



1

General

The series 200 consist of a broad range of valves with various type of actuation.

The connections for this series are from G 1/8" to G 1".

Due to their special construction with a balanced spool, these valves can be used interchangeably as 3 ways or 5 ways as can be seen in the functional schematics in section 0. This is important because, for example, the 3 ways can be used normally closed or normally open and the 5 ways can be fed through the exhausts 3 and 5 with different pressures according to the need. The spool, as it is moving, isolates the connections without being effected by the inlet pressure.

The main components constituting the valves of the Tecno228 series are manufactured with high performance technopolymer. The use of technopolymer has resulted in a light weight product which can be offered to the market at very interesting prices. This valve series is manufactured with 1/8" connections, 3 and 5 ways function, mechanical or pneumatically operated, monostable spring or pneumatic return, bistable and in 5 ways 3 positions version with closed, open and pressured centres.

This series is completely interchangeable with the standard 228 series (with aluminium body).

Construction characteristics

	G 1/8" - G 1/4" - G 1/2" - G 1"	G 1/8" (in Technopolymer T228 Series)
Body	Aluminium	Technopolymer
Actuators	Aluminium Technopolymer	Technopolymer
Spool	Stainless steel Technopolymer	Technopolymer (5/2 version) Nickel plated steel (5/3 version)
Seals	NBR	NBR
Spacers	Technopolymer (Aluminium for G 1")	Technopolymer
Spring	Spring steel	Spring steel
Pistons	Technopolymer	Technopolymer

Maximum fitting torque (for T228 Series)

Thread	Maximum Torque (Nm)
G 1/8"	4

Use and maintenance

These valves have an average life of 15 million cycles depending on the application and air quality, filtered and lubricated air using specified lubricants will dramatically reduce the wear of the seals and ensures long and trouble free operation.

Please ensure that the valve is being used according with the manufacturers specification, such as air pressure and temperature and that exhaust ports 3 & 5 are protected against the possible ingress of dirt or debris.

Repair kits including the spool complete with seals are available for overhauling the valves; however, although this is a simple operation it should be carried out by a competent person.

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



1

Tappet - Spring	3/2	Ordering code 228.1.0.1	5/2	Tappet - Spring				
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>TYPE</td> </tr> <tr> <td>T 32 = 3 ways</td> </tr> <tr> <td>52 = 5 ways</td> </tr> </table>		TYPE	T 32 = 3 ways	52 = 5 ways		
				TYPE				
T 32 = 3 ways								
52 = 5 ways								
Weight gr. 85 Operating force 33 N				Weight gr. 105 Operating force 33 N				

Operational characteristic					
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	540 NI/min	mm 6	G 1/8"



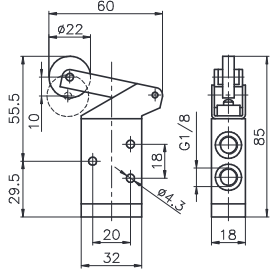
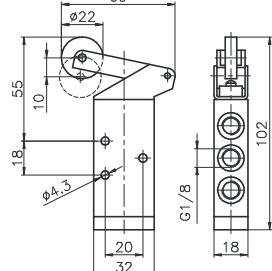
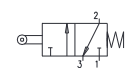
Tappet panel - Spring	3/2	Ordering code 228.1.1.1	5/2	Tappet panel - Spring				
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>TYPE</td> </tr> <tr> <td>T 32 = 3 ways</td> </tr> <tr> <td>52 = 5 ways</td> </tr> </table>		TYPE	T 32 = 3 ways	52 = 5 ways		
				TYPE				
T 32 = 3 ways								
52 = 5 ways								
Weight gr. 102 Operating force 33 N				Weight gr. 122 Operating force 33 N				

Operational characteristic					
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	540 NI/min	mm 6	G 1/8"



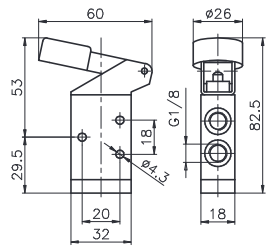
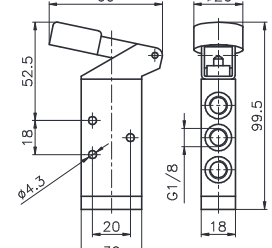
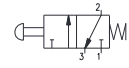
Lever roller - Spring	3/2	Ordering code 228.1.2.V	5/2	Lever roller - Spring							
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>TYPE</td> </tr> <tr> <td>T 32 = 3 ways</td> </tr> <tr> <td>52 = 5 ways</td> </tr> <tr> <td>VERSION</td> </tr> <tr> <td>V 1 = Plastic roller</td> </tr> <tr> <td>1/2 = Metal roller</td> </tr> </table>		TYPE	T 32 = 3 ways	52 = 5 ways	VERSION	V 1 = Plastic roller	1/2 = Metal roller		
				TYPE							
T 32 = 3 ways											
52 = 5 ways											
VERSION											
V 1 = Plastic roller											
1/2 = Metal roller											
Weight gr. 115 Operating force 15 N				Weight gr. 135 Operating force 15 N							

Operational characteristic					
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	540 NI/min	mm 6	G 1/8"



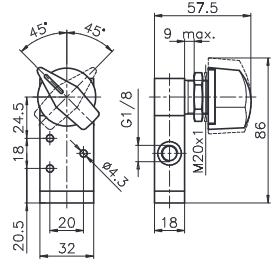
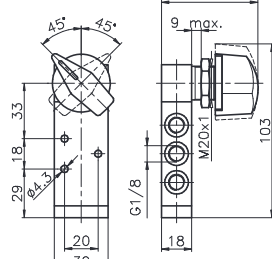
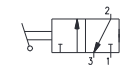
1

Lever roller ball bearing - Spring	3/2	Ordering code 228.1.2.1/1	5/2	Lever roller ball bearing - Spring
		TYPE T 32 = 3 ways 52 = 5 ways		
				
Weight gr. 130 Operating force 15 N				Weight gr. 150 Operating force 15 N

Operational characteristic					
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	540 NI/min	mm 6	G 1/8"

Lever button - Spring	3/2	Ordering code 228.1.2.6/C	5/2	Lever button - Spring
		TYPE T 32 = 3 ways 52 = 5 ways BUTTON COLOR C 1 = Red 2 = Black 3 = Green		
				
Weight gr. 120 Operating force 15 N				Weight gr. 120 Operating force 15 N

Operational characteristic					
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	540 NI/min	mm 6	G 1/8"

Switch lateral 2 positions	3/2	Ordering code 228.1.27	5/2	Switch lateral 2 positions
		TYPE T 32 = 3 ways 52 = 5 ways		
				
Weight gr. 190				Weight gr. 210

Operational characteristic					
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	540 NI/min	mm 6	G 1/8"



1

Lever roller unidirectional - Spring	3/2	Ordering code 228.1.3.V	5/2	Lever roller unidirectional - Spring
		TYPE T 32 = 3 ways 52 = 5 ways VERSION V 1 = Plastic roller 1/2 = Metal roller		
Weight gr. 110				Weight gr. 130

Operational characteristic					
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	540 NI/min	mm 6	G 1/8"

Lever roller lateral bidirectional - Spring	3/2	Ordering code 228.1.4.1	5/2	Lever roller lateral bidirectional - Spring
		TYPE T 32 = 3 ways 52 = 5 ways		
Weight gr. 180				Weight gr. 200

Operational characteristic					
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	540 NI/min	mm 6	G 1/8"

Lever sensitive - differential	3/2	Ordering code 228.1.4.13	5/2	Lever sensitive - differential
		TYPE T 32 = 3 ways 52 = 5 ways		
Weight gr. 200 Minimum rotation angle 11° Minimum working pressure 2,5 bar				Weight gr. 220 Minimum rotation angle 11° Minimum working pressure 2,5 bar

Operational characteristic					
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	540 NI/min	mm 6	G 1/8"

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Lever panel Ø30 - 2 positions

3/2

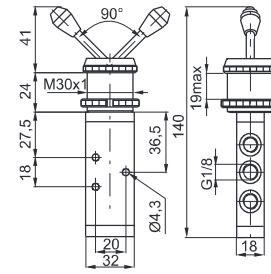
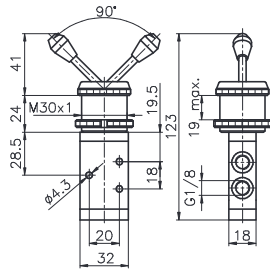
Ordering code

228.1.5/C

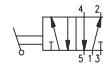
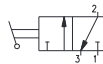
- TYPE
T 32 = 3 ways
 52 = 5 ways
 BUTTON COLOR
C 1 = Red
 2 = Black
 3 = Green

5/2

Lever panel Ø30 - 2 positions



Weight gr. 198



Weight gr. 218

Operational characteristic

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	540 NI/min	mm 6	G 1/8"

Lever front - 2 positions

3/2

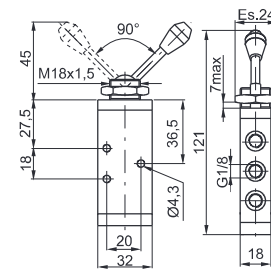
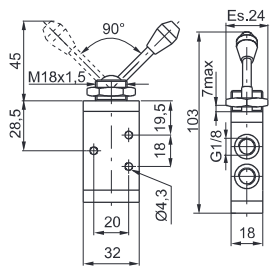
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228.1.55/C

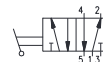
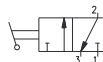
- TYPE
T 32 = 3 ways
 52 = 5 ways
 BUTTON COLOR
C 1 = Red
 2 = Black
 3 = Green

5/2

Lever front - 2 positions



Weight gr. 115



Weight gr. 135

Operational characteristic

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	540 NI/min	mm 6	G 1/8"

Push button Ø30 - Spring

3/2

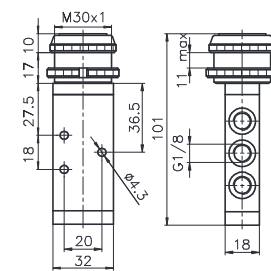
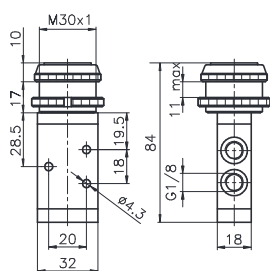
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228.1.6.1/C

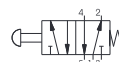
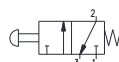
- TYPE
T 32 = 3 ways
 52 = 5 ways
 BUTTON COLOR
C 1 = Red
 2 = Black
 3 = Green

5/2

Push button Ø30 - Spring



Weight gr. 155
 Operating force 33 N



Weight gr. 175
 Operating force 33 N

Operational characteristic

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	540 NI/min	mm 6	G 1/8"



1

Sensitive pushbutton Ø30 - differential	3/2	Ordering code 228.1.6.13/C	5/2	Sensitive pushbutton Ø30 - differential	
Weight gr. 197 Operating force 18,5N (at 6 bar)				Weight gr. 217 Operating force 18,5N (at 6 bar)	

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

Push button - Spring	3/2	Ordering code 228.1.6.22/C	5/2	Push button - Spring	
Weight gr. 225 Operating force 33N				Weight gr. 245 Operating force 33N	

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

Raised pushbutton Ø22 - Spring	3/2	Ordering code 228.1.6.23/C	5/2	Raised pushbutton Ø22 - Spring	
Weight gr. 230 Operating force 33N				Weight gr. 250 Operating force 33N	

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

1

Push button Ø22 - 2 positions	3/2	Ordering code 228. 6.25	5/2	Push button Ø22 - 2 positions			
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="text-align: center;">TYPE</td></tr> <tr><td style="text-align: center;">32 = 3 ways</td></tr> <tr><td style="text-align: center;">52 = 5 ways</td></tr> </table>	TYPE	32 = 3 ways	52 = 5 ways		
TYPE							
32 = 3 ways							
52 = 5 ways							
Weight gr. 235 Operating force 33N Emergency - Rotate to unlock				Weight gr. 235 Operating force 33N Emergency - Rotate to unlock			

Operational characteristic					
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	540 NI/min	mm 6	G 1/8"

Switch 2 positions	3/2	Ordering code 228. 6.27	5/2	Switch 2 positions			
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TYPE							
32 = 3 ways							
52 = 5 ways							
Weight gr. 230				Weight gr. 250			

Operational characteristic					
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	540 NI/min	mm 6	G 1/8"

Key switch 2 positions	3/2	Ordering code 228. 6.28	5/2	Key switch 2 positions			
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TYPE							
32 = 3 ways							
52 = 5 ways							
Weight gr. 230				Weight gr. 250			

Operational characteristic					
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	540 NI/min	mm 6	G 1/8"



1

Palm pushbutton Ø30 2 positions	3/2	Ordering code 228.1.7.1/C	5/2	Palm pushbutton Ø30 2 positions							
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TYPE											
T 32 = 3 ways											
52 = 5 ways											
BUTTON COLOR											
C 1 = Red											
2 = Black											
3 = Green											
<p>Weight gr. 148 Operating force 33N</p>				<p>Weight gr. 168 Operating force 33N</p>							

Operational characteristic					
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	540 NI/min	mm 6	G 1/8"

Push button - Spring	3/2	Ordering code 228.1.8.1/C	5/2	Push button - Spring							
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>TYPE</td></tr> <tr><td>T 32 = 3 ways</td></tr> <tr><td>52 = 5 ways</td></tr> <tr><td>BUTTON COLOR</td></tr> <tr><td>C 1 = Red</td></tr> <tr><td>2 = Black</td></tr> <tr><td>3 = Green</td></tr> </table>	TYPE	T 32 = 3 ways	52 = 5 ways	BUTTON COLOR	C 1 = Red	2 = Black	3 = Green		
TYPE											
T 32 = 3 ways											
52 = 5 ways											
BUTTON COLOR											
C 1 = Red											
2 = Black											
3 = Green											
<p>Weight gr. 120 Operating force 33N</p>				<p>Weight gr. 140 Operating force 33N</p>							

Operational characteristic					
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	540 NI/min	mm 6	G 1/8"

Push button 2 positions	3/2	Ordering code 228.1.8/C	5/2	Push button 2 positions							
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>TYPE</td></tr> <tr><td>T 32 = 3 ways</td></tr> <tr><td>52 = 5 ways</td></tr> <tr><td>BUTTON COLOR</td></tr> <tr><td>C 1 = Red</td></tr> <tr><td>2 = Black</td></tr> <tr><td>3 = Green</td></tr> </table>	TYPE	T 32 = 3 ways	52 = 5 ways	BUTTON COLOR	C 1 = Red	2 = Black	3 = Green		
TYPE											
T 32 = 3 ways											
52 = 5 ways											
BUTTON COLOR											
C 1 = Red											
2 = Black											
3 = Green											
<p>Weight gr. 120 Operating force 10N</p>				<p>Weight gr. 140 Operating force 10N</p>							

Operational characteristic					
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	540 NI/min	mm 6	G 1/8"



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Lever lateral - Spring

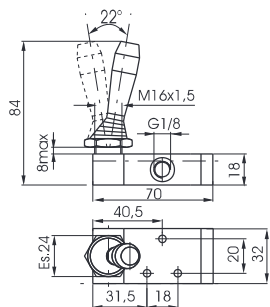
3/2

Ordering code

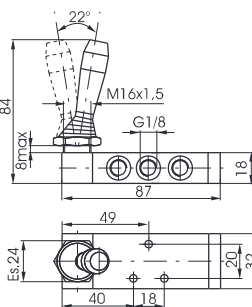
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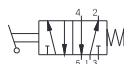
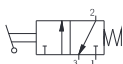
Lever lateral - Spring



- TYPE
- 32 = 3 ways
- 52 = 5 ways
- BUTTON COLOR
- 1 = Red
- 2 = Black
- 3 = Green



Weight gr. 140



Weight gr. 160

Operational characteristic

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	540 NI/min	mm 6	G 1/8"

Lever lateral 2 positions

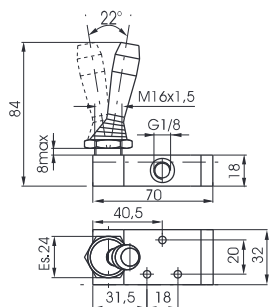
3/2

Ordering code

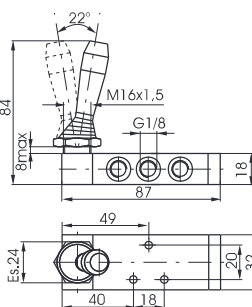
228.1.9/C

5/2

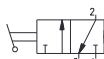
Lever lateral 2 positions



- TYPE
- 32 = 3 ways
- 52 = 5 ways
- BUTTON COLOR
- 1 = Red
- 2 = Black
- 3 = Green



Weight gr. 140



Weight gr. 160

Operational characteristic

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	540 NI/min	mm 6	G 1/8"

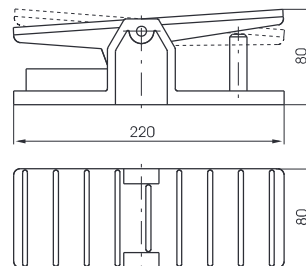
Pedal aluminium 2 positions

3/2
5/2

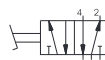
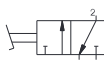
Ordering code

228.1.10

- TYPE
- 32 = 3 ways
- 52 = 5 ways



Weight gr. 790 (3/2)
Weight gr. 810 (5/2)

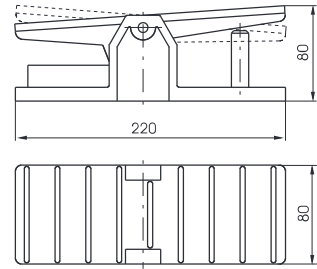


Operational characteristic

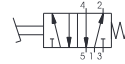
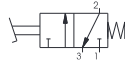
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	540 NI/min	mm 6	G 1/8"

Pedal aluminium - Spring

Ordering code
228.10.1
TYPE
T 32 = 3 ways
52 = 5 ways



Weight gr. 790 (3/2)
Weight gr. 810 (5/2)

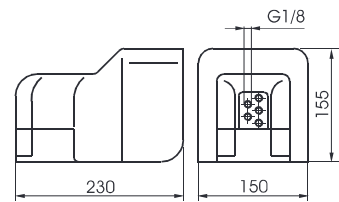


Operational characteristic

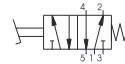
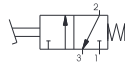
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	540 NI/min	mm 6	G 1/8"

Pedal protected - Spring

Ordering code
228.10.V
TYPE
T 32 = 3 ways
52 = 5 ways
VERSION
V 1/1 = Standard version
2/1 = without safety device



Weight gr. 1.120

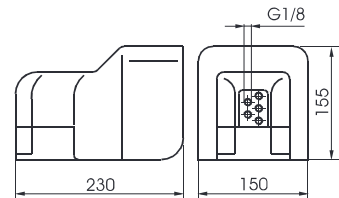


Operational characteristic

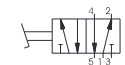
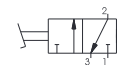
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	540 NI/min	mm 6	G 1/8"

Pedal protected 2 positions

Ordering code
228.10/1
TYPE
T 32 = 3 ways
52 = 5 ways



Weight gr. 1.120

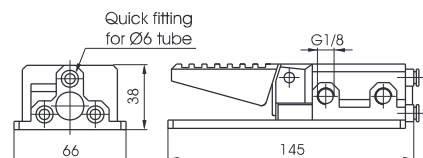


Operational characteristic

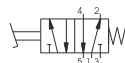
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	540 NI/min	mm 6	G 1/8"

Pedal plastic miniaturized - Spring

Ordering code
228.52.10.F
FUNCTION
F 1P = Standard version
1PX = Stainless steel spool



Weight gr. 230

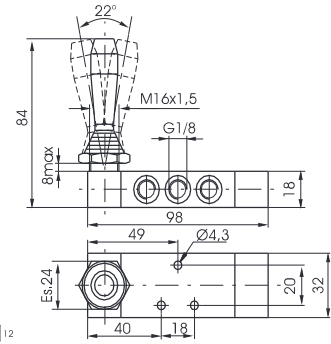
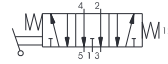
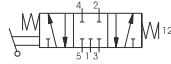


Operational characteristic

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	540 NI/min	mm 6	G 1/8"

Lever lateral spring centre 3 positions

Ordering code
228.53.F.9.1/C
FUNCTION
F 31 = Closed centres
32 = Open centres
BUTTON COLOR
C 1 = Red
2 = Black
3 = Green
Weight gr. 190

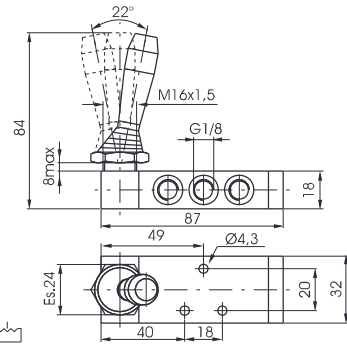
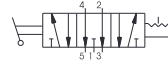
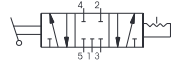


Operational characteristic

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	410 NI/min	mm 6	G 1/8"

Lever lateral 3 positions detent

Ordering code
228.53.F.9/C
FUNCTION
F 31 = Closed centres
32 = Open centres
BUTTON COLOR
C 1 = Red
2 = Black
3 = Green
Weight gr. 160

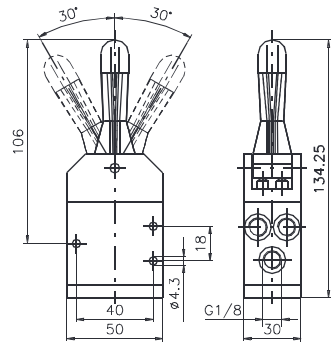


Operational characteristic

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	410 NI/min	mm 6	G 1/8"

Lever central (spring 3 pos.) Operator, Levar, Spole in Technopolymer

Ordering code
228.53.32.99P/C
LEVER COLOR
C 1 = Red
2 = Black
Weight gr. 140

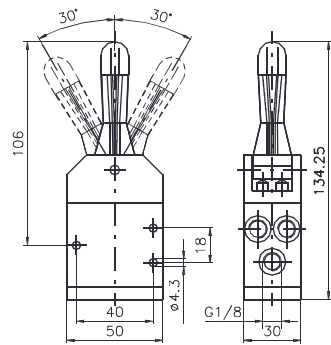


Operational characteristic

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10	-5 - +70	410	6	G 1/8"

Lever central (spring 3 pos.) Levar in Technopolymer

Ordering code
228.53.32.99/C
LEVER COLOR
C 1 = Red
2 = Black
Weight gr. 140



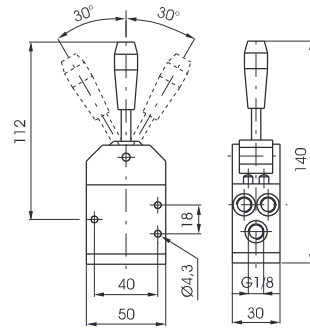
Operational characteristic

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10	-5 - +70	410	6	G 1/8"

Lever central Metal (spring 3 pos.) One position stable

5/3

Ordering code
228.53.32.99/CS
LEVER COLOR
1 = Red
2 = Black



Weight gr. 140

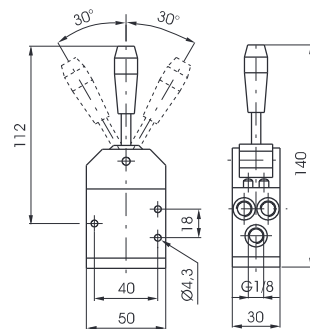


Operational characteristic					
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10	-5 - +70	410	6	G 1/8"

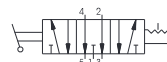
Lever central Metal

5/3

Ordering code
228.53.32.99/F/C
FUNCTION
2 = 2 Stable positions
3 = 3 Stable positions
LEVER COLOR
1 = Red
2 = Black



Weight gr. 140

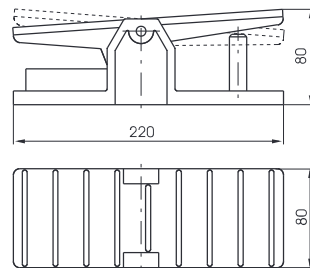


Operational characteristic					
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10	-5 - +70	410	6	G 1/8"

Pedal - Spring 3 positions

5/3

Ordering code
228.53.F.10.1
FUNCTION
31 = Closed centres
32 = Open centres



Weight gr. 810



Operational characteristic					
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	410 NI/min	mm 6	G 1/8"

1

Plunger - Spring	3/2	Ordering code T228.0.0.1	5/2	Plunger - Spring
		T TYPE 32 = 3 ways 52 = 5 ways		
Weight gr. 60 Operating force 33 N				Weight gr. 72 Operating force 33 N

Operational characteristic						
Fluid	Max working pressure (bar)	Temperature °C		Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	Min.	Max.	620 NI/min	mm 6	G 1/8"

Plunger - Spring	3/2	Ordering code T228.1.1.1	5/2	Plunger - Spring
<i>for panel mounting</i>		T TYPE 32 = 3 ways 52 = 5 ways		<i>for panel mounting</i>
		T TYPE 32 = 3 ways 52 = 5 ways		
Weight gr. 77 Operating force 33 N				Weight gr. 90 Operating force 33 N

Operational characteristic						
Fluid	Max working pressure (bar)	Temperature °C		Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	Min.	Max.	620 NI/min	mm 6	G 1/8"

Roller lever - Spring	3/2	Ordering code T228.2.2.V	5/2	Roller lever - Spring
		T TYPE 32 = 3 ways 52 = 5 ways V VERSION 1 = Plastic roller 1/2 = Ball bearing		
Weight gr. 90 Operating force 15 N				Weight gr. 102 Operating force 15 N

Operational characteristic						
Fluid	Max working pressure (bar)	Temperature °C		Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	Min.	Max.	620 NI/min	mm 6	G 1/8"

Roller lever (ball bearings) - Spring	3/2	Ordering code T228.1.2.1/1	5/2	Roller lever (ball bearings) - Spring							
		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td colspan="2">TYPE</td> </tr> <tr> <td style="width:10px;">T</td> <td>32 = 3 ways</td> </tr> <tr> <td></td> <td>52 = 5 ways</td> </tr> </table>		TYPE		T	32 = 3 ways		52 = 5 ways		
				TYPE							
T	32 = 3 ways										
	52 = 5 ways										
<p>Weight gr. 105 Operating force 15 N</p>		<p>Weight gr. 117 Operating force 15 N</p>									

Operational characteristic						
Fluid	Max working pressure (bar)	Temperature °C		Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	Min.	Max.	620 NI/min	mm 6	G 1/8"

Button lever - Spring	3/2	Ordering code T228.1.2.6/C	5/2	Button lever - Spring															
		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td colspan="2">TYPE</td> </tr> <tr> <td style="width:10px;">T</td> <td>32 = 3 ways</td> </tr> <tr> <td></td> <td>52 = 5 ways</td> </tr> <tr> <td colspan="2">BUTTON COLOR</td> </tr> <tr> <td style="width:10px;">C</td> <td>1 = Red</td> </tr> <tr> <td></td> <td>2 = Black</td> </tr> <tr> <td></td> <td>3 = Green</td> </tr> </table>		TYPE		T	32 = 3 ways		52 = 5 ways	BUTTON COLOR		C	1 = Red		2 = Black		3 = Green		
				TYPE															
T	32 = 3 ways																		
	52 = 5 ways																		
BUTTON COLOR																			
C	1 = Red																		
	2 = Black																		
	3 = Green																		
<p>Weight gr. 95 Operating force 15 N</p>		<p>Weight gr. 87 Operating force 15 N</p>																	

Operational characteristic						
Fluid	Max working pressure (bar)	Temperature °C		Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	Min.	Max.	620 NI/min	mm 6	G 1/8"

One way Roller lever - Spring	3/2	Ordering code T228.1.3.V	5/2	One way Roller lever - Spring													
		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td colspan="2">TYPE</td> </tr> <tr> <td style="width:10px;">T</td> <td>32 = 3 ways</td> </tr> <tr> <td></td> <td>52 = 5 ways</td> </tr> <tr> <td colspan="2">VERSION</td> </tr> <tr> <td style="width:10px;">V</td> <td>1 = Plastic roller</td> </tr> <tr> <td></td> <td>1/2 = Ball bearing</td> </tr> </table>		TYPE		T	32 = 3 ways		52 = 5 ways	VERSION		V	1 = Plastic roller		1/2 = Ball bearing		
				TYPE													
T	32 = 3 ways																
	52 = 5 ways																
VERSION																	
V	1 = Plastic roller																
	1/2 = Ball bearing																
<p>Weight gr. 85</p>		<p>Weight gr. 97</p>															

Operational characteristic						
Fluid	Max working pressure (bar)	Temperature °C		Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	Min.	Max.	620 NI/min	mm 6	G 1/8"

1

Toggle Lever (for panel mounting) Ø 30 2 positions	3/2	Ordering code T228.1.5/C	5/2	Toggle Lever (for panel mounting) Ø 30 2 positions
		<p>TYPE</p> <ul style="list-style-type: none"> T 32 = 3 ways 52 = 5 ways <p>BUTTON COLOR</p> <ul style="list-style-type: none"> C 1 = Red 2 = Black 3 = Green 		
Weight gr. 168				Weight gr. 180

Operational characteristic						
Fluid	Max working pressure (bar)	Temperature °C		Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	Min.	Max.	620 NI/min	mm 6	G 1/8"

Toggle Lever - 2 positions	3/2	Ordering code T228.1.55/C	5/2	Toggle Lever - 2 positions
		<p>TYPE</p> <ul style="list-style-type: none"> T 32 = 3 ways 52 = 5 ways <p>BUTTON COLOR</p> <ul style="list-style-type: none"> C 1 = Red 2 = Black 3 = Green 		
Weight gr. 84				Weight gr. 96

Operational characteristic						
Fluid	Max working pressure (bar)	Temperature °C		Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	Min.	Max.	620 NI/min	mm 6	G 1/8"

Push button Ø 30 - spring	3/2	Ordering code T228.1.6.1/C	5/2	Push button Ø 30 - spring
		<p>TYPE</p> <ul style="list-style-type: none"> T 32 = 3 ways 52 = 5 ways <p>BUTTON COLOR</p> <ul style="list-style-type: none"> C 1 = Red 2 = Black 3 = Green 		
Weight gr. 125 Operating force 33 N				Weight gr. 137 Operating force 33 N

Operational characteristic						
Fluid	Max working pressure (bar)	Temperature °C		Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	Min.	Max.	620 NI/min	mm 6	G 1/8"



1

Push button - spring	3/2	Ordering code T228.1.6.22/C	5/2	Push button - spring									
		<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>TYPE</td></tr> <tr><td>1 32 = 3 ways</td></tr> <tr><td>52 = 5 ways</td></tr> <tr><td>BUTTON COLOR</td></tr> <tr><td>C 1 = Red</td></tr> <tr><td>2 = Black</td></tr> <tr><td>3 = Green</td></tr> <tr><td>4 = Yellow</td></tr> </table>		TYPE	1 32 = 3 ways	52 = 5 ways	BUTTON COLOR	C 1 = Red	2 = Black	3 = Green	4 = Yellow		
				TYPE									
1 32 = 3 ways													
52 = 5 ways													
BUTTON COLOR													
C 1 = Red													
2 = Black													
3 = Green													
4 = Yellow													
<p>Weight gr. 200 Operating force 33N</p>		<p>Weight gr. 212 Operating force 33N</p>											

Operational characteristic						
Fluid	Max working pressure (bar)	Temperature °C		Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	Min.	Max.	620 NI/min	mm 6	G 1/8"

Raised Push button - spring	3/2	Ordering code T228.1.6.23/C	5/2	Raised Push button - spring									
		<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>TYPE</td></tr> <tr><td>1 32 = 3 ways</td></tr> <tr><td>52 = 5 ways</td></tr> <tr><td>BUTTON COLOR</td></tr> <tr><td>C 1 = Red</td></tr> <tr><td>2 = Black</td></tr> <tr><td>3 = Green</td></tr> <tr><td>4 = Yellow</td></tr> </table>		TYPE	1 32 = 3 ways	52 = 5 ways	BUTTON COLOR	C 1 = Red	2 = Black	3 = Green	4 = Yellow		
				TYPE									
1 32 = 3 ways													
52 = 5 ways													
BUTTON COLOR													
C 1 = Red													
2 = Black													
3 = Green													
4 = Yellow													
<p>Weight gr. 205 Operating force 33N</p>		<p>Weight gr. 217 Operating force 33N</p>											

Operational characteristic						
Fluid	Max working pressure (bar)	Temperature °C		Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	Min.	Max.	620 NI/min	mm 6	G 1/8"

Palm button - 2 positions	3/2	Ordering code T228.1.6.25	5/2	Palm button - 2 positions				
<p><i>emergency - Rotate to unlock</i></p>		<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>TYPE</td></tr> <tr><td>1 32 = 3 ways</td></tr> <tr><td>52 = 5 ways</td></tr> </table>		TYPE	1 32 = 3 ways	52 = 5 ways	<p><i>emergency - Rotate to unlock</i></p>	
				TYPE				
1 32 = 3 ways								
52 = 5 ways								
<p>Weight gr. 210 Operating force 33N</p>		<p>Weight gr. 202 Operating force 33N</p>						

Operational characteristic						
Fluid	Max working pressure (bar)	Temperature °C		Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	Min.	Max.	620 NI/min	mm 6	G 1/8"

1

Switch - 2 positions	3/2	Ordering code T228.1.6.27	5/2	Switch - 2 positions				
		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td colspan="2">TYPE</td> </tr> <tr> <td>32 = 3 ways</td> <td>52 = 5 ways</td> </tr> </table>			TYPE		32 = 3 ways	52 = 5 ways
					TYPE			
32 = 3 ways	52 = 5 ways							
<p>Weight gr. 205 Operating force 33N</p>		<p>Weight gr. 217 Operating force 33N</p>						

Operational characteristic						
Fluid	Max working pressure (bar)	Temperature °C		Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	Min.	Max.	620 NI/min	mm 6	G 1/8"

Key switch - 2 positions	3/2	Ordering code T228.1.6.28	5/2	Key switch - 2 positions				
		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td colspan="2">TYPE</td> </tr> <tr> <td>32 = 3 ways</td> <td>52 = 5 ways</td> </tr> </table>			TYPE		32 = 3 ways	52 = 5 ways
					TYPE			
32 = 3 ways	52 = 5 ways							
<p>Weight gr. 205 Operating force 33N</p>		<p>Weight gr. 217 Operating force 33N</p>						

Operational characteristic						
Fluid	Max working pressure (bar)	Temperature °C		Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	Min.	Max.	620 NI/min	mm 6	G 1/8"

Palm Push button Ø 30	3/2	Ordering code T228.1.7.1/C	5/2	Palm Push button Ø 30										
		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td colspan="2">TYPE</td> </tr> <tr> <td>32 = 3 ways</td> <td>52 = 5 ways</td> </tr> <tr> <td colspan="2">BUTTON COLOR</td> </tr> <tr> <td>1 = Red</td> <td>2 = Black</td> </tr> <tr> <td>3 = Green</td> <td></td> </tr> </table>			TYPE		32 = 3 ways	52 = 5 ways	BUTTON COLOR		1 = Red	2 = Black	3 = Green	
					TYPE									
32 = 3 ways	52 = 5 ways													
BUTTON COLOR														
1 = Red	2 = Black													
3 = Green														
<p>Weight gr. 118 Operating force 33N</p>		<p>Weight gr. 130 Operating force 33N</p>												

Operational characteristic						
Fluid	Max working pressure (bar)	Temperature °C		Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	Min.	Max.	620 NI/min	mm 6	G 1/8"

Push button - Spring	3/2	Ordering code T228.1.8.1/C	5/2	Push button - Spring								
		<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>TYPE</td></tr> <tr><td>1 32 = 3 ways</td></tr> <tr><td>52 = 5 ways</td></tr> <tr><td>BUTTON COLOR</td></tr> <tr><td>C 1 = Red</td></tr> <tr><td>2 = Black</td></tr> <tr><td>3 = Green</td></tr> </table>		TYPE	1 32 = 3 ways	52 = 5 ways	BUTTON COLOR	C 1 = Red	2 = Black	3 = Green		
TYPE												
1 32 = 3 ways												
52 = 5 ways												
BUTTON COLOR												
C 1 = Red												
2 = Black												
3 = Green												
Weight gr. 95 Operating force 33N				Weight gr. 107 Operating force 33N								

Operational characteristic						
Fluid	Max working pressure (bar)	Temperature °C		Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	Min.	Max.	620 NI/min	mm 6	G 1/8"

Push button - 2 positions	3/2	Ordering code T228.1.8/C	5/2	Push button - 2 positions								
		<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>TYPE</td></tr> <tr><td>1 32 = 3 ways</td></tr> <tr><td>52 = 5 ways</td></tr> <tr><td>BUTTON COLOR</td></tr> <tr><td>C 1 = Red</td></tr> <tr><td>2 = Black</td></tr> <tr><td>3 = Green</td></tr> </table>		TYPE	1 32 = 3 ways	52 = 5 ways	BUTTON COLOR	C 1 = Red	2 = Black	3 = Green		
TYPE												
1 32 = 3 ways												
52 = 5 ways												
BUTTON COLOR												
C 1 = Red												
2 = Black												
3 = Green												
Weight gr. 95 Operating force 10N				Weight gr. 107 Operating force 10N								

Operational characteristic						
Fluid	Max working pressure (bar)	Temperature °C		Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	Min.	Max.	620 NI/min	mm 6	G 1/8"

Lever lateral - Spring	3/2	Ordering code T228.1.9.1/C	5/2	Lever lateral - Spring								
		<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>TYPE</td></tr> <tr><td>1 32 = 3 ways</td></tr> <tr><td>52 = 5 ways</td></tr> <tr><td>BUTTON COLOR</td></tr> <tr><td>C 1 = Red</td></tr> <tr><td>2 = Black</td></tr> <tr><td>3 = Green</td></tr> </table>		TYPE	1 32 = 3 ways	52 = 5 ways	BUTTON COLOR	C 1 = Red	2 = Black	3 = Green		
TYPE												
1 32 = 3 ways												
52 = 5 ways												
BUTTON COLOR												
C 1 = Red												
2 = Black												
3 = Green												
Weight gr. 100				Weight gr. 110								

Operational characteristic						
Fluid	Max working pressure (bar)	Temperature °C		Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	Min.	Max.	620 NI/min	mm 6	G 1/8"

Lateral lever - 2 positions

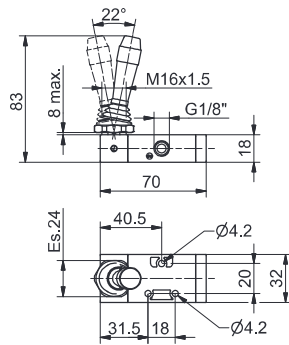
3/2

Ordering code

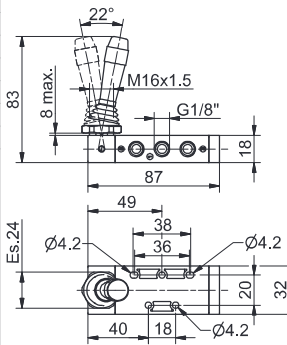
T228.1.9/C

5/2

Lateral lever - 2 positions

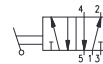
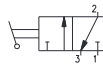


- TYPE
T 32 = 3 ways
 52 = 5 ways
 BUTTON COLOR
C 1 = Red
 2 = Black
 3 = Green



Weight gr. 100

Weight gr. 110



Operational characteristic

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	Min. Max.	620 NI/min	mm 6	G 1/8"

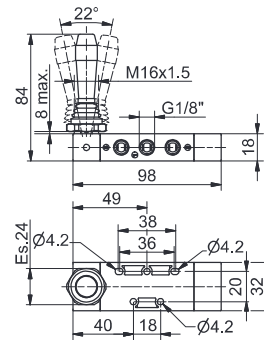
Lateral Lever spring - 3 positions

5/3

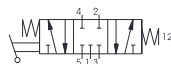
Ordering code

T228.53.F.9.1/C

- FUNCTION
F 31 = Closed Centres
 32 = Open Centres
 BUTTON COLOR
C 1 = Red
 2 = Black
 3 = Green



Weight gr. 140



Operational characteristic

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	Min. Max.	410 NI/min	mm 6	G 1/8"

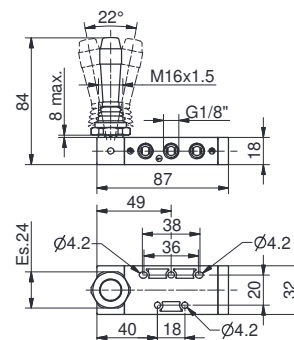
Lateral lever - 3 positions detent

5/3

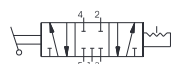
Ordering code

T228.53.F.9/C

- FUNCTION
F 31 = Closed Centres
 32 = Open Centres
 BUTTON COLOR
C 1 = Red
 2 = Black
 3 = Green



Weight gr. 110



Operational characteristic

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	Min. Max.	410 NI/min	mm 6	G 1/8"



1

Tappet panel - Spring	3/2	Ordering code 224.1.1	5/2	Tappet panel - Spring							
		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;">TYPE</td> </tr> <tr> <td style="text-align: center;">T</td> <td>32 = 3 ways</td> </tr> <tr> <td></td> <td>52 = 5 ways</td> </tr> </table>		TYPE		T	32 = 3 ways		52 = 5 ways		
				TYPE							
T	32 = 3 ways										
	52 = 5 ways										
<p>Weight gr. 370 Operating force 71,5N</p>				<p>Weight gr. 455 Operating force 71,5N</p>							

Operational characteristic					
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	1360 NI/min	mm 8	G 1/4"

Lever roller - Spring	3/2	Ordering code 224.2.1	5/2	Lever roller - Spring							
		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;">TYPE</td> </tr> <tr> <td style="text-align: center;">T</td> <td>32 = 3 ways</td> </tr> <tr> <td></td> <td>52 = 5 ways</td> </tr> </table>		TYPE		T	32 = 3 ways		52 = 5 ways		
				TYPE							
T	32 = 3 ways										
	52 = 5 ways										
<p>Weight gr. 510 Operating force 35N</p>				<p>Weight gr. 595 Operating force 35N</p>							

Operational characteristic					
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	1360 NI/min	mm 8	G 1/4"

Lever roller unidirectional - Spring	3/2	Ordering code 224.3.1	5/2	Lever roller unidirectional - Spring							
		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;">TYPE</td> </tr> <tr> <td style="text-align: center;">T</td> <td>32 = 3 ways</td> </tr> <tr> <td></td> <td>52 = 5 ways</td> </tr> </table>		TYPE		T	32 = 3 ways		52 = 5 ways		
				TYPE							
T	32 = 3 ways										
	52 = 5 ways										
<p>Weight gr. 525 Operating force 35N</p>				<p>Weight gr. 610 Operating force 35N</p>							

Operational characteristic					
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	1360 NI/min	mm 8	G 1/4"

1

Push button - Spring	3/2	Ordering code 224.1.8.1	5/2	Push button - Spring			
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>TYPE</td></tr> <tr><td>32 = 3 ways</td></tr> <tr><td>52 = 5 ways</td></tr> </table>	TYPE	32 = 3 ways	52 = 5 ways		
TYPE							
32 = 3 ways							
52 = 5 ways							
<p>Weight gr. 395 Operating force 71,5N</p>				<p>Weight gr. 480 Operating force 71,5N</p>			


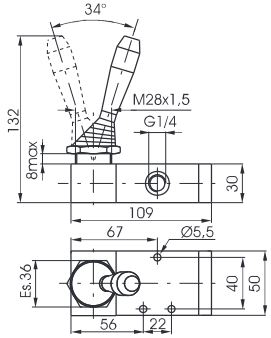

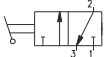
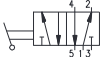
Operational characteristic					
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	1360 NI/min	mm 8	G 1/4"

Push button 2 positions	3/2	Ordering code 224.1.8	5/2	Push button 2 positions			
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>TYPE</td></tr> <tr><td>32 = 3 ways</td></tr> <tr><td>52 = 5 ways</td></tr> </table>	TYPE	32 = 3 ways	52 = 5 ways		
TYPE							
32 = 3 ways							
52 = 5 ways							
<p>Weight gr. 385 Operating force 105N</p>				<p>Weight gr. 470 Operating force 10N</p>			


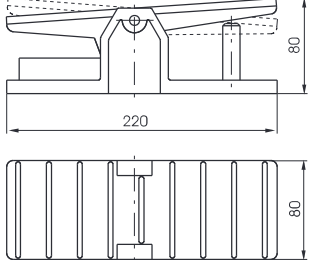
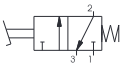
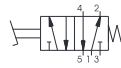
Operational characteristic					
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	1360 NI/min	mm 8	G 1/4"


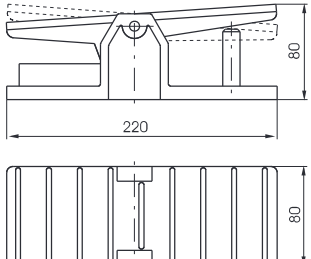
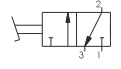
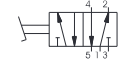
Lever lateral - Spring	3/2	Ordering code 224.1.9.1/C	5/2	Lever lateral - Spring							
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>TYPE</td></tr> <tr><td>32 = 3 ways</td></tr> <tr><td>52 = 5 ways</td></tr> <tr><td>BUTTON COLOR</td></tr> <tr><td>1 = Red</td></tr> <tr><td>2 = Black</td></tr> <tr><td>3 = Green</td></tr> </table>	TYPE	32 = 3 ways	52 = 5 ways	BUTTON COLOR	1 = Red	2 = Black	3 = Green		
TYPE											
32 = 3 ways											
52 = 5 ways											
BUTTON COLOR											
1 = Red											
2 = Black											
3 = Green											
<p>Weight gr. 520</p>				<p>Weight gr. 605</p>							

Operational characteristic					
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	1360 NI/min	mm 8	G 1/4"

Lever lateral 2 positions	3/2	Ordering code 224.1.9/C	5/2	Lever lateral 2 positions
				
		<p>TYPE</p> <p>1 32 = 3 ways 52 = 5 ways</p> <p>BUTTON COLOR</p> <p>C 1 = Red 2 = Black 3 = Green</p>		
Weight gr. 510				Weight gr. 595
				

Operational characteristic					
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	1360 NI/min	mm 8	G 1/4"

Pedal aluminium - Spring					
<p>Ordering code</p> <p>224.1.10.1</p> <p>TYPE</p> <p>1 32 = 3 ways 52 = 5 ways</p>	<div style="display: flex; justify-content: space-around;">   </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;">   </div>				
<p>Weight gr. 1.070 (3/2)</p> <p>Weight gr. 1.155 (3/2)</p>					
Operational characteristic					
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	1360 NI/min	mm 8	G 1/4"

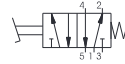
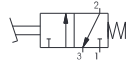
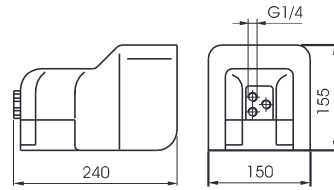
Pedal aluminium 2 positions					
<p>Ordering code</p> <p>224.1.10</p> <p>TYPE</p> <p>1 32 = 3 ways 52 = 5 ways</p>	<div style="display: flex; justify-content: space-around;">   </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;">   </div>				
<p>Weight gr. 1.060 (3/2)</p> <p>Weight gr. 1.145 (3/2)</p>					
Operational characteristic					
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	1360 NI/min	mm 8	G 1/4"

Pedal protected - Spring

Ordering code

214.1.10.V

- T** TYPE
32 = 3 ways
52 = 5 ways
- V** VERSION
1/1 = Standard version
2/1 = without safety device



Weight gr. 1.730

Operational characteristic

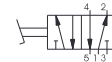
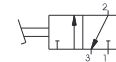
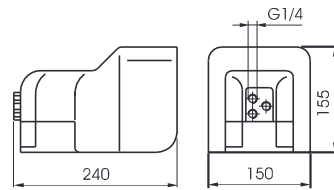
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	1360 NI/min	mm 8	G 1/4"

Pedal protected 2 positions

Ordering code

214.1.10/1

- T** TYPE
32 = 3 ways
52 = 5 ways



Weight gr. 1.730

Operational characteristic

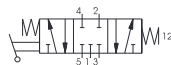
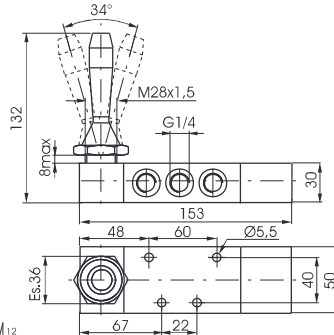
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	1360 NI/min	mm 8	G 1/4"

Lever lateral spring 3 positions

Ordering code

224.53.F.9.1/C

- F** FUNCTION
31 = Closed centres
32 = Open centres
- C** BUTTON COLOR
1 = Red
2 = Black
3 = Green



Weight gr. 745

Operational characteristic

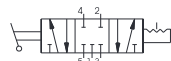
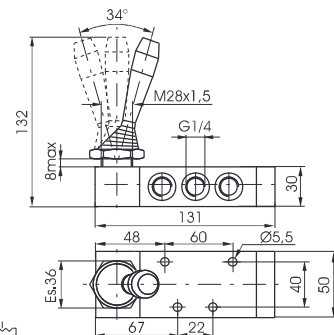
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	1280 NI/min	mm 8	G 1/4"

Lever lateral 3 positions

Ordering code

224.53.F.9/C

- F** FUNCTION
31 = Closed centres
32 = Open centres
- C** BUTTON COLOR
1 = Red
2 = Black
3 = Green



Weight gr. 605

Operational characteristic

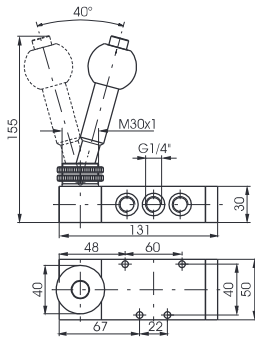
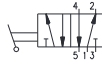
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	1280 NI/min	mm 8	G 1/4"

Lever lateral with locking device - 2 positions

Ordering code
224.52.9.2



Weight gr. 825



Operational characteristic

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	1020 NI/min	mm 8	G 1/4"

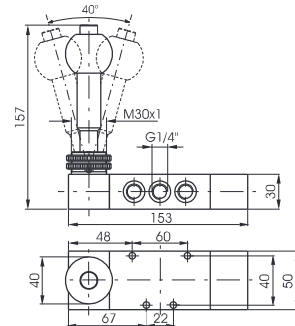
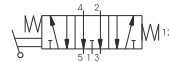
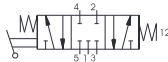
Lever lateral with locking device - Spring 3 positions

Ordering code
224.53.F.9.2

FUNCTION
F 31 = Closed centres
 32 = Open centres



Weight gr. 965



Operational characteristic

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	1020 NI/min	mm 8	G 1/4"

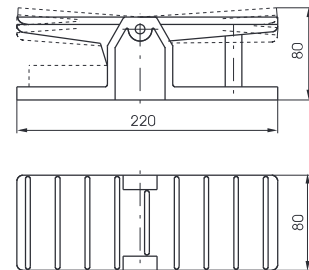
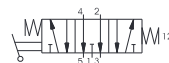
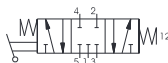
Pedal - Spring 3 positions

Ordering code
224.53.F.10.1

FUNCTION
F 31 = Closed centres
 32 = Open centres



Weight gr. 1.285



Operational characteristic

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	1280 NI/min	mm 8	G 1/4"

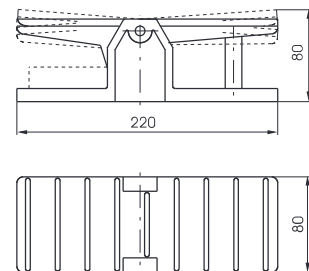
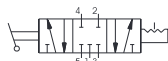
Pedal 3 positions

Ordering code
224.53.F.10

FUNCTION
F 31 = Closed centres
 32 = Open centres



Weight gr. 1.145



Operational characteristic

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	1280 NI/min	mm 8	G 1/4"

1

Push button - Spring	3/2	Ordering code T224.8.1	5/2	Push button - Spring			
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>TYPE</td></tr> <tr><td>32 = 3 ways</td></tr> <tr><td>52 = 5 ways</td></tr> </table>	TYPE	32 = 3 ways	52 = 5 ways		
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 (bar)	Temperature °C		Flow rate at 6 bar with Δp=1 (NI/min)	Ø Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	Min.	Max.	1050 NI/min	mm 8,5	G 1/4"

Push button 2 positions	3/2	Ordering code T224.8	5/2	Push button 2 positions			
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>TYPE</td></tr> <tr><td>32 = 3 ways</td></tr> <tr><td>52 = 5 ways</td></tr> </table>	TYPE	32 = 3 ways	52 = 5 ways		
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 (bar)	Temperature °C		Flow rate at 6 bar with Δp=1 (NI/min)	Ø Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	Min.	Max.	1050 NI/min	mm 8,5	G 1/4"

Lever lateral - Spring	3/2	Ordering code T224.9.1/C	5/2	Lever lateral - Spring							
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>TYPE</td></tr> <tr><td>32 = 3 ways</td></tr> <tr><td>52 = 5 ways</td></tr> <tr><td>LEVER COLOR</td></tr> <tr><td>1 = Red</td></tr> <tr><td>2 = Black</td></tr> <tr><td>3 = Green</td></tr> </table>	TYPE	32 = 3 ways	52 = 5 ways	LEVER COLOR	1 = Red	2 = Black	3 = Green		
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 (bar)	Temperature °C		Flow rate at 6 bar with Δp=1 (NI/min)	Ø Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	Min.	Max.	1050 NI/min	mm 8,5	G 1/4"



1

Lever lateral 2 positions	3/2	Ordering code T224.1.9/C	5/2	Lever lateral 2 positions
		TYPE 1 32 = 3 ways 52 = 5 ways LEVER COLOR C 1 = Red 2 = Black 3 = Green		
Weight gr. 220				Weight gr. 250

Operational characteristic						
Fluid	Max working pressure (bar)	Temperature °C		Flow rate at 6 bar with Δp=1 (NI/min)	Ø Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	Min.	Max.	1050 NI/min	mm 8,5	G 1/4"


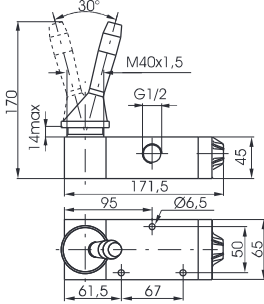

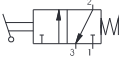
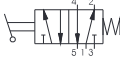
Lever lateral spring centre - 3 positions		5/3
Ordering code T224.53.F.9.1/C		
FUNCTION F 31 = Closed centres 32 = Open centres 33 = Pressured centres LEVER COLOR C 1 = Red 2 = Black 3 = Green		
Weight gr. 270		

Operational characteristic						
Fluid	Max working pressure (bar)	Temperature °C		Flow rate at 6 bar with Δp=1 (NI/min)	Ø Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	Min.	Max.	900 NI/min	mm 8,5	G 1/4"


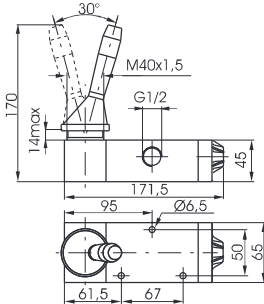

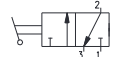
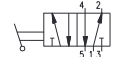
Lever lateral - 3 positions detent		5/3
Ordering code T224.53.F.9/C		
FUNCTION F 31 = Closed centres 32 = Open centres 33 = Pressured centres LEVER COLOR C 1 = Red 2 = Black 3 = Green		
Weight gr. 270		

Operational characteristic						
Fluid	Max working pressure (bar)	Temperature °C		Flow rate at 6 bar with Δp=1 (NI/min)	Ø Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	Min.	Max.	900 NI/min	mm 8,5	G 1/4"


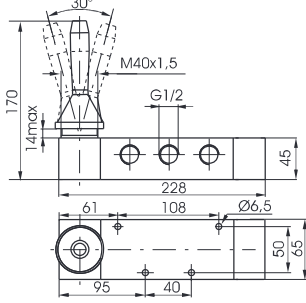
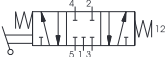
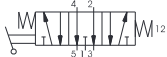
1

Lever lateral - Spring	3/2	Ordering code 212.1.9.1	5/2	Lever lateral - Spring			
							
		<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>TYPE</td></tr> <tr><td>32 = 3 ways</td></tr> <tr><td>52 = 5 ways</td></tr> </table>	TYPE	32 = 3 ways	52 = 5 ways		
TYPE							
32 = 3 ways							
52 = 5 ways							
Weight gr. 1.480							

Operational characteristic					
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	3500 NI/min	mm 15	G 1/2"

Lever lateral - 2 positions	3/2	Ordering code 212.1.9	5/2	Lever lateral - 2 positions			
							
		<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>TYPE</td></tr> <tr><td>32 = 3 ways</td></tr> <tr><td>52 = 5 ways</td></tr> </table>	TYPE	32 = 3 ways	52 = 5 ways		
TYPE							
32 = 3 ways							
52 = 5 ways							
Weight gr. 1.460							

Operational characteristic					
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	3500 NI/min	mm 15	G 1/2"

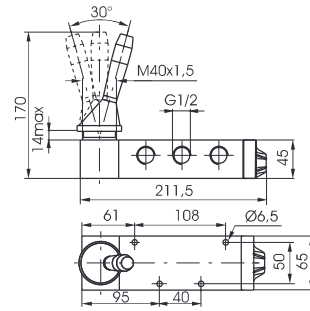
Lever lateral - Spring 3 positions				5/3					
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Ordering code									
212.53.F.9.1									
FUNCTION									
31 = Closed centres									
32 = Open centres									
Weight gr. 2.100									
Operational characteristic									
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size				
Filtered and lubricated air	10 bar	-5 - +70	3000 NI/min	mm 15	G 1/2"				



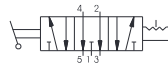
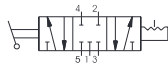
Lever lateral Ø40 - 3 positions

5/3

Ordering code
212.53.F.9
FUNCTION
F 31 = Closed centres
32 = Open centres



Weight gr. 1.765



Operational characteristic

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (l/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	3000 l/min	mm 15	G 1/2"



1

Lever lateral - Spring	3/2	Ordering code 211.1.9.1	5/2	Lever lateral - Spring				
		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">TYPE</td> </tr> <tr> <td>32 = 3 ways</td> </tr> <tr> <td>52 = 5 ways</td> </tr> </table>		TYPE	32 = 3 ways	52 = 5 ways		
				TYPE				
32 = 3 ways								
52 = 5 ways								
Weight gr. 4.300				Weight gr. 4.900				

Operational characteristic					
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	6500 NI/min	mm 20	G 1"

Lever lateral 2 positions	3/2	Ordering code 211.1.9	5/2	Lever lateral 2 positions				
		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">TYPE</td> </tr> <tr> <td>32 = 3 ways</td> </tr> <tr> <td>52 = 5 ways</td> </tr> </table>		TYPE	32 = 3 ways	52 = 5 ways		
				TYPE				
32 = 3 ways								
52 = 5 ways								
Weight gr. 4.300				Weight gr. 4.900				

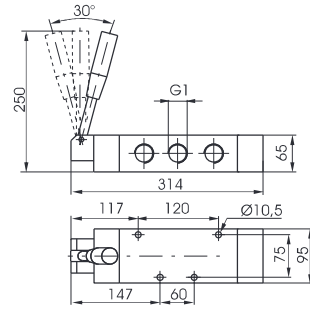
Operational characteristic					
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	6500 NI/min	mm 20	G 1"

Lever lateral - Spring 3 positions				5/3					
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Ordering code</td> </tr> <tr> <td style="text-align: center;">211.53.F.9.1</td> </tr> <tr> <td style="text-align: center;">FUNCTION</td> </tr> <tr> <td>31 = Closed centres</td> </tr> <tr> <td>32 = Open centres</td> </tr> </table>	Ordering code	211.53.F.9.1	FUNCTION	31 = Closed centres	32 = Open centres				
Ordering code									
211.53.F.9.1									
FUNCTION									
31 = Closed centres									
32 = Open centres									
Weight gr. 5.000									
Operational characteristic									
Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size				
Filtered and lubricated air	10 bar	-5 - +70	6500 NI/min	mm 20	G 1"				

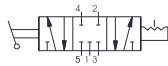
Lever lateral - 3 positions

5/3

Ordering code
211.53.F.9
FUNCTION
F 31 = Closed centres
32 = Open centres



Weight gr. 5.000



Operational characteristic

Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size
Filtered and lubricated air	10 bar	-5 - +70	6500 NI/min	mm 20	G 1"

1