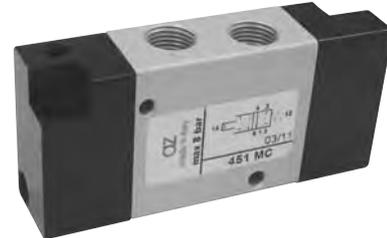


valvole 16 mm ad azionamento pneumatico

pneumatically piloted valves - 16 mm



- Valvole a spola 5/2 con attacchi filettati M5 o G1/8" (scarichi M5)
5/2 spool valves with M5 or G1/8" threaded ports (M5 exhaust ports)
- Spessore della valvola: 16 mm
Valve thickness: 16 mm
- Montaggio in linea o su basi modulari (pag. 257-259)
Installation in-line or on multiple sub-bases (refer to pages 257-259)
- Azionamento pneumatico monostabile o bistabile
Mono-stable or bi-stable pneumatic pilot



Materiali

Corpo: alluminio 11S

Molle: INOX

Guarnizioni: NBR

Spola: alluminio nichelato

Parti interne: ottone OT58

Materials

Body: aluminium 11S

Springs: stainless steel

Seals: NBR

Spool: nickel plated aluminium

Internal parts: brass OT58

Diametro nominale <i>Nominal orifice</i>	4 mm	
Portata nominale a 6 bar, Δp 1 bar <i>Nominal flow rate at 6 bar, Δp 1 bar</i>	M5: 320 NI/min G1/8": 350 NI/min	
Temperatura di esercizio <i>Temperature range</i>	max +60°C	
Pressione di esercizio <i>Working pressure</i>	-0.9 ... 10 bar -0.09 ... 1 MPa	
Pressione di azionamento <i>Actuating pressure</i>	monostabile <i>[mono-stable]</i>	bistabile <i>[bi-stable]</i>
	3 ... 10 bar 0.3 ... 1 MPa	2 ... 10 bar 0.2 ... 1 MPa
Fluido <i>Fluid</i>	Aria filtrata 50 μ con o senza lubrificazione <i>50μ filtered, lubricated or non lubricated air</i>	

valvole 16 mm ad azionamento pneumatico

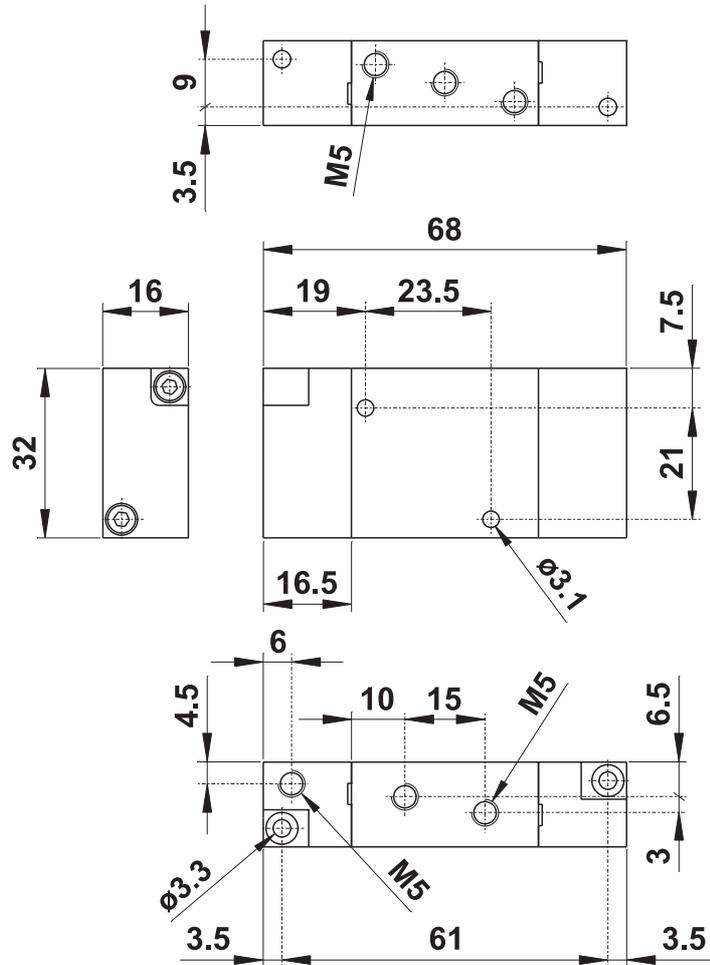
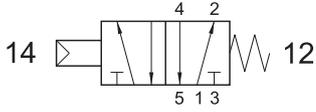
pneumatically piloted valves - 16 mm



455 MC

5/2 M5 comando pneumatico - ritorno a molla

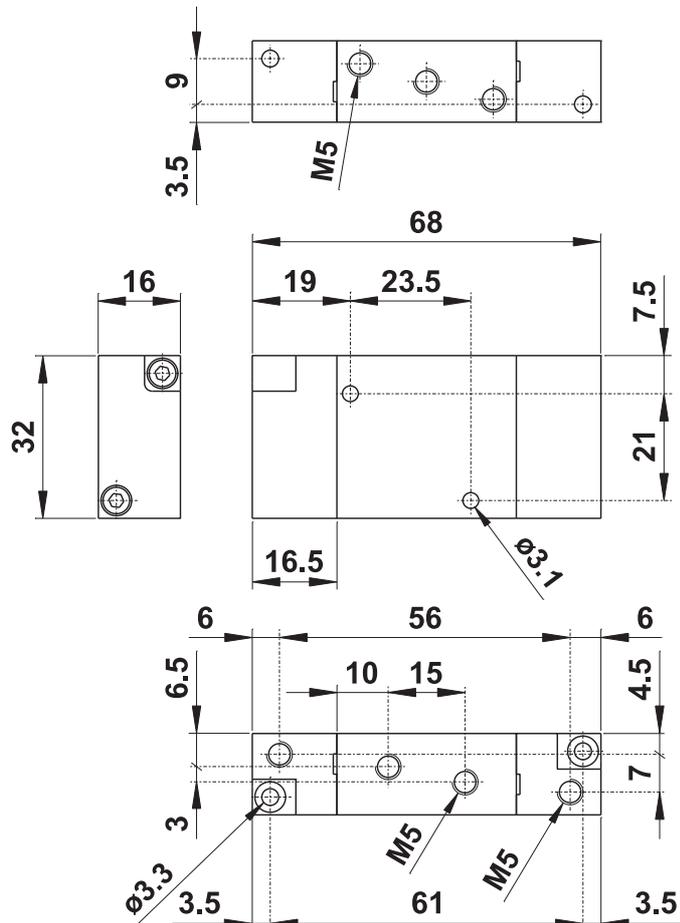
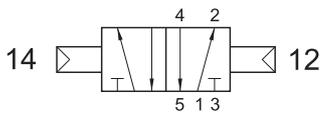
5/2 M5 pneumatic pilot - spring return



455 CC

5/2 M5 doppio comando pneumatico

5/2 M5 double pneumatic pilot



valvole 16 mm ad azionamento pneumatico

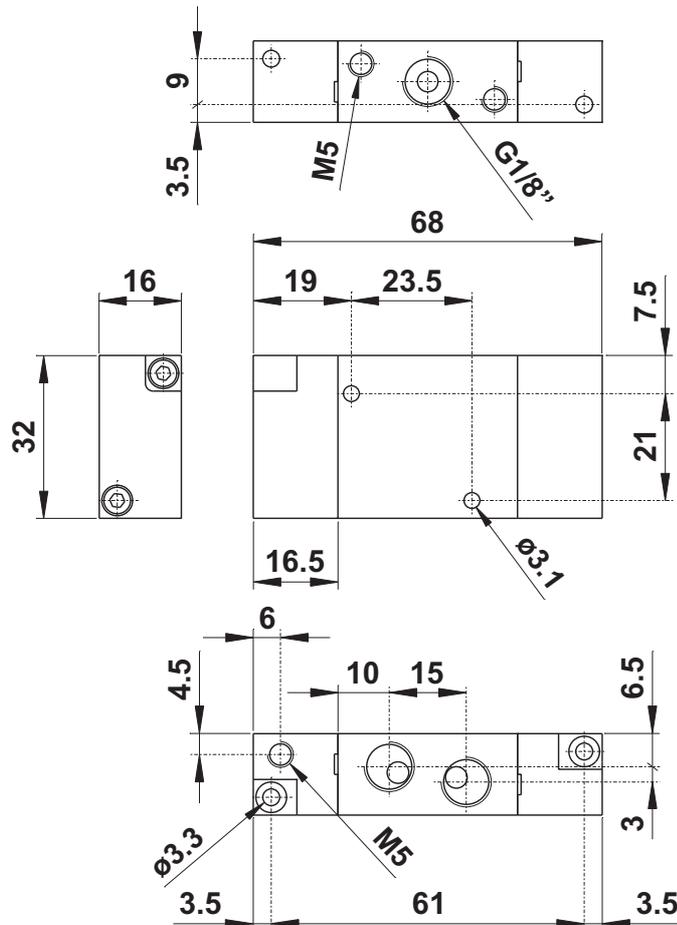
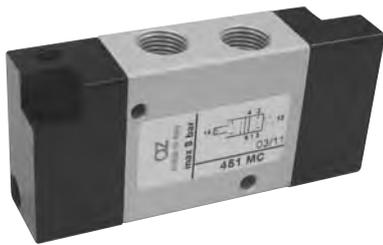
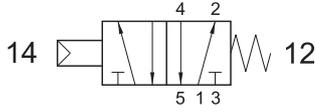
pneumatically piloted valves - 16 mm



451 MC

5/2 1/8" comando pneumatico - ritorno a molla

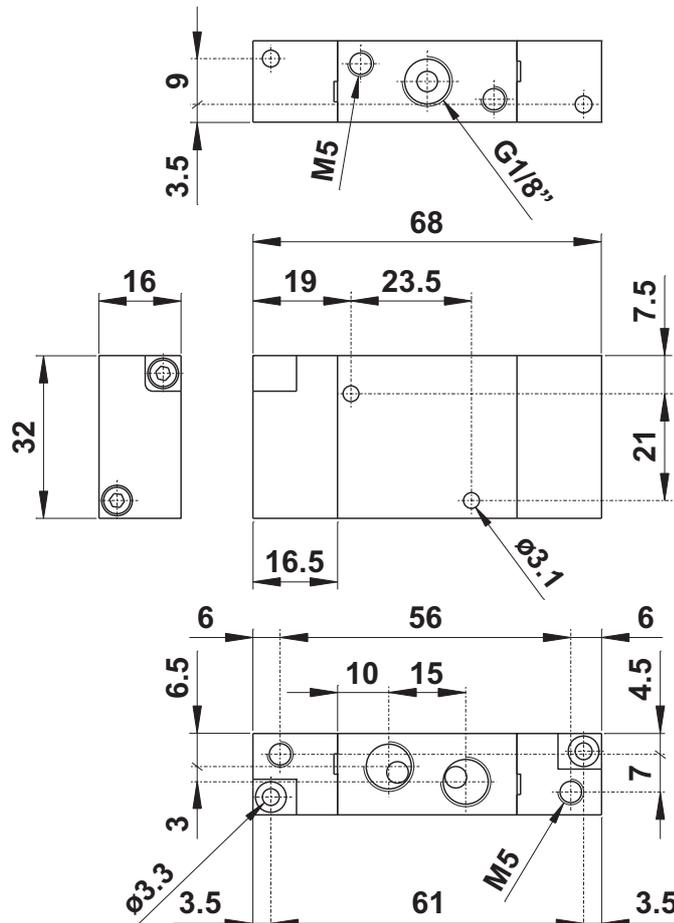
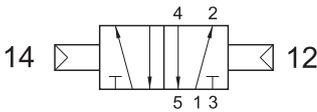
5/2 1/8" *pneumatic pilot - spring return*



451 CC

5/2 1/8" doppio comando pneumatico

5/2 1/8" *double pneumatic pilot*

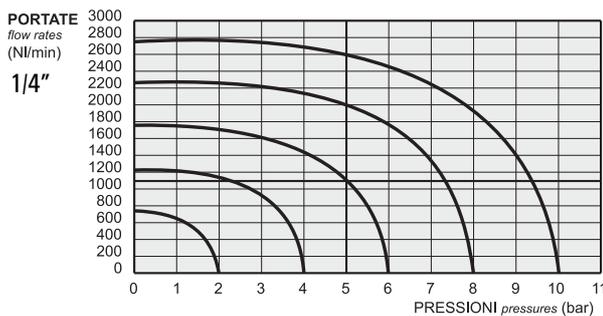
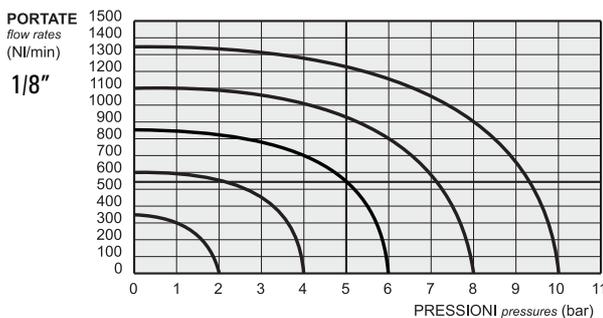


valvole ad azionamento pneumatico

pneumatically piloted valves



- Valvole a spola 3/2-5/2-5/3 con attacchi filettati G1/8"-G1/4"
3/2-5/2-5/3 spool valves with G1/8"-G1/4" threaded ports
- Montaggio in linea, su collettori multipli o su basi manifold (pag. 222-232)
Installation in-line, gang or manifold mounted (refer to pages 222-232)
- Ampia gamma di azionamenti
Comprehensive range of actuations
- Versioni con elemento logico integrato
Versions with integrated logic element
- Esecuzioni speciali a richiesta
Special versions on request



Materiali

Corpo: alluminio 11S

Comando e fondello: tecnopolimero (*)

Molle: INOX

Guarnizioni: NBR

Spola: alluminio nichelato

Parti interne: ottone OT58

Materials

Body: aluminium 11S

End caps: technopolymer (*)

Springs: stainless steel

Seals: NBR

Spool: nickel plated aluminium

Internal parts: brass OT58

(*) Su richiesta e dietro supplemento di prezzo, le valvole sono fornibili con corpo, comando e fondello interamente in alluminio. Alcune valvole, come di seguito specificato, sono disponibili solo nella versione in alluminio. Le valvole ATEX sono solo in alluminio.

Le parti in tecnopolimero recano impresso il logo

(*) On request and upon extra charge, the valves are available also with body and end caps entirely in aluminium. Some valves, as specified in the next pages, are available only in the aluminium version. ATEX valves are only in aluminium.

The parts in technopolymer are marked with the logo

Tempi di risposta - response times

	1/8"	1/4"
monostabile <i>mono-stable</i>	TRA (14): 6 ms TRR (12): 15 ms	TRA (14): 7 ms TRR (12): 15 ms
bistabile <i>bi-stable</i>	TRA (14): 7 ms TRR (12): 7 ms	TRA (14): 7 ms TRR (12): 7 ms

Diametro nominale <i>Nominal orifice</i>	1/8": 5 mm 1/4": 7.5 mm	
Temperatura di esercizio <i>Temperature range</i>	max +60°C	
Pressione di esercizio <i>Working pressure</i>	monostabile <i>[mono-stable]</i>	bistabile <i>[bi-stable]</i>
	2.5 ... 10 bar 0.25 ... 1 MPa	-0.9 ... 10 bar -0.09 ... 1 MPa
Pressione di azionamento <i>Actuating pressure</i>	monostabile <i>[mono-stable]</i>	bistabile <i>[bi-stable]</i>
	2.5 ... 10 bar 0.25 ... 1 MPa	1 ... 10 bar 0.1 ... 1 MPa
Fluido <i>Fluid</i>	Aria filtrata 50µ con o senza lubrificazione <i>50µ filtered, lubricated or non lubricated air</i>	

valvole ad azionamento pneumatico

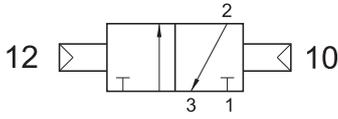
pneumatically piloted valves



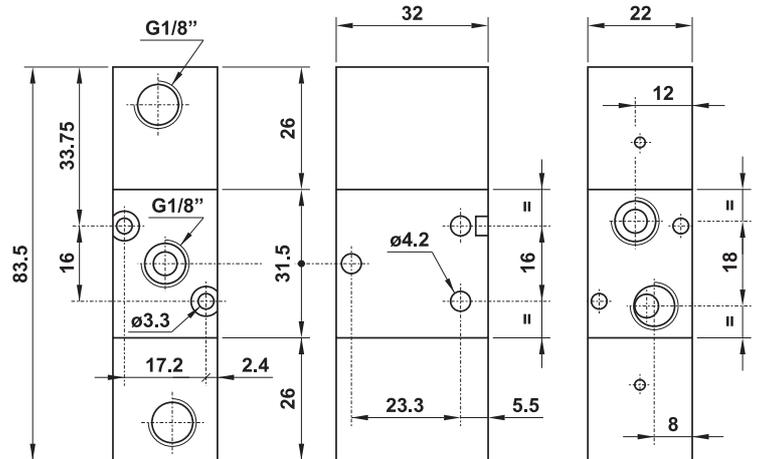
321 CC

3/2 1/8" doppio comando pneumatico

3/2 1/8" double pneumatic pilot



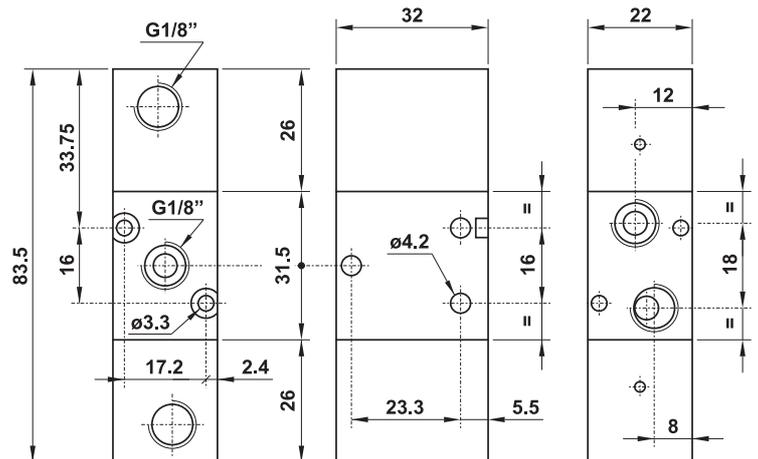
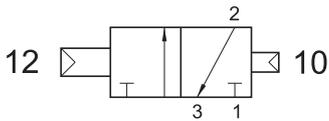
Può essere utilizzata con vuoto.
It can be used with vacuum.



321 CCD

3/2 1/8" doppio comando pneumatico - con differenziale

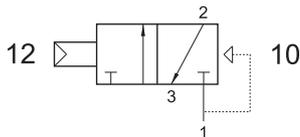
3/2 1/8" double pneumatic pilot - with differential



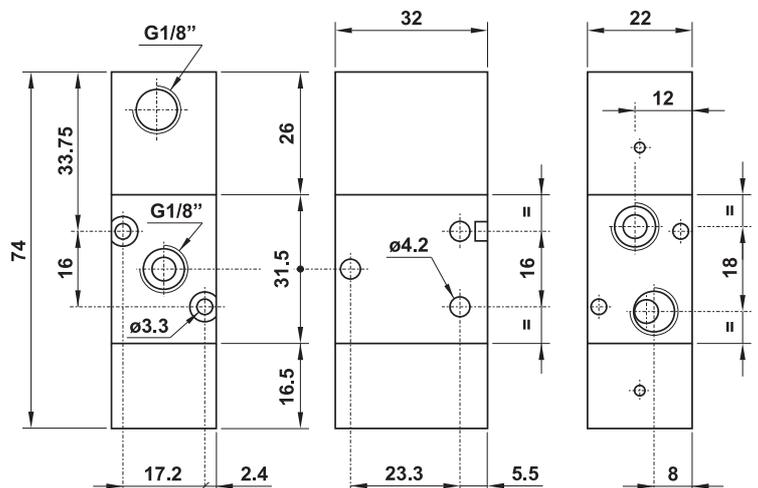
321 CFP

3/2 1/8" NC comando pneumatico - ritorno a molla pneumatica

3/2 1/8" NC pneumatic pilot - pneumatic spring return



Non può essere utilizzata come valvola normalmente aperta.
It cannot be used as normally open valve.



valvole ad azionamento pneumatico

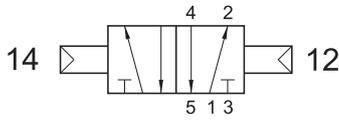
pneumatically piloted valves



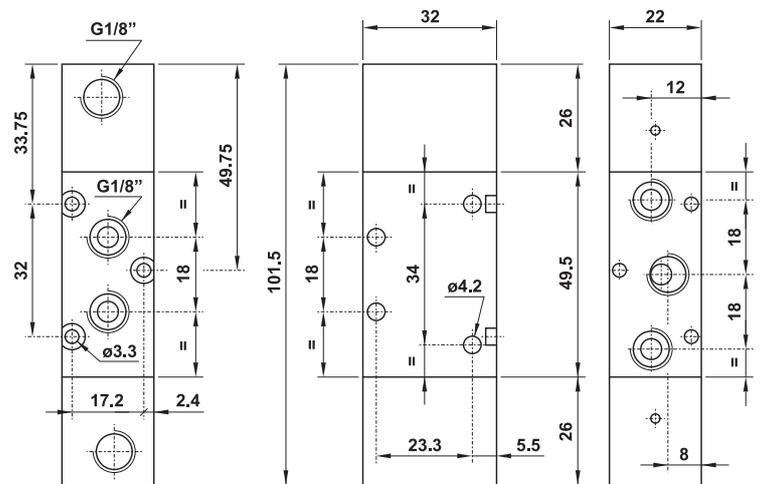
521 CC

5/2 1/8" doppio comando pneumatico

5/2 1/8" double pneumatic pilot



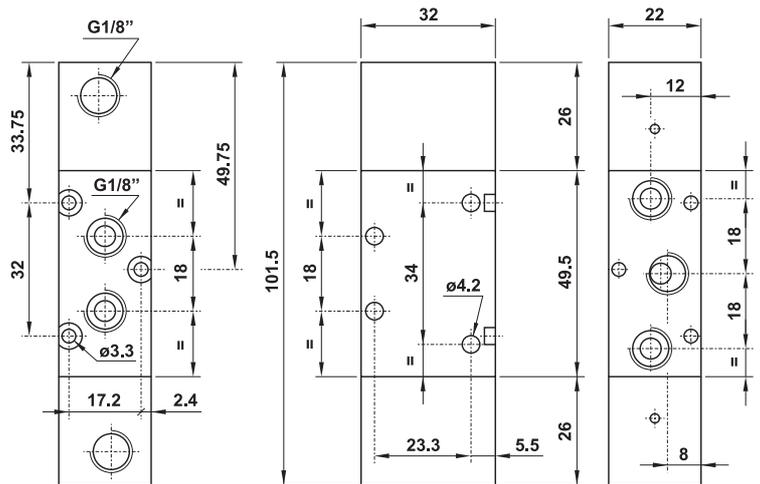
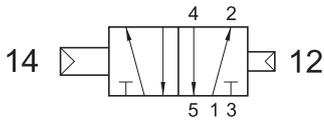
Può essere utilizzata con vuoto.
It can be used with vacuum.



521 CCD

5/2 1/8" doppio comando pneumatico - con differenziale

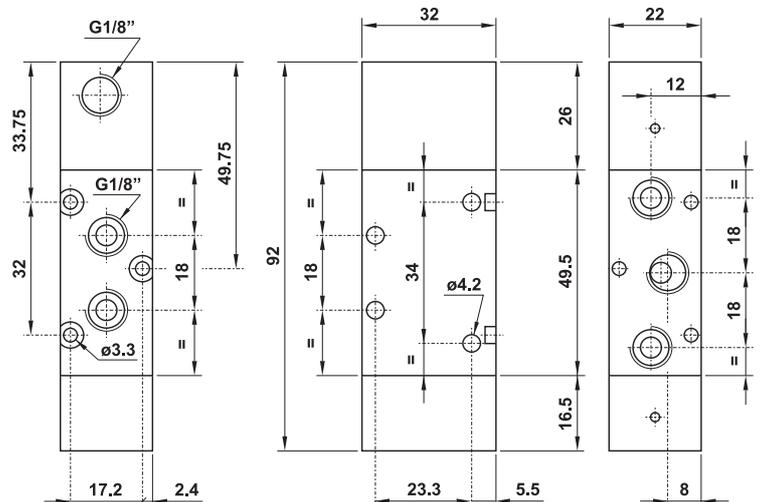
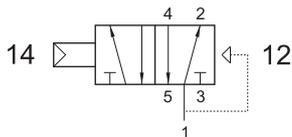
5/2 1/8" double pneumatic pilot - with differential



521 CFP

5/2 1/8" comando pneumatico - ritorno a molla pneumatica

5/2 1/8" pneumatic pilot - pneumatic spring return



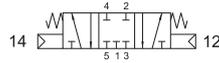
valvole ad azionamento pneumatico

pneumatically piloted valves



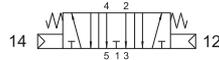
5213C CC

centri chiusi
closed centres



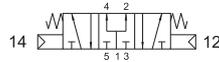
5213A CC

centri aperti
open centres



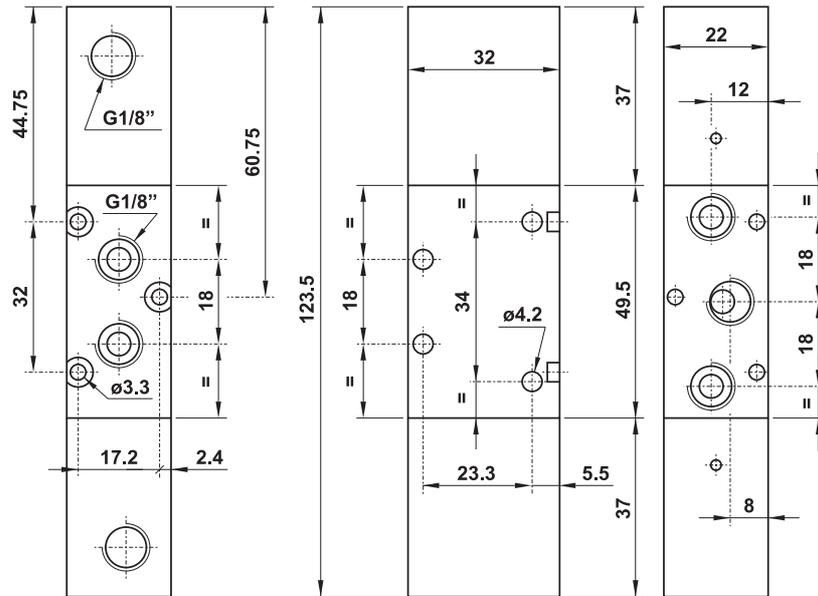
5213P CC

centri in pressione
pressurized centres



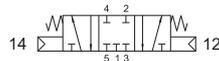
5/3 1/8" doppio comando pneumatico

5/3 1/8" double pneumatic pilot



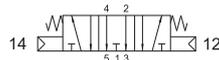
5223C CC

centri chiusi
closed centres



5223A CC

centri aperti
open centres



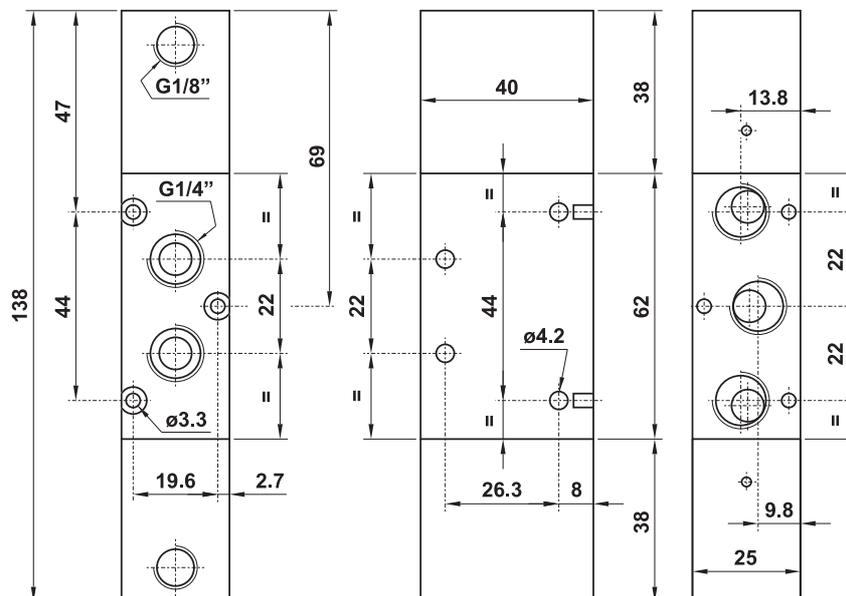
5223P CC

centri in pressione
pressurized centres



5/3 1/4" doppio comando pneumatico

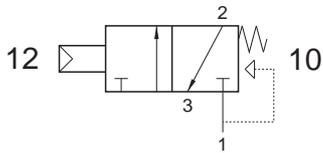
5/3 1/4" double pneumatic pilot



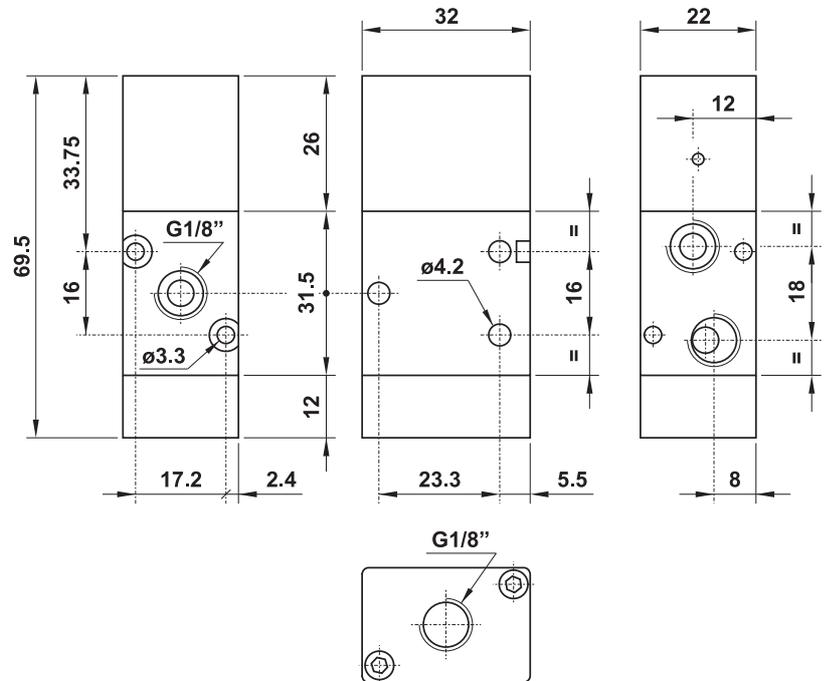
321 MC SUP

3/2 1/8" NC comando pneumatico attacco superiore - ritorno a molla

3/2 1/8" NC pneumatic pilot on the top - spring return



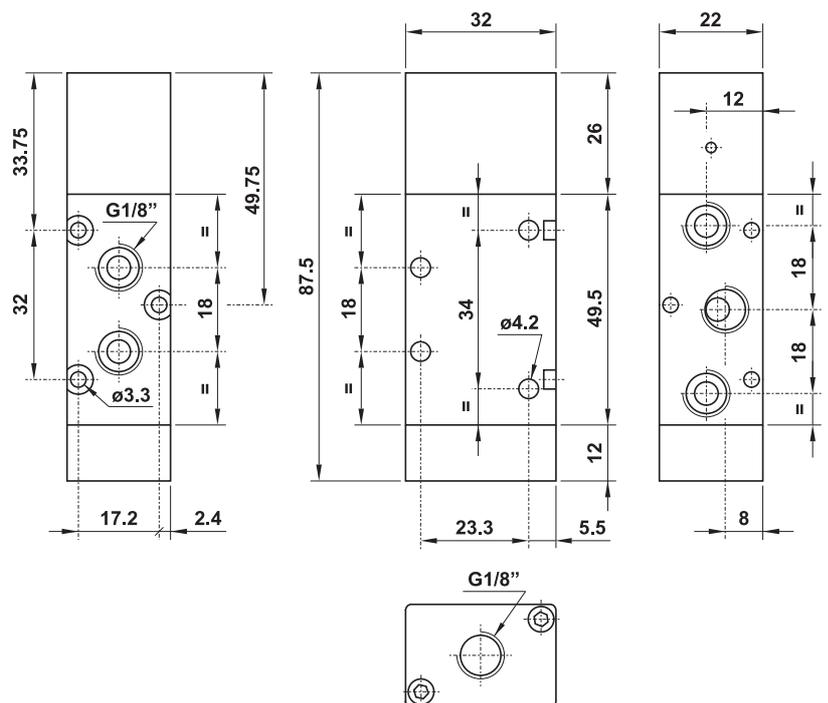
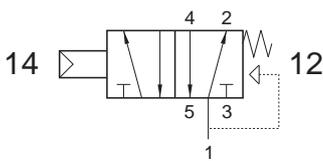
Non può essere utilizzata come valvola normalmente aperta.
It cannot be used as normally open valve.



521 MC SUP

5/2 1/8" comando pneumatico attacco superiore - ritorno a molla

5/2 1/8" pneumatic pilot on the top - spring return



valvole ad azionamento pneumatico

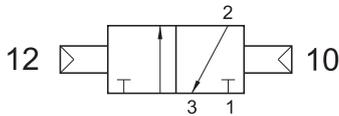
pneumatic piloted valves



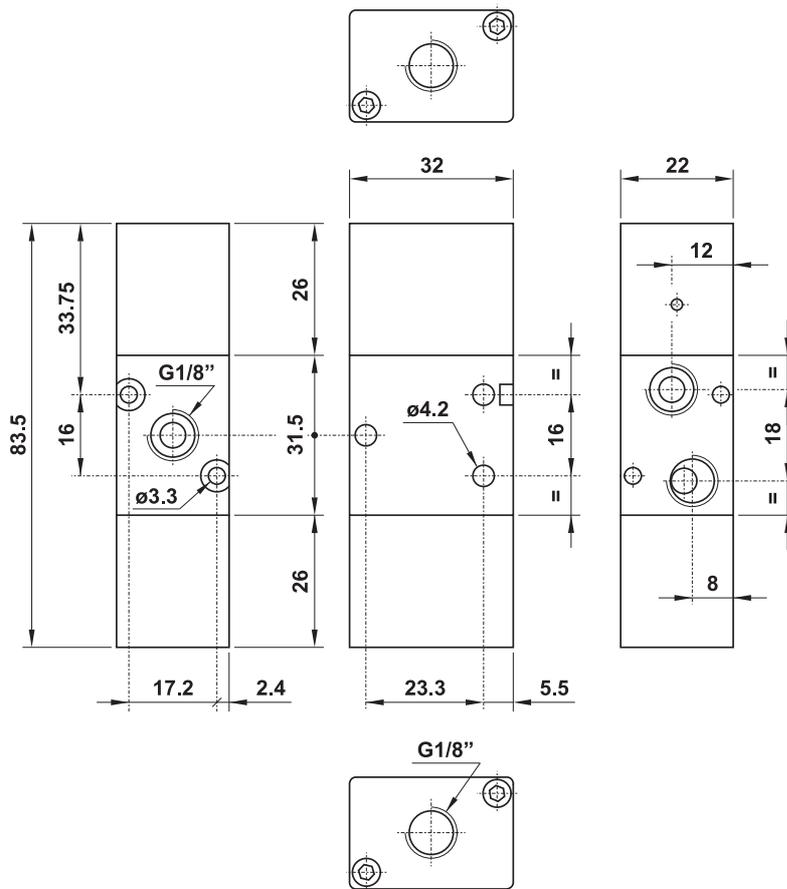
321 CC SUP

3/2 1/8" doppio comando pneumatico attacco superiore

3/2 1/8" double pneumatic pilot on the top



Può essere utilizzata con vuoto.
It can be used with vacuum.



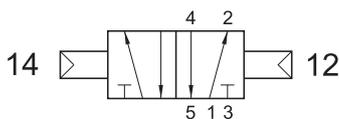
SOLO VERSIONE IN ALLUMINIO

ONLY ALUMINIUM VERSION

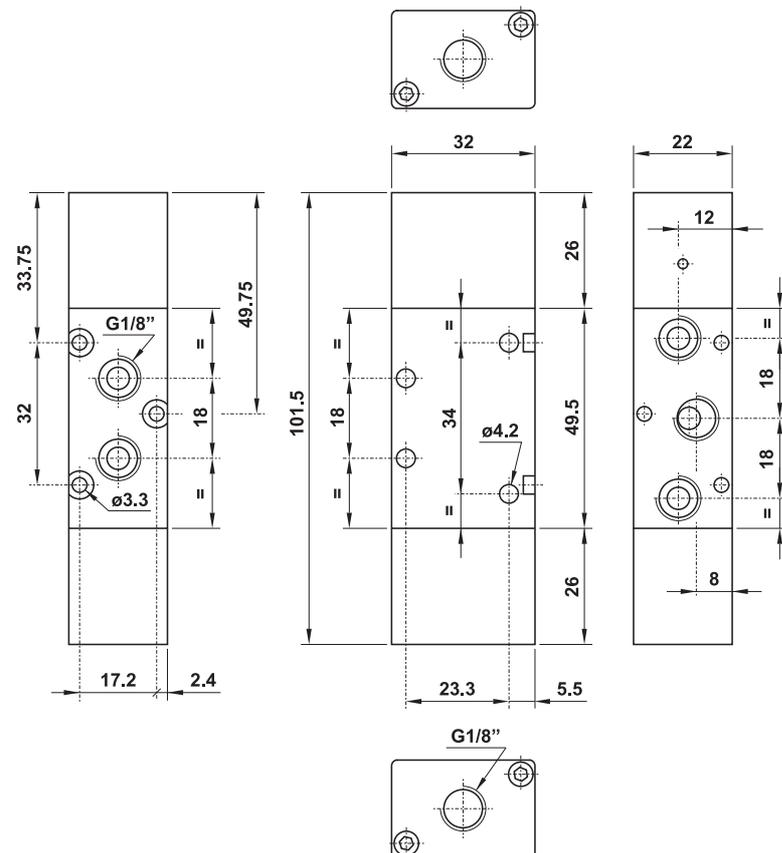
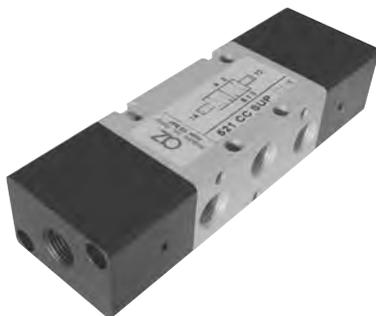
521 CC SUP

5/2 1/8" doppio comando pneumatico attacco superiore

5/2 1/8" double pneumatic pilot on the top



Può essere utilizzata con vuoto.
It can be used with vacuum.



SOLO VERSIONE IN ALLUMINIO

ONLY ALUMINIUM VERSION

valvole ad azionamento pneumatico

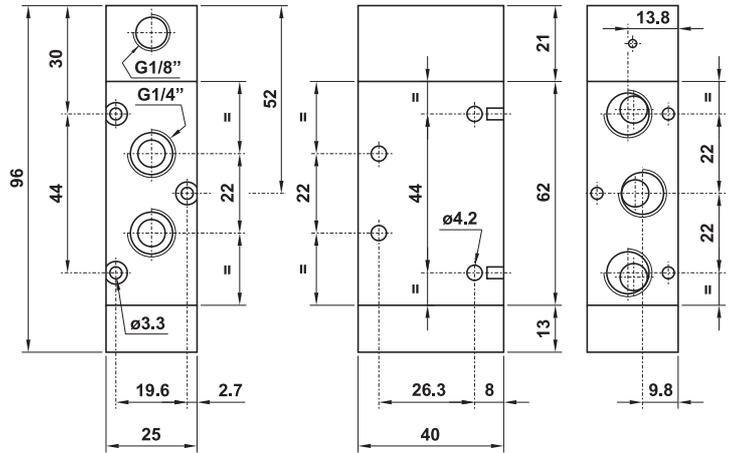
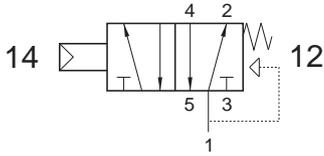
pneumatically piloted valves



522 MC

5/2 1/4" comando pneumatico - ritorno a molla

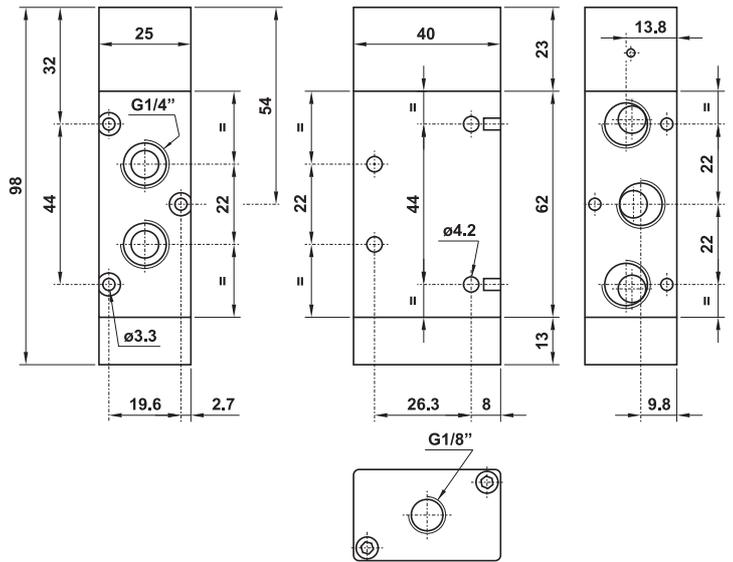
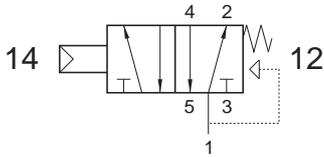
5/2 1/4" pneumatic pilot - spring return



522 MC SUP

5/2 1/4" comando pneumatico attacco superiore - ritorno a molla

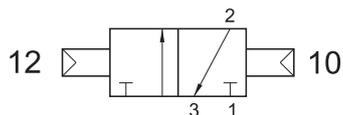
5/2 1/4" pneumatic pilot on the top - spring return



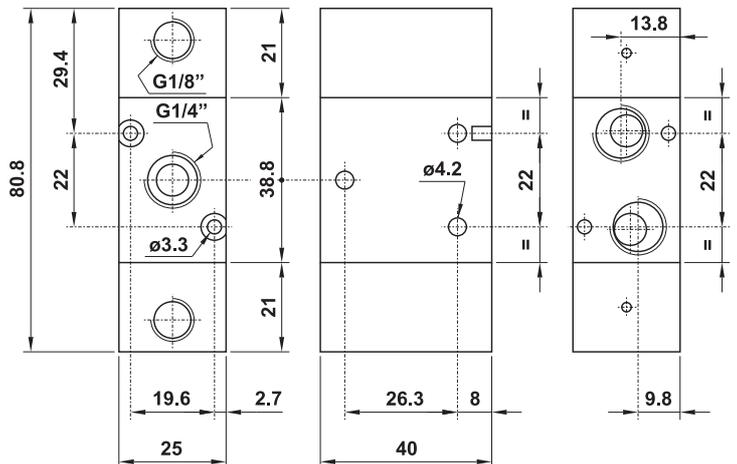
322 CC

3/2 1/4" doppio comando pneumatico

3/2 1/4" double pneumatic pilot



Può essere utilizzata con vuoto.
It can be used with vacuum.



valvole ad azionamento pneumatico

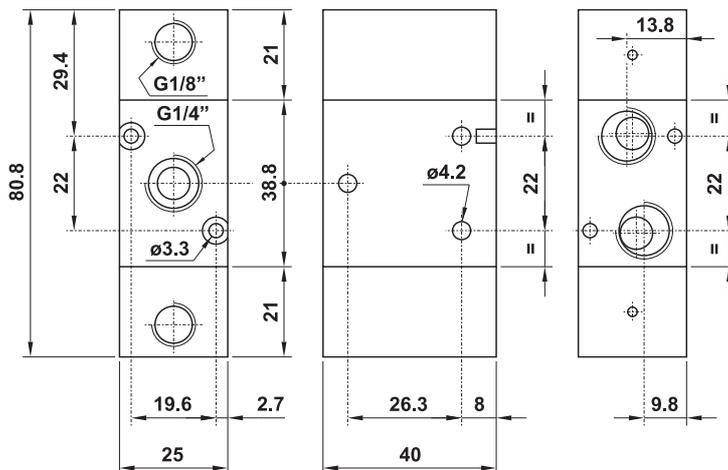
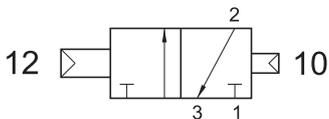
pneumatically piloted valves



322 CCD

3/2 1/4" doppio comando pneumatico - con differenziale

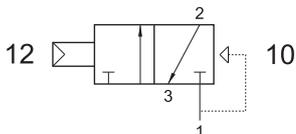
3/2 1/4" double pneumatic pilot - with differential



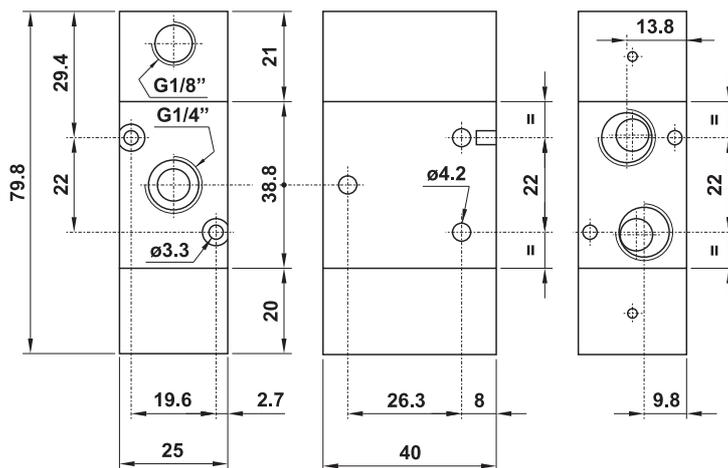
322 CFP

3/2 1/4" NC comando pneumatico - ritorno a molla pneumatica

3/2 1/4" NC pneumatic pilot - pneumatic spring return



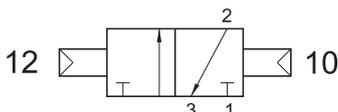
Non può essere utilizzata come valvola normalmente aperta.
It cannot be used as normally open valve.



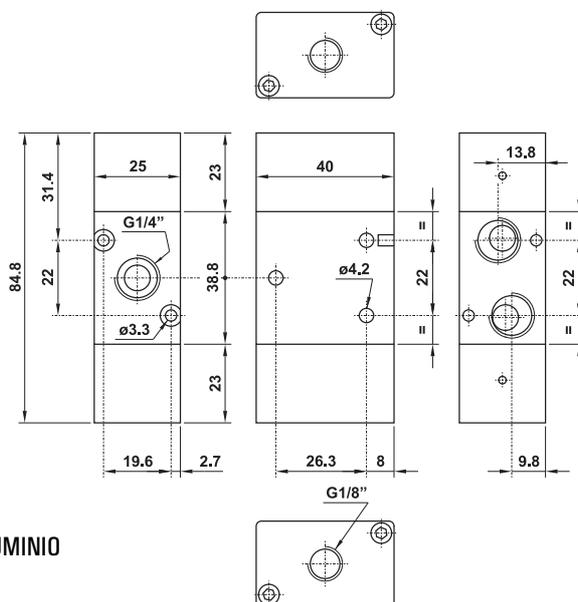
322 CC SUP

3/2 1/4" doppio comando pneumatico attacco superiore

3/2 1/4" double pneumatic pilot on the top



Può essere utilizzata con vuoto.
It can be used with vacuum.



SOLO VERSIONE IN ALLUMINIO
ONLY ALUMINIUM VERSION

valvole ad azionamento pneumatico

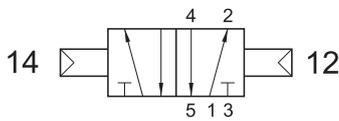
pneumatically piloted valves



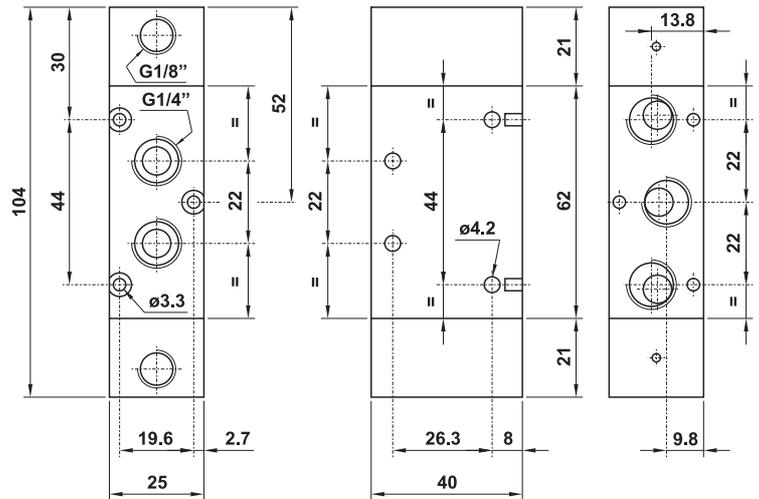
522 CC

5/2 1/4" doppio comando pneumatico

5/2 1/4" double pneumatic pilot



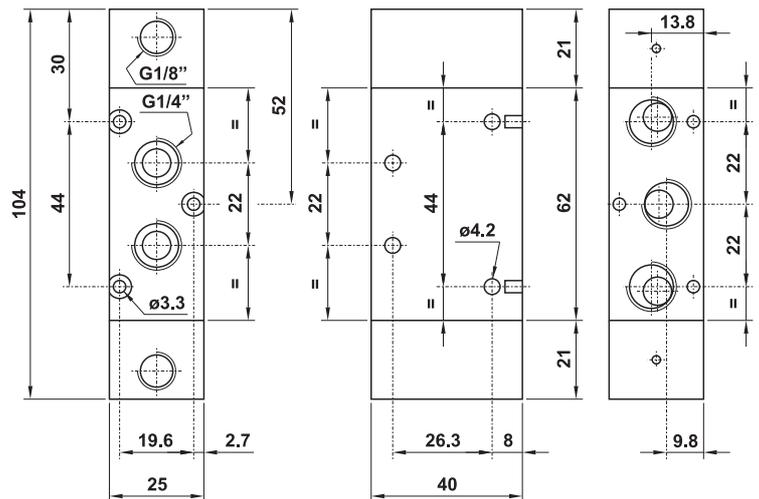
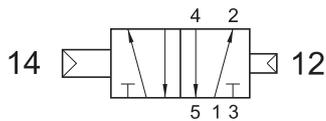
Può essere utilizzata con vuoto.
It can be used with vacuum.



522 CCD

5/2 1/4" doppio comando pneumatico - con differenziale

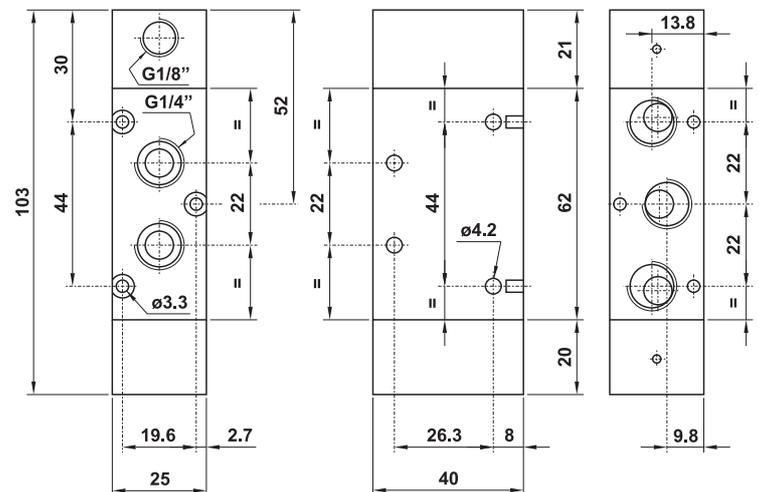
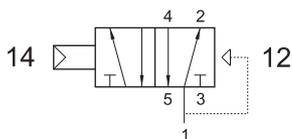
5/2 1/4" double pneumatic pilot - with differential



522 CFP

5/2 1/4" comando pneumatico - ritorno a molla pneumatica

5/2 1/4" pneumatic pilot - pneumatic spring return



valvole ad azionamento pneumatico

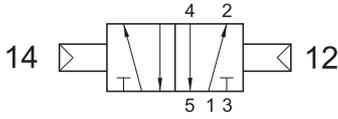
pneumatically piloted valves



522 CC SUP

5/2 1/4" doppio comando pneumatico attacco superiore

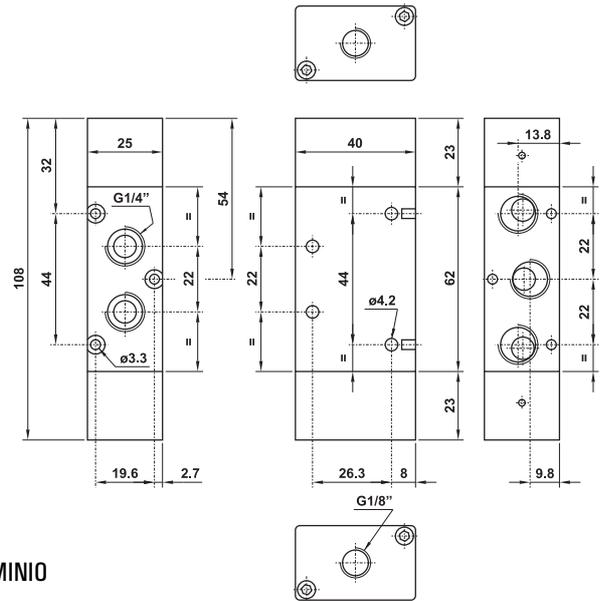
5/2 1/4" double pneumatic pilot on the top



Può essere utilizzata con vuoto.
It can be used with vacuum.



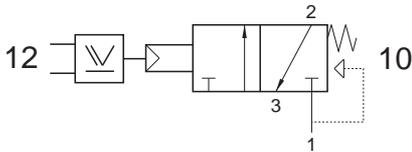
SOLO VERSIONE IN ALLUMINIO
ONLY ALUMINIUM VERSION



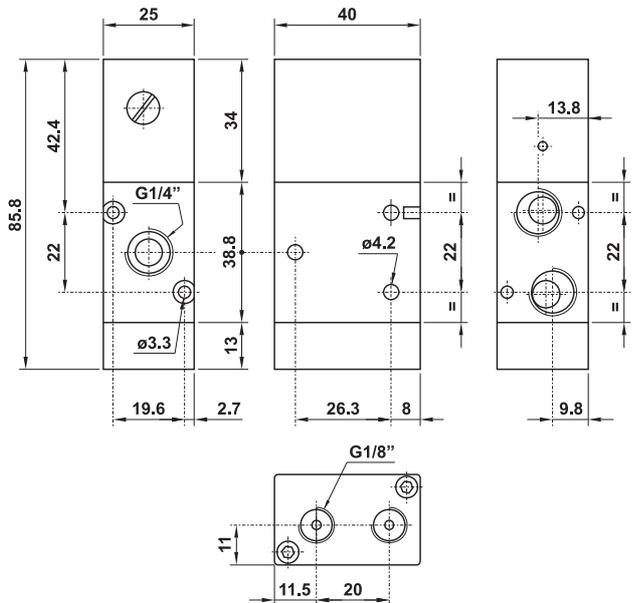
322 ORM

3/2 1/4" NC comando pneum. con elem. OR integrato - ritorno a molla

3/2 1/4" NC pneumatic pilot with integrated OR element - spring return



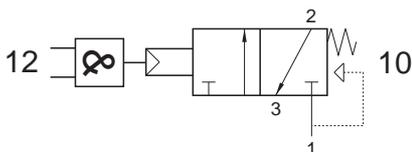
Non può essere utilizzata come valvola normalmente aperta.
It cannot be used as normally open valve.



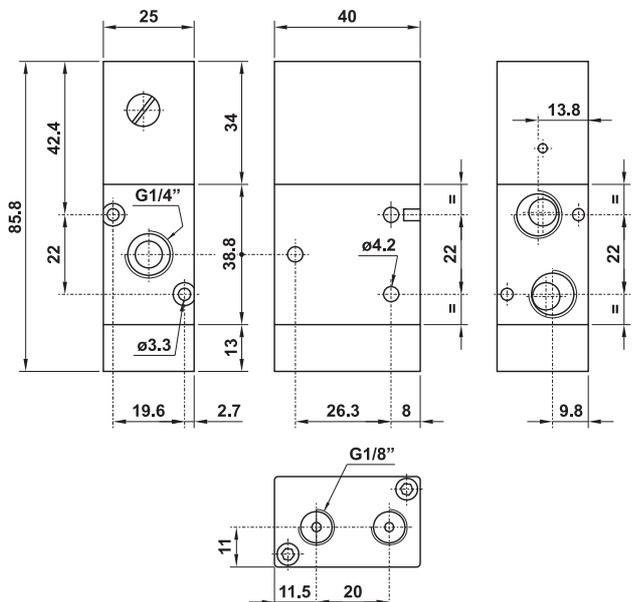
322 ANDM

3/2 1/4" NC comando pneum. con elem. AND integrato - ritorno a molla

3/2 1/4" NC pneumatic pilot with integrated AND element - spring return



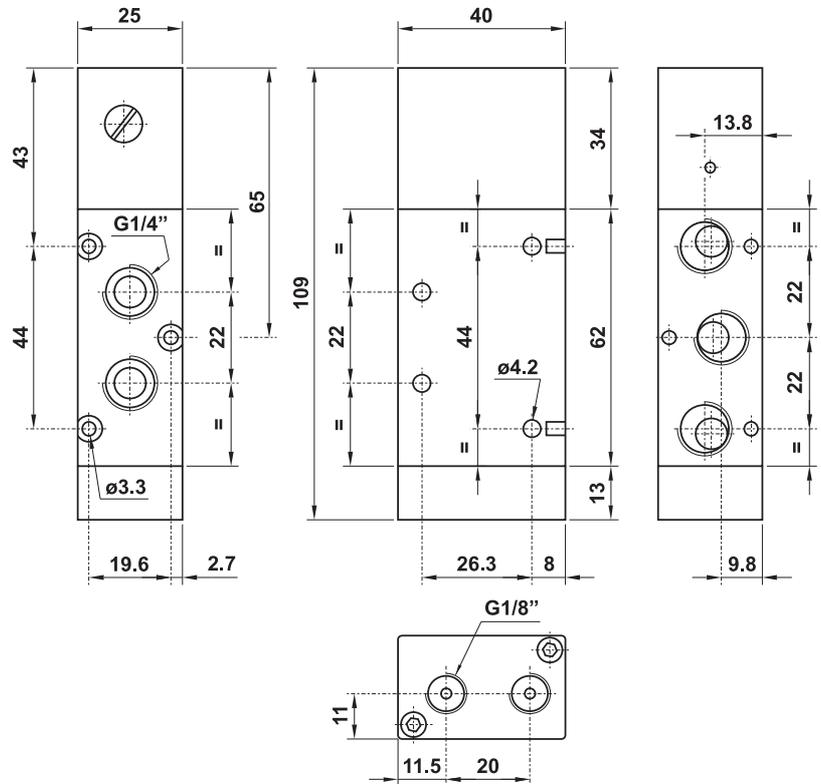
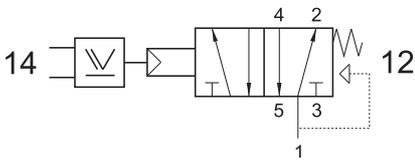
Non può essere utilizzata come valvola normalmente aperta.
It cannot be used as normally open valve.



522 ORM

5/2 1/4" comando pneum. con elemento OR integrato - ritorno a molla

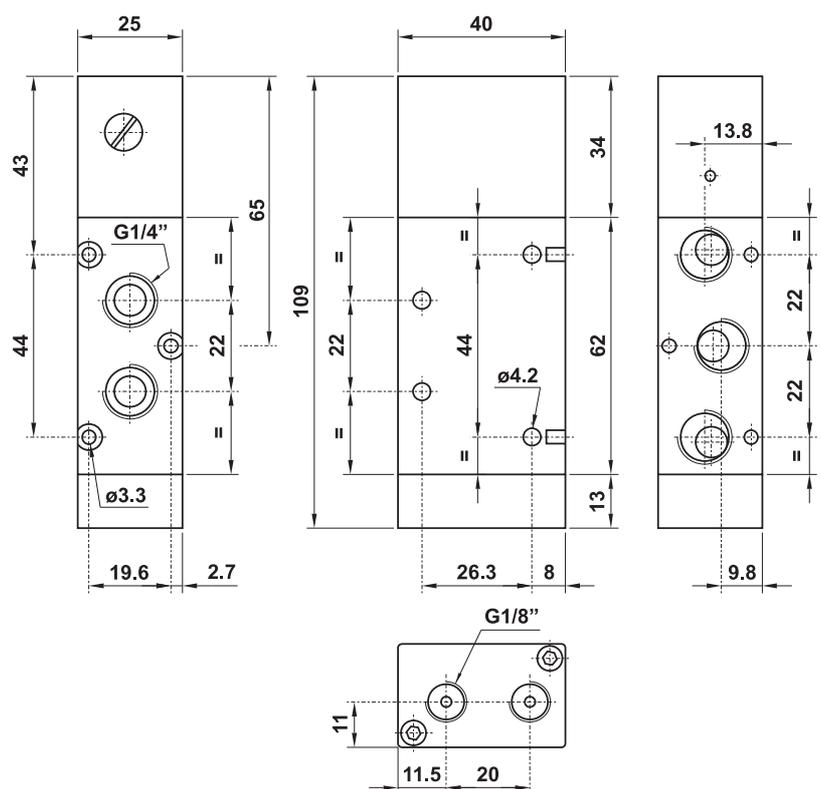
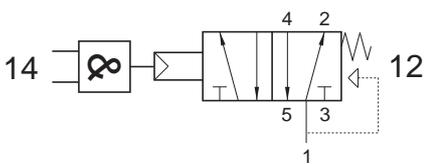
5/2 1/4" pneumatic pilot with integrated OR element - spring return



522 ANDM

5/2 1/4" comando pneum. con elem. AND integrato - ritorno a molla

5/2 1/4" pneumatic pilot with integrated AND element - spring return



valvole ad azionamento pneumatico

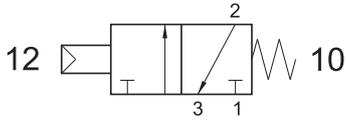
pneumatically piloted valves



321 MRC

3/2 1/8" comando pneumatico - ritorno a molla RINFORZATA

3/2 1/8" pneumatic pilot - REINFORCED spring return



Attenzione: il fondello per molla rinforzata è più lungo rispetto al fondello di una valvola con ritorno a molla normale.

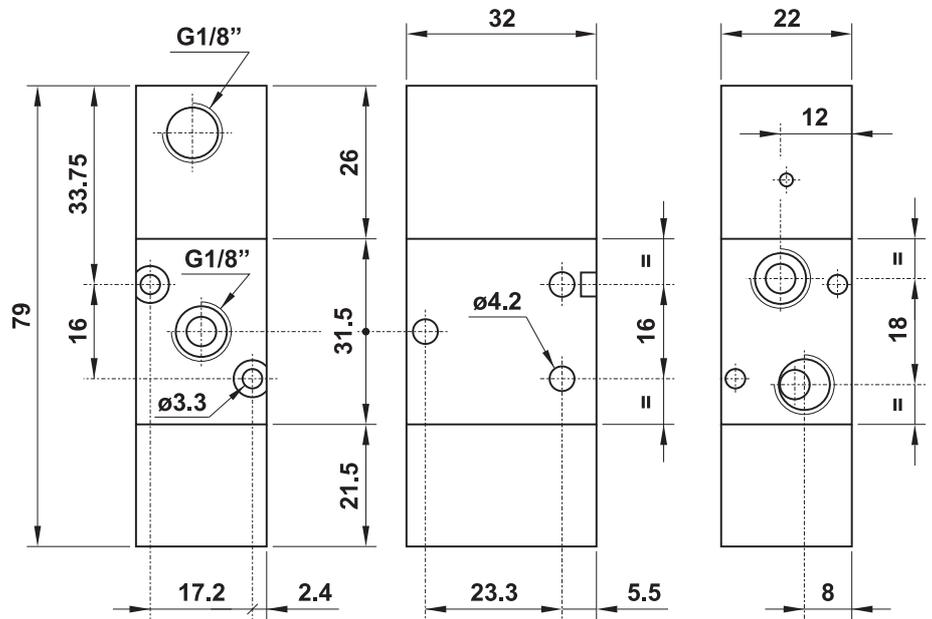
Attention: the bottom end cap for reinforced spring return is longer than the end cap for normal spring return.

Pressione di esercizio: -0.9 ... 10 bar

Working pressure: -0.9 ... 10 bar

Pressione di azionamento: 2.5 ... 10 bar

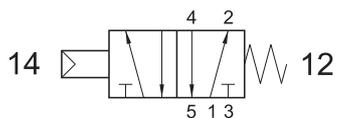
Actuating pressure: 2.5 ... 10 bar



521 MRC

5/2 1/8" comando pneumatico - ritorno a molla RINFORZATA

5/2 1/8" pneumatic pilot - REINFORCED spring return



Attenzione: il fondello per molla rinforzata è più lungo rispetto al fondello di una valvola con ritorno a molla normale.

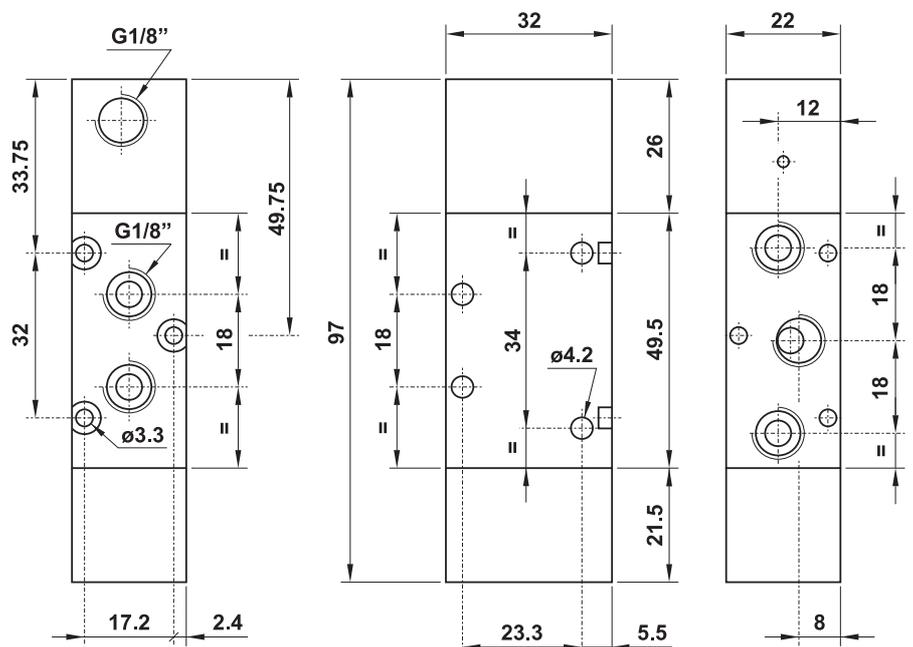
Attention: the bottom end cap for reinforced spring return is longer than the end cap for normal spring return.

Pressione di esercizio: -0.9 ... 10 bar

Working pressure: -0.9 ... 10 bar

Pressione di azionamento: 2.5 ... 10 bar

Actuating pressure: 2.5 ... 10 bar



valvole ad azionamento pneumatico

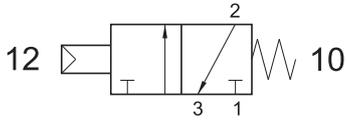
pneumatically piloted valves



322 MRC

3/2 1/4" comando pneumatico - ritorno a molla RINFORZATA

3/2 1/4" pneumatic pilot - REINFORCED spring return



Attenzione: il fondello per molla rinforzata è più lungo rispetto al fondello di una valvola con ritorno a molla normale.

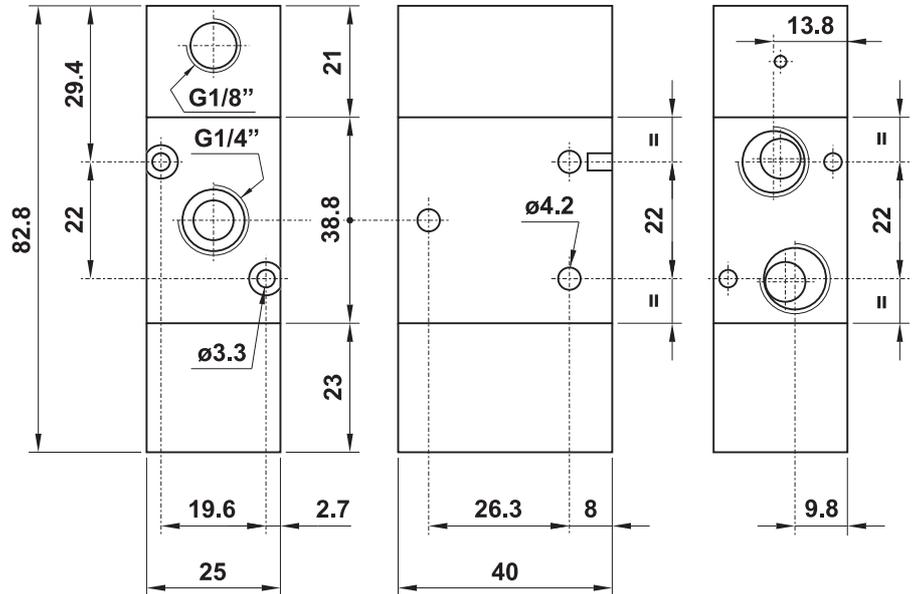
Attention: the bottom end cap for reinforced spring return is longer than the end cap for normal spring return.

Pressione di esercizio: -0.9 ... 10 bar

Working pressure: -0.9 ... 10 bar

Pressione di azionamento: 2.5 ... 10 bar

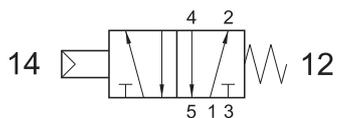
Actuating pressure: 2.5 ... 10 bar



522 MRC

5/2 1/4" comando pneumatico - ritorno a molla RINFORZATA

5/2 1/4" pneumatic pilot - REINFORCED spring return



Attenzione: il fondello per molla rinforzata è più lungo rispetto al fondello di una valvola con ritorno a molla normale.

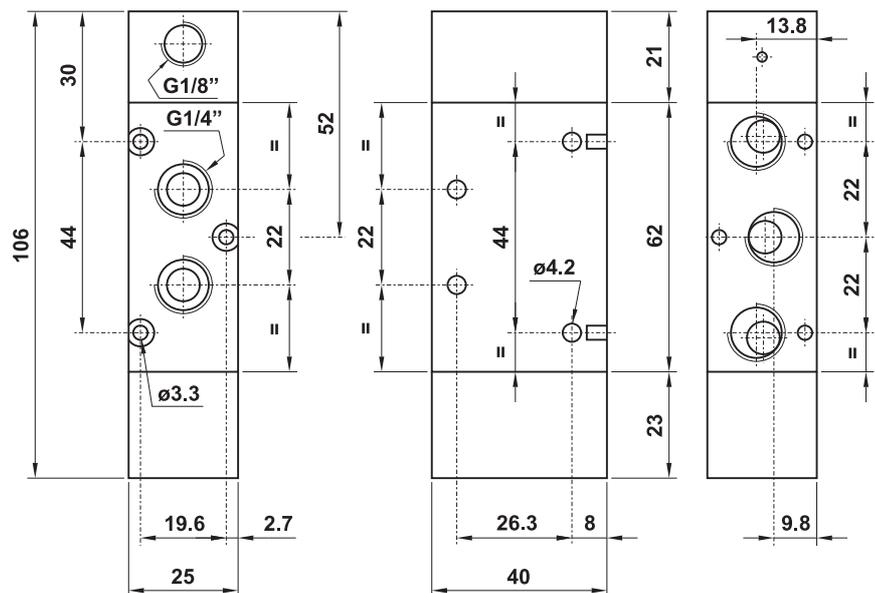
Attention: the bottom end cap for reinforced spring return is longer than the end cap for normal spring return.

Pressione di esercizio: -0.9 ... 10 bar

Working pressure: -0.9 ... 10 bar

Pressione di azionamento: 2.5 ... 10 bar

Actuating pressure: 2.5 ... 10 bar



valvole ad azionamento pneumatico

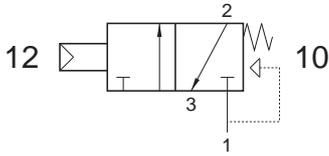
pneumatically piloted valves



321 MCQ

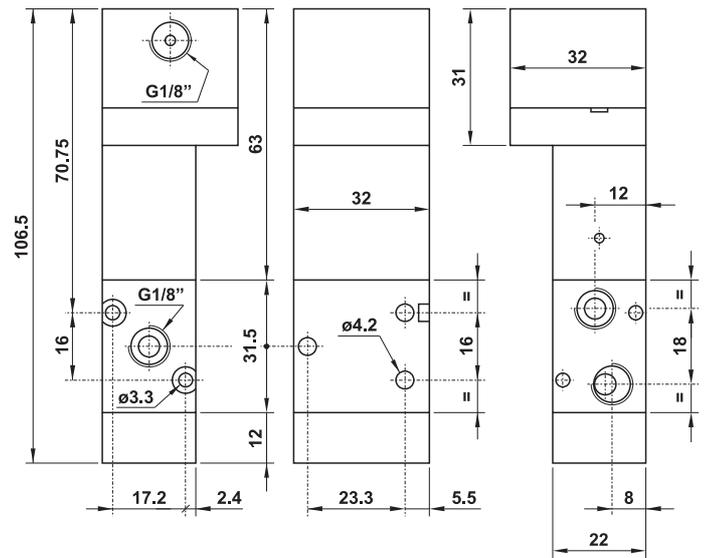
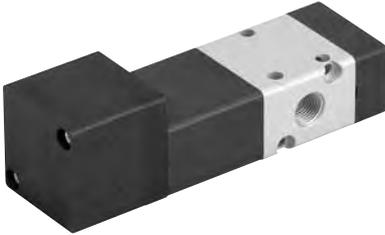
3/2 1/8" NC comando pneumatico 0.3 bar - ritorno a molla

3/2 1/8" NC pneumatic pilot 0.3 bar - spring return



Pressione di esercizio: min. 2.5 bar
Pressione di azionamento: min. 0.3 bar

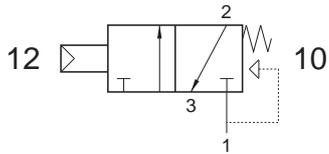
Working pressure: min. 2.5 bar
Actuating pressure: min. 0.3 bar



321 MCS

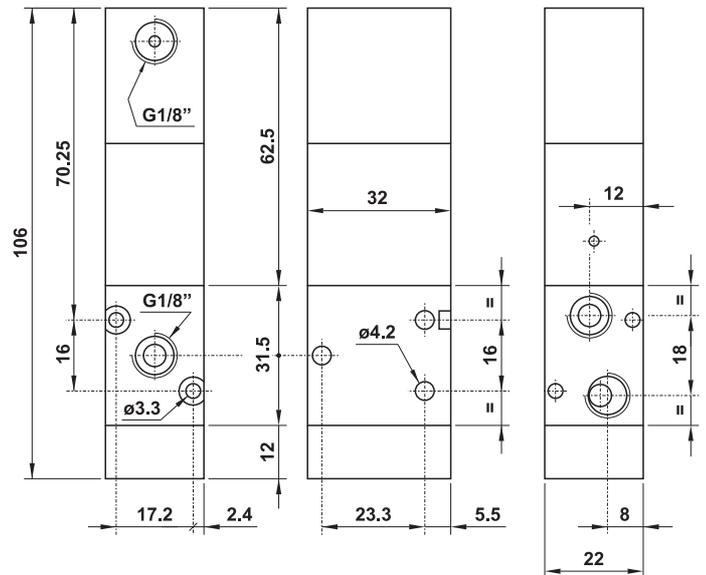
3/2 1/8" NC comando pneumatico 0.6 bar - ritorno a molla

3/2 1/8" NC pneumatic pilot 0.6 bar - spring return



Pressione di esercizio: min. 2.5 bar
Pressione di azionamento: min. 0.6 bar

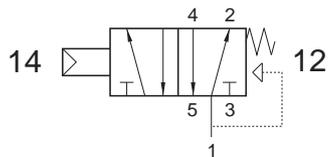
Working pressure: min. 2.5 bar
Actuating pressure: min. 0.6 bar



521 MCQ

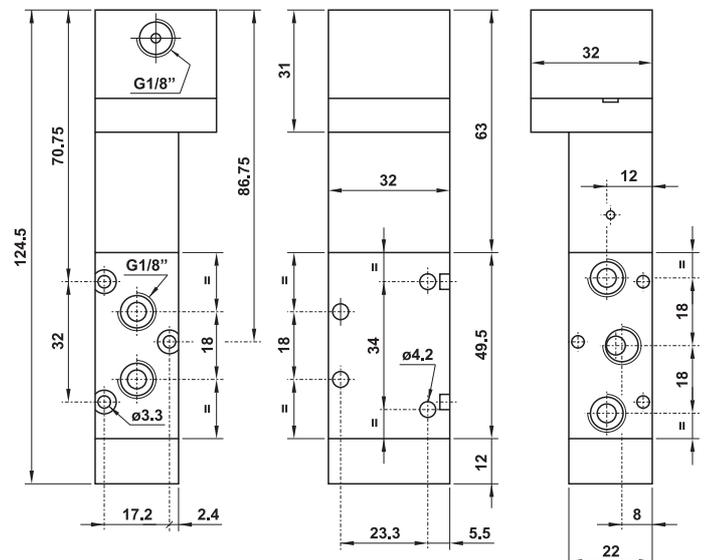
5/2 1/8" comando pneumatico 0.3 bar - ritorno a molla

5/2 1/8" pneumatic pilot 0.3 bar - spring return



Pressione di esercizio: min. 2.5 bar
Pressione di azionamento: min. 0.3 bar

Working pressure: min. 2.5 bar
Actuating pressure: min. 0.3 bar



valvole ad azionamento pneumatico

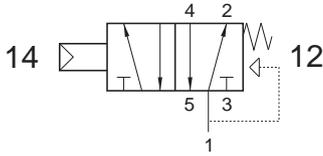
pneumatically piloted valves



521 MCS

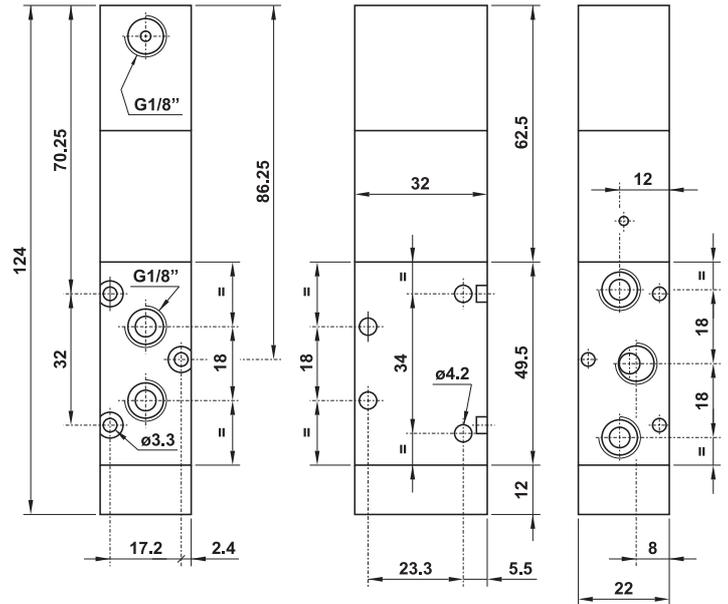
5/2 1/8" comando pneumatico 0.6 bar - ritorno a molla

5/2 1/8" pneumatic pilot 0.6 bar - spring return



Pressione di esercizio: min. 2.5 bar
Pressione di azionamento: min. 0.6 bar

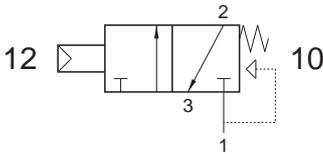
*Working pressure: min. 2.5 bar
Actuating pressure: min. 0.6 bar*



322 MCS

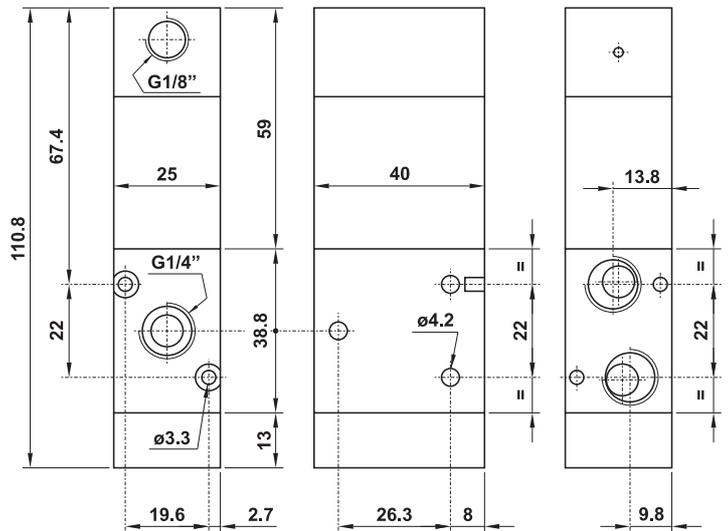
3/2 1/4" NC comando pneumatico 0.6 bar - ritorno a molla

3/2 1/4" NC pneumatic pilot 0.6 bar - spring return



Pressione di esercizio: min. 2.5 bar
Pressione di azionamento: min. 0.6 bar

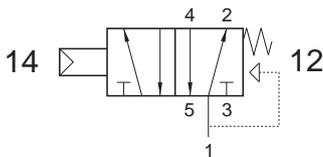
*Working pressure: min. 2.5 bar
Actuating pressure: min. 0.6 bar*



522 MCS

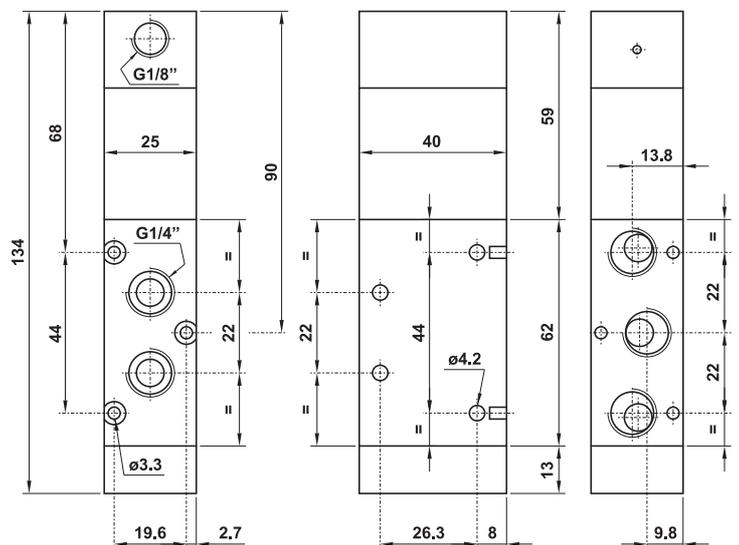
5/2 1/4" comando pneumatico 0.6 bar - ritorno a molla

5/2 1/4" pneumatic pilot 0.6 bar - spring return



Pressione di esercizio: min. 2.5 bar
Pressione di azionamento: min. 0.6 bar

*Working pressure: min. 2.5 bar
Actuating pressure: min. 0.6 bar*



valvole G1/2" azionamento pneumatico

pneumatically piloted valves - G1/2"



- Valvole a spola 3/2-5/2-5/3 con attacchi filettati G1/2"
3/2-5/2-5/3 spool valves with G1/2" threaded ports
- Elevatissima portata
Very high flow rate
- Montaggio in linea
Installation in-line
- Azionamento pneumatico monostabile o bistabile
Mono-stable or bi-stable pneumatic pilot
- Multifunzionalità e adattabilità
Multifunction feature



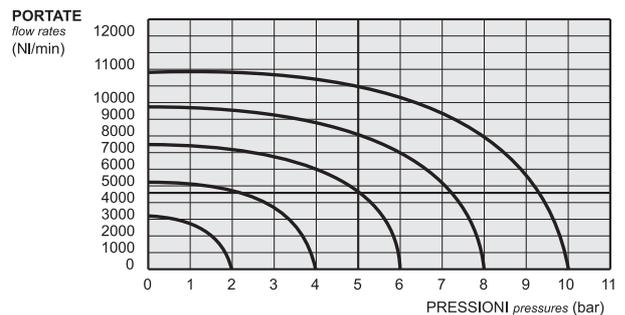
Kit ricambi - spare parts

02.030.2 : per valvole a 3 vie [for 3 way valves] ME - ME AS - MC

02.031.2 : per valvole a 5 vie [for 5 way valves] ME - ME AS - MC

02.032.2 : per valvole a 3 vie [for 3 way valves] EE - EE AS - CC

02.033.2 : per valvole a 5 vie [for 5 way valves] EE - EE AS - CC



Tempi di risposta - response times

monostabile <i>mono-stable</i>	TRA (14): 24 ms TRR (12): 43 ms
bistabile <i>bi-stable</i>	TRA (14): 30 ms TRR (12): 30 ms

Materiali

Corpo: alluminio 11S

Molle: INOX

Guarnizioni: NBR

Spola: alluminio nichelato

Parti interne: ottone OT58

Materials

Body: aluminium 11S

Springs: stainless steel

Seals: NBR

Spool: nickel plated aluminium

Internal parts: brass OT58

Diametro nominale <i>Nominal orifice</i>	13 mm	
Portata nominale a 6 bar, Δp 1 bar <i>Nominal flow rate at 6 bar, Δp 1 bar</i>	4600 NI/min	
Temperatura di esercizio <i>Temperature range</i>	max +60°C	
Pressione di esercizio <i>Working pressure</i>	monostabile [mono-stable]	bistabile [bi-stable]
	2.5 ... 10 bar 0.25 ... 1 MPa	-0.9 ... 10 bar -0.09 ... 1 MPa
Pressione di azionamento <i>Actuating pressure</i>	monostabile [mono-stable]	bistabile [bi-stable]
	2.5 ... 10 bar 0.25 ... 1 MPa	1 ... 10 bar 0.1 ... 1 MPa
Fluido <i>Fluid</i>	Aria filtrata 50 μ con o senza lubrificazione <i>50μ filtered, lubricated or non lubricated air</i>	

valvole G1/2" azionamento pneumatico

pneumatically piloted valves - G1/2"



Multifunzionalità e adattabilità della valvola

La funzione della valvola può essere variata in ogni momento secondo necessità cambiando la posizione dei tappi da M5 e G1/8" collocati nel corpo secondo gli schemi sottoriportati.

La valvola è fornita nella configurazione richiesta al momento dell'ordine. Eventuali tappi aggiuntivi possono essere ordinati separatamente.

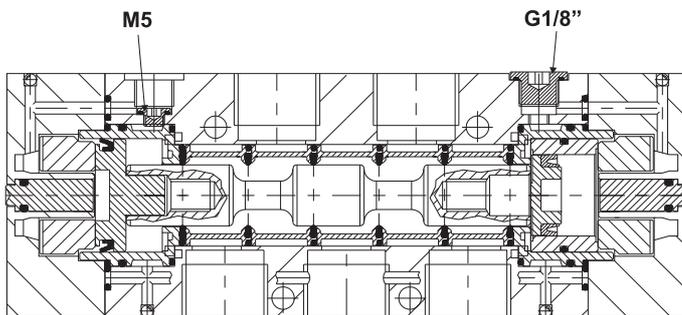
Multifunction feature of the valve

The function of the valve can be changed in any moment. To do this it is enough to change the position of the plugs M5 and G1/8", which are inserted into the body according to the scheme.

The valve is supplied in the configuration specified on the order. More plugs can be ordered separately.

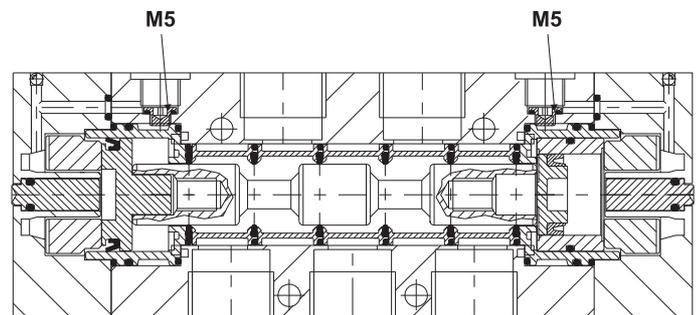
324 CFP

524 CFP



324 CCD

524 CCD



valvole G1/2" azionamento pneumatico

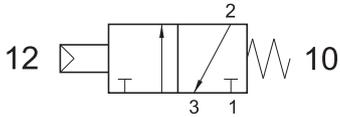
pneumatically piloted valves - G1/2"



324 MC

3/2 1/2" NC comando pneumatico - ritorno a molla

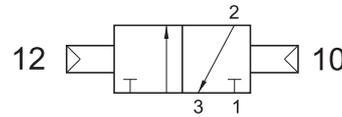
3/2 1/2" NC pneumatic pilot - spring return



324 CC

3/2 1/2" doppio comando pneumatico

3/2 1/2" double pneumatic pilot

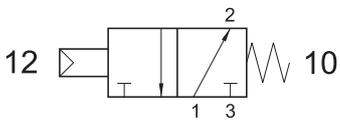


Può essere utilizzata con vuoto.
It can be used with vacuum.

324 MCA

3/2 1/2" NA comando pneumatico - ritorno a molla

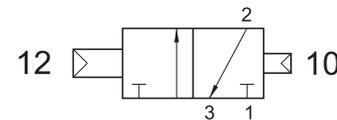
3/2 1/2" NO pneumatic pilot - spring return



324 CCD

3/2 1/2" doppio comando pneumatico - con differenziale

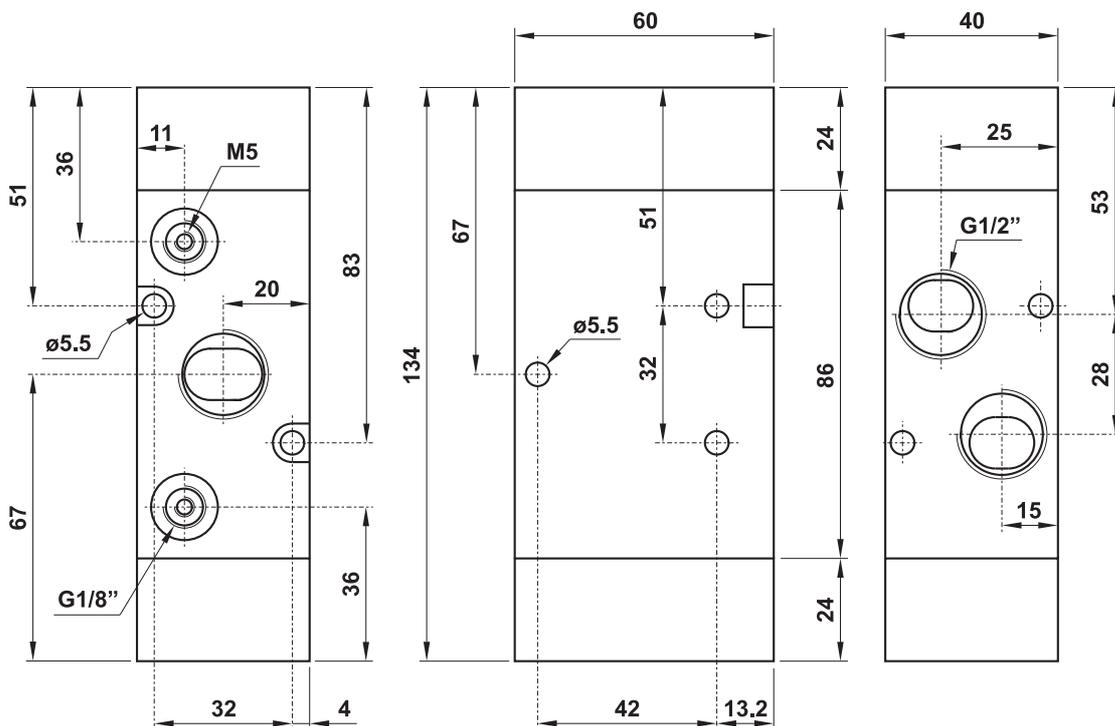
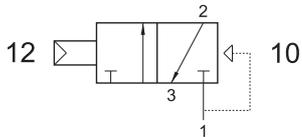
3/2 1/2" double pneumatic pilot - with differential



324 CFP

3/2 1/2" NC comando pneumatico - ritorno a molla pneumatica

3/2 1/2" NC pneumatic pilot - pneumatic spring return



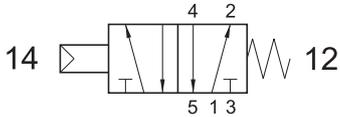
valvole G1/2" azionamento pneumatico

pneumatically piloted valves - G1/2"



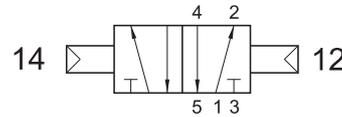
524 MC

5/2 1/2" comando pneumatico - ritorno a molla
 5/2 1/2" *pneumatic pilot - spring return*



524 CC

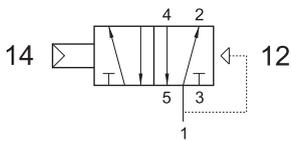
5/2 1/2" doppio comando pneumatico
 5/2 1/2" *double pneumatic pilot*



Può essere utilizzata con vuoto.
It can be used with vacuum.

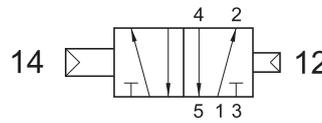
524 CFP

5/2 1/2" comando pneumatico - ritorno a molla pneumatica
 5/2 1/2" *pneumatic pilot - pneumatic spring return*



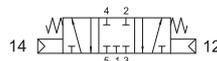
524 CCD

5/2 1/2" doppio comando pneumatico - con differenziale
 5/2 1/2" *double pneumatic pilot - with differential*



5243C CC

centri chiusi
closed centres



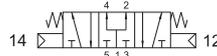
5243A CC

centri aperti
open centres



5243P CC

centri in pressione
pressurized centres



5/3 1/2" doppio comando pneumatico
 5/3 1/2" *double pneumatic pilot*

