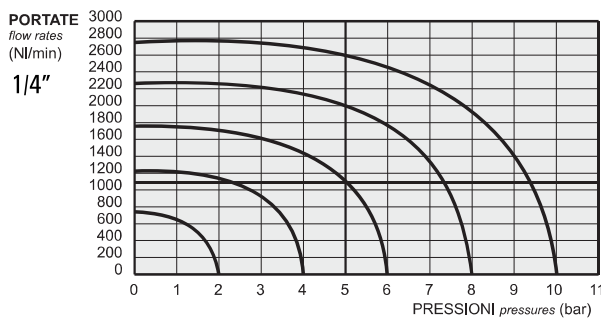
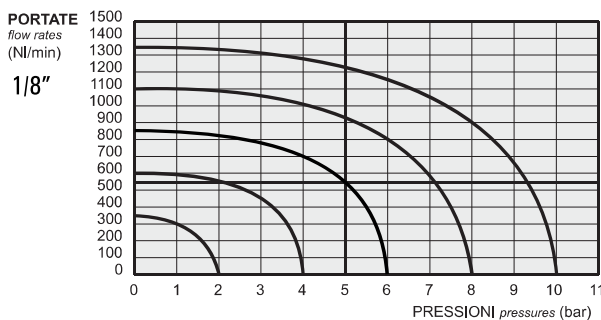


# valvole ad azionamento pneumatico

*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

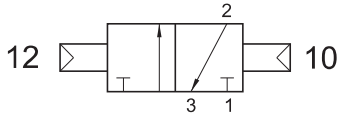
*pneumatically piloted valves*



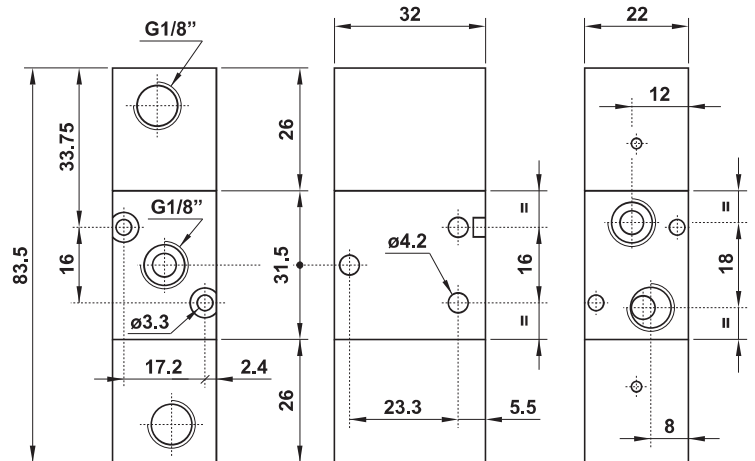
## 321 CC

3/2 1/8" doppio comando pneumatico

3/2 1/8" double pneumatic pilot



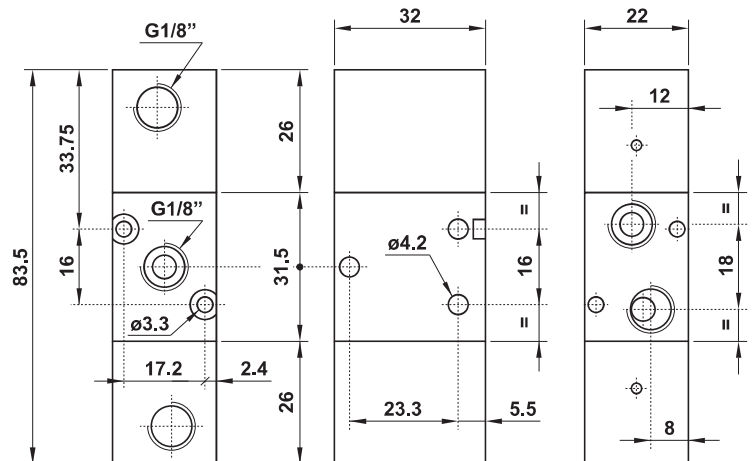
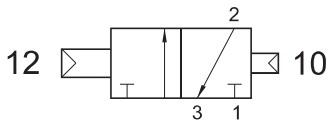
Può essere utilizzata con vuoto.  
*It can be used with vacuum.*



## 321 CCD

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

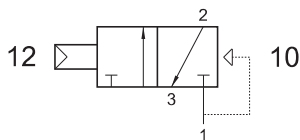
3/2 1/8" double pneumatic pilot - with differential



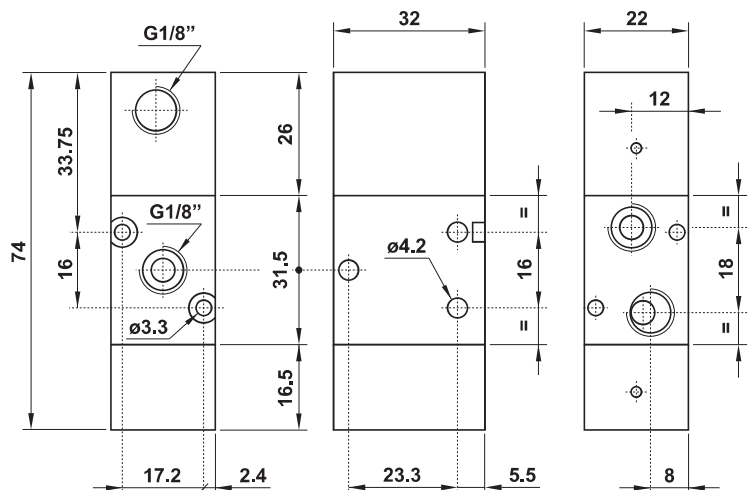
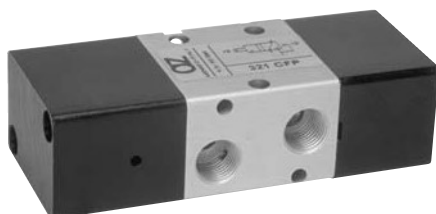
## 321 CFP

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

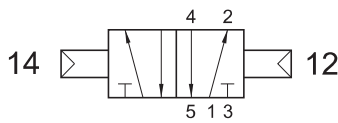
*pneumatically piloted valves*



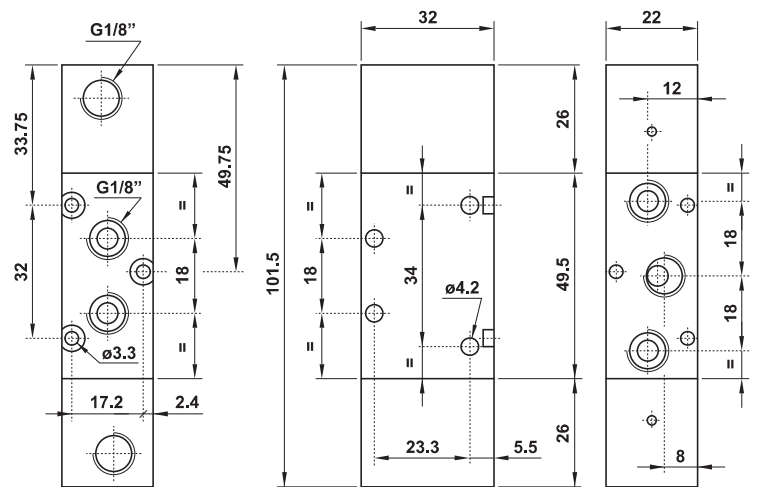
## 521 CC

5/2 1/8" doppio comando pneumatico

5/2 1/8" double pneumatic pilot



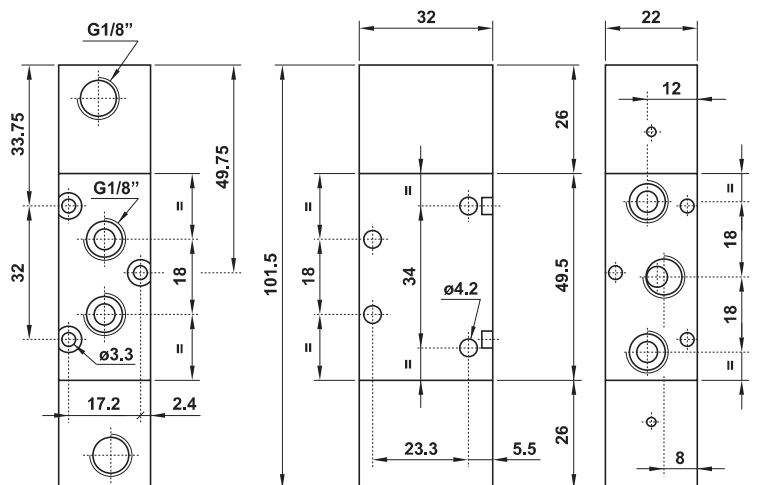
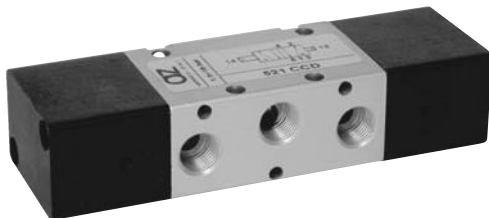
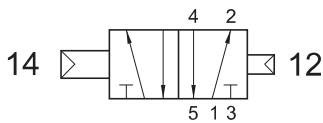
Può essere utilizzata con vuoto.  
*It can be used with vacuum.*



## 521 CCD

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

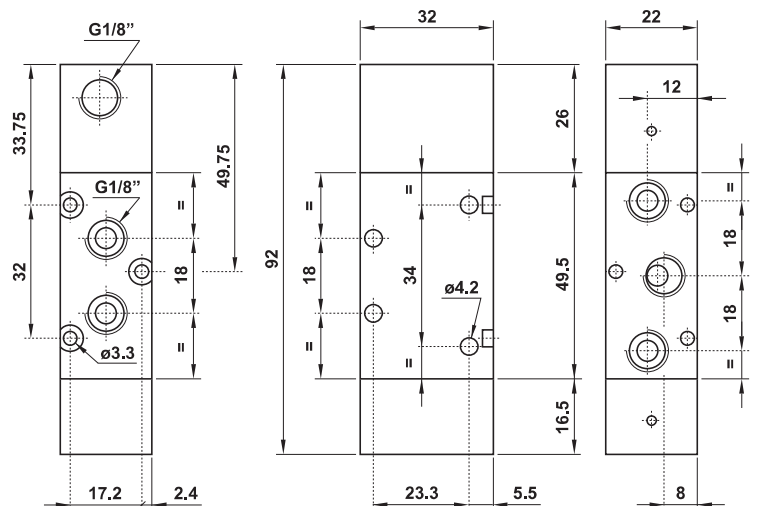
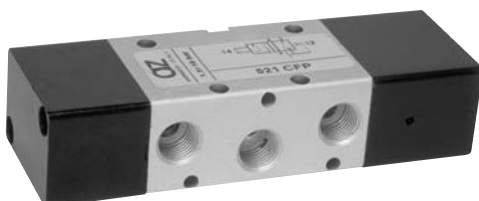
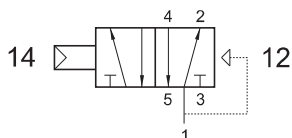
5/2 1/8" double pneumatic pilot - with differential



## 521 CFP

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

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



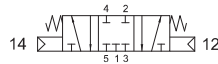
# valvole ad azionamento pneumatico

*pneumatically piloted valves*



**5213C CC**

centri chiusi  
*closed centres*



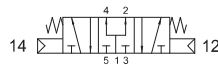
**5213A CC**

centri aperti  
*open centres*



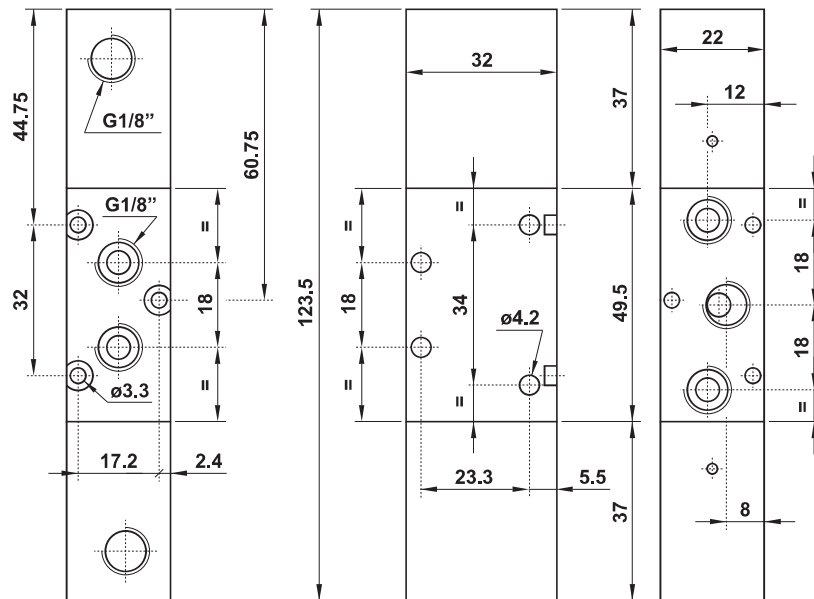
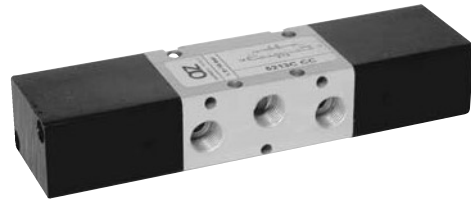
**5213P CC**

centri in pressione  
*pressurized centres*



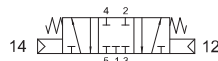
5/3 1/8" doppio comando pneumatico

*5/3 1/8" double pneumatic pilot*



**5223C CC**

centri chiusi  
*closed centres*



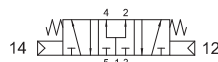
**5223A CC**

centri aperti  
*open centres*



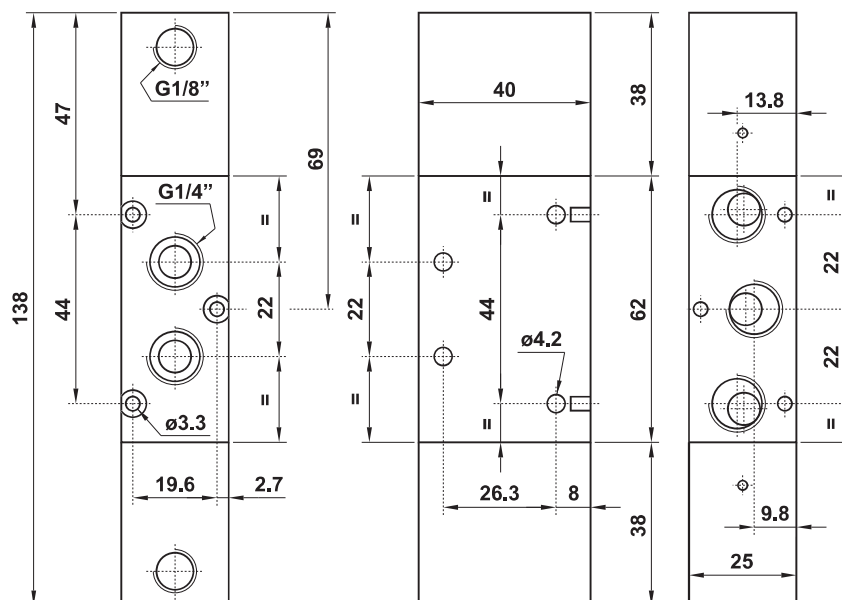
**5223P CC**

centri in pressione  
*pressurized centres*



5/3 1/4" doppio comando pneumatico

*5/3 1/4" double pneumatic pilot*



# valvole ad azionamento pneumatico

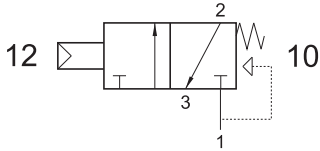
pneumatic piloted valves



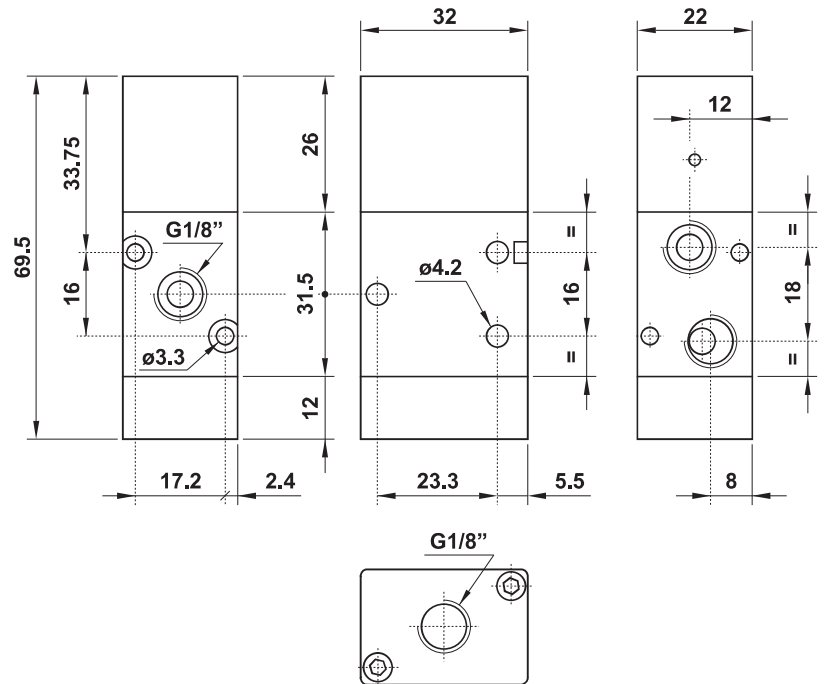
## 321 MC SUP

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

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



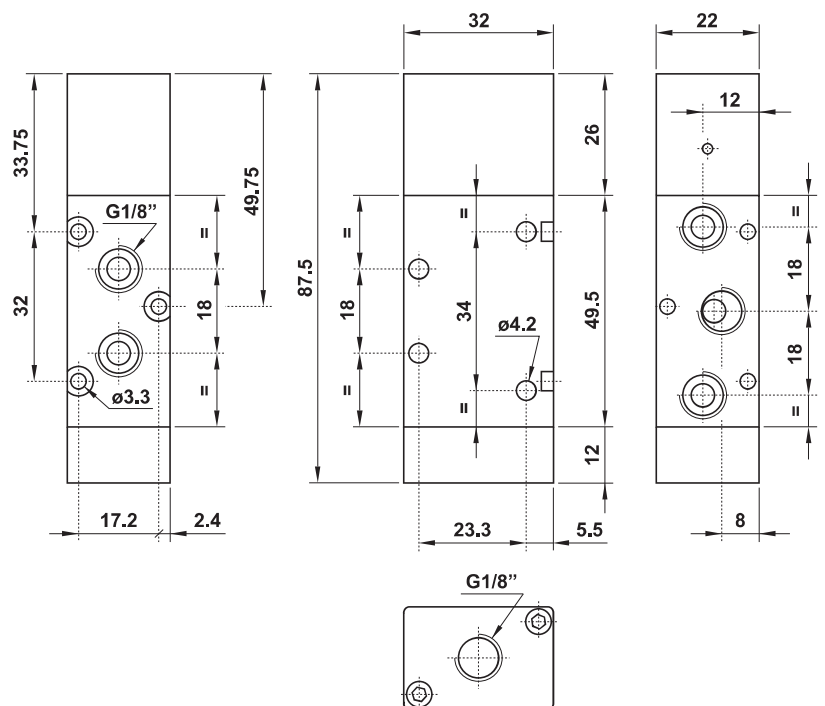
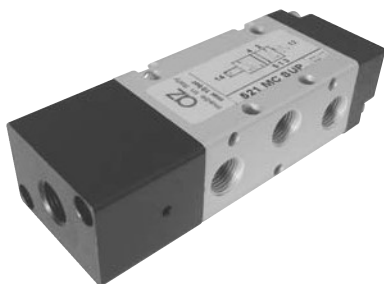
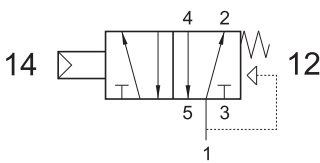
Non può essere utilizzata come valvola normalmente aperta.  
It cannot be used as normally open valve.



## 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

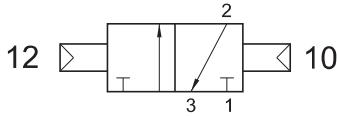
*pneumatic piloted valves*



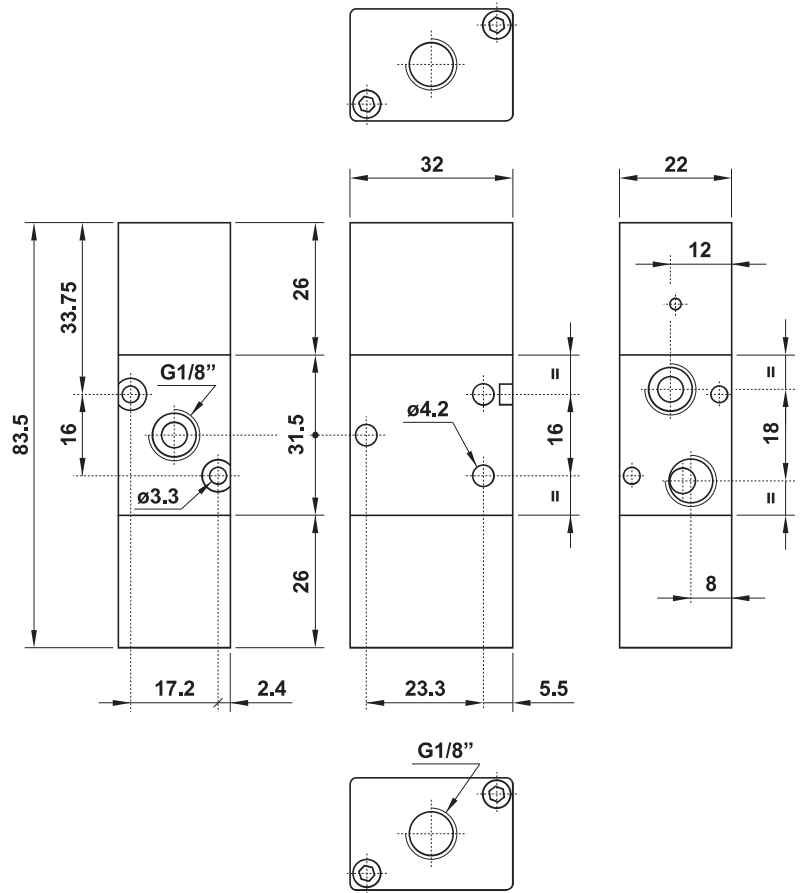
## 321 CC SUP

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.



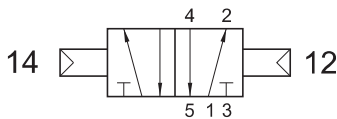
SOLO VERSIONE IN ALLUMINIO

ONLY ALUMINIUM VERSION

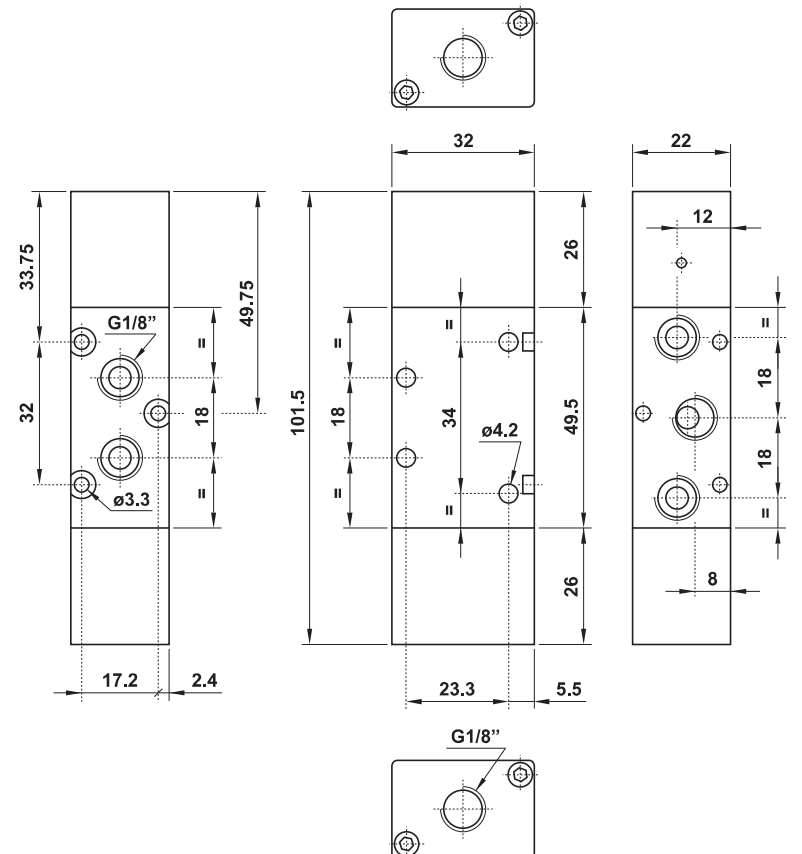
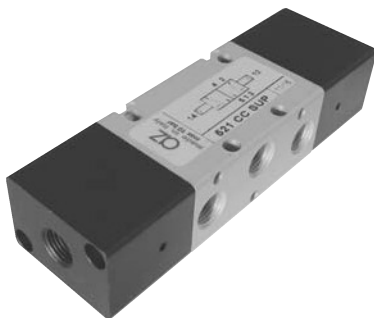
## 521 CC SUP

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

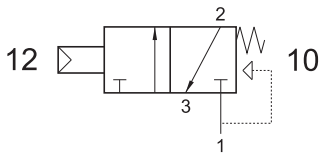
*pneumatically piloted valves*



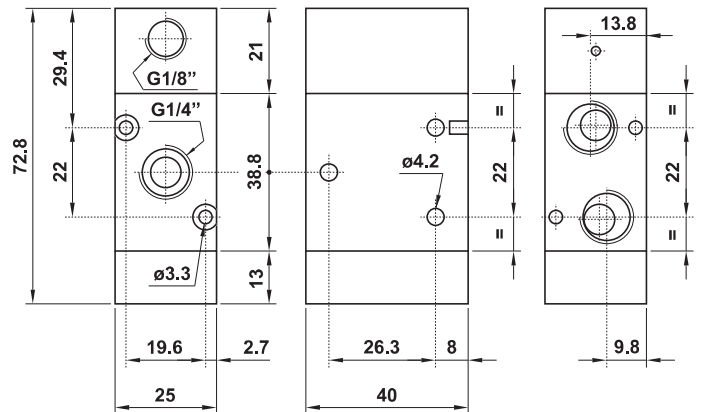
## 322 MC

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

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



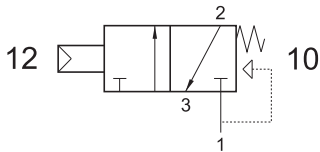
Non può essere utilizzata come valvola normalmente aperta.  
It cannot be used as normally open valve.



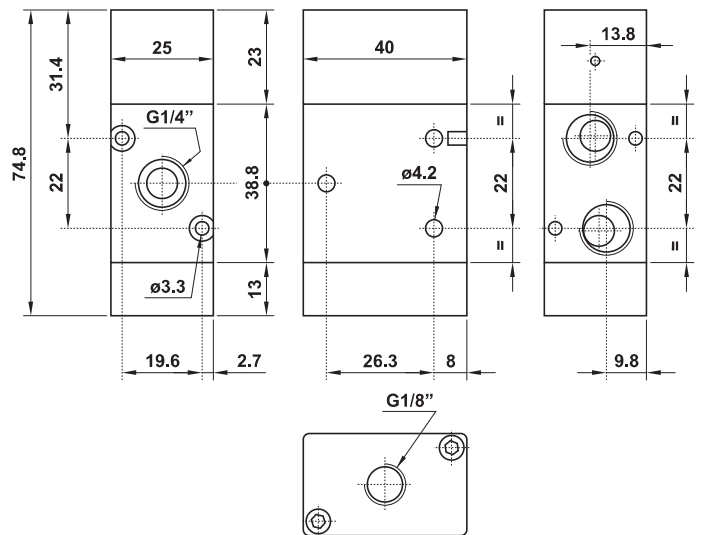
## 322 MC SUP

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

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



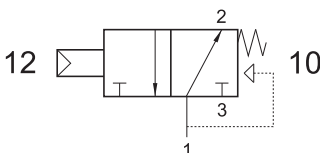
Non può essere utilizzata come valvola normalmente aperta.  
It cannot be used as normally open valve.



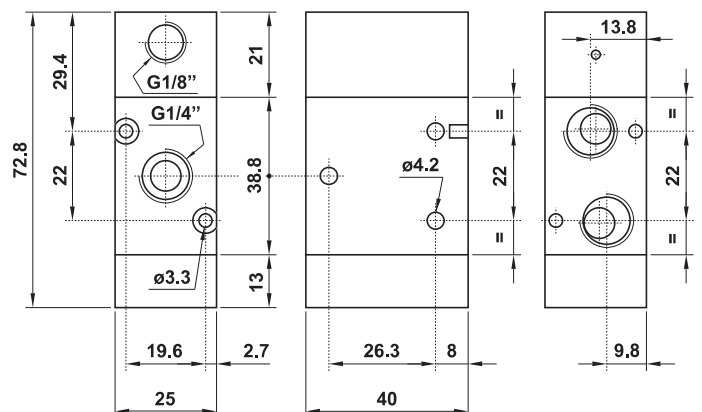
## 322 MCA

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

3/2 1/4" NO pneumatic pilot - spring return



Non può essere utilizzata come valvola normalmente chiusa.  
It cannot be used as normally closed valve.





# valvole ad azionamento pneumatico

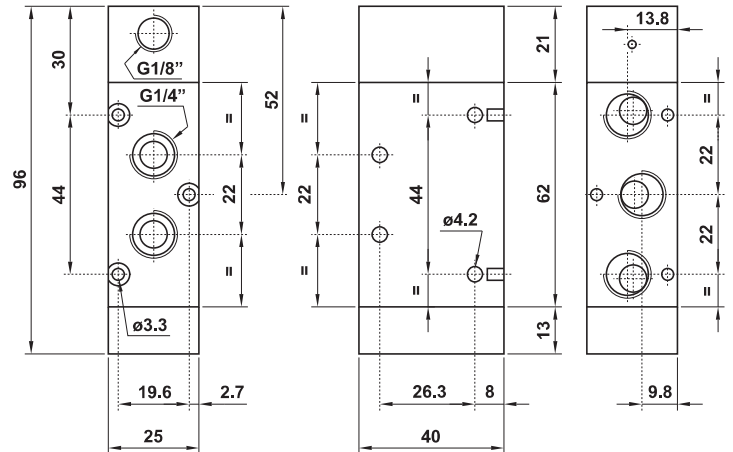
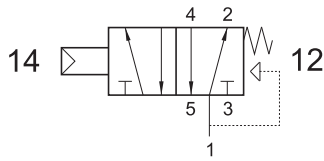
*pneumatically piloted valves*



## 522 MC

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

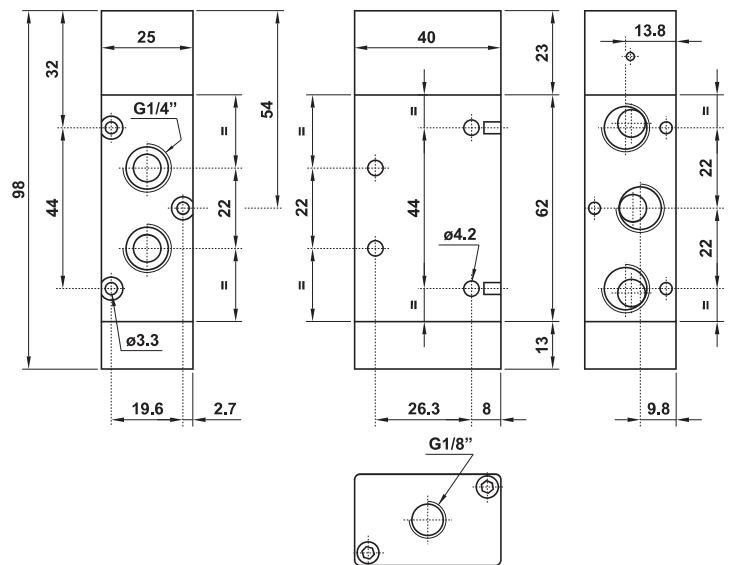
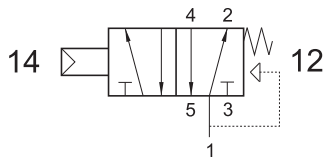
5/2 1/4" pneumatic pilot - spring return



## 522 MC SUP

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

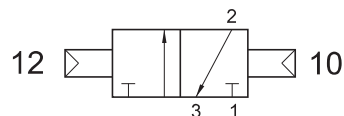
5/2 1/4" pneumatic pilot on the top - spring return



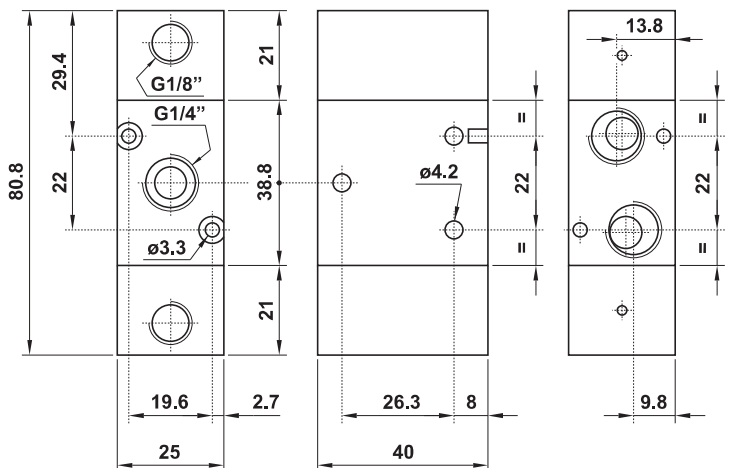
## 322 CC

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

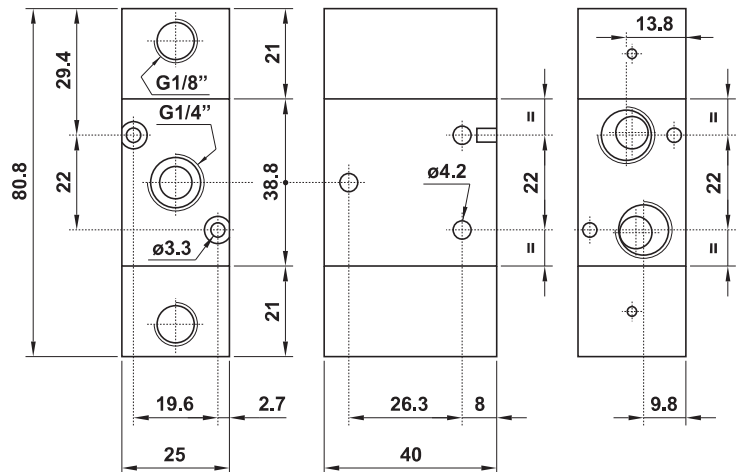
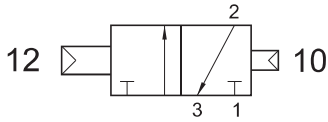
*pneumatically piloted valves*



## 322 CCD

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

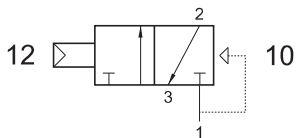
3/2 1/4" double pneumatic pilot - with differential



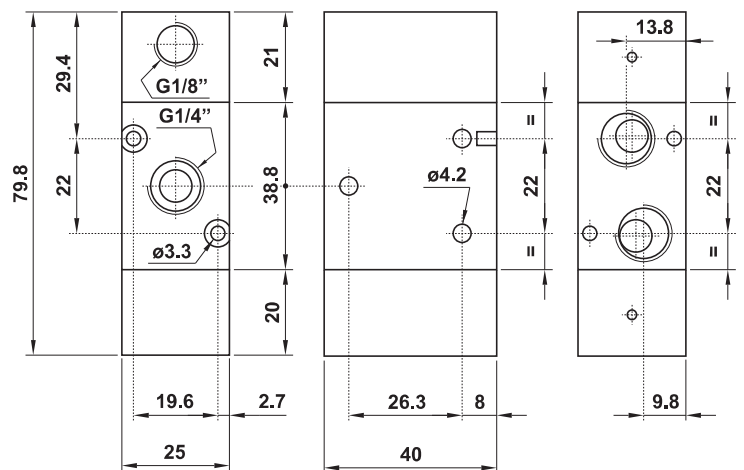
## 322 CFP

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

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



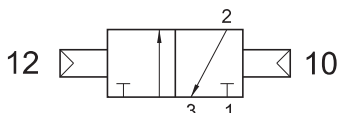
Non può essere utilizzata come valvola normalmente aperta.  
It cannot be used as normally open valve.



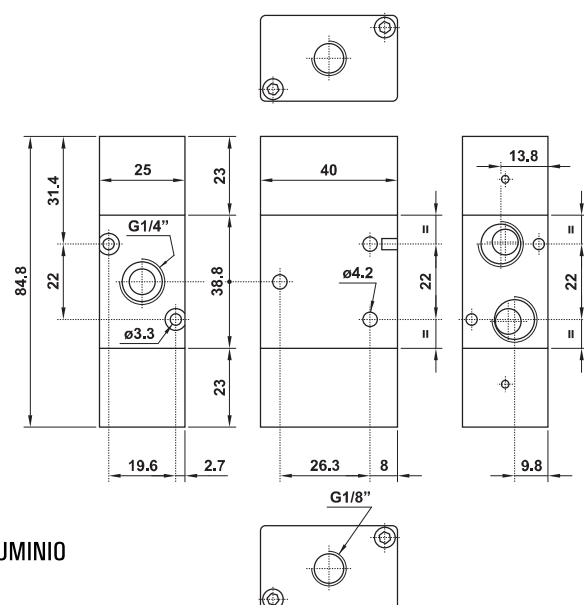
## 322 CC SUP

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

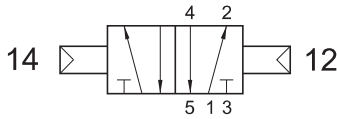
*pneumatically piloted valves*



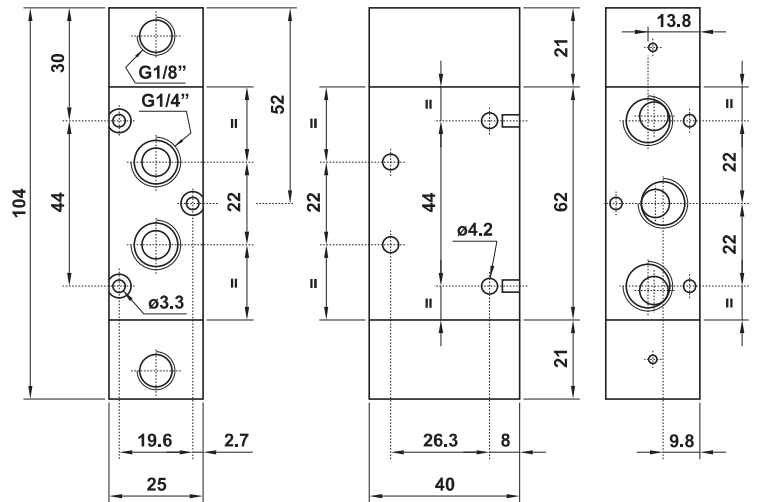
## 522 CC

5/2 1/4" doppio comando pneumatico

5/2 1/4" double pneumatic pilot



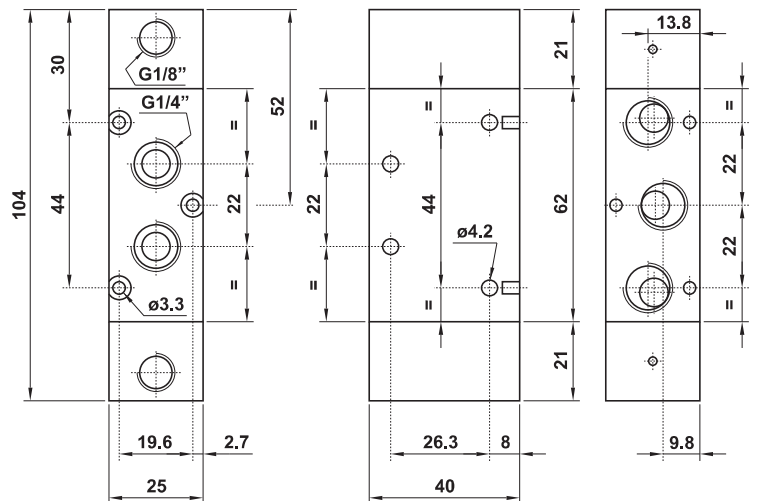
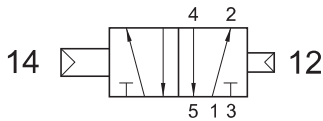
Può essere utilizzata con vuoto.  
It can be used with vacuum.



## 522 CCD

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

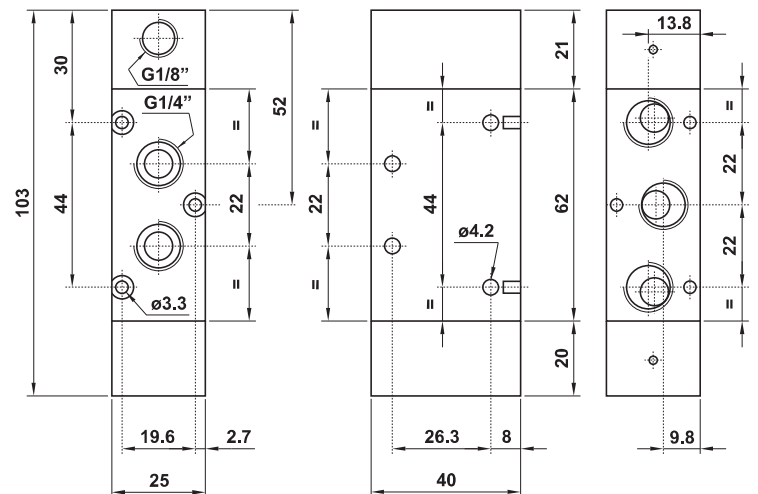
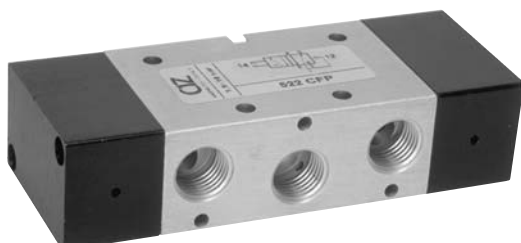
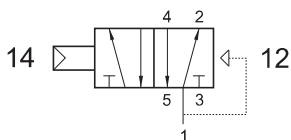
5/2 1/4" double pneumatic pilot - with differential



## 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

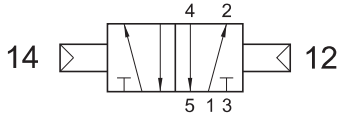
*pneumatically piloted valves*



## 522 CC SUP

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

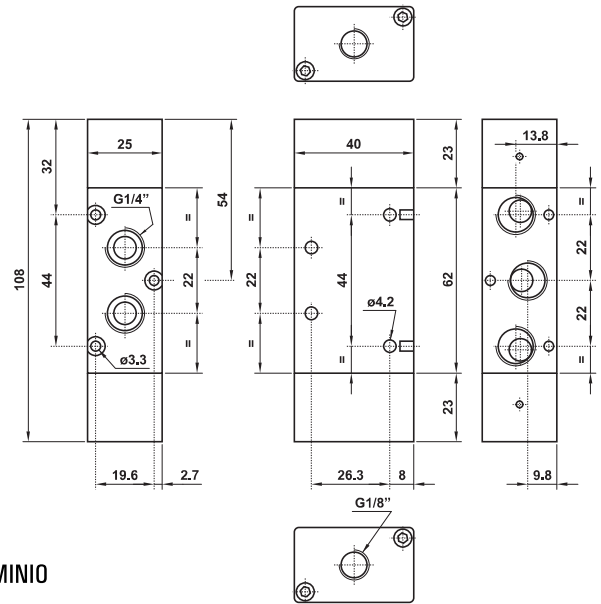
5/2 1/4" double pneumatic pilot on the top



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



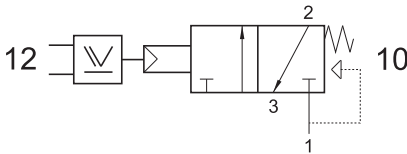
SOLO VERSIONE IN ALLUMINIO  
*ONLY ALUMINIUM VERSION*



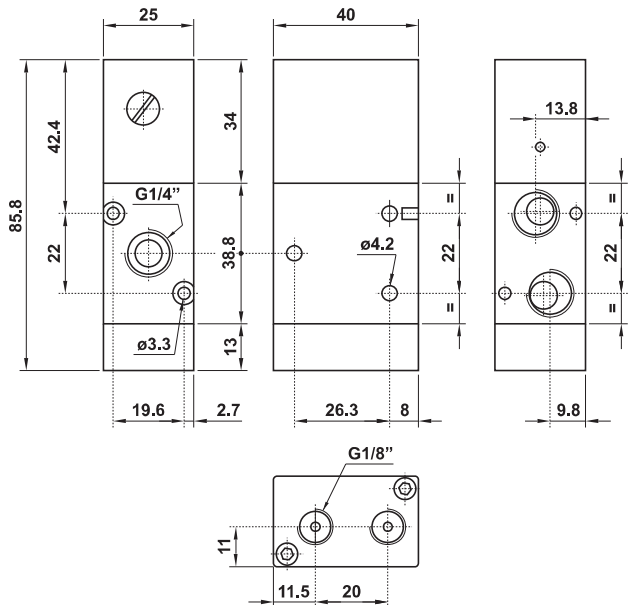
## 322 ORM

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



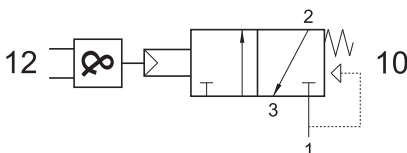
Non può essere utilizzata come valvola normalmente aperta.  
*It cannot be used as normally open valve.*



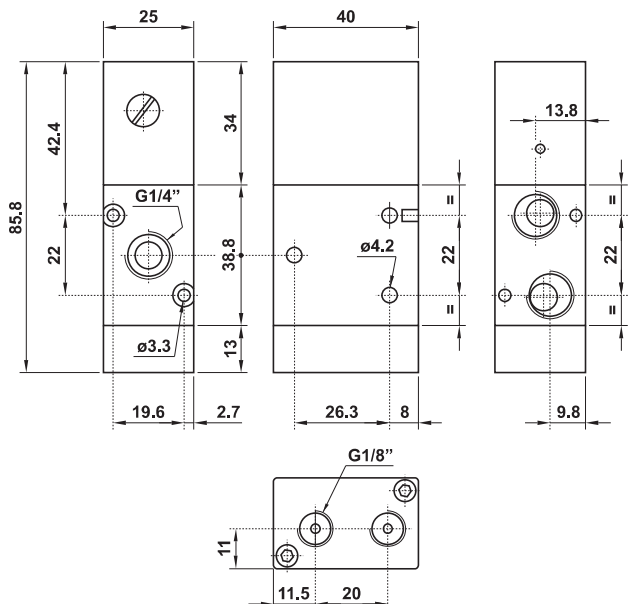
## 322 ANDM

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.*





# valvole ad azionamento pneumatico

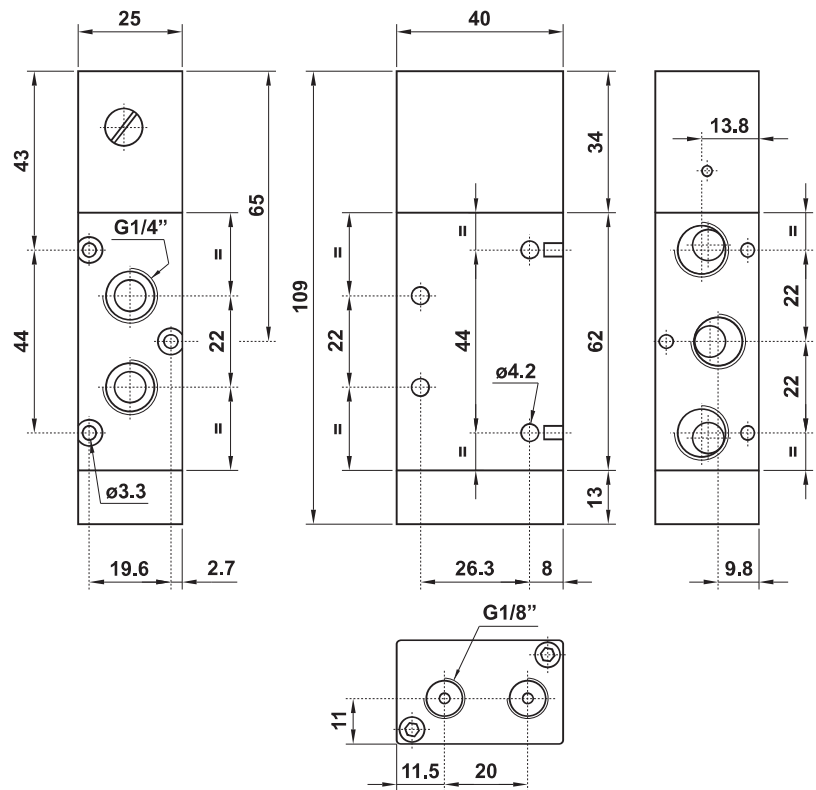
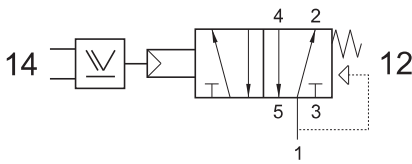
*pneumatically piloted valves*



## 522 ORM

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

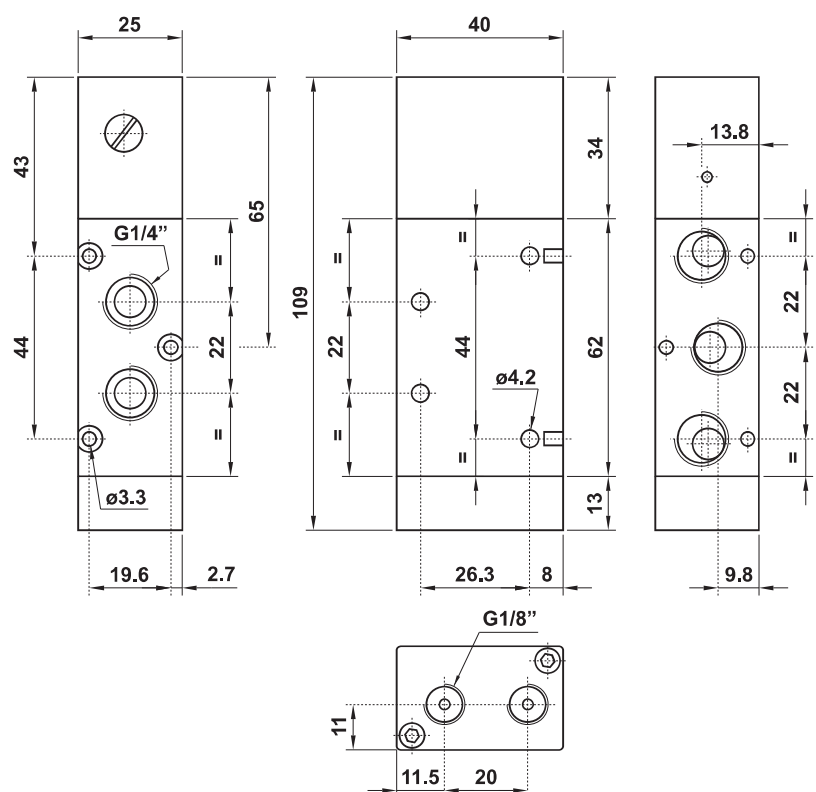
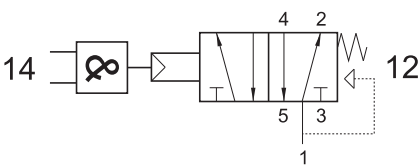
5/2 1/4" pneumatic pilot with integrated OR element - spring return



## 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

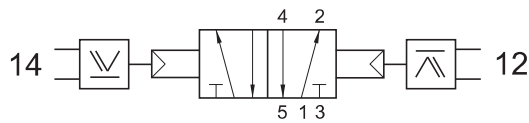
*pneumatically piloted valves*



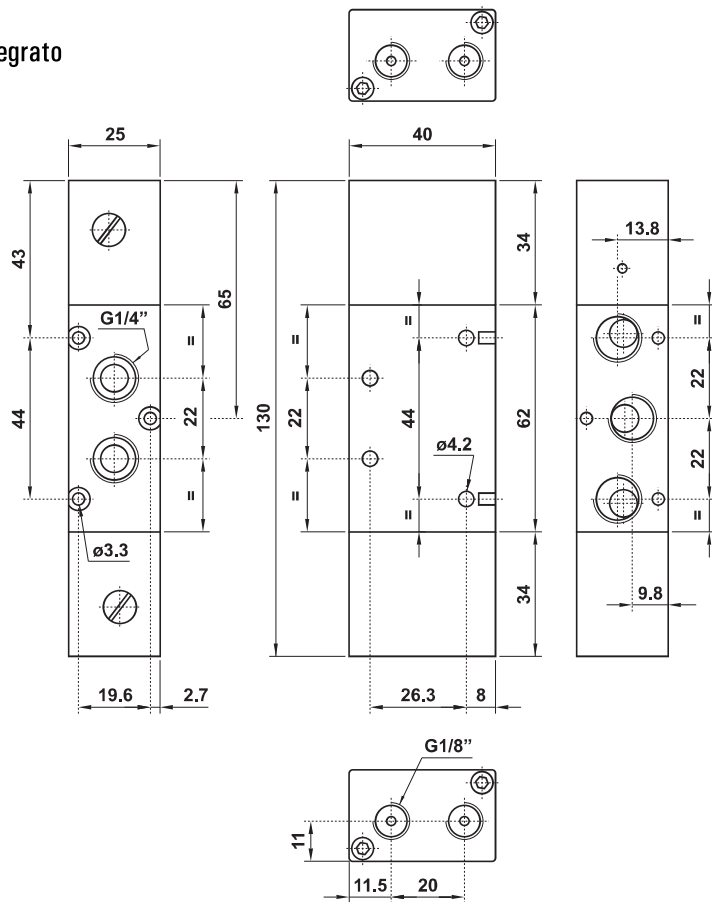
## 522 20R

5/2 1/4" doppio comando pneumatico con elemento OR integrato

*5/2 1/4" double pneumatic pilot with integrated OR element*



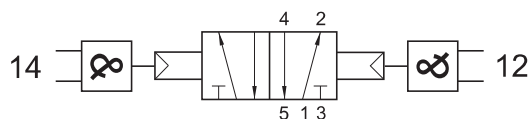
SOLO VERSIONE IN ALLUMINIO  
*ONLY ALUMINIUM VERSION*



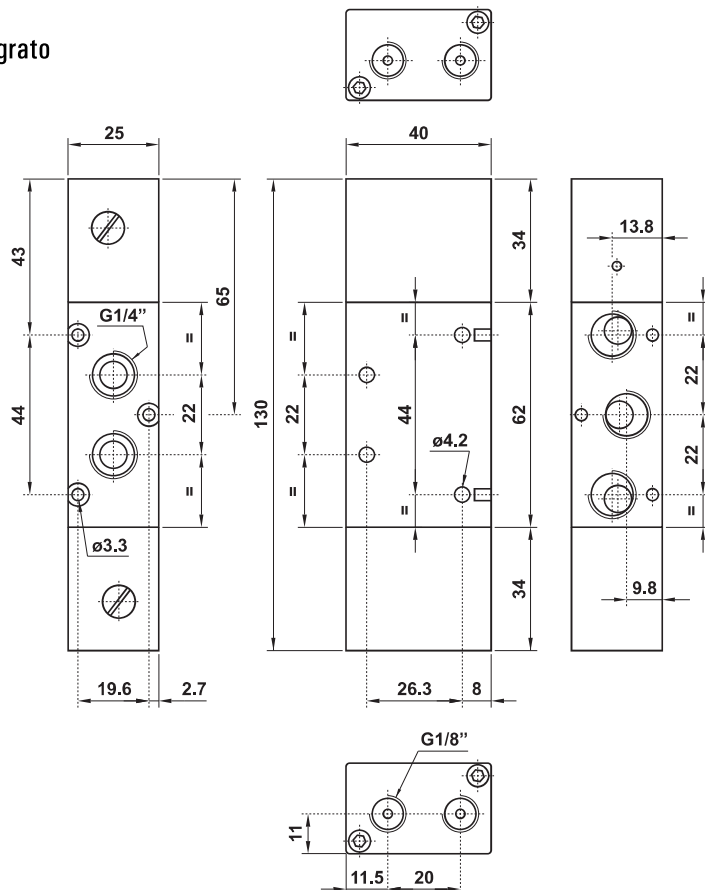
## 522 2AND

5/2 1/4" doppio comando pneumatico con elemento AND integrato

*5/2 1/4" double pneumatic pilot with integrated AND element*



SOLO VERSIONE IN ALLUMINIO  
*ONLY ALUMINIUM VERSION*







# valvole ad azionamento pneumatico

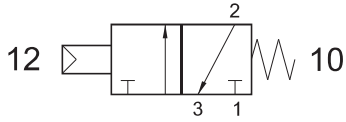
*pneumatically piloted valves*



## 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.

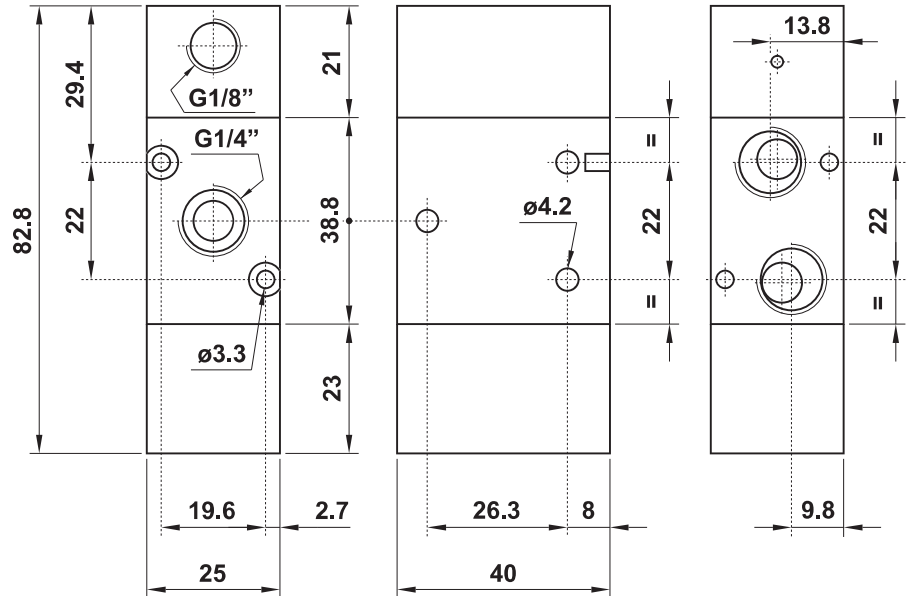
Attention: the bottom end cap for reinforced spring return is longer than the end cap for normal spring return.

Pressione di esercizio: -0.9 ... 10 bar

Working pressure: -0.9 ... 10 bar

Pressione di azionamento: 2.5 ... 10 bar

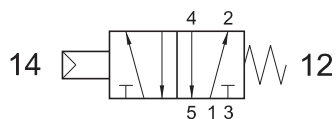
Actuating pressure: 2.5 ... 10 bar



## 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.

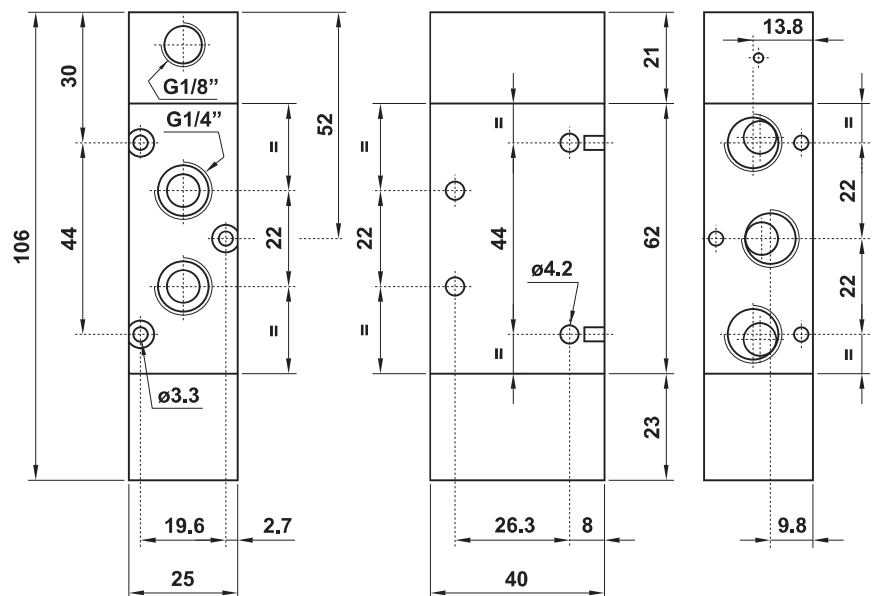
Attention: the bottom end cap for reinforced spring return is longer than the end cap for normal spring return.

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

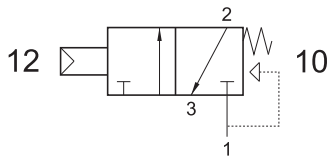
*pneumatically piloted valves*



## 321 MCQ

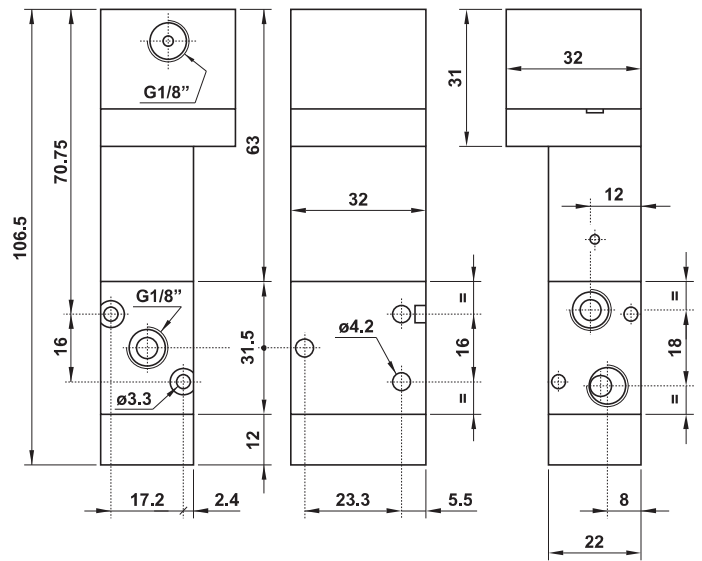
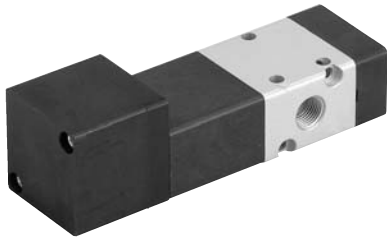
3/2 1/8" NC comando pneumatico 0.3 bar - ritorno a molla

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

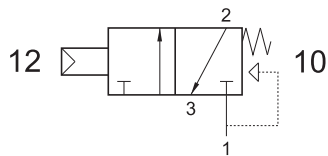
Working pressure: min. 2.5 bar  
Actuating pressure: min. 0.3 bar



## 321 MCS

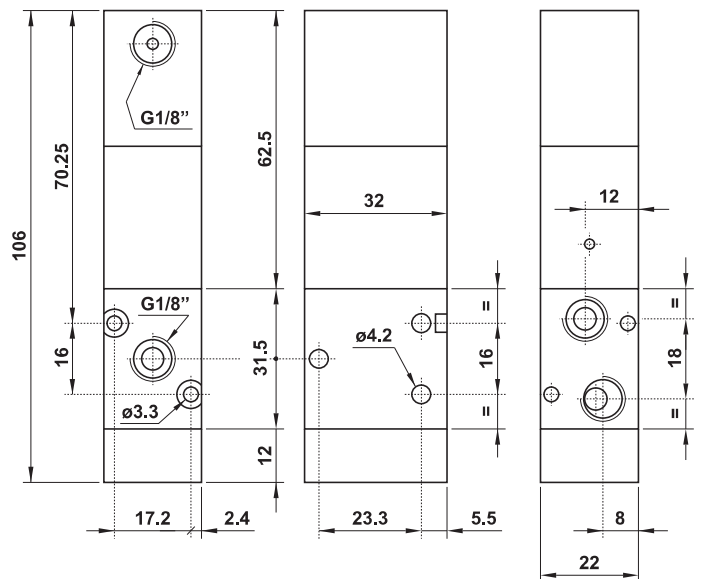
3/2 1/8" NC comando pneumatico 0.6 bar - ritorno a molla

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

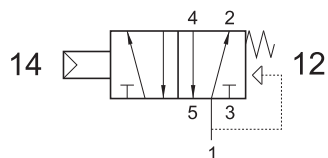
Working pressure: min. 2.5 bar  
Actuating pressure: min. 0.6 bar



## 521 MCQ

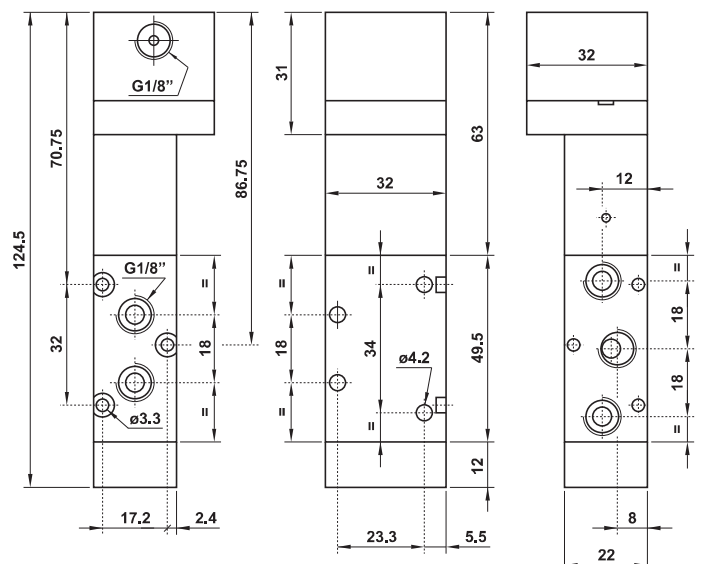
5/2 1/8" comando pneumatico 0.3 bar - ritorno a molla

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

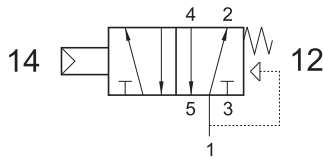
*pneumatically piloted valves*



## 521 MCS

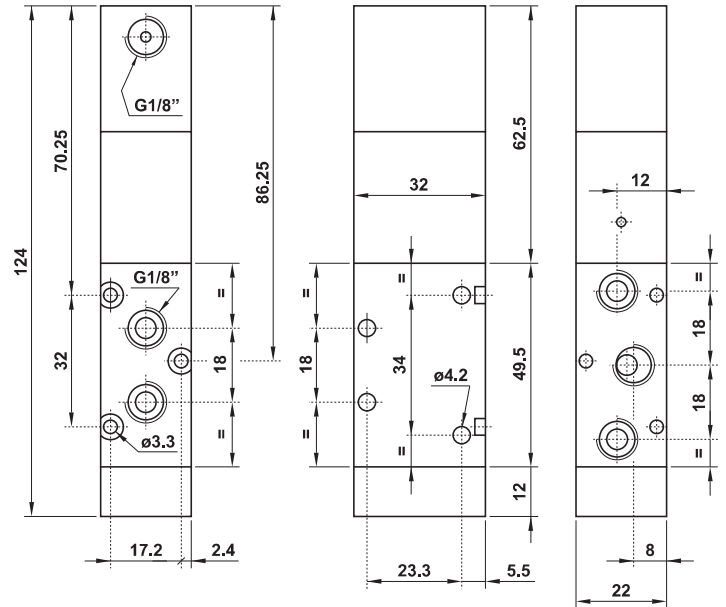
5/2 1/8" comando pneumatico 0.6 bar - ritorno a molla

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

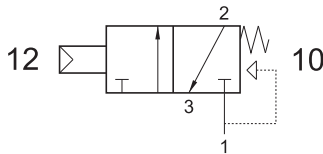
*Working pressure: min. 2.5 bar  
Actuating pressure: min. 0.6 bar*



## 322 MCS

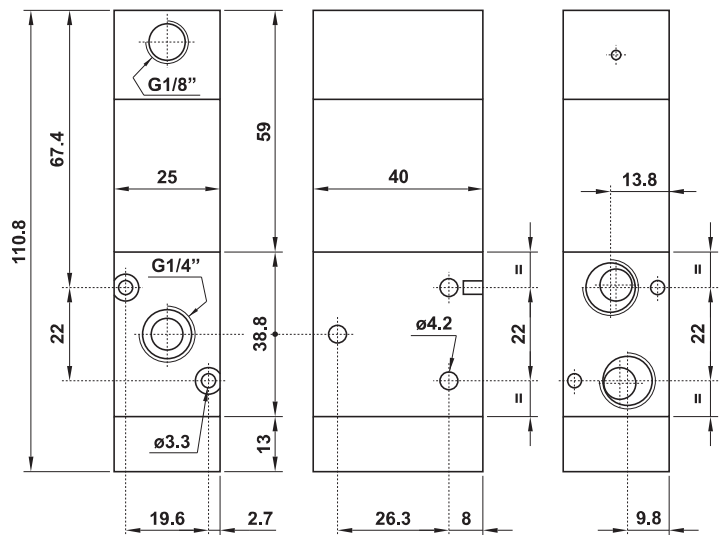
3/2 1/4" NC comando pneumatico 0.6 bar - ritorno a molla

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

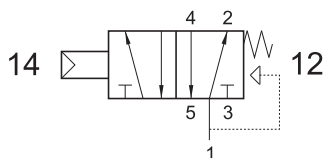
*Working pressure: min. 2.5 bar  
Actuating pressure: min. 0.6 bar*



## 522 MCS

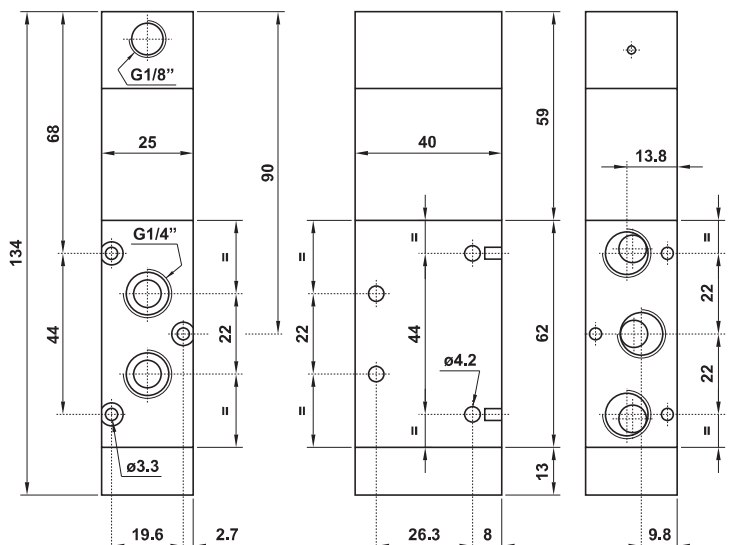
5/2 1/4" comando pneumatico 0.6 bar - ritorno a molla

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*



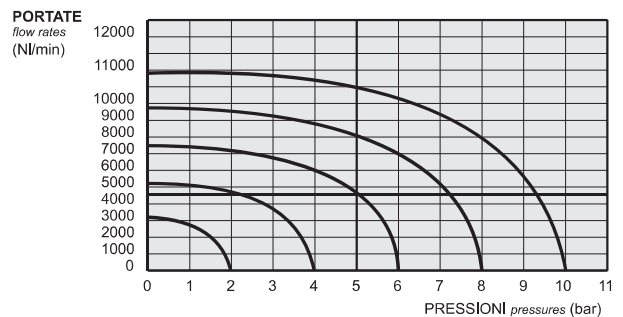
## Kit ricambi - spare parts

**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, $\Delta p$ 1 bar <i>Nominal flow rate at 6 bar, <math>\Delta p</math> 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 $\mu$ con o senza lubrificazione <i>50<math>\mu</math> 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.

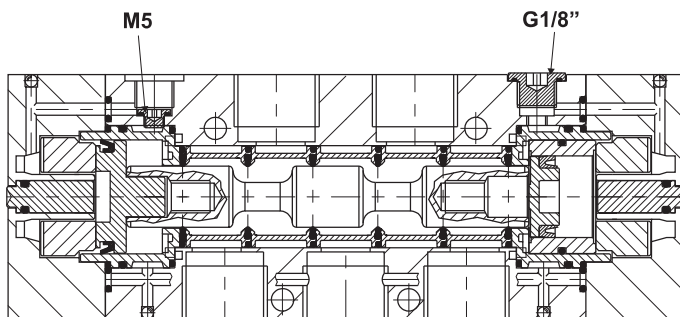
## Multifunction feature of the valve

*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.*

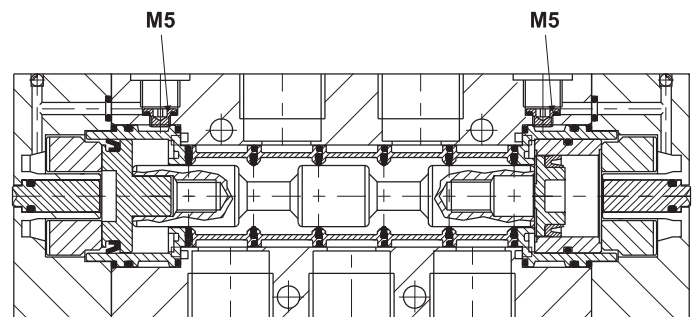
**324 CFP**

**524 CFP**



**324 CCD**

**524 CCD**



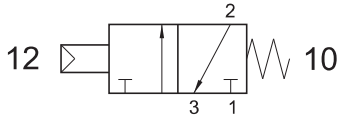
# valvole G1/2" azionamento pneumatico

*pneumatically piloted valves - G1/2"*



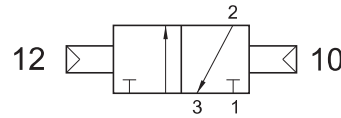
## 324 MC

3/2 1/2" NC comando pneumatico - ritorno a molla  
 3/2 1/2" NC pneumatic pilot - spring return



## 324 CC

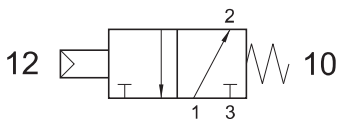
3/2 1/2" doppio comando pneumatico  
 3/2 1/2" double pneumatic pilot



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

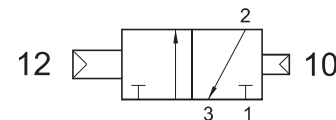
## 324 MCA

3/2 1/2" NA comando pneumatico - ritorno a molla  
 3/2 1/2" NO pneumatic pilot - spring return



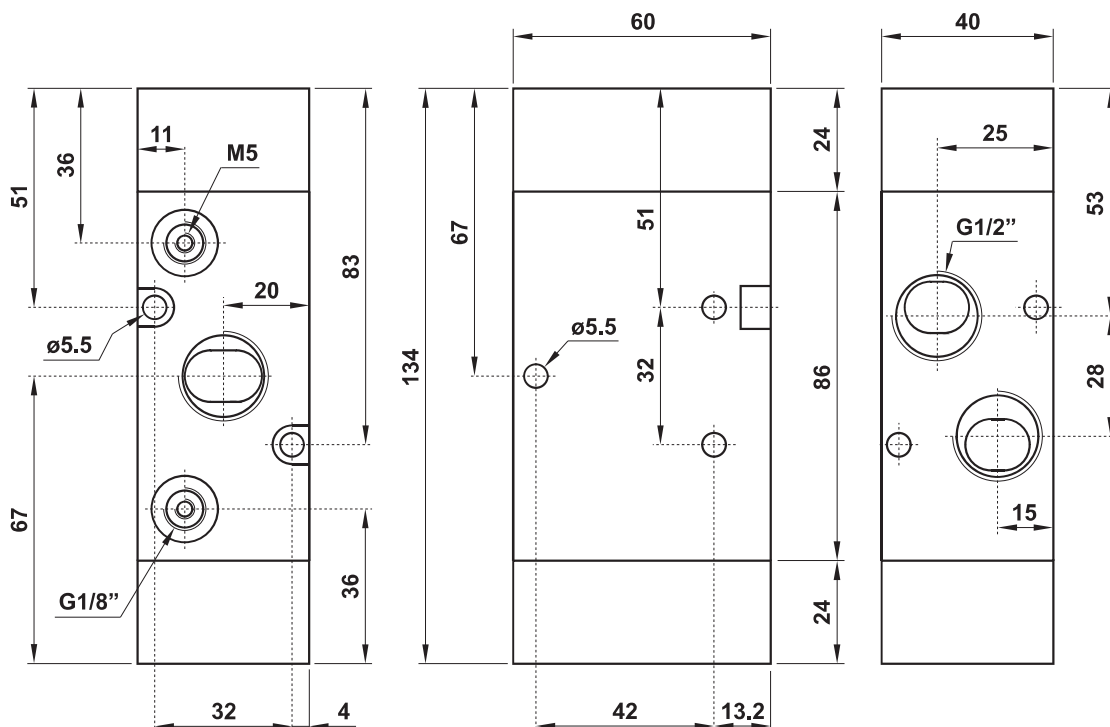
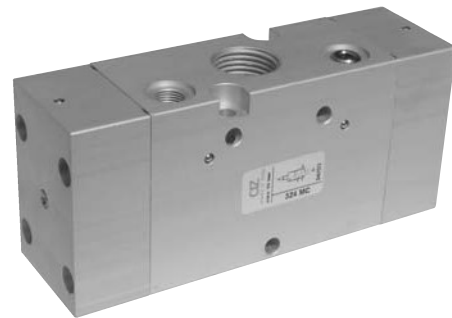
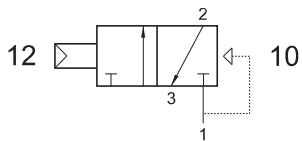
## 324 CCD

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



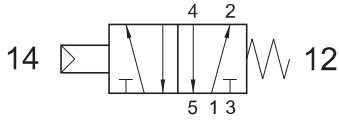
# valvole G1/2" azionamento pneumatico

*pneumatically piloted valves - G1/2"*



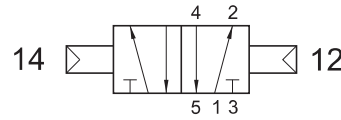
## 524 MC

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



## 524 CC

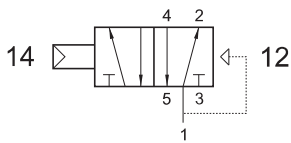
5/2 1/2" doppio comando pneumatico  
5/2 1/2" *double pneumatic pilot*



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

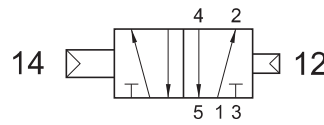
## 524 CFP

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



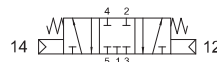
## 524 CCD

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



## 5243C CC

centri chiusi  
*closed centres*



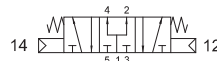
## 5243A CC

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*

