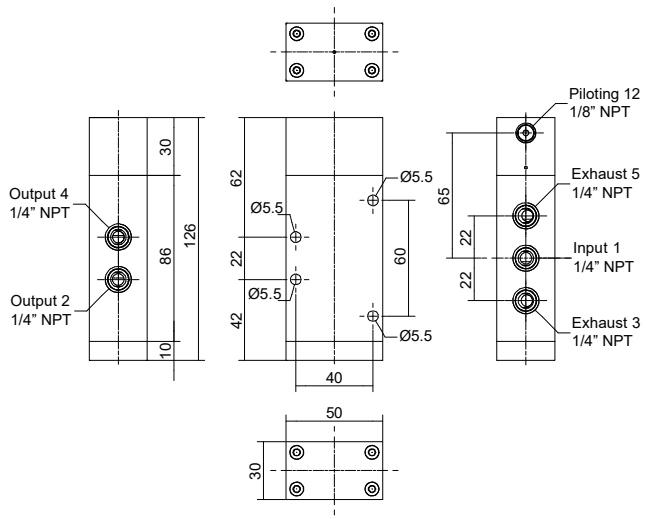


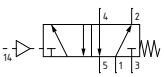
Minimum piloting pressure 2,5 bar

Operational characteristics									
Fluid	Maximum working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working port size	Pilot connections	Weight (g)	Cv	kv
Filtered and lubricated air	12	-30 ... +70	1360	8	1/4" NPT	1/8" NPT	394	1,38	20,60

Pneumatic-Spring

Ordering code
SA145201101L



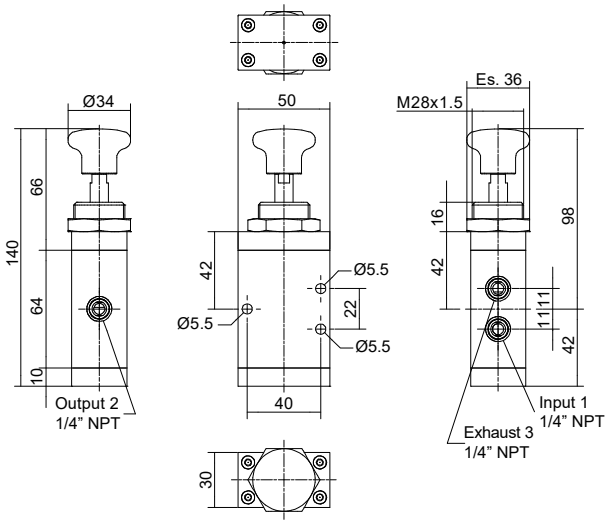


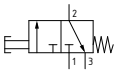
Minimum piloting pressure 2,5 bar

Operational characteristics									
Fluid	Maximum working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working port size	Pilot connections	Weight (g)	Cv	kv
Filtered and lubricated air	12	-30 ... +70	1360	8	1/4" NPT	1/8" NPT	475	1,38	20,60

Push button-pneumatic valve

Ordering code
SA1432C0801L



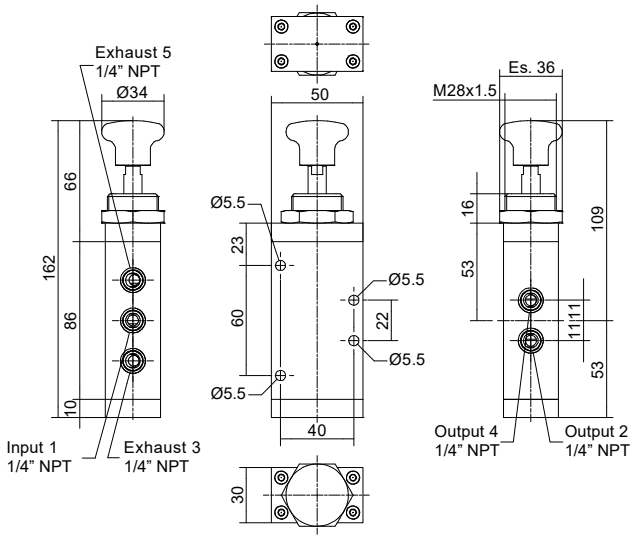


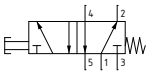
Operating force 71,5N

Operational characteristics								
Fluid	Maximum working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working port size	Weight (g)	Cv	kv
Filtered and lubricated air	12	-30 ... +70	1360	8	1/4” NPT	405	1,38	20,60

Push button-pneumatic valve

Ordering code
SA145200801L



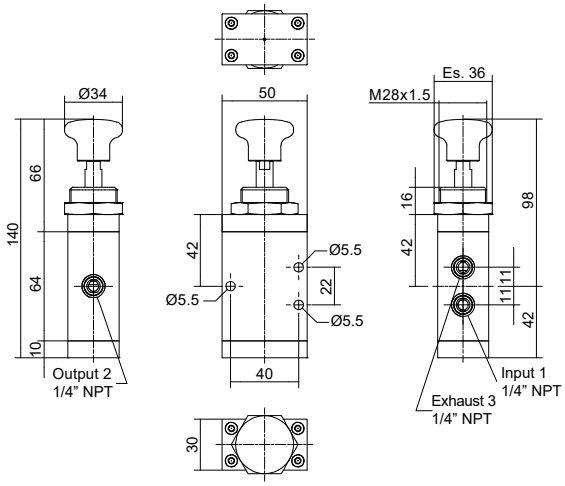


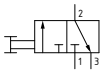
Operating force 71,5N

Operational characteristics								
Fluid	Maximum working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working port size	Weight (g)	Cv	kv
Filtered and lubricated air	12	-30 ... +70	1360	8	1/4” NPT	487	1,38	20,60

Bistable push button valve

Ordering code
SA1432C0803L



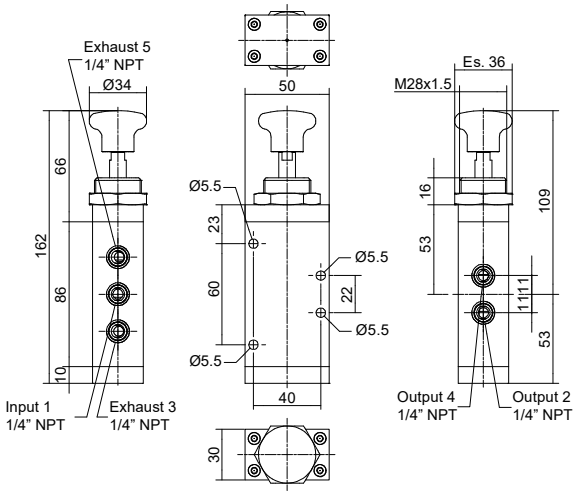


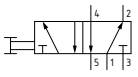
Operating force 105N

Operational characteristics								
Fluid	Maximum working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working port size	Weight (g)	Cv	kv
Filtered and lubricated air	12	-30 ... +70	1360	8	1/4" NPT	395	1,38	20,60

Bistable push button valve

Ordering code
SA145200803L



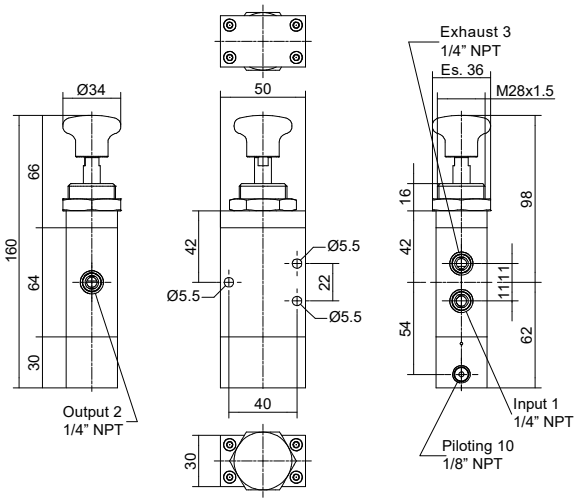


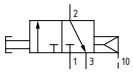
Operating force 105N

Operational characteristics								
Fluid	Maximum working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working port size	Weight (g)	Cv	kv
Filtered and lubricated air	12	-30 ... +70	1360	8	1/4" NPT	483	1,38	20,60

Push button-pneumatic valve

Ordering code
SA1432C0811L



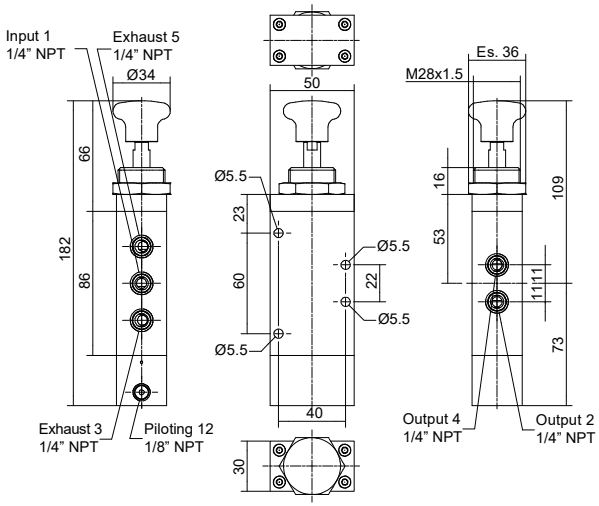


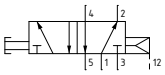
Minimum piloting pressure 2 bar

Operational characteristics									
Fluid	Maximum working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working port size	Pilot connections	Weight (g)	Cv	kv
Filtered and lubricated air	12	-30 ... +70	1360	8	1/4" NPT	1/8" NPT	481	2,54	37,88

Push button-pneumatic valve

Ordering code
SA145200811L



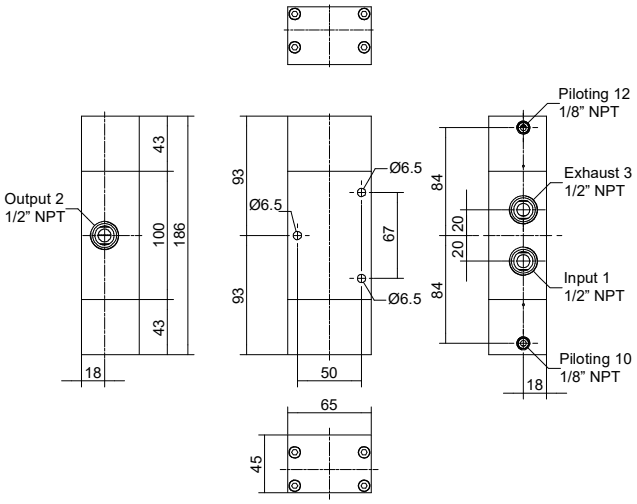


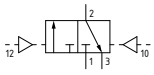
Minimum piloting pressure 2 bar

Operational characteristics									
Fluid	Maximum working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working port size	Pilot connections	Weight (g)	Cv	kv
Filtered and lubricated air	12	-30 ... +70	1360	8	1/4" NPT	1/8" NPT	561	2,54	37,88

Pneumatic-Pneumatic

Ordering code
SA1232C1111L



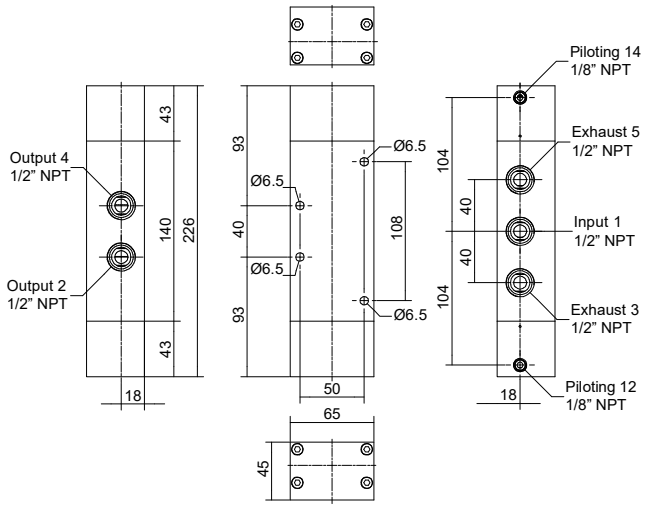


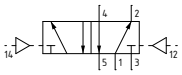
Minimum piloting pressure 2 bar

Operational characteristics									
Fluid	Maximum working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working port size	Pilot connections	Weight (g)	Cv	kv
Filtered and lubricated air	12	-30 ... +70	2500	15	1/2" NPT	1/8" NPT	1360	2,54	37,88

Pneumatic-Pneumatic

Ordering code
SA125201111L



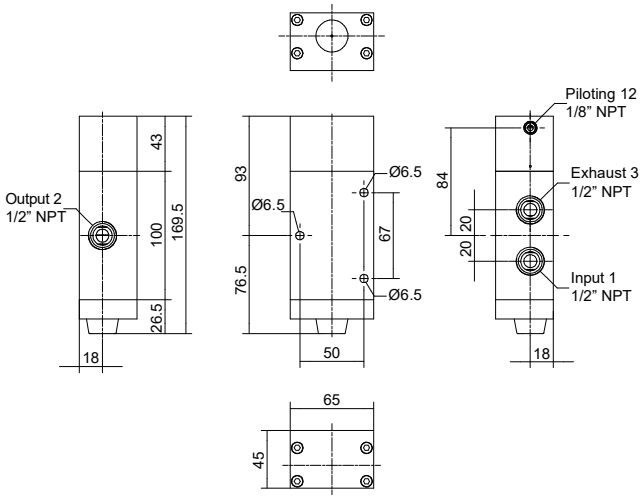


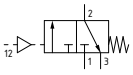
Minimum piloting pressure 2 bar

Operational characteristics									
Fluid	Maximum working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working port size	Pilot connections	Weight (g)	Cv	kv
Filtered and lubricated air	12	-30 ... +70	2500	15	1/2" NPT	1/8" NPT	1660	2,54	37,88

Pneumatic-Spring

Ordering code
SA1232C1101L



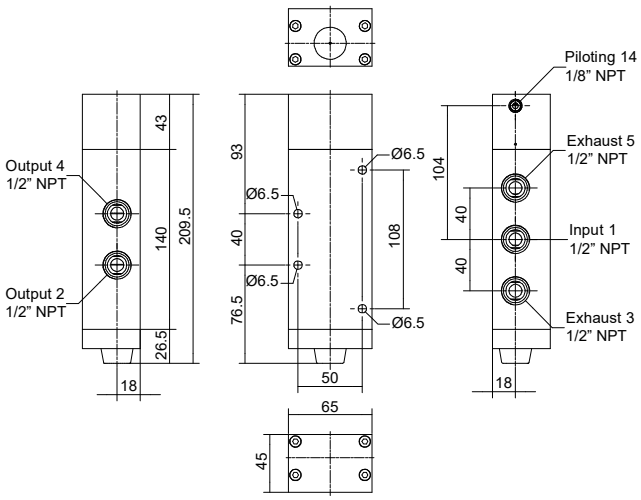


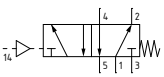
Minimum piloting pressure 2,5 bar

Operational characteristics									
Fluid	Maximum working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working port size	Pilot connections	Weight (g)	Cv	kv
Filtered and lubricated air	12	-30 ... +70	2500	15	1/2 NPT	1/8” NPT	1135	2,54	37,88

Pneumatic-Spring

Ordering code
SA125201101L



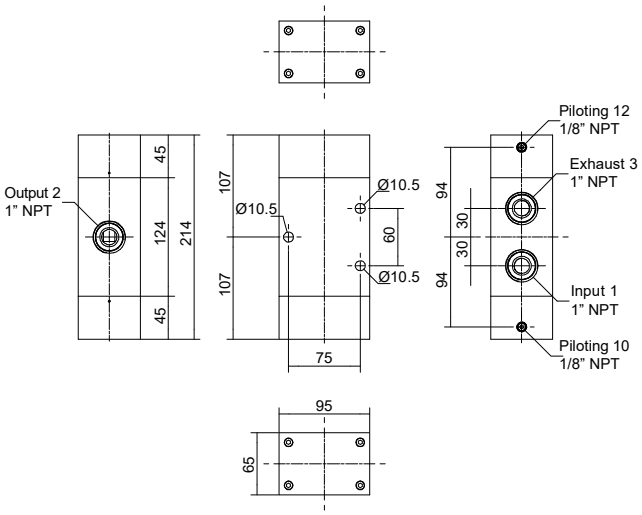


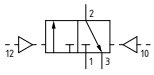
Minimum piloting pressure 2,5 bar

Operational characteristics									
Fluid	Maximum working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working port size	Pilot connections	Weight (g)	Cv	kv
Filtered and lubricated air	12	-30 ... +70	2500	15	1/2” NPT	1/8” NPT	1430	2,54	37,88

Pneumatic-Pneumatic

Ordering code
SA1132C1111L



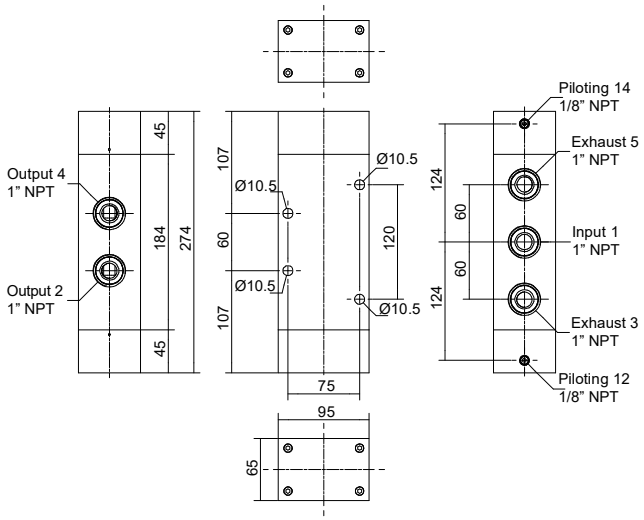


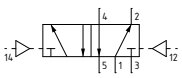
Minimum piloting pressure 2 bar

Operational characteristics									
Fluid	Maximum working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working port size	Pilot connections	Weight (g)	Cv	kv
Filtered and lubricated air	12	-30 ... +70	6500	20	1" NPT	1/8" NPT	3315	6,60	98,48

Pneumatic-Pneumatic

Ordering code
SA115201111L



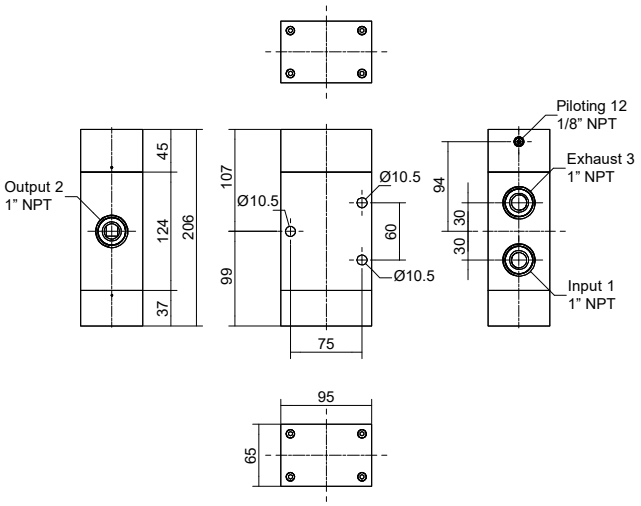


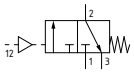
Minimum piloting pressure 2 bar

Operational characteristics									
Fluid	Maximum working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working port size	Pilot connections	Weight (g)	Cv	kv
Filtered and lubricated air	12	-30 ... +70	6500	20	1" NPT	1/8" NPT	4220	6,60	98,48

Pneumatic-Spring

Ordering code
SA1132C1101L



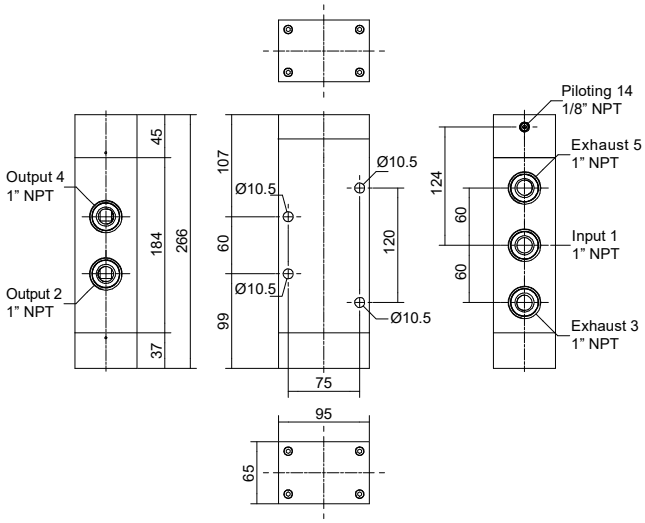


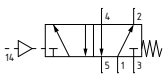
Minimum piloting pressure 2,5 bar

Operational characteristics									
Fluid	Maximum working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working port size	Pilot connections	Weight (g)	Cv	kv
Filtered and lubricated air	12	-30 ... +70	6500	20	1” NPT	1/8” NPT	3225	6,60	98,48

Pneumatic-Spring

Ordering code
SA115201101L

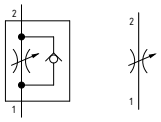


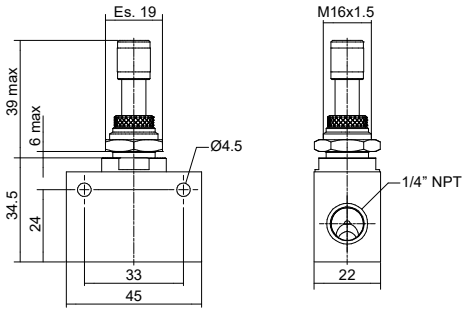


Minimum piloting pressure 2,5 bar

Operational characteristics									
Fluid	Maximum working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working port size	Pilot connections	Weight (g)	Cv	kv
Filtered and lubricated air	12	-30 ... +70	6500	20	1” NPT	1/8” NPT	4130	6,60	98,48

Flow regulator 1/4" NPT

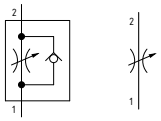


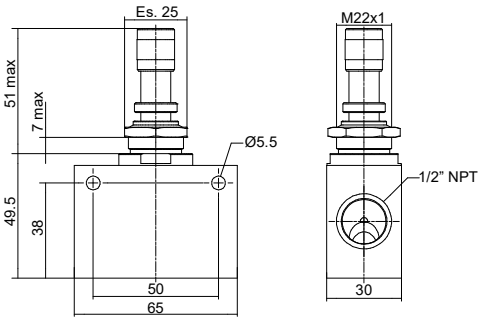


Ordering code
A6.01.F
FUNCTION
F 14N=Unidirectional
14/1N=Bidirectional

Operational characteristics							
Fluid	Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Temperature °C	Weight (g)	Cv	kv
Filtered air	12	900	7	-30 ... +70	102	0,91	13,63

Flow regulator 1/2" NPT

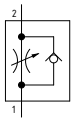


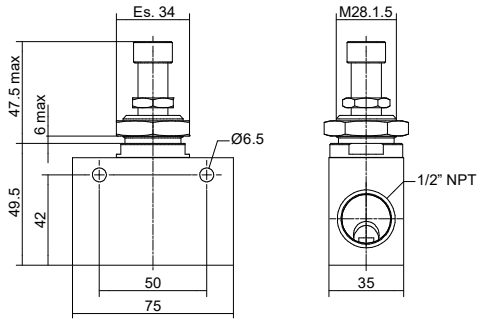


Ordering code
A6.01.F
FUNCTION
F 12N=Unidirectional
12/1N=Bidirectional

Operational characteristics							
Fluid	Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Temperature °C	Weight (g)	Cv	kv
Filtered air	12	2000	12	-30 ... +70	276	2,03	30,30

Flow regulator 3/4" NPT - Unidirectional

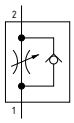


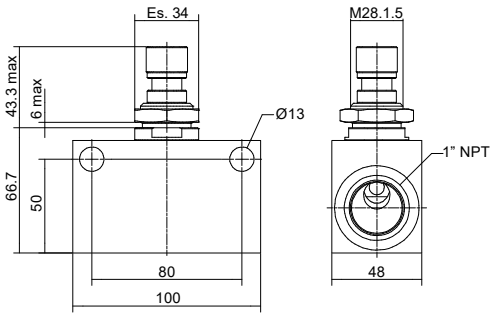


Ordering code
A6.01.34

Operational characteristics							
Fluid	Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Temperature °C	Weight (g)	Cv	kv
Filtered air	12	2800	12	-30 ... +70	482	2,84	42,42

Flow regulator 1" NPT - Unidirectional



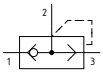


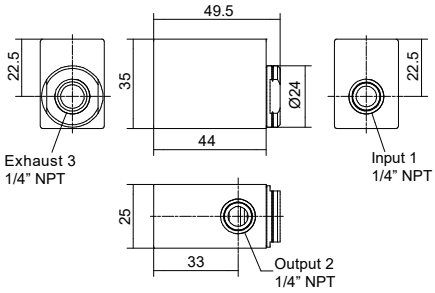
Ordering code
A6.01.11

Operational characteristics							
Fluid	Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Temperature °C	Weight (g)	Cv	kv
Filtered air	12	3300	14	-30 ... +70	874	3,35	50

Quick exhaust valve 1/4" NPT

Ordering code
A6.02.14

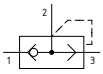


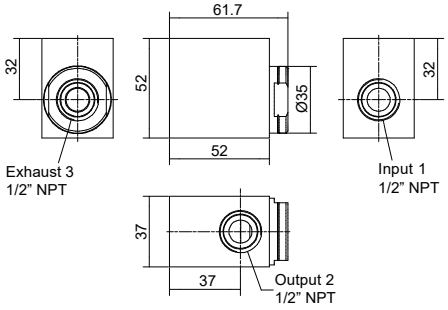


Operational characteristics									
Fluid	Working pressure (bar)	Flow rate from 1 to 2 at 6 bar with Δp=1 (Nl/min)	Cv	kv	Flow rate from 2 to 3 at 6 bar on free exhaust (Nl/min)	Cv	kv	Temperature °C	Weight (g)
Filtered air	0,5 ... 10	500	0.50	0.75	2500	2,54	37,87	-30 ... +70	112

Quick exhaust valve 1/2" NPT

Ordering code
A6.02.12

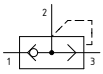


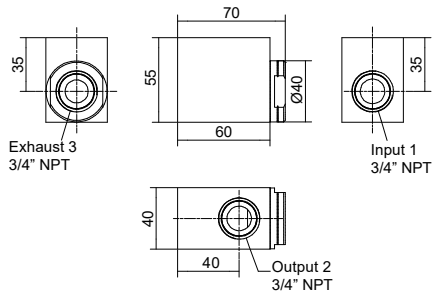


Operational characteristics									
Fluid	Working pressure (bar)	Flow rate from 1 to 2 at 6 bar with Δp=1 (Nl/min)	Cv	kv	Flow rate from 2 to 3 at 6 bar on free exhaust (Nl/min)	Cv	kv	Temperature °C	Weight (g)
Filtered air	0,5 ... 10	1500	1,52	22,72	6000	6,10	90,90	-30 ... +70	310

Quick exhaust valve 3/4" NPT

Ordering code
A6.02.34

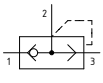


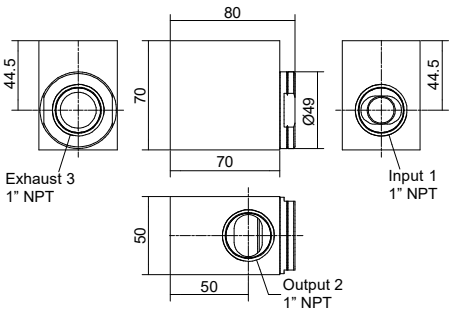


Operational characteristics									
Fluid	Working pressure (bar)	Flow rate from 1 to 2 at 6 bar with Δp=1 (Nl/min)	Cv	kv	Flow rate from 2 to 3 at 6 bar on free exhaust (Nl/min)	Cv	kv	Temperature °C	Weight (g)
Filtered air	0,5 ... 10	3000	3,04	45,45	10000	10,16	151,51	-30 ... +70	400

Quick exhaust valve 1" NPT

Ordering code
A6.02.11

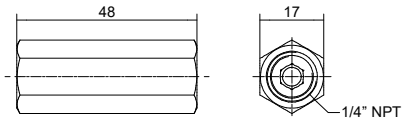


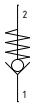


Operational characteristics									
Fluid	Working pressure (bar)	Flow rate from 1 to 2 at 6 bar with Δp=1 (Nl/min)	Cv	kv	Flow rate from 2 to 3 at 6 bar on free exhaust (Nl/min)	Cv	kv	Temperature °C	Weight (g)
Filtered air	0,5 ... 10	5000	5,08	75,75	18000	18,29	272,72	-30 ... +70	670

Non return valve 1/4" NPT

Ordering code
A6.07.14

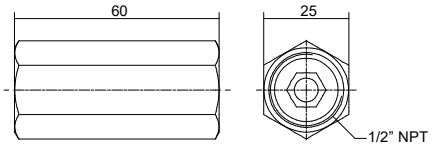




Operational characteristics						
Fluid	Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Temperature °C	Weight (g)	Cv	kv
Filtered and lubricated air	12	1450	-30 ... +70	59	1,47	21,97

Non return valve 1/2" NPT

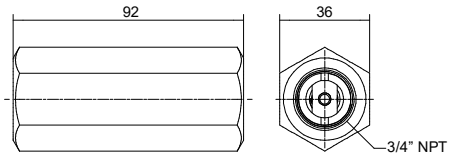
Ordering code
A6.07.12

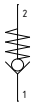


Operational characteristics						
Fluid	Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Temperature °C	Weight (g)	Cv	kv
Filtered and lubricated air	12	3500	-30 ... +70	139	3,55	53,03

Non return valve 3/4" NPT

Ordering code
A6.07.34

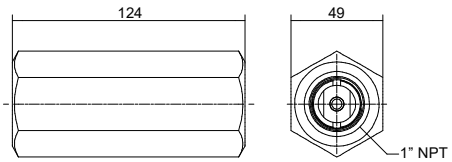




Operational characteristics						
Fluid	Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Temperature °C	Weight (g)	Cv	kv
Filtered and lubricated air	12	6250	-30 ... +70	564	6,35	94,69

Non return valve 1" NPT

Ordering code
A6.07.11



Operational characteristics						
Fluid	Maximum working pressure (bar)	Flow rate at 6 bar with Δp=1 (Nl/min)	Temperature °C	Weight (g)	Cv	kv
Filtered and lubricated air	12	9500	-30 ... +70	1502	9,65	143,94

Valves poppet system 1/2” NPT - 3/4” NPT - 1” NPT 1 1/2” NPT series SA - aluminium

Pneumax poppet valves are excellent solution for application that requires high flow rates figures. Engineered and designed 3/2 configuration, normally closed and normally open, pneumatic-spring return execution. When used for compressed air, functionality is similar to spool valves.

Construction characteristics

Body	Aluminium
End covers	Aluminium
Actuators	NBR
Pistons	POM
Actuator rod	Stainless steel
Springs	Stainless steel
Seals	NBR

Operating range

Fluid	Filtered air. No lubrication needed, if applied it shall be continuous. Inert Gas. Sweet gas (natural).
Operating temperature	-30°C ... +70°C
Maximum operating pressure	12 bar

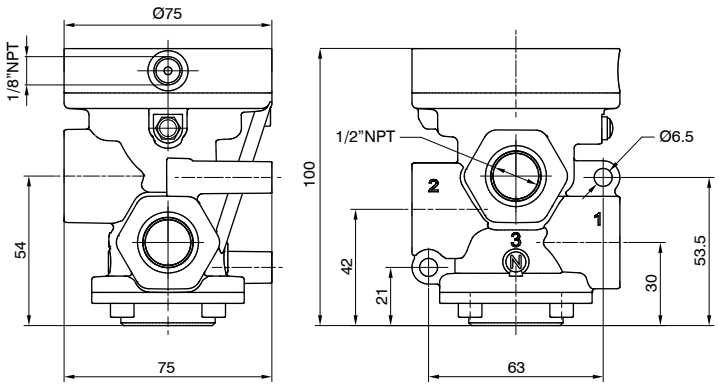
Certifications available:

ATEX CE Ex II 2 GD c IIB T5 T100°C

: **II 2G Ex h IIB T5 Gb**
II 2D Ex h IIIC T100°C Db

: Suitable up to SIL 3

Pneumatic-Spring - 1/2" NPT



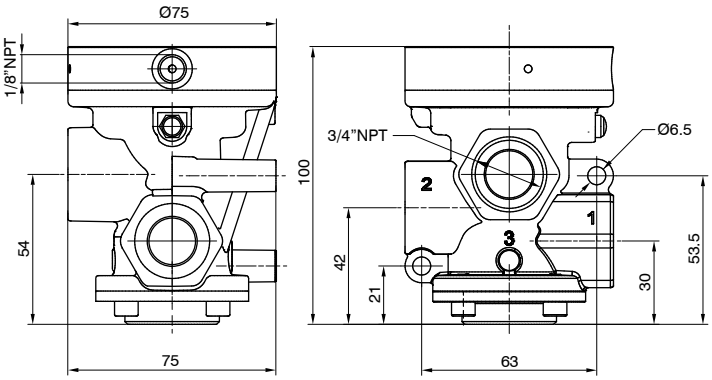
Ordering code
SA772321101F

	FUNCTION
F	C= Normally Closed
	A= Normally Open

Normally closed
Minimum piloting pressure 2,5 bar

Operational characteristics									
Fluid	Maximum working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working port size	Pilot connections	Cv	kv	Weight (g)
Filtered and lubricated air	12	-30 ... +70	4800	15	1/2" NPT	1/8" NPT	4,88	72,72	1100

Pneumatic-Spring - 3/4" NPT



Ordering code
SA773321101F

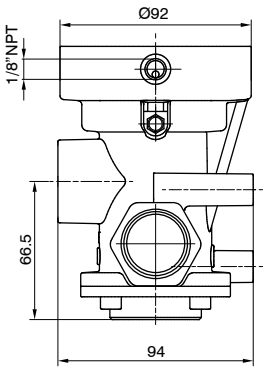
	FUNCTION
F	C= Normally Closed
	A= Normally Open

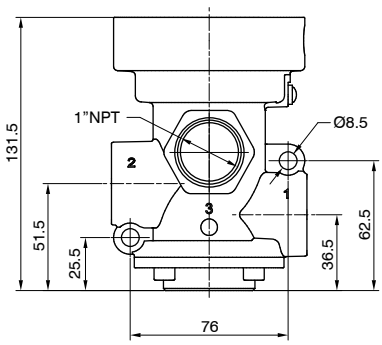
Normally closed
Minimum piloting pressure 2,5 bar

Operational characteristics									
Fluid	Maximum working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working port size	Pilot connections	Cv	kv	Weight (g)
Filtered and lubricated air	12	-30 ... +70	6100	20	3/4" NPT	1/8" NPT	6,20	92,42	1050

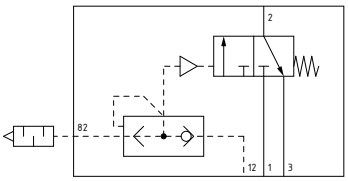
Pneumatic-Spring - 1” NPT

Ordering code	
SA771321101F	
	FUNCTION
F	C= Normally Closed
	A= Normally Open





N.C.



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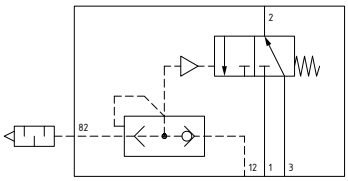
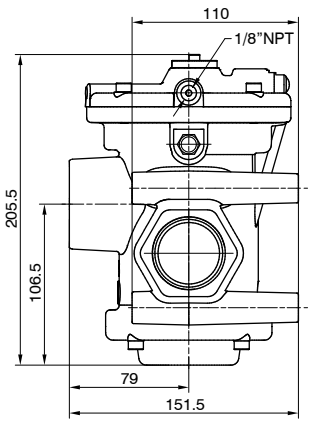


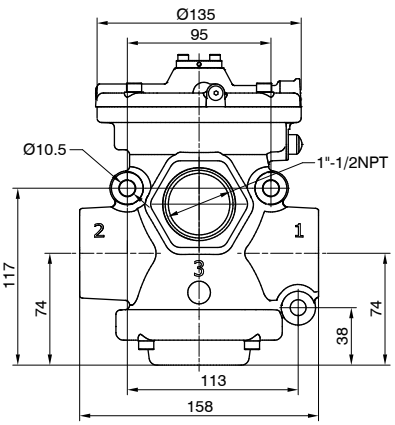
Normally closed
Minimum piloting pressure 2,5 bar

Operational characteristics									
Fluid	Maximum working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working port size	Pilot connections	Cv	kv	Weight (g)
Filtered and lubricated air	12	-30 ... +70	12000	25	1” NPT	1/8” NPT	12,19	181,81	1050

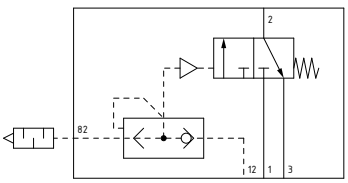
Pneumatic-Spring - 1 1/2” NPT

Ordering code	
SAN77632110F	
	FUNCTION
F	1= Normally Closed
	1A= Normally Open





N.C.



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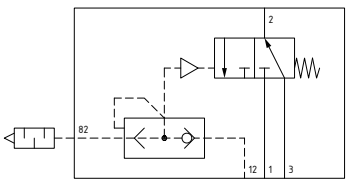


Normally closed
Minimum piloting pressure 3 bar

Operational characteristics									
Fluid	Maximum working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working port size	Pilot connections	Cv	kv	Weight (g)
Filtered and lubricated air	12	-30 ... +70	33500	38	1 1/2” NPT	1/8” NPT	34,04	507,57	3550

PROCESS AUTOMATION TECHNOLOGY

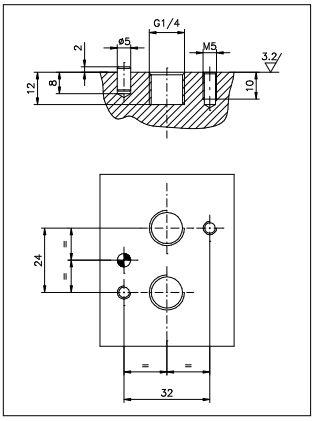
Valves and solenoid valves with “Namur” interface series 514 High Performance

General

The valves 514 series are designed with interface connections in compliance with **NAMUR** standards.
The range includes 5/2 and 4/2 versions with pneumatic or electric actuation and with NPT or BSPT connections.
This series is classified for use in potentially explosive atmospheres (Directive 2014/34/EU).
NAMUR valves have been designed to guarantee flexibility and an increased flow rate capacity exceeding that of traditional spool valves.
Innovative materials guarantee high performances also in critical environment conditions.
The solenoid valves are available with protection classes for zones 2-22, 1-21 solenoids Ex nA, Ex mb, Ex ia, international approvals IECEx, FM and CSA.

Note:
"Although accurately described, the 4/2 valve actually functions as a 3/2 normally closed valve and should be used as such."

NAMUR interface dimensions:
according to standard (VDI/VDE 3847 July 2003)



Construction characteristics

Body	Aluminium
Spacers	Technopolymer
Seals	Nitrile rubber
Springs	Stainless steel
Operators	Technopolymer
Spools	Steel
Screws	Zinc coated steel / Stainless steel

Order codes

	51	4	.	52.00.39	.	B04	

Model
: Standard valve
X : ATEX valve (-20°C ... +40°C) - only with solenoid coils “B##”,“C##” e “X##” (-30°C ... +50°C) - only with solenoid coils “MHC”,“MH#”

Connections
4 : G1/4” - supplied with plate
6 : 1/4” NPT - supplied with plate

Function and version
42.00.16: 4 ways - Pneumatic-Differential
42.00.18: 4 ways - Pneumatic-Pneumatic
42.00.19: 4 ways - Pneumatic-Spring
42.00.35: 4 ways - Solenoid-Solenoid
42.00.36: 4 ways - Solenoid-Differential
42.00.39: 4 ways - Solenoid-Spring
52.00.16: 5 ways - Pneumatic-Differential
52.00.18: 5 ways - Pneumatic-Pneumatic
52.00.19: 5 ways - Pneumatic-Spring
52.00.35: 5 ways - Solenoid-Solenoid
52.00.36: 5 ways - Solenoid-Differential
52.00.39: 5 ways - Solenoid-Spring
92.00.16: Universal kit - Pneumatic-Differential
92.00.18: Universal kit - Pneumatic-Pneumatic
92.00.19: Universal kit - Pneumatic-Spring
92.00.35: Universal kit - Solenoid-Solenoid
92.00.36: Universal kit - Solenoid-Differential
92.00.39: Universal kit - Solenoid-Spring

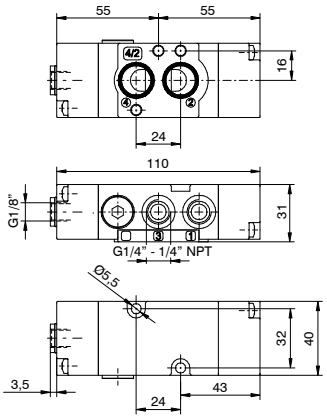
Voltages	Valve marking with ATEX solenoid coil	Protection method of the ATEX solenoid coil
B00: Ø10 stem without solenoid coil to be used with the following solenoid coils	Ex : CE UKCA Ex **II 2G Ex h IIC T5 Gb X** CE UKCA Ex **II 2D Ex h IIIC T96°C Db X**	/
B04: 12 VDC - for all models **B05**: 24 VDC - for all models **B09**: 24 VDC (2W) - only for standard model **B56**: 24 VAC (50-60 Hz) - for all models **B57**: 110 VAC (50-60 Hz) - for all models **B58**: 230 VAC (50-60 Hz) - for all models **C04**: 12 VDC - for all models **C05**: 24 VDC - for all models **C09**: 24 VDC (2W) - only for standard model **C56**: 24 VAC (50-60 Hz) - for all models **C57**: 110 VAC (50-60 Hz) - for all models **C58**: 230 VAC (50-60 Hz) - for all models	Ex : CE UKCA Ex **II 3G Ex h IIC T4 Gc X** CE UKCA Ex **II 3D Ex h IIIC T120°C Dc X IP65**	**Ex ec** **Ex tc**
F00: Ø9 stem without solenoid coil to be used with the following solenoid coils	Ex : CE UKCA Ex **II 2G Ex h IIC T5 Gb X** CE UKCA Ex **II 2D Ex h IIIC T96°C Db X**	/
X05: 24 VDC - only for ATEX model **X56**: 24 VAC (50-60 Hz) - only for ATEX model **X57**: 110 VAC (50-60 Hz) - only for ATEX model **X58**: 230 VAC (50-60 Hz) - only for ATEX model	Ex : CE UKCA Ex **II 2G Ex h IIC T4 Gb X** CE UKCA Ex **II 2D Ex h IIIC T135°C Db X IP65**	**Ex mb**
MHC: 32 VDC T6 - only for ATEX model complete with connector	Ex : CE UKCA Ex **II 2G Ex h IIB/IIC T4 Gb X** CE UKCA Ex **II 2D Ex h IIIC T130°C Db X IP65**	**Ex ia**
MH4: 32 VDC T4 - only for ATEX model **MH6**: 32 VDC T6 - only for ATEX model	Ex : CE UKCA Ex **II 2G Ex h IIB/IIC T4 Gb X**	**Ex ia**
Voltages	**Valve marking with FM solenoid coil**	
L04: 12 VDC - only for FM APPROVED model **L05**: 24 VDC - only for FM APPROVED model **L39**: 120 VAC - only for FM APPROVED model **L41**: 240 VAC - only for FM APPROVED model	FM C US APPROVED	
FM APPROVED valve (-20°C ... +50°C) - only with solenoid coils “L##”		

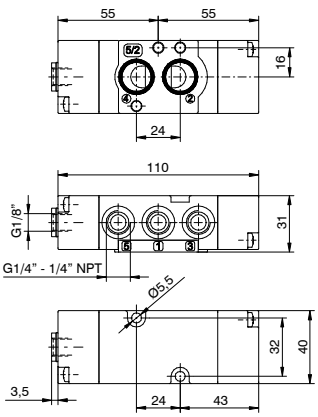
Temperature options
: Standard valve (-10°C ... +50°C)
LT : Low temperature (-30°C ... +50°C)

Example : 514.52.00.39.B04 : Standard valve, G1/4” connections supplied with plate, solenoid-spring 5 ways, 12 VDC solenoid coil

Pneumatic-Differential

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous.
Maximum working pressure (bar)	10
Temperature °C	See order codes page
Flow rate at 6 bar with Δp=1 (Nl/min)	1100
Orifice size (mm)	8
Working port size	G 1/4" - 1/4" NPT
Cv	1,11
kv	16,66



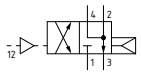


Ordering code: Ⓜ51Ⓒ.Ⓣ.00.16Ⓞ

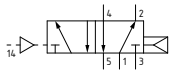
Ⓜ	MODEL
	= Standard valves
	X = ATEX valves
Ⓒ	CONNECTIONS
	4 = G1/4"
	6 = 1/4" NPT
Ⓣ	TIPOLOGIA
	42 = 4 ways, 2 positions
	52 = 5 ways, 2 positions
Ⓞ	TEMPERATURE OPTION
	See order codes page

Minimum pilot pressure 2,5 bar
Maximum fittings torque 9 N/m

Ⓜ51Ⓒ.42.00.16Ⓞ Weight 240 g

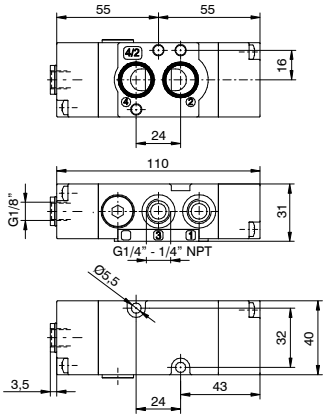


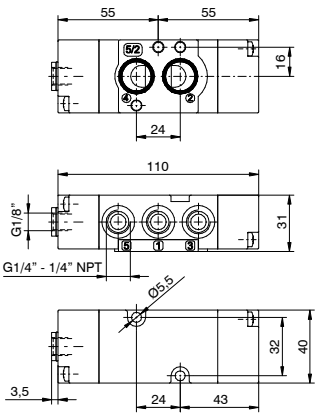
Ⓜ51Ⓒ.52.00.16Ⓞ Weight 235 g



Pneumatic-Pneumatic

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous.
Maximum working pressure (bar)	10
Temperature °C	See order codes page
Flow rate at 6 bar with Δp=1 (Nl/min)	1100
Orifice size (mm)	8
Working port size	G 1/4" - 1/4" NPT
Cv	1,11
kv	16,66



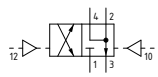


Ordering code: Ⓜ51Ⓒ.Ⓣ.00.18Ⓞ

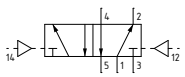
Ⓜ	MODEL
	= Standard valves
	X = ATEX valves
Ⓒ	CONNECTIONS
	4 = G1/4"
	6 = 1/4" NPT
Ⓣ	TYPE
	42 = 4 ways, 2 positions
	52 = 5 ways, 2 positions
Ⓞ	TEMPERATURE OPTION
	See order codes page

Minimum pilot pressure 2,5 bar
Maximum fittings torque 9 N/m

Ⓜ51Ⓒ.42.00.18Ⓞ Weight 240 g

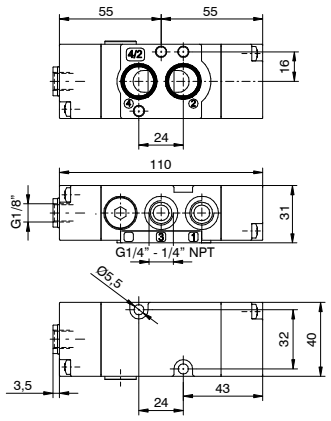


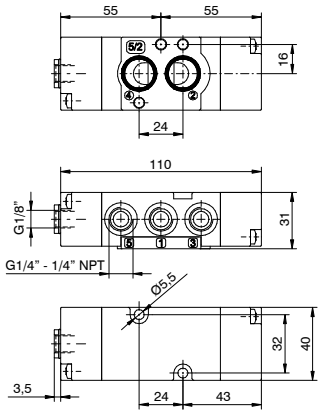
Ⓜ51Ⓒ.52.00.18Ⓞ Weight 235 g



Pneumatic-Spring

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous.
Maximum working pressure (bar)	10
Temperature °C	See order codes page
Flow rate at 6 bar with Δp=1 (Nl/min)	1100
Orifice size (mm)	8
Working port size	G 1/4" - 1/4" NPT
Cv	1,11
kv	16,66



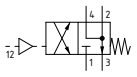


Ordering code: Ⓜ51Ⓒ.Ⓣ.00.19Ⓞ

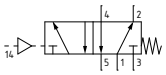
Ⓜ	MODEL
	= Standard valves
	X = ATEX valves
Ⓒ	CONNECTIONS
	4 = G1/4"
	6 = 1/4" NPT
Ⓣ	TYPE
	42 = 4 ways, 2 positions
	52 = 5 ways, 2 positions
Ⓞ	TEMPERATURE OPTION
	See order codes page

Minimum pilot pressure 2,5 bar
Maximum fittings torque 9 N/m

Ⓜ51Ⓒ.42.00.19Ⓞ Weight 240 g

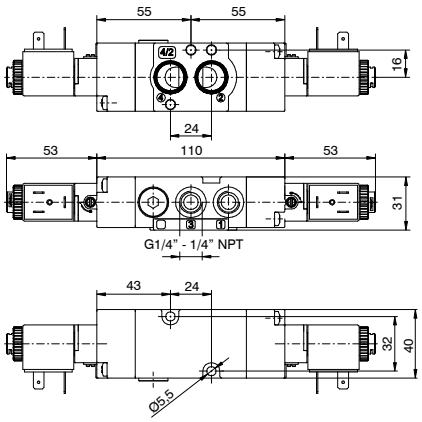


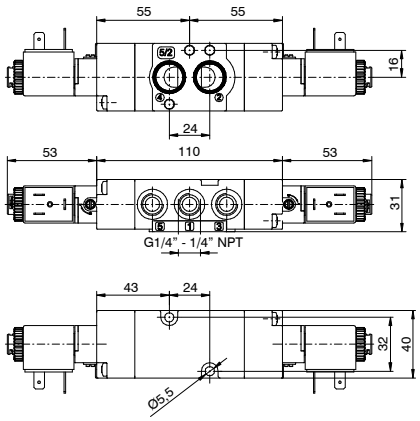
Ⓜ51Ⓒ.52.00.19Ⓞ Weight 235 g



Solenoid-Solenoid

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous.
Maximum working pressure (bar)	10
Temperature °C	See order codes page
Flow rate at 6 bar with Δp=1 (Nl/min)	1100
Orifice size (mm)	8
Working port size	G 1/4" - 1/4" NPT
Cv	1,11
kv	16,66



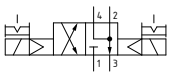


Ordering code: Ⓜ51Ⓒ.Ⓣ.00.35.ⓋⓄ

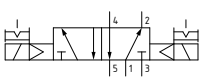
Ⓜ	MODEL
	= Standard valves
	X = ATEX valves
Ⓒ	CONNECTIONS
	4 = G1/4"
	6 = 1/4" NPT
Ⓣ	TYPE
	42 = 4 ways, 2 positions
	52 = 5 ways, 2 positions
Ⓥ	VOLTAGE
	See order codes page
Ⓞ	TEMPERATURE OPTION
	See order codes page

Minimum pilot pressure 2,5 bar
Maximum fittings torque 9 N/m

Ⓜ51Ⓒ.42.00.35.ⓋⓄ Weight 410 g

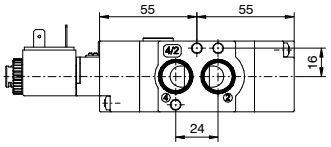


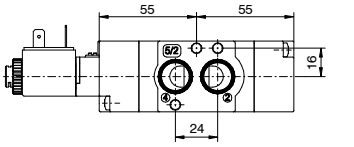
Ⓜ51Ⓒ.52.00.35.ⓋⓄ Weight 405 g



Solenoid-Differential

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous.
Maximum working pressure (bar)	10
Temperature °C	See order codes page
Flow rate at 6 bar with Δp=1 (Nl/min)	1100
Orifice size (mm)	8
Working port size	G 1/4" - 1/4" NPT
Cv	1,11
kv	16,66



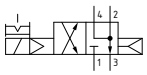


Ordering code: Ⓜ51Ⓒ.Ⓣ.00.36.ⓋⓄ

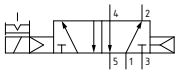
Ⓜ	MODEL
	= Standard valves
	X = ATEX valves
Ⓒ	CONNECTIONS
	4 = G1/4"
	6 = 1/4" NPT
Ⓣ	TYPE
	42 = 4 ways, 2 positions
	52 = 5 ways, 2 positions
Ⓥ	VOLTAGE
	See order codes page
Ⓞ	TEMPERATURE OPTION
	See order codes page

Minimum pilot pressure 2,5 bar
Maximum fittings torque 9 N/m

Ⓜ51Ⓒ.42.00.36.ⓋⓄ Weight 330 g

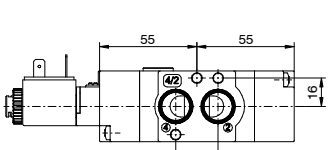


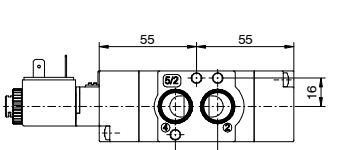
Ⓜ51Ⓒ.52.00.36.ⓋⓄ Weight 325 g



Pneumatic-Spring

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous.
Maximum working pressure (bar)	10
Temperature °C	See order codes page
Flow rate at 6 bar with Δp=1 (Nl/min)	1100
Orifice size (mm)	8
Working port size	G 1/4" - 1/4" NPT
Cv	1,11
kv	16,66



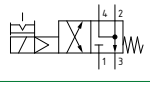


Ordering code: Ⓜ51Ⓒ.Ⓣ.00.39.ⓋⓄ

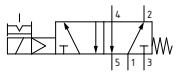
Ⓜ	MODEL
	= Standard valves
	X = ATEX valves
Ⓒ	CONNECTIONS
	4 = G1/4"
	6 = 1/4" NPT
Ⓣ	TYPE
	42 = 4 ways, 2 positions
	52 = 5 ways, 2 positions
Ⓥ	VOLTAGE
	See order codes page
Ⓞ	TEMPERATURE OPTION
	See order codes page

Minimum pilot pressure 2,5 bar
Maximum fittings torque 9 N/m

Ⓜ51Ⓒ.42.00.39.ⓋⓄ Weight 330 g

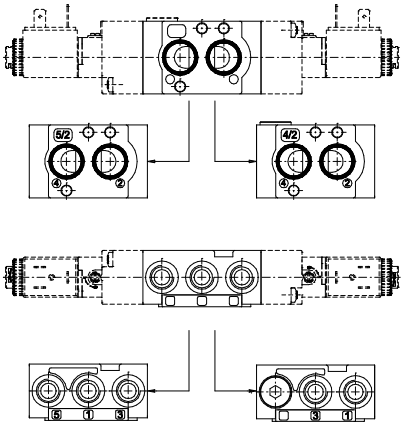


Ⓜ51Ⓒ.52.00.39.ⓋⓄ Weight 325 g



Universal kit

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous.
Maximum working pressure (bar)	10
Temperature °C	See order codes page
Flow rate at 6 bar with Δp=1 (Nl/min)	1100
Orifice size (mm)	8
Working port size	G 1/4" - 1/4" NPT
Cv	1,11
kv	16,66



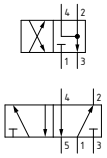
Ordering code: Ⓜ51Ⓒ.92.00.Ⓥ.ⓉⓄ

Ⓜ	MODEL
	= Standard valves
	X = ATEX valves
Ⓒ	CONNECTIONS
	4 = G1/4"
	6 = 1/4" NPT
Ⓥ	VERSION
	16 = Pneumatic - Differential
	18 = Pneumatic - Pneumatic
	19 = Pneumatic - Spring
	35 = Solenoid - Solenoid
	36 = Solenoid - Differential
	39 = Solenoid - Spring
Ⓣ	VOLTAGE
	See order codes page
Ⓞ	TEMPERATURE OPTION
	See order codes page

Minimum pilot pressure 2,5 bar
Maximum fittings torque 9 N/m

To change a 5/2 valve into a 4/2:
Simply replace the bottom plate with the one included in the universal kit (cod. 514.92...) and by plugging port 5

Ⓜ51Ⓒ.92.00.Ⓥ.ⓉⓄ Weight 405 g



Valves and solenoid valves with “Namur” interface series 515 High Performance

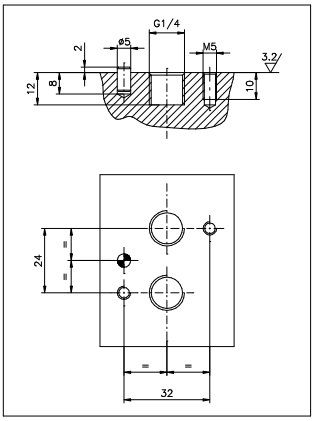
General

The valves 515 series are designed with interface connections in compliance with **NAMUR** standards.
The range includes 5/2 version with pneumatic or electric actuation and with NPT or BSPT connections.
This series is classified for use in potentially explosive atmospheres (Directive 2014/34/EU).
NAMUR valves have been designed to guarantee flexibility and an increased flow rate capacity exceeding that of traditional spool valves.
Innovative materials guarantee high performances also in critical environment conditions.
The solenoid valves are available with protection classes for zones 2-22, 1-21 solenoids Ex ec, Ex mb, Ex ia, international approvals IECEx, FM and CSA.

ATTENTION:

It differs from version 514 because it is supplied without plate.

NAMUR interface dimensions:
according to standard (VDI/VDE 3847 July 2003)



Construction characteristics

Body	Aluminium
Spacers	Technopolymer
Seals	Nitrile rubber
Springs	Stainless steel
Operators	Technopolymer
Spools	Steel
Screws	Zinc coated steel / Stainless steel

Order codes

	51	5	.	52.00.39	.	B04	

Model
: Standard valve
X : ATEX valve (-20°C ... +40°C) - only with solenoid coils “B##”,“C##” e “X##” (-30°C ... +50°C) - only with solenoid coils “MHC”,“MH#”

Connections
5 : G1/4” - supplied without plate
7 : 1/4” NPT - supplied without plate

Function and version
52.00.16: 5 ways - Pneumatic-Differential
52.00.18: 5 ways - Pneumatic-Pneumatic
52.00.19: 5 ways - Pneumatic-Spring
52.00.35: 5 ways - Solenoid-Solenoid
52.00.36: 5 ways - Solenoid-Differential
52.00.39: 5 ways - Solenoid-Spring

Voltages	**Valve marking with ATEX solenoid coil**	**Protection method of the ATEX solenoid coil**
B00: Ø10 stem without solenoid coil to be used with the following solenoid coils	: **II 2G Ex h IIC T5 Gb X** **II 2D Ex h IIIC T96°C Db X**	/
B04: 12 VDC - for all models **B05**: 24 VDC - for all models **B09**: 24 VDC (2W) - only for standard model **B56**: 24 VAC (50-60 Hz) - for all models **B57**: 110 VAC (50-60 Hz) - for all models **B58**: 230 VAC (50-60 Hz) - for all models **C04**: 12 VDC - for all models **C05**: 24 VDC - for all models **C09**: 24 VDC (2W) - only for standard model **C56**: 24 VAC (50-60 Hz) - for all models **C57**: 110 VAC (50-60 Hz) - for all models **C58**: 230 VAC (50-60 Hz) - for all models	: **II 3G Ex h IIC T4 Gc X** **II 3D Ex h IIIC T120°C Dc X IP65**	**Ex ec** **Ex tc**
F00: Ø9 stem without solenoid coil to be used with the following solenoid coils	: **II 2G Ex h IIC T5 Gb X** **II 2D Ex h IIIC T96°C Db X**	/
X05: 24 VDC - only for ATEX model **X56**: 24 VAC (50-60 Hz) - only for ATEX model **X57**: 110 VAC (50-60 Hz) - only for ATEX model **X58**: 230 VAC (50-60 Hz) - only for ATEX model	: **II 2G Ex h IIC T4 Gb X** **II 2D Ex h IIIC T135°C Db X IP65**	**Ex mb**
MHC: 32 VDC T6 - only for ATEX model complete with connector	: **II 2G Ex h IIB/IIC T4 Gb X** **II 2D Ex h IIIC T130°C Db X IP65**	**Ex ia**
MH4: 32 VDC T4 - only for ATEX model **MH6**: 32 VDC T6 - only for ATEX model	: **II 2G Ex h IIB/IIC T4 Gb X**	**Ex ia**
Voltages	**Valve marking with FM solenoid coil**	
L04: 12 VDC - only for FM APPROVED model **L05**: 24 VDC - only for FM APPROVED model **L39**: 120 VAC - only for FM APPROVED model **L41**: 240 VAC - only for FM APPROVED model	FM APPROVED	
FM APPROVED valve (-20°C ... +50°C) - only with solenoid coils “L##”		

Temperature options
: Standard valve (-10°C ... +50°C)
LT : Low temperature (-30°C ... +50°C)

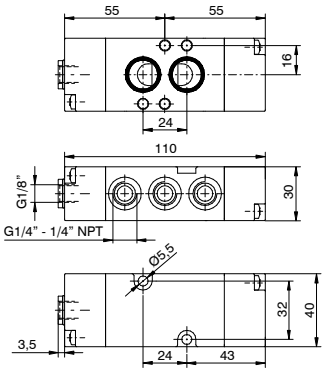
Example : 515.52.00.39.B04 : Standard valve, G1/4” connections supplied without plate, solenoid-spring 5 ways, 12 VDC solenoid coil

Pneumatic-Differential

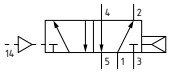
Ordering code: Ⓜ51Ⓒ.52.00.16Ⓞ

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous.
Maximum working pressure (bar)	10
Temperature °C	See order codes page
Flow rate at 6 bar with Δp=1 (Nl/min)	1100
Orifice size (mm)	8
Working port size	G 1/4" - 1/4" NPT
Cv	1,11
kv	16,66

Ⓜ	MODEL
	= Standard valves
	X = ATEX valves
Ⓒ	CONNECTIONS
	5 = G1/4"
	7 = 1/4" NPT
Ⓞ	TEMPERATURE OPTION
	See order codes page



Weight 245 g
Minimum pilot pressure 2,5 bar
Maximum fittings torque 9 N/m

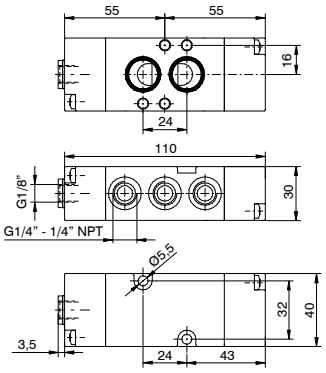


Pneumatic-Pneumatic

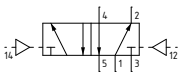
Ordering code: Ⓜ51Ⓒ.52.00.18Ⓞ

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous.
Maximum working pressure (bar)	10
Temperature °C	See order codes page
Flow rate at 6 bar with Δp=1 (Nl/min)	1100
Orifice size (mm)	8
Working port size	G 1/4" - 1/4" NPT
Cv	1,11
kv	16,66

Ⓜ	MODEL
	= Standard valves
	X = ATEX valves
Ⓒ	CONNECTIONS
	5 = G1/4"
	7 = 1/4" NPT
Ⓞ	TEMPERATURE OPTION
	See order codes page



Weight 245 g
Minimum pilot pressure 2,5 bar
Maximum fittings torque 9 N/m

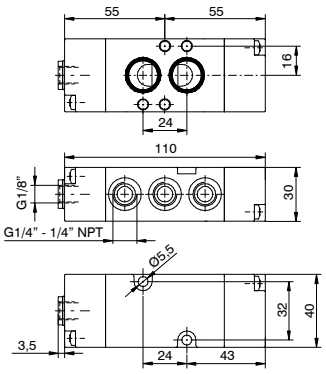


Pneumatic-Spring

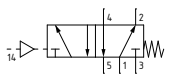
Ordering code: Ⓜ51Ⓒ.52.00.19Ⓞ

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous.
Maximum working pressure (bar)	10
Temperature °C	See order codes page
Flow rate at 6 bar with Δp=1 (Nl/min)	1100
Orifice size (mm)	8
Working port size	G 1/4" - 1/4" NPT
Cv	1,11
kv	16,66

Ⓜ	MODEL
	= Standard valves
	X = ATEX valves
Ⓒ	CONNECTIONS
	5 = G1/4"
	7 = 1/4" NPT
Ⓞ	TEMPERATURE OPTION
	See order codes page



Weight 245 g
Minimum pilot pressure 2,5 bar
Maximum fittings torque 9 N/m

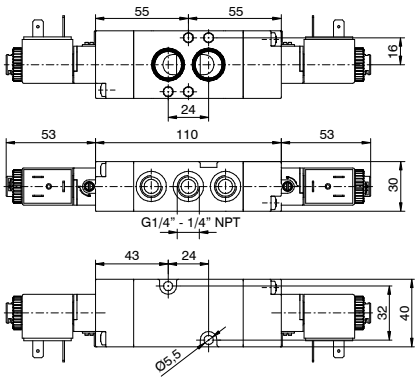


Solenoid-Solenoid

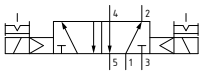
Ordering code: Ⓜ51Ⓒ.52.00.35ⓉⓄ

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous.
Maximum working pressure (bar)	10
Temperature °C	See order codes page
Flow rate at 6 bar with Δp=1 (Nl/min)	1100
Orifice size (mm)	8
Working port size	G 1/4" - 1/4" NPT
Cv	1,11
kv	16,66

Ⓜ	MODEL
	= Standard valves
	X = ATEX valves
Ⓒ	CONNECTIONS
	5 = G1/4"
	7 = 1/4" NPT
Ⓣ	VOLTAGE
	See order codes page
Ⓞ	TEMPERATURE OPTION
	See order codes page



Weight 415 g
Minimum pilot pressure 2,5 bar
Maximum fittings torque 9 N/m

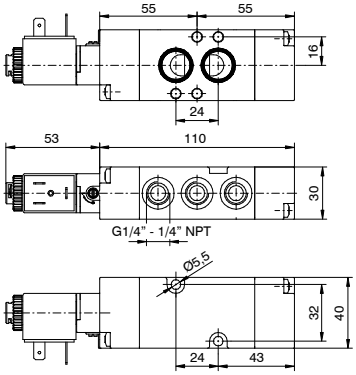


Solenoid-Differential

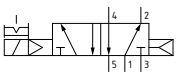
Ordering code: Ⓜ51Ⓒ.52.00.36ⓉⓄ

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous.
Maximum working pressure (bar)	10
Temperature °C	See order codes page
Flow rate at 6 bar with Δp=1 (Nl/min)	1100
Orifice size (mm)	8
Working port size	G 1/4" - 1/4" NPT
Cv	1,11
kv	16,66

Ⓜ	MODEL
	= Standard valves
	X = ATEX valves
Ⓒ	CONNECTIONS
	5 = G1/4"
	7 = 1/4" NPT
Ⓣ	VOLTAGE
	See order codes page
Ⓞ	TEMPERATURE OPTION
	See order codes page



Weight 330 g
Minimum pilot pressure 2,5 bar
Maximum fittings torque 9 N/m

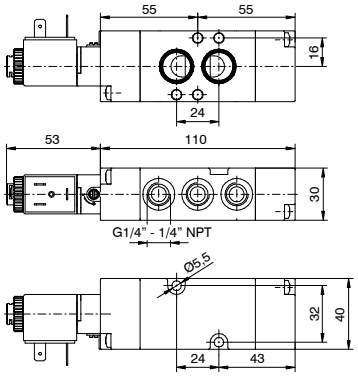


Solenoid-Spring

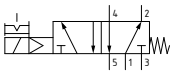
Ordering code: Ⓜ51Ⓒ.52.00.39ⓉⓄ

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous.
Maximum working pressure (bar)	10
Temperature °C	See order codes page
Flow rate at 6 bar with Δp=1 (Nl/min)	1100
Orifice size (mm)	8
Working port size	G 1/4" - 1/4" NPT
Cv	1,11
kv	16,66

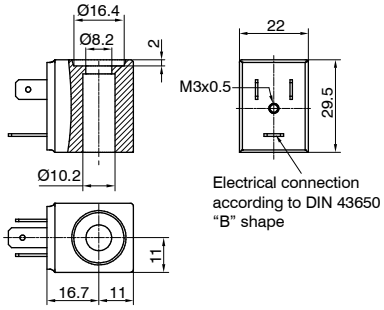
Ⓜ	MODEL
	= Standard valves
	X = ATEX valves
Ⓒ	CONNECTIONS
	5 = G1/4"
	7 = 1/4" NPT
Ⓣ	VOLTAGE
	See order codes page
Ⓞ	TEMPERATURE OPTION
	See order codes page



Weight 330 g
Minimum pilot pressure 2,5 bar
Maximum fittings torque 9 N/m



Solenoid coil 22 mm Ø10, type MB

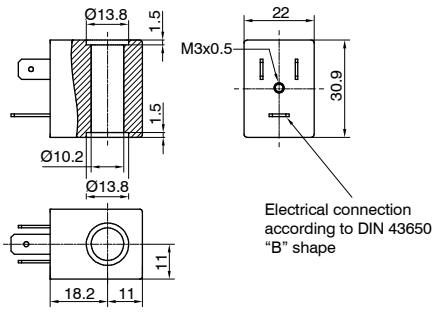


Ordering code	
MB(T)	
	VOLTAGE
	4= 12 VDC
	5= 24 VDC
(T)	9= 24 VDC (2W)
	56= 24 VAC (50-60 Hz)
	57= 110 VAC (50-60 Hz)
	58= 230 VAC (50-60 Hz)

Operational characteristics				
Class of insulation	Tolerance on voltage	IP Rating with connector	Electrical connection	Weight (g)
F	±10%	IP65	DIN43650 B industrial	53

Solenoid coil 22 mm Ø10, type XMB

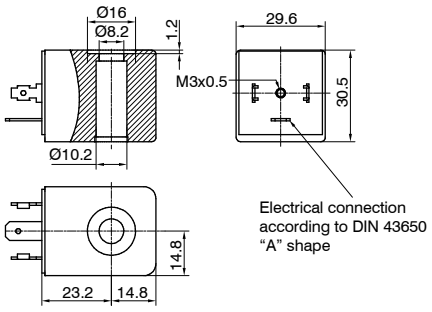
CE UK EAC II 3 G Ex ec IIC Gc
CE UK EAC II 3 D Ex tc IIIC Dc IP65



Ordering code	
XMB(T)	
	VOLTAGE
	4= 12 VDC
(T)	5= 24 VDC
	56= 24 VAC (50-60 Hz)
	57= 110 VAC (50-60 Hz)
	58= 230 VAC (50-60 Hz)

Operational characteristics				
Class of insulation	Tolerance on voltage	IP Rating with connector	Electrical connection	Weight (g)
F	±10%	IP65	DIN43650 B industrial	54

Solenoid coil 30 mm Ø10, type MC

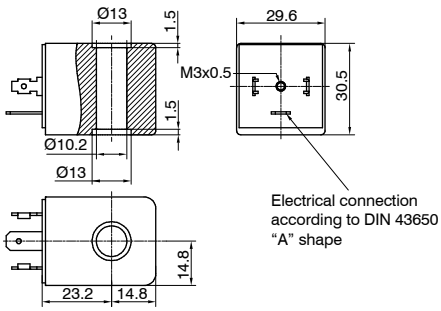


Ordering code	
MC(T)	
	VOLTAGE
	4= 12 VDC
	5= 24 VDC
(T)	9= 24 VDC (2W)
	56= 24 VAC (50-60 Hz)
	57= 110 VAC (50-60 Hz)
	58= 230 VAC (50-60 Hz)

Operational characteristics				
Class of insulation	Tolerance on voltage	IP Rating with connector	Electrical connection	Weight (g)
F	±10%	IP65	DIN43650 A	113

Solenoid coil 30 mm Ø10, type XMC

CE UK EAC II 3 G Ex ec IIC Gc
CE UK EAC II 3 D Ex tc IIIC Dc IP65

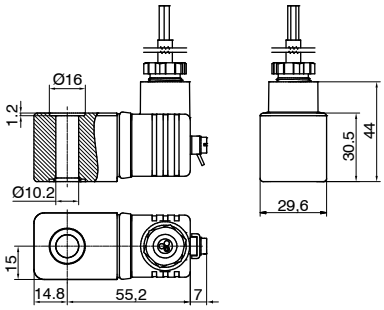


Ordering code	
XMC(T)	
	VOLTAGE
	4= 12 VDC
(T)	5= 24 VDC
	56= 24 VAC (50-60 Hz)
	57= 110 VAC (50-60 Hz)
	58= 230 VAC (50-60 Hz)

Operational characteristics				
Class of insulation	Tolerance on voltage	IP Rating with connector	Electrical connection	Weight (g)
F	±10%	IP65	DIN43650 A	117

Solenoid coil 30 mm Ø10, type XME

II 2 G Ex mb IIC T4 Gb
II 2 D Ex mb IIIC T135°C Db IP65

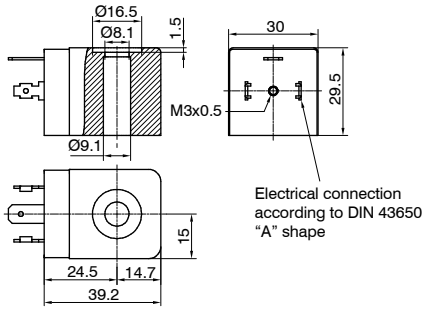


Ordering code	
XME❶-3	
	VOLTAGE
	5= 24 VDC
❶	56= 24 VAC (50-60 Hz)
	57= 110 VAC (50-60 Hz)
	58= 230 VAC (50-60 Hz)

Operational characteristics				
Class of insulation	Tolerance on voltage	IP Rating with connector	Electrical connection	Weight (g)
H	±10%	IP65	Cavo 3 mt.	325

Solenoid coil 30 mm Ø9, type XMHB EX ia

II 2 G Ex ia IIB/IIC T6/T4 Ga

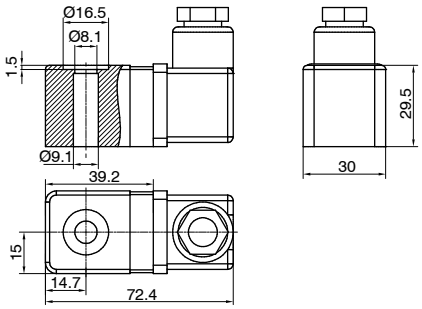


Ordering code	
XMHB❶	
	VOLTAGE
❶	4= 32 VDC T4
	6= 32 VDC T6

Operational characteristics				
Class of insulation	Tolerance on voltage	IP Rating with connector	Electrical connection	Weight (g)
F	±10%	IP65	DIN43650 A	111

Solenoid coil 30 mm Ø9, type XMHC EX ia 32 VDC T6

II 2G Ex ia IIB/IIC T6, T4 Ga
II 2D Ex t IIIC T80°C, T130°C Db IP6

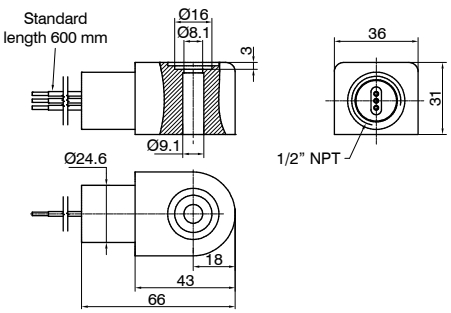


Ordering code
XMHC

Operational characteristics			
Class of insulation	Tolerance on voltage	IP Rating	Weight (g)
F	±10%	IP65	136

Solenoid coil 36 mm Ø9, type ML FM APPROVED

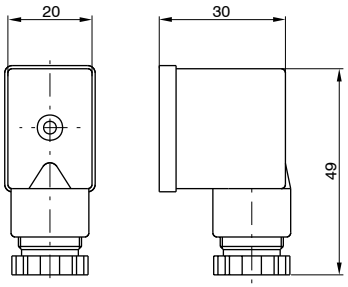
Class I, Division 2, Groups A, B, C, D, T4, Ta=60°C
Suitable for Class II, III, Division 2, Groups E, F, G, T4, Ta=60°C hazardous (classified) locations.



Ordering code	
ML❶	
	VOLTAGE
	4= 12 VDC
❶	5= 24 VDC
	39= 120 VAC
	41= 240 VAC

Operational characteristics				
Class of insulation	Tolerance on voltage	IP Rating with connector	Electrical connection (mm)	Weight (g)
H	±10%	IP65	600	150

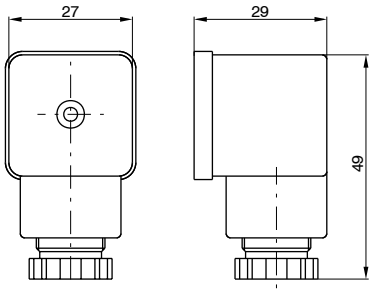
Connector 22 mm ATEX DIN43650 B industrial



Ordering code
X305.11.00

Weight 21 g

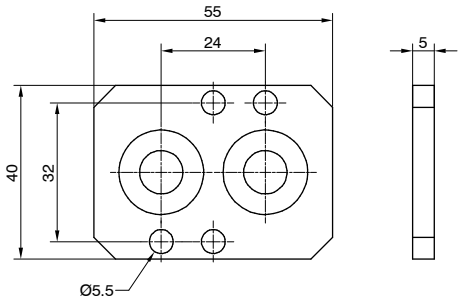
Connector 30 mm ATEX DIN43650 A



Ordering code
X300.11.00

Weight 25 g

30 mm solenoid base adaptor



Ordering code
514.05

Weight 25 g

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