General

The pneumatic actuated valves are grouped in this part of catalogue because they have similar operating conditions of the solenoid valves. In fact the commutation signal is remote as it is for the manual and mechanical actuated valves.

In the first part of these catalogues are listed the pneumatic actuated valves for single use not suitable to be assembled on bases but eventually on manifold with one inlet port only.

The valves series 800 are suitable for both single and ganged applications.

These valves have a diversified use of 3-ways and 5-ways based on balanced spool as shown on functional symbols.
The repositions are made by spring, differential pneumatic spring or pneumatic fot the bistable and centre spring return.
The polyurethane seals are available for oil free operation. In this case, the ordering code becomes:
238... for G 1/8" - **234** ... for G 1/4" **232**... for G 1/2"

Important: on this type of valves a temperature higher then 40°C along with water or high humidity are causing a progressive reduction of mechanical characteristics of the seals. This chemical reaction (hydrolysis) duration depends by the ambient temperature and in some cases the seal becomes brittle and falls to pieces.
The valves equipped with polyurethane seals are not suitable for tropical climate.

Construction characteristics

	Tube Ø 4	M5	G 1/8" ÷ G 1"
Bodies	Reinforced technopolymer	Nickel plated brass	Anodized aluminium
Actuators	Reinforced technopolymer	Nickel plated brass	Anodized aluminium
Spools	Hardened nickel plated steel		
Seals	Nitrile (NBR) rubber oil resistant		
Spacers	Polyacetal		
Pistons	Acetal resin	Brass	Brass
Springs	Spring steel		
Bottom plates	/	/	Acetal resin Anodized aluminium

Use and maintenance

These valves are a mean life of 10 to 15 millions of cycles depending on application. Proper lubrication with specified oil reduces dramatically the wear of the seals as well as a good filtration ensures long and trouble free operation. Check that the operating conditions are according to the suggested pressure, temperature and so on.

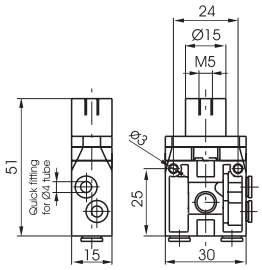
The exhaust ports of the distributor have to be protected in a dusty and dirty environment.

A spare parts kit including the spool complete of wearing seals and actuators are available for overhauling the valve. This simple operation does not require a skilled worker. Although a particular care is needed for assembling the valve.

ATTENTION: use hydraulic oil class H for lubrication such as MAGNA GC 32 (Castrol).

Pneumatic - Spring — 2/2 3/2

Lateral connections

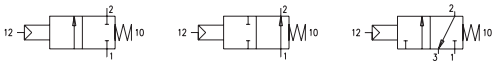


Ordering code

104.Ⓣ.11.1.ⒸⒻ

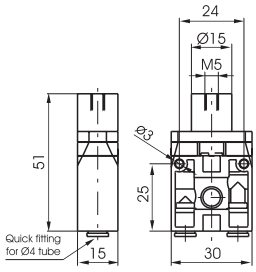
Ⓣ TYPE	
	22 = 2 ways
	32 = 3 ways
Ⓒ CONNECTION TYPE	
	L = Lateral
	P = Rear
Ⓕ FUNCTION	
	A = Normally Open (N.O.)
	C = Normally Closed (N.C.)

Weight gr. 25
Minimum piloting pressure 2,5 bar



Pneumatic - Spring — 2/2 3/2

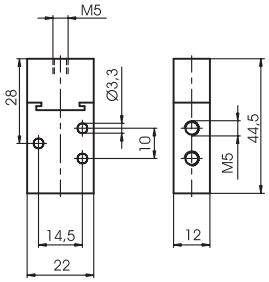
Rear connections



Weight gr. 25
Minimum piloting pressure 2,5 bar

Operational characteristic	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +50°C	90 Nl/min	mm 2,5	ø4 tube	M5

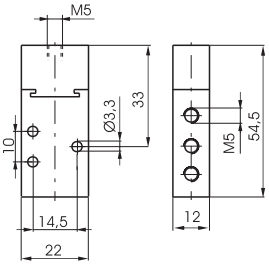
Pneumatic - Spring — 3/2 5/2



Ordering code

105.Ⓣ.11.1

Ⓣ TYPE	
	32 = 3 ways
	52 = 5 ways

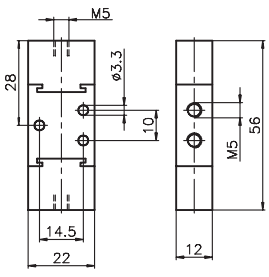


Weight gr. 90
Minimum piloting pressure 2,5 bar

Weight gr. 100
Minimum piloting pressure 2,5 bar

Operational characteristic	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +70°C	120 Nl/min	mm 2,5	M5	M5

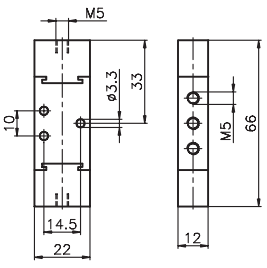
Pneumatic - Differential external — 3/2 5/2



Ordering code

105.Ⓣ.11.12

Ⓣ TYPE	
	32 = 3 ways
	52 = 5 ways

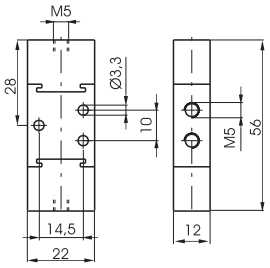


Weight gr. 110
Minimum piloting pressure 2,5 bar

Weight gr. 120
Minimum piloting pressure 2,5 bar

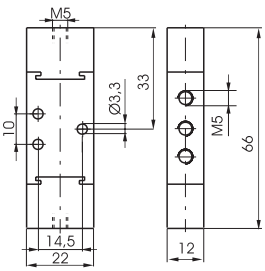
Operational characteristic	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +70°C	120 Nl/min	mm 2,5	M5	M5

Pneumatic - Pneumatic | 3/2 | 5/2 | **Pneumatic - Pneumatic**

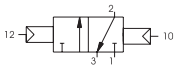


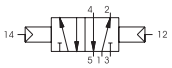
Ordering code
105.Ⓣ.11.11

Ⓣ	TYPE
	32 = 3 ways
	52 = 5 ways



Weight gr. 110
Minimum piloting pressure 2,5 bar



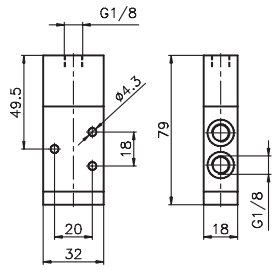


Weight gr. 120
Minimum piloting pressure 2,5 bar

Operational characteristic	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +70°C	120 Nl/min	mm 2,5	M5	M5

Pneumatic - Spring

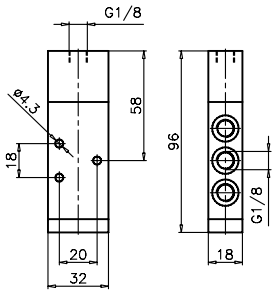
3/2 | 5/2



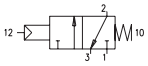
Ordering code

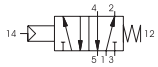
228.T.11.1

T	TYPE
	32 = 3 ways
	52 = 5 ways



Weight gr. 110
Minimum piloting pressure 2,5 bar



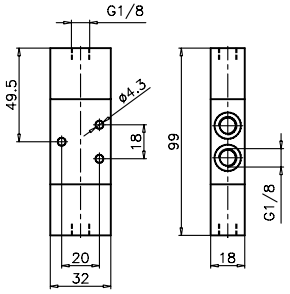


Weight gr. 130
Minimum piloting pressure 2,5 bar

Operational characteristic	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +70°C	540 Nl/min	mm 6	G 1/8"	G 1/8"

Pneumatic - Differential external

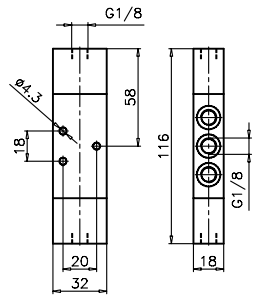
3/2 | 5/2



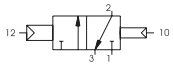
Ordering code

228.T.11.12

T	TYPE
	32 = 3 ways
	52 = 5 ways



Weight gr. 140
Minimum piloting pressure 2,5 bar

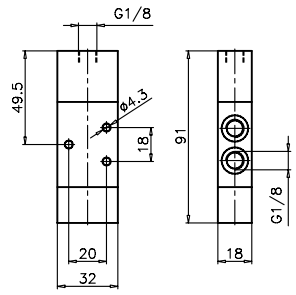


Weight gr. 160
Minimum piloting pressure 2,5 bar

Operational characteristic	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +70°C	540 Nl/min	mm 6	G 1/8"	G 1/8"

Pneumatic - Differential self aligned

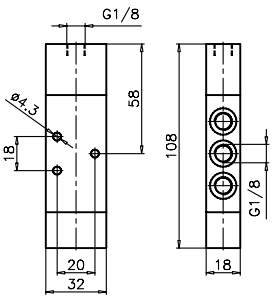
3/2 | 5/2



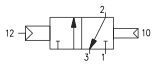
Ordering code

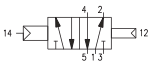
228.T.11.12/1

T	TYPE
	32 = 3 ways
	52 = 5 ways



Weight gr. 130
Minimum piloting pressure 2,5 bar





Weight gr. 150
Minimum piloting pressure 2,5 bar

Operational characteristic	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +70°C	540 Nl/min	mm 6	G 1/8"	G 1/8"

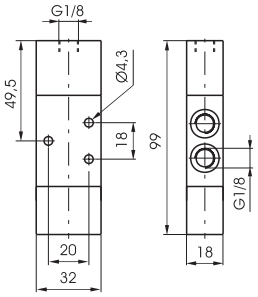
2

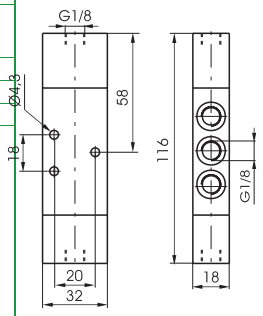
Pneumatic - Pneumatic — 3/2 — 5/2 — Pneumatic - Pneumatic

Ordering code

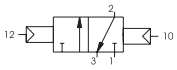
228.Ⓣ.11.11

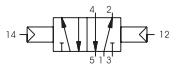
Ⓣ	TYPE
	32 = 3 ways
	52 = 5 ways





Weight gr. 140
Minimum piloting pressure 2 bar





Weight gr. 160
Minimum piloting pressure 2 bar

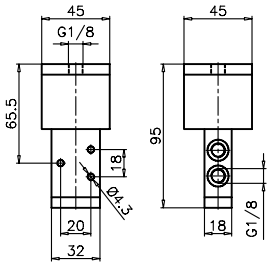
Operational characteristic	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +70°C	540 Nl/min	mm 6	G 1/8"	G 1/8"

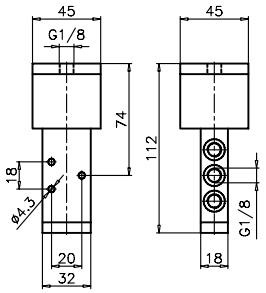
Amplified pneumatic - Spring — 3/2 — 5/2 — Amplified pneumatic - Spring

Ordering code

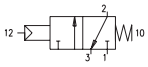
228.Ⓣ.13.1

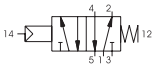
Ⓣ	TYPE
	32 = 3 ways
	52 = 5 ways





Weight gr. 260
Minimum piloting pressure 0,5 bar





Weight gr. 290
Minimum piloting pressure 0,5 bar

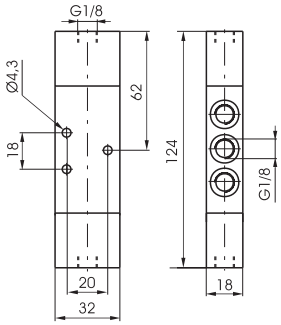
Operational characteristic	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +70°C	540 Nl/min	mm 6	G 1/8"	G 1/8"

Pneumatic - Pneumatic — 5/3

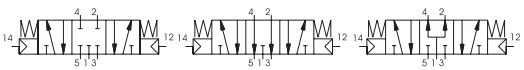
Ordering code

228.53.Ⓕ.11.11

Ⓕ	FUNCTION
	31 = Closed centres
	32 = Open centres
	33 = Pressured centres



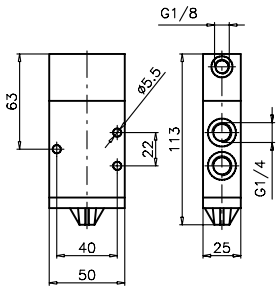
Weight gr. 180
Minimum piloting pressure 3 bar



Operational characteristic	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +70°C	410 Nl/min	mm 6	G 1/8"	G 1/8"

Pneumatic - Spring

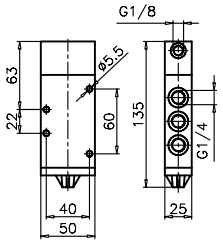
3/2 | 5/2



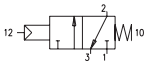
Ordering code

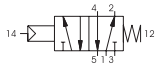
214/2.Ⓣ.11.1

Ⓣ	TYPE
	32 = 3 ways
	52 = 5 ways



Weight gr. 310
Minimum piloting pressure 2,5 bar



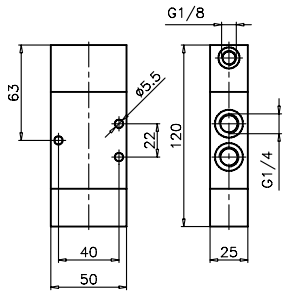


Weight gr. 370
Minimum piloting pressure 2,5 bar

Operational characteristic	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +70°C	1030 Nl/min	mm 7	G 1/4"	G 1/8"

Pneumatic - Differential self aligned

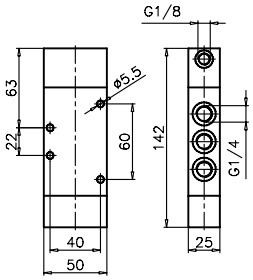
3/2 | 5/2



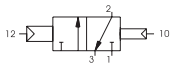
Ordering code

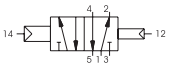
214/2.Ⓣ.11.12

Ⓣ	TYPE
	32 = 3 ways
	52 = 5 ways



Weight gr. 380
Minimum piloting pressure 2,5 bar



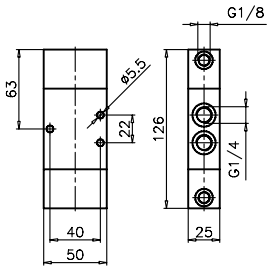


Weight gr. 440
Minimum piloting pressure 2,5 bar

Operational characteristic	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +70°C	1030 Nl/min	mm 7	G 1/4"	G 1/8"

Pneumatic - Pneumatic

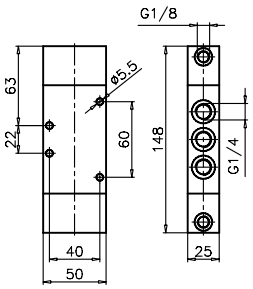
3/2 | 5/2



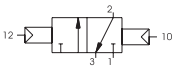
Ordering code

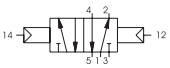
214/2.Ⓣ.11.11

Ⓣ	TYPE
	32 = 3 ways
	52 = 5 ways



Weight gr. 400
Minimum piloting pressure 2,5 bar



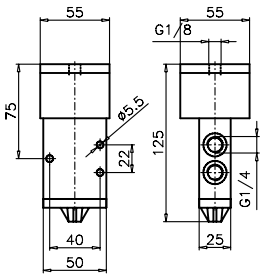


Weight gr. 460
Minimum piloting pressure 2,5 bar

Operational characteristic	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +70°C	1030 Nl/min	mm 7	G 1/4"	G 1/8"

2

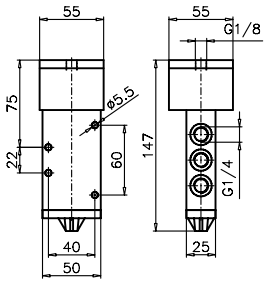
Amplified pneumatic - Spring	3/2	5/2	Amplified pneumatic - Spring



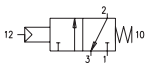
Ordering code

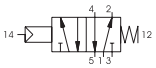
214/2.Ⓣ.13.1

Ⓣ	TYPE
	32 = 3 ways
	52 = 5 ways



Weight gr. 500
Minimum piloting pressure 2,5 bar





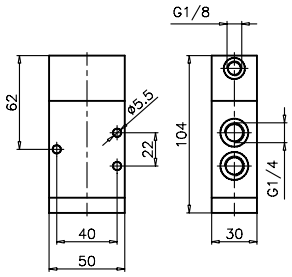
Weight gr. 560
Minimum piloting pressure 2,5 bar

Operational characteristic	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +70°C	1030 Nl/min	mm 7	G 1/4"	G 1/8"

Pneumatic - Spring

3/2 | 5/2

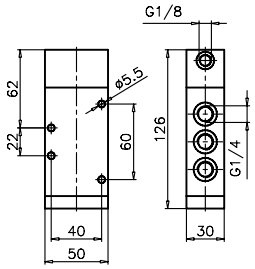
Pneumatic - Spring



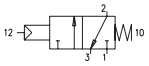
Ordering code

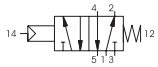
224.Ⓣ.11.1

Ⓣ	TYPE
	32 = 3 ways
	52 = 5 ways



Weight gr. 370
Minimum piloting pressure 2,5 bar





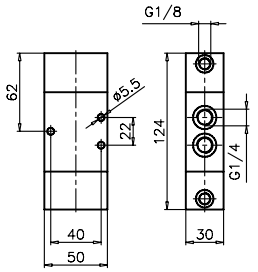
Weight gr. 450
Minimum piloting pressure 2,5 bar

Operational characteristic	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +70°C	1360 Nl/min	mm 8	G 1/4"	G 1/8"

Pneumatic - Differential external

3/2 | 5/2

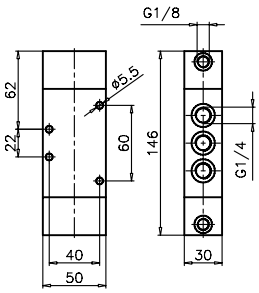
Pneumatic - Differential external



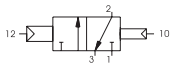
Ordering code

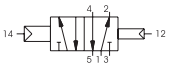
224.Ⓣ.11.12

Ⓣ	TYPE
	32 = 3 ways
	52 = 5 ways



Weight gr. 480
Minimum piloting pressure 2,5 bar





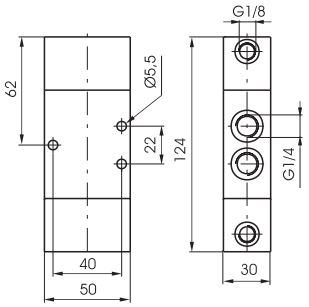
Weight gr. 550
Minimum piloting pressure 2,5 bar

Operational characteristic	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +70°C	1360 Nl/min	mm 8	G 1/4"	G 1/8"

Pneumatic - Pneumatic

3/2 | 5/2

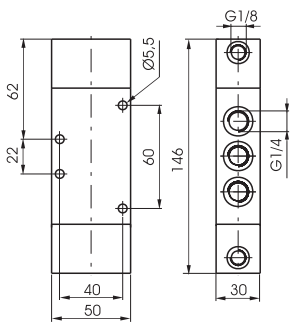
Pneumatic - Pneumatic



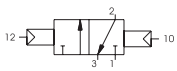
Ordering code

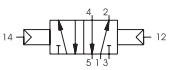
224.Ⓣ.11.11

Ⓣ	TYPE
	32 = 3 ways
	52 = 5 ways



Weight gr. 470
Minimum piloting pressure 2 bar





Weight gr. 540
Minimum piloting pressure 2 bar

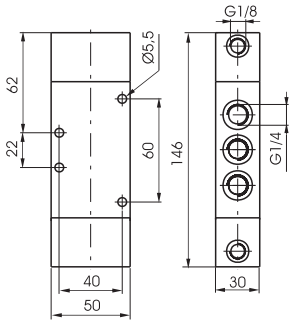
Operational characteristic	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +70°C	1360 Nl/min	mm 8	G 1/4"	G 1/8"

Pneumatic - Pneumatic

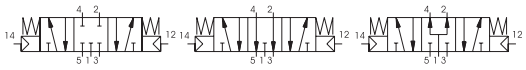
5/3

Ordering code
224.53.Ⓕ.11.11

Ⓕ	FUNCTION
	31 = Closed centres
	32 = Open centres
	33 = Pressured centres



Weight gr. 550
Minimum piloting pressure 3 bar



Operational characteristic	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +70°C	1280 Nl/min	mm 8	G 1/4"	G 1/8"

ECOLINE

General

The main components constituting this new valves and solenoid valves series are manufactured with hight performance technopolimer. The use of technopolimer has resulted in a light weight product which can be offered to the market at very interesting prices. This valve series is manufactured with 1/4" connections.

Depending on version and actuation (manual, pneumatic, or electrical), and self aligning (pneu - elect, spring) 3/2, 5/2 and 5/3 ways function, (monostable), (bistable).

The gang mounted solenoid valves are available with the traditional manifold obtained from bored square bar of series 600 and with the extruded aluminium base allowing a unic inlet port conveying the exhausts.

The base is also prearranged to be fixed on DIN 46277/3 guide.

The solenoid valves are supplied complete with coil so that the tension has to be added to the solenoid valve code.

Voltages		Code to be added
Direct current DC	12V	**B04**
	24V	**B05**
	24V (2W)	**B09**
Alternating current AC (50-60 Hz)	24V	**B56**
	110V	**B57**
	220V	**B58**

Maximum tightening torque for fittings

Thread	Maximum torque (Nm)
G 1/4"	9
G 1/8"	4

Construction characteristic

Body	Technopolymer
Operators	Technopolymer
Spools	Nickel - plated steel / Technopolymer
Piston seals	Nitrile rubber (NBR) oil resistant
Seals	Nitrile rubber (NBR) oil resistant
Spacers	Technopolymer
Springs	AISI 302 stainless steel
Pistons	Technopolymer

Use and maintenance

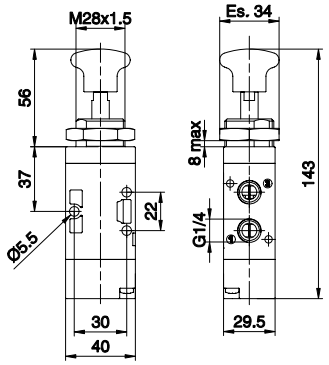
These valves have a mean life of 15 milions of cycles if used in standard conditions.
Proper lubrication reduces dramatically the wear of the seals and a good filtration prevents the build-up of dirt and consequent malfunctioning of the valve. Make sure that the conditions of use comply with the pressure and temperature suggested. The exhaust port 3 and 5 have to be protected in a dusty and dirty environment.A spare parts kit including the spool and seals is available for overhauling the valve. This simple operation does not require a skilled worker.
ATTENTION: use hydraulic oil class H such as MAGNA GC 32 (CASTROL).

2

Push button - Spring

3/2 | 5/2

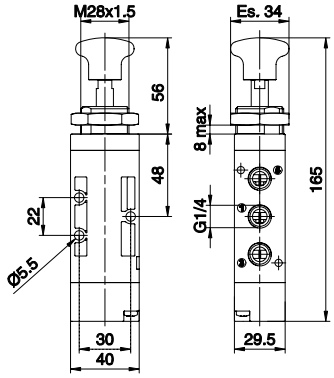
Push button - Spring



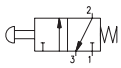
Ordering code

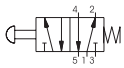
T224.Ⓣ.8.1

Ⓣ	TYPE
	32 = 3 ways
	52 = 5 ways



Weight gr. 170
Operating force 50N





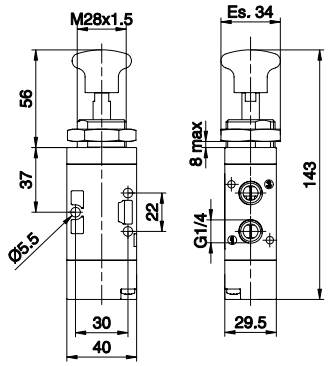
Weight gr. 200
Operating force 50N

Operational characteristic	Fluid	Max working pressure	Operating temperature	Flow rate at 6 bar with Δp=1	Ø orifice size	Working port size
	Filtered and lubricated air	10 bar	Min. -5°C Max. +50°C	1050 Nl/min	mm 8,5	G 1/4"

Push button 2 positions

3/2 | 5/2

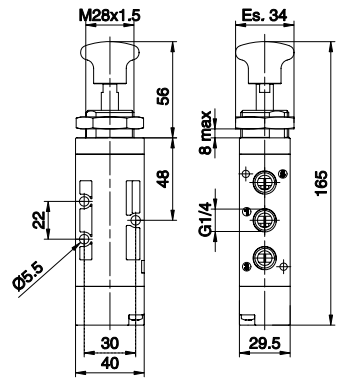
Push button 2 positions



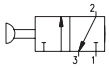
Ordering code

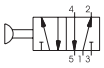
T224.Ⓣ.8

Ⓣ	TYPE
	32 = 3 ways
	52 = 5 ways



Weight gr. 170
Operating force 13N





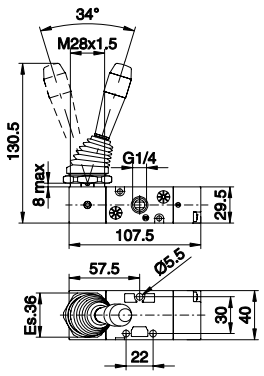
Weight gr. 200
Operating force 13N

Operational characteristic	Fluid	Max working pressure	Operating temperature	Flow rate at 6 bar with Δp=1	Ø orifice size	Working port size
	Filtered and lubricated air	10 bar	Min. -5°C Max. +50°C	1050 Nl/min	mm 8,5	G 1/4"

Lever lateral - Spring

3/2 | 5/2

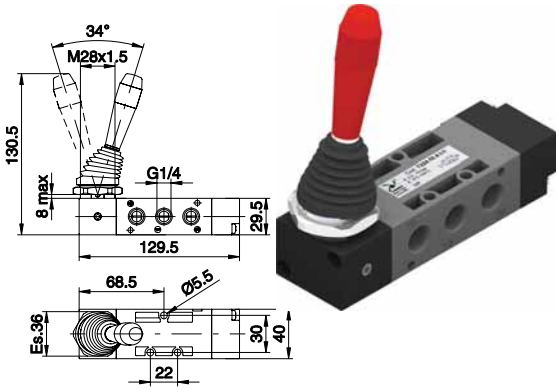
Lever lateral - Spring



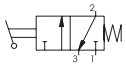
Ordering code

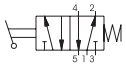
T224.Ⓣ.9.1/Ⓒ

Ⓣ	TYPE
	32 = 3 ways
	52 = 5 ways
Ⓒ	LEVER COLOR
	1 = Red
	2 = Black
	3 = Green



Weight gr. 220





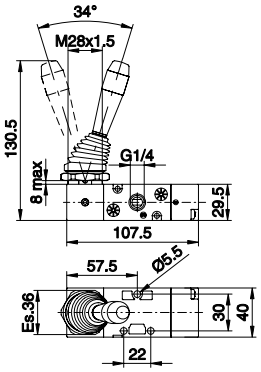
Weight gr. 250

Operational characteristic	Fluid	Max working pressure	Operating temperature	Flow rate at 6 bar with Δp=1	Ø orifice size	Working port size
	Filtered and lubricated air	10 bar	Min. -5°C Max. +50°C	1050 Nl/min	mm 8,5	G 1/4"

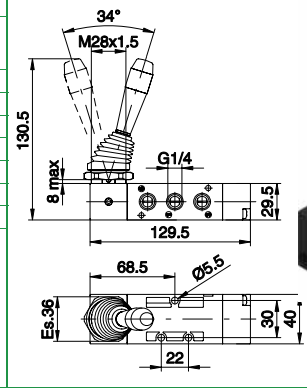
Lever lateral 2 positions

3/2 | 5/2

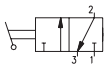
Lever lateral 2 positions

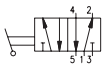


Ordering code	
T224.Ⓣ.9/Ⓒ	
Ⓣ	TYPE
	32 = 3 ways
	52 = 5 ways
Ⓒ	LEVER COLOR
	1 = Red
	2 = Black
	3 = Green



Weight gr. 220





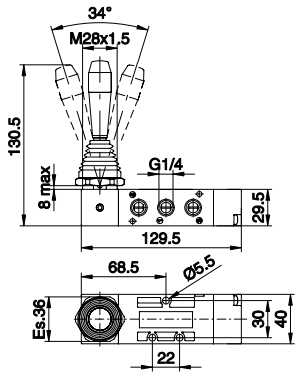
Weight gr. 250

Operational characteristic	Fluid	Max working pressure	Operating temperature	Flow rate at 6 bar with Δp=1	Ø orifice size	Working port size
	Filtered and lubricated air	10 bar	Min. -5°C Max. +50°C	1050 Nl/min	mm 8,5	G 1/4"

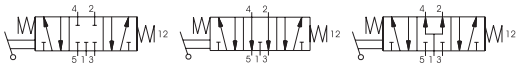
Lever lateral spring centre - 3 positions

5/3

Ordering code	
T224.53.Ⓕ.9.1/Ⓒ	
Ⓕ	FUNCTION
	31 = Closed centres
	32 = Open centres
	33 = Pressured centres
Ⓒ	LEVER COLOR
	1 = Red
	2 = Black
	3 = Green



Weight gr. 270

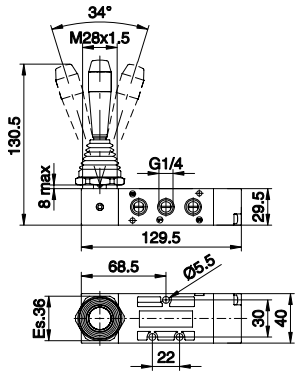


Operational characteristic	Fluid	Max working pressure	Operating temperature	Flow rate at 6 bar with Δp=1	Ø orifice size	Working port size
	Filtered and lubricated air	10 bar	Min. -5°C Max. +50°C	900 Nl/min	mm 8,5	G 1/4"

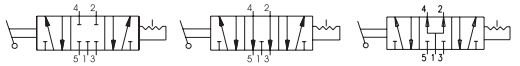
Lever lateral - 3 positions detent

5/3

Ordering code	
T224.53.Ⓕ.9/Ⓒ	
Ⓕ	FUNCTION
	31 = Closed centres
	32 = Open centres
	33 = Pressured centres
Ⓒ	LEVER COLOR
	1 = Red
	2 = Black
	3 = Green



Weight gr. 270



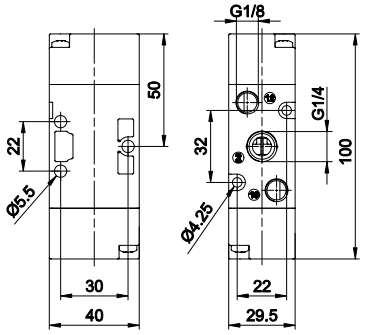
Operational characteristic	Fluid	Max working pressure	Operating temperature	Flow rate at 6 bar with Δp=1	Ø orifice size	Working port size
	Filtered and lubricated air	10 bar	Min. -5°C Max. +50°C	900 Nl/min	mm 8,5	G 1/4"

2

Pneumatic - Spring

3/2 | 5/2

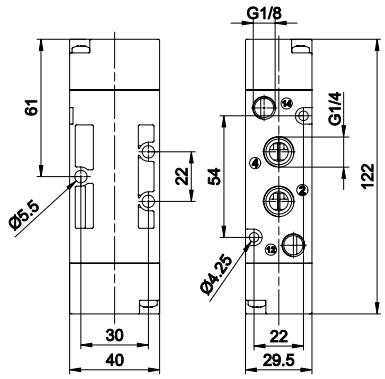
Pneumatic - Spring



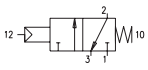
Ordering code

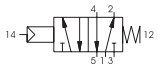
T224.Ⓣ.11.1

Ⓣ	TYPE
	32 = 3 ways
	52 = 5 ways



Weight gr. 110
Minimum operating pressure 2,5 bar





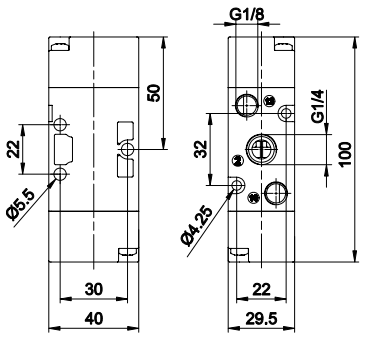
Weight gr. 140
Minimum operating pressure 2,5 bar

Operational characteristic	Fluid	Max working pressure	Operating temperature		Flow rate at 6 bar with Δp=1	Ø orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +50°C	1050 Nl/min	mm 8,5	G 1/4"	G 1/8"

Pneumatic - Differential (external)

3/2 | 5/2

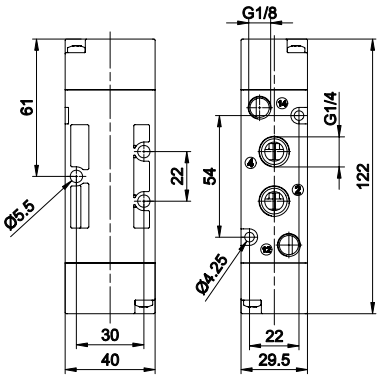
Pneumatic - Differential (external)



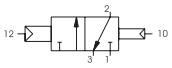
Ordering code

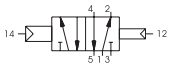
T224.Ⓣ.11.12

Ⓣ	TYPE
	32 = 3 ways
	52 = 5 ways



Weight gr. 110
Minimum operating pressure 2 bar





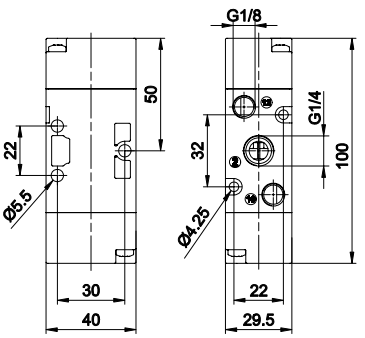
Weight gr. 140
Minimum operating pressure 2 bar

Operational characteristic	Fluid	Max working pressure	Operating temperature		Flow rate at 6 bar with Δp=1	Ø orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +50°C	1050 Nl/min	mm 8,5	G 1/4"	G 1/8"

Pneumatic - Pneumatic

3/2 | 5/2

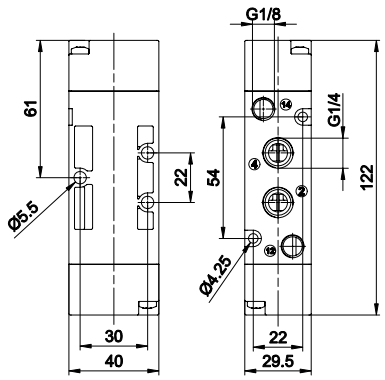
Pneumatic - Pneumatic



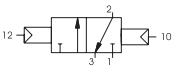
Ordering code

T224.Ⓣ.11.11

Ⓣ	TYPE
	32 = 3 ways
	52 = 5 ways



Weight gr. 110
Minimum operating pressure 2 bar



Weight gr. 140
Minimum operating pressure 2 bar

Operational characteristic	Fluid	Max working pressure	Operating temperature		Flow rate at 6 bar with Δp=1	Ø orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +50°C	1050 Nl/min	mm 8,5	G 1/4"	G 1/8"

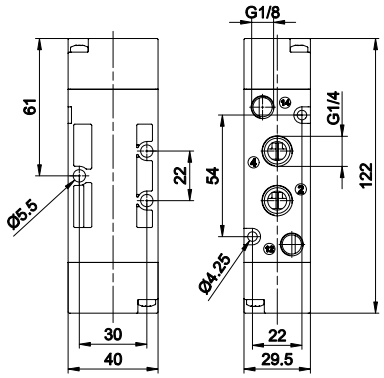
Pneumatic - Pneumatic 3 positions

5/3

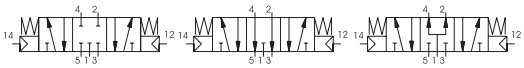
Ordering code

T224.53.Ⓕ.11.11

Ⓕ	FUNCTION
	31 = Closed centres
	32 = Open centres
	33 = Pressured centres



Weight gr. 160
Minimum operating pressure 3 bar



Operational characteristic	Fluid	Max working pressure	Operating temperature		Flow rate at 6 bar with Δp=1	Ø orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +50°C	900 Nl/min	mm 8,5	G 1/4"	G 1/8"

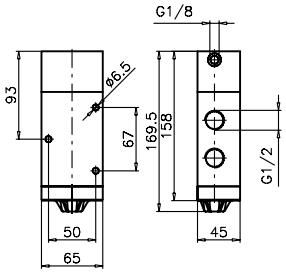
2

2

Pneumatic - Spring

3/2 | 5/2

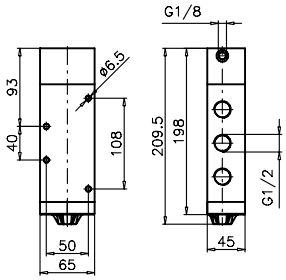
Pneumatic - Spring



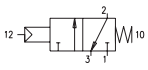
Ordering code

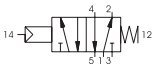
212.Ⓣ.11.1

Ⓣ	TYPE
	32 = 3 ways
	52 = 5 ways



Weight gr. 1110
Minimum piloting pressure 2,5 bar





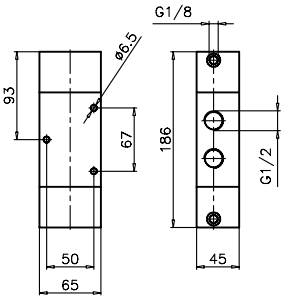
Weight gr. 1390
Minimum piloting pressure 2,5 bar

Operational characteristic	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +70°C	3500 Nl/min	mm 15	G 1/2"	G 1/8"

Pneumatic - Differential external

3/2 | 5/2

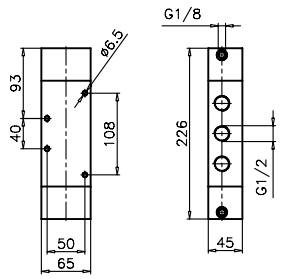
Pneumatic - Differential external



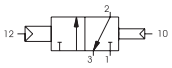
Ordering code

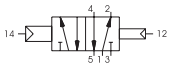
212.Ⓣ.11.12

Ⓣ	TYPE
	32 = 3 ways
	52 = 5 ways



Weight gr. 1380
Minimum piloting pressure 2,5 bar





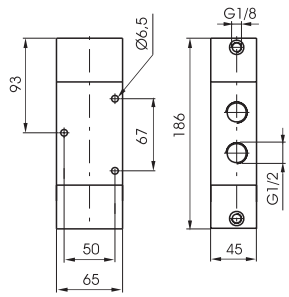
Weight gr. 1660
Minimum piloting pressure 2,5 bar

Operational characteristic	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +70°C	3500 Nl/min	mm 15	G 1/2"	G 1/8"

Pneumatic - Pneumatic

3/2 | 5/2

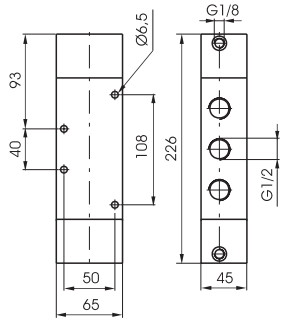
Pneumatic - Pneumatic



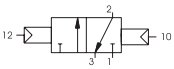
Ordering code

212.Ⓣ.11.11

Ⓣ	TYPE
	32 = 3 ways
	52 = 5 ways



Weight gr. 1350
Minimum piloting pressure 2 bar



Weight gr. 1630
Minimum piloting pressure 2 bar

Operational characteristic	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +70°C	3500 Nl/min	mm 15	G 1/2"	G 1/8"

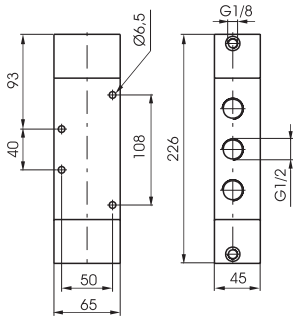
Pneumatic - Pneumatic

5/3

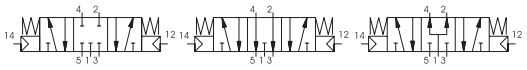
Ordering code

212.53.Ⓣ.11.11

Ⓕ	FUNCTION
	31 = Closed centres
	32 = Open centres
	33 = Pressured centres



Weight gr. 1650
Minimum piloting pressure 3 bar

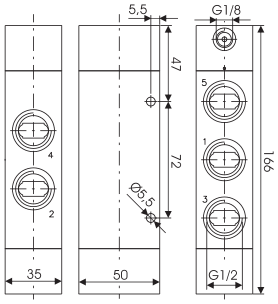


Operational characteristic	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +70°C	3000 Nl/min	mm 15	G 1/2"	G 1/8"

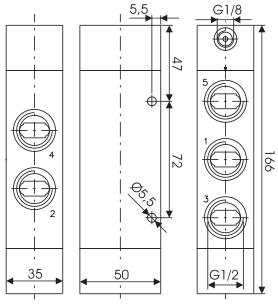
2

2

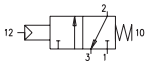
Pneumatic - Spring — 3/2 — 5/2 — Pneumatic - Spring

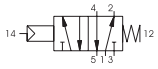


Ordering code	
212/2.T.11.1	
T	TYPE
	32 = 3 ways
	52 = 5 ways



Minimum piloting pressure 2,5 bar



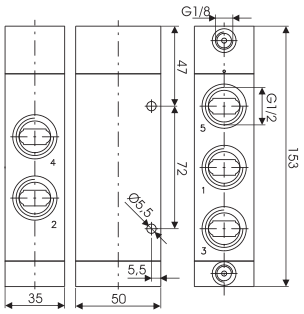


Minimum piloting pressure 2,5 bar

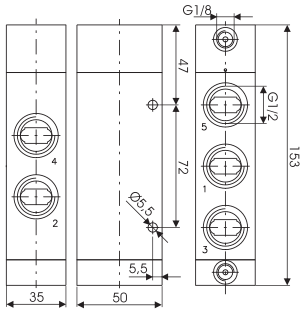
Operational characteristic	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +70°C	3600 Nl/min	mm 15	G 1/2"	G 1/8"

Pneumatic - Differential — 3/2 — 5/2 — Pneumatic - Differential

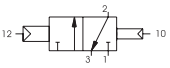
Diff. external - N.C. — *Diff. external*

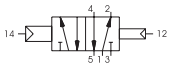


Ordering code	
212/2.T.11.12	
T	TYPE
	32 = 3 ways
	52 = 5 ways



Minimum piloting pressure 2,5 bar



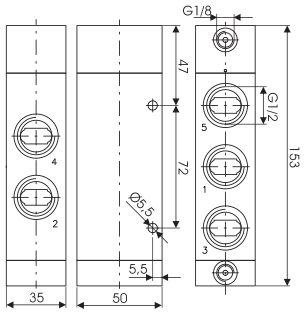


Minimum piloting pressure 2,5 bar

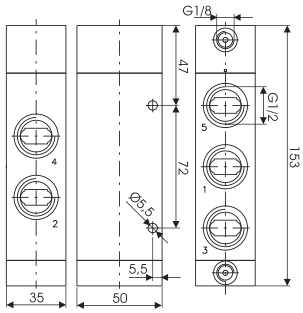
Operational characteristic	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +70°C	3600 Nl/min	mm 15	G 1/2"	G 1/8"

Pneumatic - Differential — 3/2 — 5/2 — Pneumatic - Differential

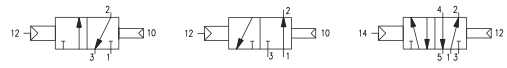
Diff. self aligned — *Diff. self aligned*



Ordering code	
212/2.T.11.12/C	
T	TYPE
	32 = 3 ways
	52 = 5 ways
C	1.C = 3 ways Norm. closed
	1.A = 3 ways norm. open
	1 = 5 ways diff. self aligned



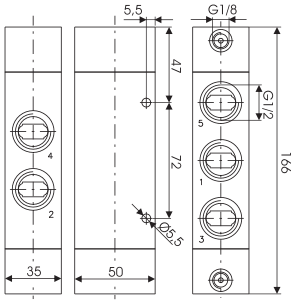
Minimum piloting pressure 2,5 bar



Minimum piloting pressure 2,5 bar

Operational characteristic	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +70°C	3600 Nl/min	mm 15	G 1/2"	G 1/8"

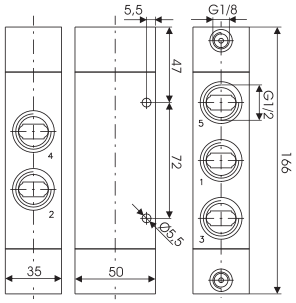
Pneumatic - Pneumatic — 3/2 — 5/2 — Pneumatic - Pneumatic



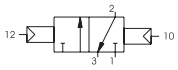
Ordering code

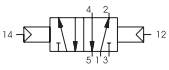
212/2.Ⓣ.11.11

Ⓣ	TYPE
	32 = 3 ways
	52 = 5 ways



Minimum piloting pressure 2,5 bar





Minimum piloting pressure 2,5 bar

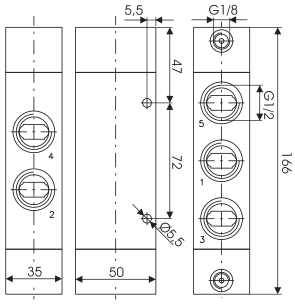
Operational characteristic	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +70°C	3600 Nl/min	mm 15	G 1/2"	G 1/8"

Pneumatic - Pneumatic — 5/3

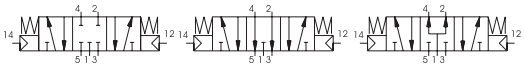
Ordering code

212/2.53.Ⓕ.11.11

Ⓕ	FUNCTION
	31 = Closed centres
	32 = Open centres
	33 = Centri in pressione



Minimum piloting pressure 3 bar



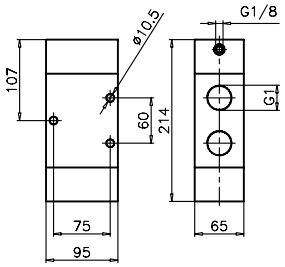
Operational characteristic	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +70°C	3300 Nl/min	mm 15	G 1/2"	G 1/8"

2

Pneumatic - Spring

3/2 | 5/2

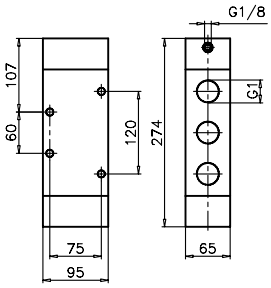
Pneumatic - Spring



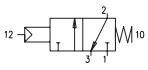
Ordering code

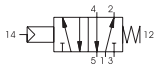
211.Ⓣ.11.1

Ⓣ	TYPE
	32 = 3 ways
	52 = 5 ways



Weight gr. 3330
Minimum piloting pressure 2,5 bar





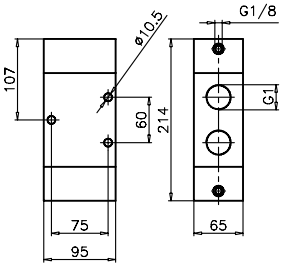
Weight gr. 4200
Minimum piloting pressure 2,5 bar

Operational characteristic	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +70°C	6500 Nl/min	mm 20	G 1"	G 1/8"

Pneumatic - Differential external

3/2 | 5/2

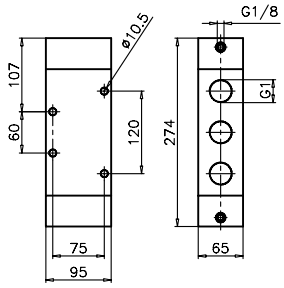
Pneumatic - Differential external



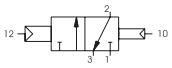
Ordering code

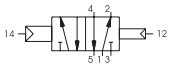
211.Ⓣ.11.12

Ⓣ	TYPE
	32 = 3 ways
	52 = 5 ways



Weight gr. 3330
Minimum piloting pressure 2,5 bar





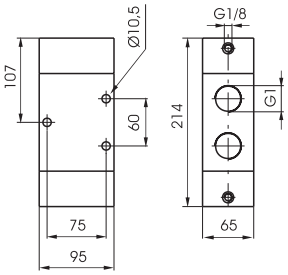
Weight gr. 4200
Minimum piloting pressure 2,5 bar

Operational characteristic	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +70°C	6500 Nl/min	mm 20	G 1"	G 1/8"

Pneumatic - Pneumatic

3/2 | 5/2

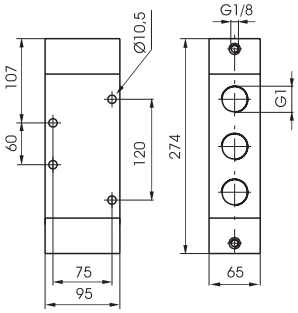
Pneumatic - Pneumatic



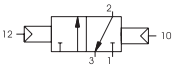
Ordering code

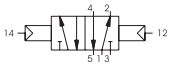
211.Ⓣ.11.11

Ⓣ	TYPE
	32 = 3 ways
	52 = 5 ways



Weight gr. 3330
Minimum piloting pressure 2 bar





Weight gr. 4200
Minimum piloting pressure 2 bar

Operational characteristic	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C	Max. +70°C	6500 Nl/min	mm 20	G 1"	G 1/8"

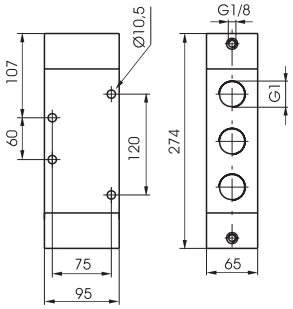
Pneumatic - Pneumatic

5/3

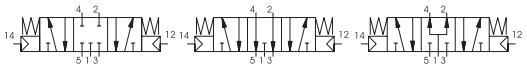
Ordering code

211.53.Ⓕ.11.11

Ⓕ	FUNCTION
	31 = Closed centres
	32 = Open centres



Weight gr. 4200
Minimum piloting pressure 3 bar



Operational characteristic	Fluid	Max working pressure	Operating Temperature	Flow rate at 6 bar with Δp=1	Orifice size	Working port size	Pilot port size
	Filtered and lubricated air	10 bar	Min. -5°C Max. +70°C	6500 Nl/min	mm 20	G 1"	G 1/8"

2