## General

The main characteristic of these valves is their poppet type construction. This offers superior resistance to adverse operating conditions such as dust particles in the compressed air, insufficient lubrication and so on.
On the other hand the valves operate as 3-ways or 2-ways only, normally closed, and the required operating force increases with increases in line pressure.
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

| | 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 (5/2 version) |
| | Technopolymer | 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).

## Lever roller unidirectional - Spring

3/2

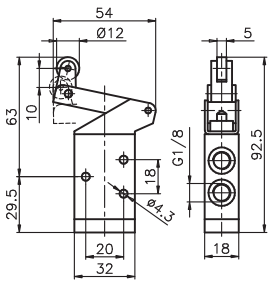
Ordering code

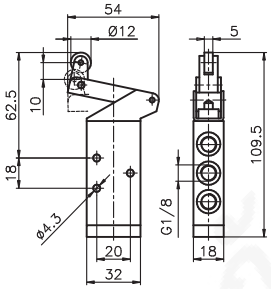
**228.Ⓣ.3.Ⓥ**

| | |
|---|---|
| Ⓣ | TYPE |
| | 32 = 3 ways |
| | 52 = 5 ways |
| Ⓥ | VERSION |
| | 1 = Plastic roller |
| | 1/2 = Metal roller |

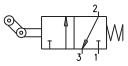
5/2

## Lever roller unidirectional - Spring




Weight gr. 110



Weight gr. 130

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

## Lever roller lateral bidirectional - Spring

3/2

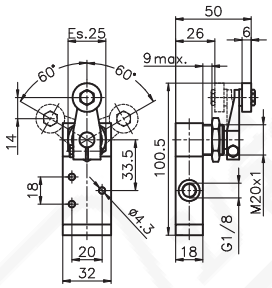
Ordering code

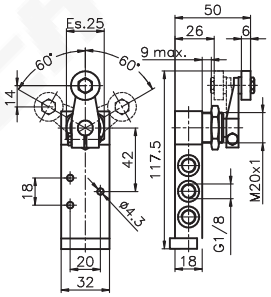
**228.Ⓣ.4.1**

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

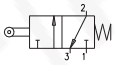
5/2

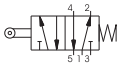
## Lever roller lateral bidirectional - Spring




Weight gr. 180





Weight gr. 200

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

## Lever sensitive - differential

3/2

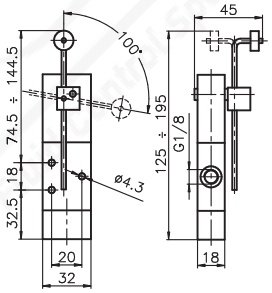
Ordering code

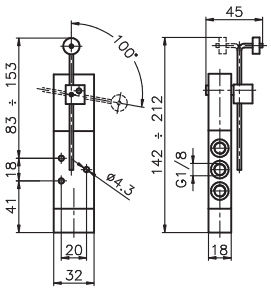
**228.Ⓣ.4.13**

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

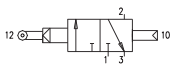
5/2

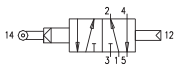
## Lever sensitive - differential




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