General

The main components constituting the valves of the Tecno228 series are manufactured with high performance technopolymer. The use of tecnopolymer 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 interchangable with the standard 228 series (with alluminium body)

Construction characteristics

Body	Technopolymer
Actuators	Technopolymer
Spool	Nickel plated steel
Piston seals	Nitrile rubber (NBR) oil resistant
Seals	Nitrile rubber (NBR) oil resistant
Spacers	Technopolymer
Springs	Stainless steel AISI 302
Pistons	Technopolymer

"Attention: Dry air must be used for application below 0°C"

Maximum tightening torque for fittings

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

Use and maintenance

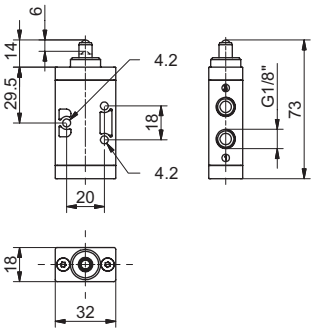
These valves have a mean life of 15 milions of cycles if used in standard conditions.
Proper lubrication reduces dramatically the wear of the seals and a good filtration prevents the build-up of dirt and consequent malfunctioning of the valve. Make sure that the conditions of use comply with the pressure 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).

1

Plunger - Spring

3/2 5/2

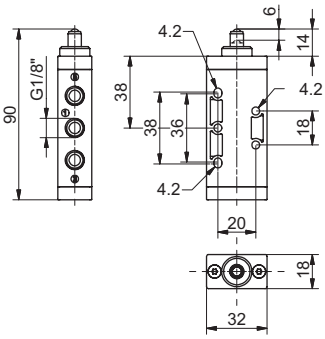
Plunger - Spring



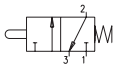
Ordering code

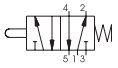
T228.Ⓣ.0.1

Ⓣ TYPE	
32 = 3 ways	
52 = 5 ways	



Weight gr. 60
Operating force 33 N





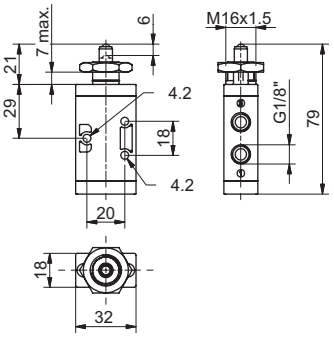
Weight gr. 72
Operating force 33 N

Operational characteristics	Fluid	Max working pressure	Operating Temperature	Flow rate at 6 bar with p=1	Orifice size	Working ports size
	Filterd and lubricated air	10 bar	Min. -5°C Max. +50°C	620 Nl/min	mm 6	G 1/8"

Plunger - Spring (for panel mounting)

3/2 5/2

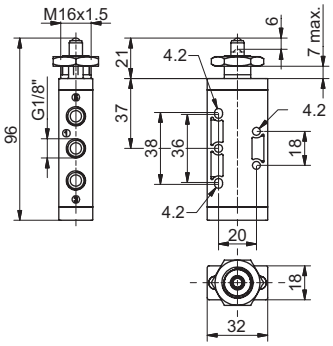
Plunger - Spring (for panel mounting)



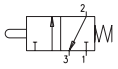
Ordering code

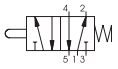
T228.Ⓣ.1.1

Ⓣ TYPE	
32 = 3 ways	
52 = 5 ways	



Weight gr. 77
Operating force 33 N





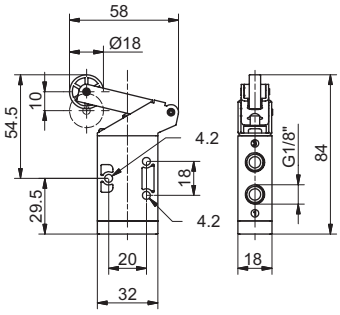
Weight gr. 90
Operating force 33 N

Operational characteristics	Fluid	Max working pressure	Operating Temperature	Flow rate at 6 bar with p=1	Orifice size	Working ports size
	Filterd and lubricated air	10 bar	Min. -5°C Max. +50°C	620 Nl/min	mm 6	G 1/8"

Roller lever - Spring

3/2 5/2

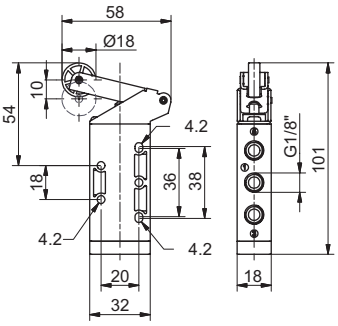
Roller lever - Spring



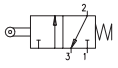
Ordering code

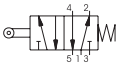
T228.Ⓣ.2.Ⓥ

Ⓣ TYPE	
32 = 3 ways	
52 = 5 ways	
Ⓥ VERSION	
1 = Plastic roller	
1/2 = Ball bearing	



Weight gr. 90
Operating force 15 N





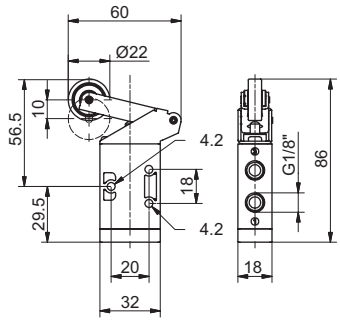
Weight gr. 102
Operating force 15 N

Operational characteristics	Fluid	Max working pressure	Operating Temperature	Flow rate at 6 bar with p=1	Orifice size	Working ports size
	Filterd and lubricated air	10 bar	Min. -5°C Max. +50°C	620 Nl/min	mm 6	G 1/8"

1

Roller lever (ball bearings) - Spring

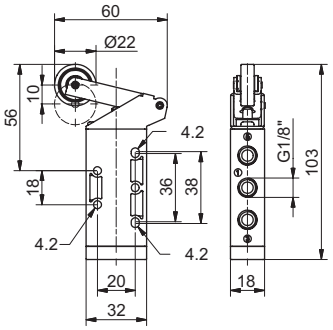
3/2 | 5/2



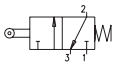
Ordering code

T228.Ⓣ.2.1/1

Ⓣ	TYPE
	32 = 3 ways
	52 = 5 ways



Weight gr. 105
Operating force 15 N

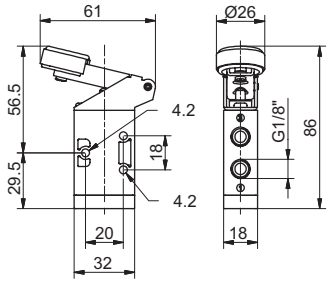


Weight gr. 117
Operating force 15 N

Operational characteristics	Fluid	Max working pressure	Operating Temperature	Flow rate at 6 bar with p=1	Orifice size	Working ports size
	Filterd and lubricated air	10 bar	Min. -5°C Max. +50°C	620 Nl/min	mm 6	G 1/8"

Button lever - Spring

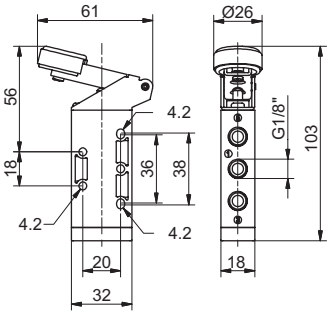
3/2 | 5/2



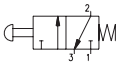
Ordering code

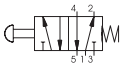
T228.Ⓣ.2.6/Ⓒ

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



Weight gr. 95
Operating force 15 N



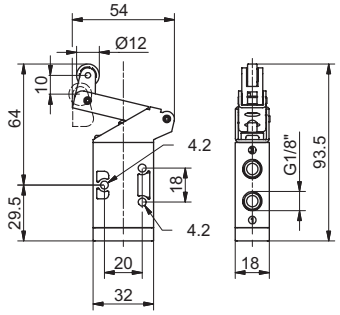


Weight gr. 87
Operating force 15 N

Operational characteristics	Fluid	Max working pressure	Operating Temperature	Flow rate at 6 bar with p=1	Orifice size	Working ports size
	Filterd and lubricated air	10 bar	Min. -5°C Max. +50°C	620 Nl/min	mm 6	G 1/8"

One way Roller lever - Spring

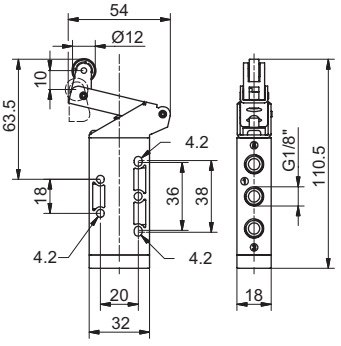
3/2 | 5/2



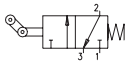
Ordering code

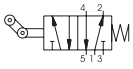
T228.Ⓣ.3.Ⓥ

Ⓣ	TYPE
	32 = 3 ways
	52 = 5 ways
Ⓥ	VERSION
	1 = Plastic roller
	1/2 = Ball bearing



Weight gr. 85





Weight gr. 97

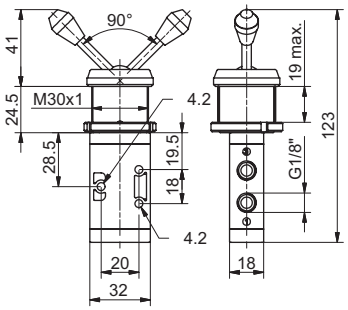
Operational characteristics	Fluid	Max working pressure	Operating Temperature	Flow rate at 6 bar with p=1	Orifice size	Working ports size
	Filterd and lubricated air	10 bar	Min. -5°C Max. +50°C	620 Nl/min	mm 6	G 1/8"

1

Toggle Lever (for panel mounting) Ø 30

3/2 | 5/2

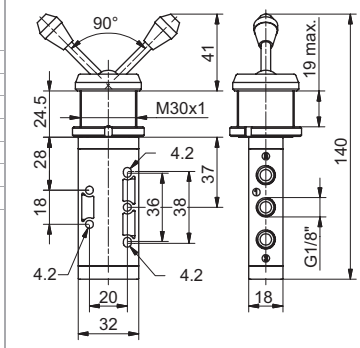
2 positionss



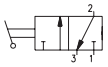
Ordering code

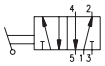
T228.Ⓣ.5/Ⓒ

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



Weight gr. 168



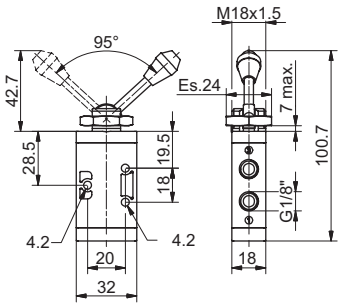


Weight gr. 180

Operational characteristics	Fluid	Max working pressure	Operating Temperature	Flow rate at 6 bar with p=1	Orifice size	Working ports size
	Filterd and lubricated air	10 bar	Min. -5°C Max. +50°C	620 Nl/min	mm 6	G 1/8"

Toggle Lever - 2 positionss

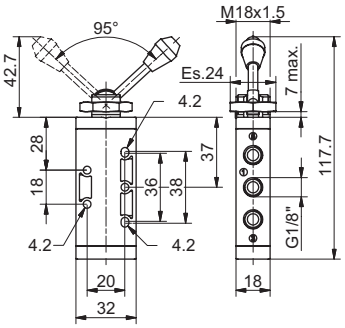
3/2 | 5/2



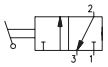
Ordering code

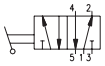
T228.Ⓣ.55/Ⓒ

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



Weight gr. 84



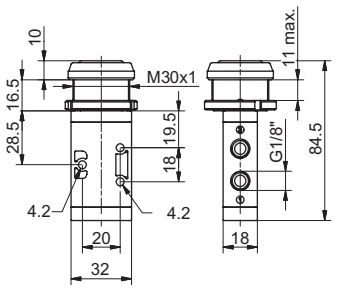


Weight gr. 96

Operational characteristics	Fluid	Max working pressure	Operating Temperature	Flow rate at 6 bar with p=1	Orifice size	Working ports size
	Filterd and lubricated air	10 bar	Min. -5°C Max. +50°C	620 Nl/min	mm 6	G 1/8"

Push button Ø 30 - spring

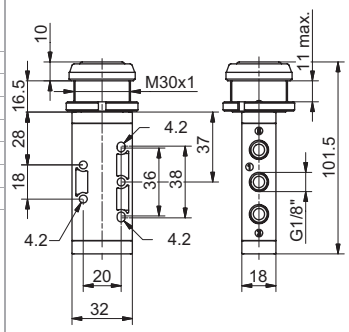
3/2 | 5/2



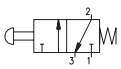
Ordering code

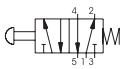
T228.Ⓣ.6.1/Ⓒ

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



Weight gr. 125
Operating force 33 N





Weight gr. 137
Operating force 33 N

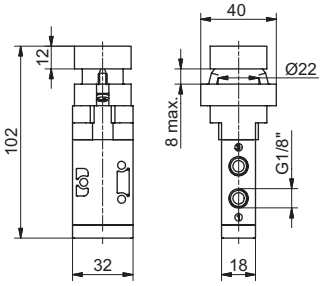
Operational characteristics	Fluid	Max working pressure	Operating Temperature	Flow rate at 6 bar with p=1	Orifice size	Working ports size
	Filterd and lubricated air	10 bar	Min. -5°C Max. +50°C	620 Nl/min	mm 6	G 1/8"

1

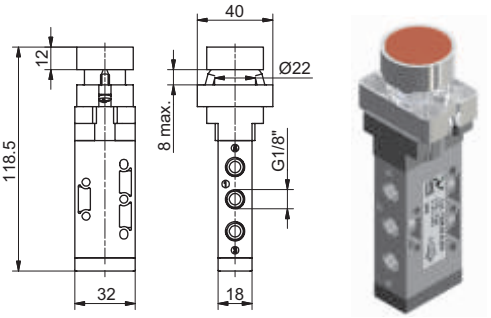
Push button - spring

3/2 5/2

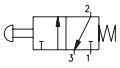
Push button - spring

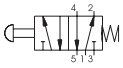


Ordering code	
T228.Ⓣ.6.22/Ⓒ	
Ⓣ TYPE	
	32 = 3 ways
	52 = 5 ways
Ⓒ BUTTON COLOR	
	1 = Red
	2 = Black
	3 = Green
	4 = Yellow



Weight gr. 200
Operating force 33N





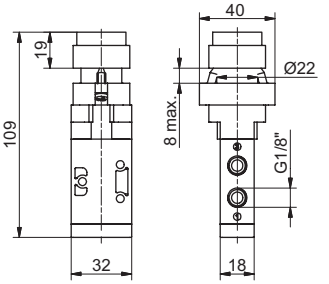
Weight gr. 212
Operating force 33N

Operational characteristics	Fluid	Max working pressure	Operating Temperature	Flow rate at 6 bar with p=1	Orifice size	Working ports size
	Filterd and lubricated air	10 bar	Min. -5°C Max. +50°C	620 Nl/min	mm 6	G 1/8"

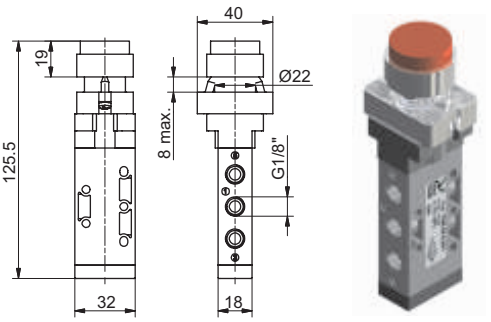
Raised Push button - spring

3/2 5/2

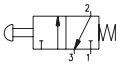
Raised Push button - spring

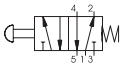


Ordering code	
T228.Ⓣ.6.23/Ⓒ	
Ⓣ TYPE	
	32 = 3 ways
	52 = 5 ways
Ⓒ BUTTON COLOR	
	1 = Red
	2 = Black
	3 = Green
	4 = Yellow



Weight gr. 205
Operating force 33N





Weight gr. 217
Operating force 33N

Operational characteristics	Fluid	Max working pressure	Operating Temperature	Flow rate at 6 bar with p=1	Orifice size	Working ports size
	Filterd and lubricated air	10 bar	Min. -5°C Max. +50°C	620 Nl/min	mm 6	G 1/8"

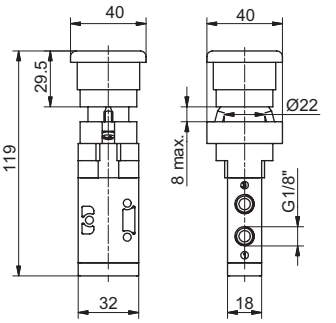
Palm button - 2 positionss

3/2 5/2

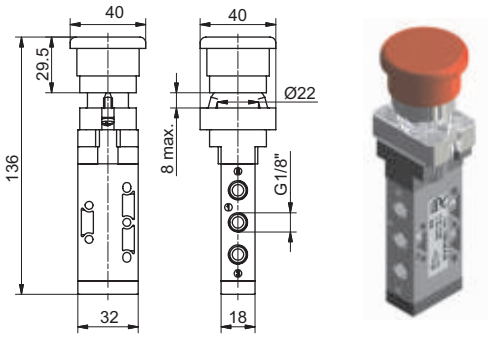
Palm button - 2 positionss

emergency - Rotate to unlock

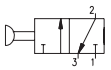
emergency - Rotate to unlock

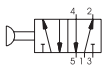


Ordering code	
T228.Ⓣ.6.25	
Ⓣ TYPE	
	32 = 3 ways
	52 = 5 ways



Weight gr. 210
Operating force 33N





Weight gr. 202
Operating force 33N

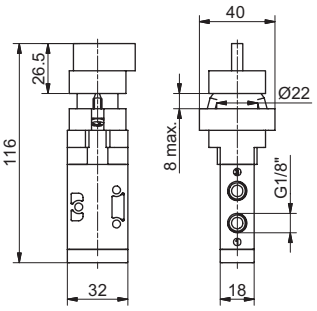
Operational characteristics	Fluid	Max working pressure	Operating Temperature	Flow rate at 6 bar with p=1	Orifice size	Working ports size
	Filterd and lubricated air	10 bar	Min. -5°C Max. +50°C	620 Nl/min	mm 6	G 1/8"

1

Switch - 2 positionss

3/2 5/2

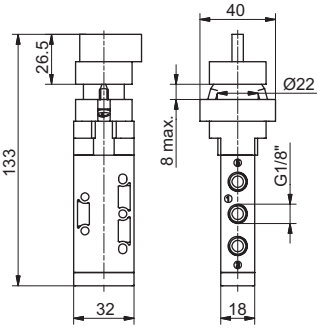
Switch - 2 positionss



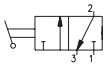
Ordering code

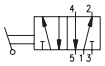
T228.Ⓣ.6.27

Ⓣ	TYPE
	32 = 3 ways
	52 = 5 ways



Weight gr. 205





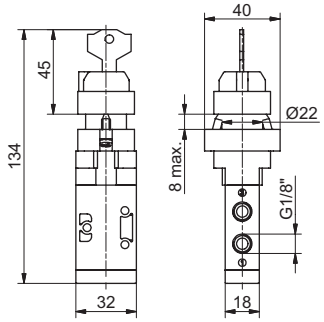
Weight gr. 217

Operational characteristics	Fluid	Max working pressure	Operating Temperature	Flow rate at 6 bar with p=1	Orifice size	Working ports size
	Filterd and lubricated air	10 bar	Min. -5°C Max. +50°C	620 Nl/min	mm 6	G 1/8"

Key switch - 2 positionss

3/2 5/2

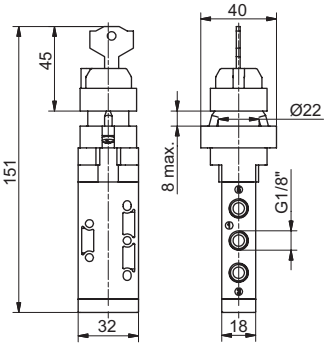
Key switch - 2 positionss



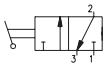
Ordering code

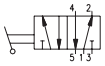
T228.Ⓣ.6.28

Ⓣ	TYPE
	32 = 3 ways
	52 = 5 ways



Weight gr. 205





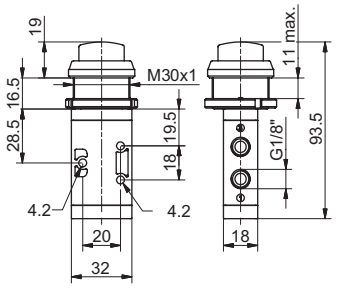
Weight gr. 217

Operational characteristics	Fluid	Max working pressure	Operating Temperature	Flow rate at 6 bar with p=1	Orifice size	Working ports size
	Filterd and lubricated air	10 bar	Min. -5°C Max. +50°C	620 Nl/min	mm 6	G 1/8"

Palm Push button Ø 30

3/2 5/2

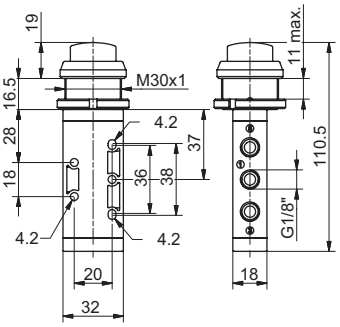
Palm Push button Ø 30



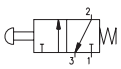
Ordering code

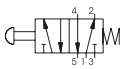
T228.Ⓣ.7.1/Ⓒ

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



Weight gr. 118
Operating force 33N





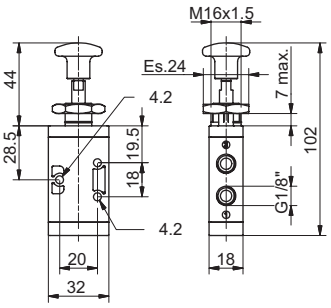
Weight gr. 130
Operating force 33N

Operational characteristics	Fluid	Max working pressure	Operating Temperature	Flow rate at 6 bar with p=1	Orifice size	Working ports size
	Filterd and lubricated air	10 bar	Min. -5°C Max. +50°C	620 Nl/min	mm 6	G 1/8"

1

Push button - Spring

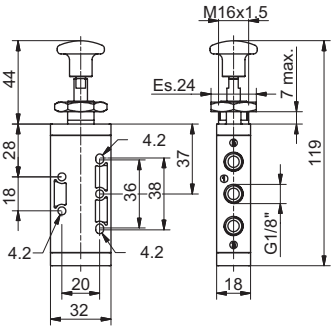
3/2 | 5/2



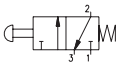
Ordering code

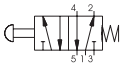
T228.Ⓣ.8.1/Ⓒ

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



Weight gr. 95
Operating force 33N



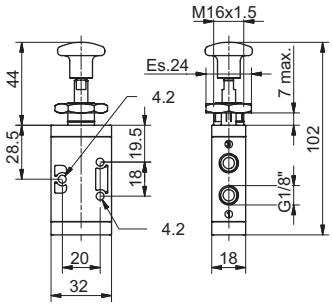


Weight gr. 107
Operating force 33N

Operational characteristics	Fluid	Max working pressure	Operating Temperature	Flow rate at 6 bar with p=1	Orifice size	Working ports size
	Filterd and lubricated air	10 bar	Min. -5°C Max. +50°C	620 Nl/min	mm 6	G 1/8"

Push button - 2 positionss

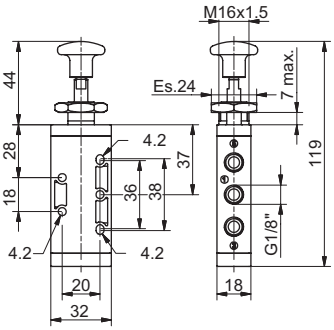
3/2 | 5/2



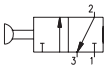
Ordering code

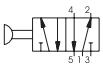
T228.Ⓣ.8/Ⓒ

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



Weight gr. 95
Operating force 10N



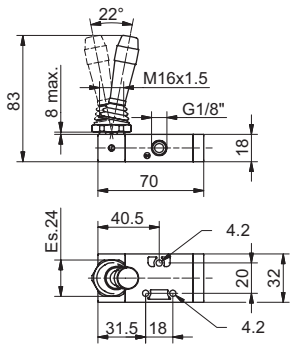


Weight gr. 107
Operating force 10N

Operational characteristics	Fluid	Max working pressure	Operating Temperature	Flow rate at 6 bar with p=1	Orifice size	Working ports size
	Filterd and lubricated air	10 bar	Min. -5°C Max. +50°C	620 Nl/min	mm 6	G 1/8"

Lever lateral - Spring

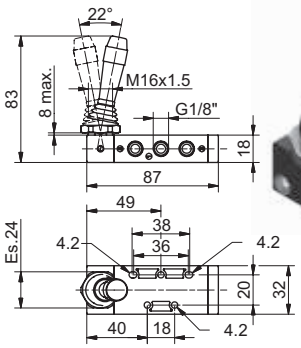
3/2 | 5/2



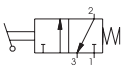
Ordering code

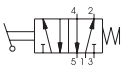
T228.Ⓣ.9.1/Ⓒ

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



Weight gr. 100





Weight gr. 110

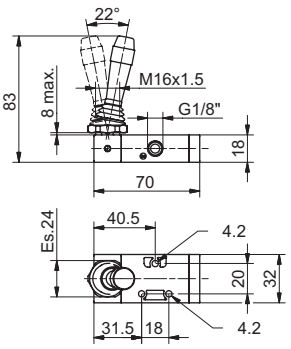
Operational characteristics	Fluid	Max working pressure	Operating Temperature	Flow rate at 6 bar with p=1	Orifice size	Working ports size
	Filterd and lubricated air	10 bar	Min. -5°C Max. +50°C	620 Nl/min	mm 6	G 1/8"

1

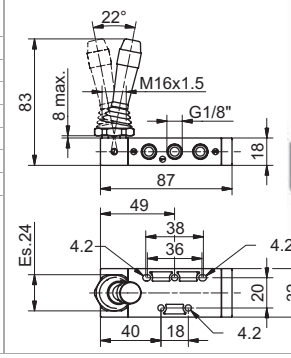
Lateral lever - 2 positionss

3/2 | 5/2

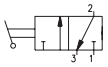
Lateral lever - 2 positionss

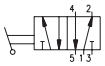


Ordering code	
T228.Ⓣ.9/Ⓒ	
Ⓣ	TYPE
	32 = 3 ways
	52 = 5 ways
Ⓒ	BUTTON COLOR
	1 = Red
	2 = Black
	3 = Green



Weight gr. 100





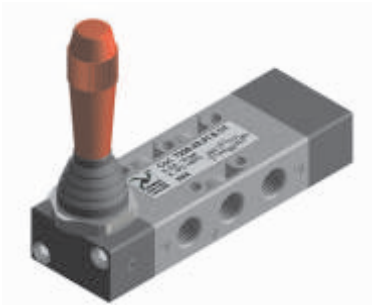
Weight gr. 110

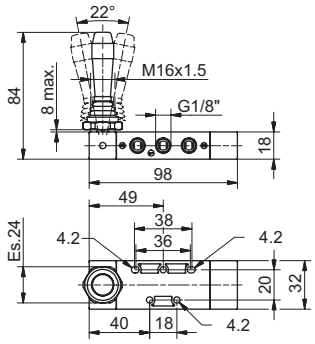
Operational characteristics	Fluid	Max working pressure	Operating Temperature	Flow rate at 6 bar with p=1	Orifice size	Working ports size
	Filterd and lubricated air	10 bar	Min. -5°C Max. +50°C	620 Nl/min	mm 6	G 1/8"

Lateral Lever spring - 3 positionss

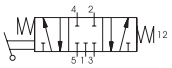
5/3

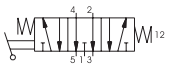
Ordering code	
T228.53.Ⓕ.9.1/Ⓒ	
Ⓕ	FUNCTION
	31 = Closed Centres
	32 = Open Centres
Ⓒ	BUTTON COLOR
	1 = Red
	2 = Black
	3 = Green





Weight gr. 140



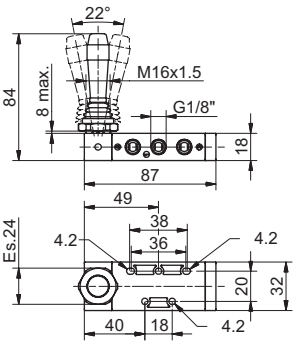


Operational characteristics	Fluid	Max working pressure	Operating Temperature	Flow rate at 6 bar with p=1	Orifice size	Working ports size
	Filterd and lubricated air	10 bar	Min. -5°C Max. +50°C	410 Nl/min	mm 6	G 1/8"

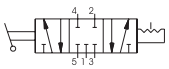
Lateral lever - 3 positionss detent

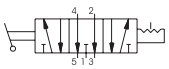
5/3

Ordering code	
T228.53.Ⓕ.9/Ⓒ	
Ⓕ	FUNCTION
	31 = Closed Centres
	32 = Open Centres
Ⓒ	BUTTON COLOR
	1 = Red
	2 = Black
	3 = Green



Weight gr. 110



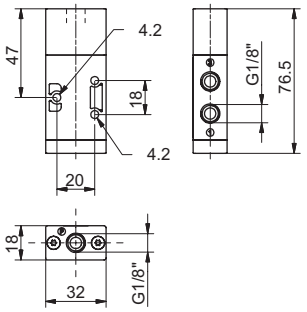


Operational characteristics	Fluid	Max working pressure	Operating Temperature	Flow rate at 6 bar with p=1	Orifice size	Working ports size
	Filterd and lubricated air	10 bar	Min. -5°C Max. +50°C	410 Nl/min	mm 6	G 1/8"

1

Pneumatic - Spring

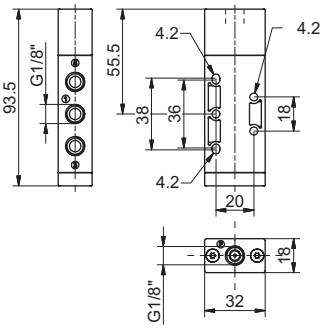
3/2 | 5/2



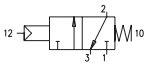
Ordering code

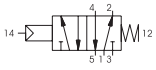
T228.Ⓣ.11.1

Ⓣ	TYPE
	32 = 3 ways
	52 = 5 ways



Weight gr. 65
Minimum operating pressure 2,5 bar



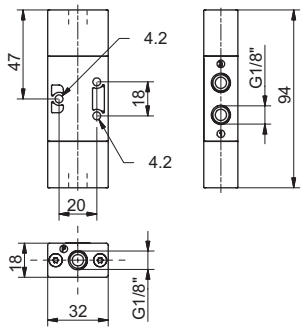


Weight gr. 78
Minimum operating pressure 2,5 bar

Operational characteristics	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with p=1	Orifice size	Working ports size	Pilot ports size
	Filterd and lubricated air	10 bar	Min. -5°C	Max. +50°C	620 Nl/min	mm 6	G 1/8"	G 1/8"

Pneumatic - Differential (external)

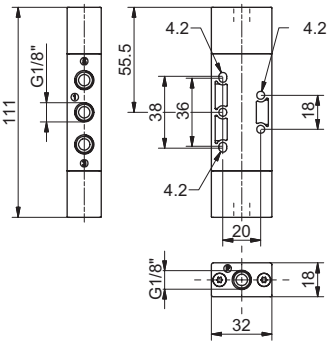
3/2 | 5/2



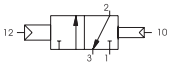
Ordering code

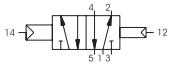
T228.Ⓣ.11.12

Ⓣ	TYPE
	32 = 3 ways
	52 = 5 ways



Weight gr. 74
Minimum operating pressure 2,5 bar



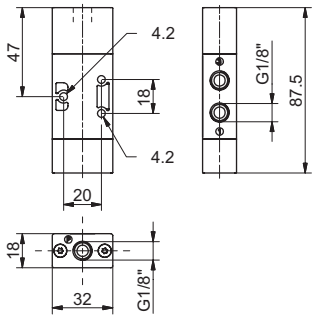


Weight gr. 86
Minimum operating pressure 2,5 bar

Operational characteristics	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with p=1	Orifice size	Working ports size	Pilot ports size
	Filterd and lubricated air	10 bar	Min. -5°C	Max. +50°C	620 Nl/min	mm 6	G 1/8"	G 1/8"

Pneumatic - Differential self-feeding

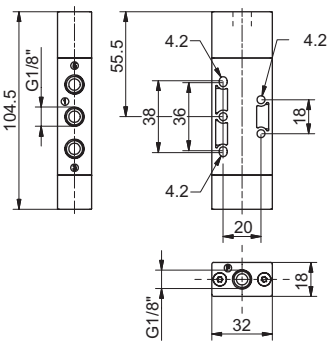
3/2 | 5/2



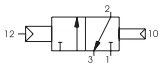
Ordering code

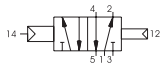
T228.Ⓣ.11.12/1

Ⓣ	TYPE
	32 = 3 ways
	52 = 5 ways



Weight gr. 70
Minimum operating pressure 2,5 bar

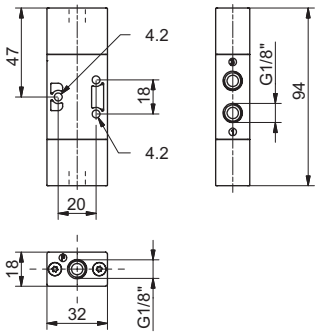




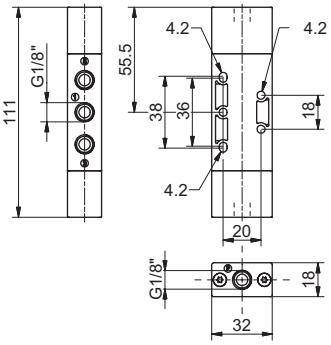
Weight gr. 82
Minimum operating pressure 2,5 bar

Operational characteristics	Fluid	Max working pressure	Operating Temperature		Flow rate at 6 bar with p=1	Orifice size	Working ports size	Pilot ports size
	Filterd and lubricated air	10 bar	Min. -5°C	Max. +50°C	620 Nl/min	mm 6	G 1/8"	G 1/8"

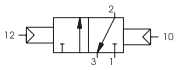
Pneumatic - Pneumatic 3/2 5/2 Pneumatic - Pneumatic



Ordering code
T228.Ⓣ.11.11
Ⓣ TYPE
32 = 3 ways
52 = 5 ways



Weight gr. 77
Minimum operating pressure 2 bar

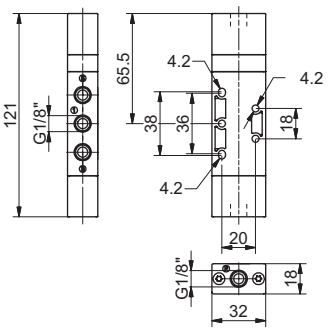


Weight gr. 90
Minimum operating pressure 2 bar

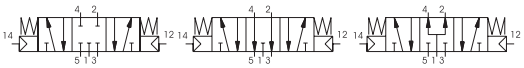
Operational characteristics	Fluid	Max working pressure	Operating Temperature	Flow rate at 6 bar with p=1	Orifice size	Working ports size	Pilot ports size
	Filterd and lubricated air	10 bar	Min. -5°C Max. +50°C	620 Nl/min	mm 6	G 1/8"	G 1/8"

Pneumatic - Pneumatic 3 positionss 5/3

Ordering code
T228.53.Ⓕ.11.11
Ⓕ FUNCTION
31 = Closed Centres
32 = Open Centres
33 = Pressured Centres



Weight gr. 110
Minimum operating pressure 3 bar



Operational characteristics	Fluid	Max working pressure	Operating Temperature	Flow rate at 6 bar with p=1	Orifice size	Working ports size	Pilot ports size
	Filterd and lubricated air	10 bar	Min. -5°C Max. +50°C	410 Nl/min	mm 6	G 1/8"	G 1/8"