General

New 104 micro valves series have been realized as an economic version to complete the range of 105 valves version. With their small overall dimensions it makes easy installation and operation.

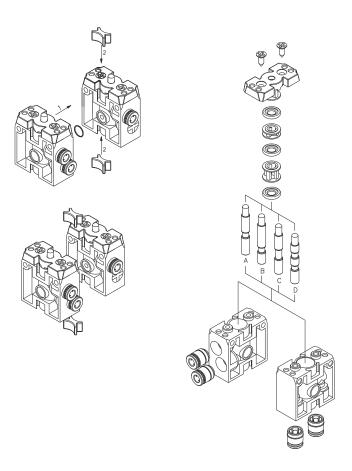
Their main characteristic is the possibility to choose between the version with lateral or rear pneumatic connections realized with quick fitting for $\emptyset 4$ mm. tube included.

The valves are available with 2 or 3 ways versions, normally closed or open, 5 ways and 5 ways 3 positions open centres and pressured centres.

The 5 ways version is made with two 3 ways valves placed side by side with common inlet.

The operators available for this valve are push button (different versions), selector (key, short and long lever), lever (lever roller or lever unidirectional) and pneumatic.

It is also possible to combine the 2 and 3 ways valves with electrical switches, normally closed or open.



A: 2/2 N.C. B: 2/2 N.O. C: 3/2 N.C. D: 3/2 N.O.

Construction characteristics

Body and cover	Technopolymer			
Actuators	Plastic material for buttons and switches			
Seals	NBR			
Spacer	Acetal resin			
Spool	Steel			
Spring	Spring steel			

Use and maintenance

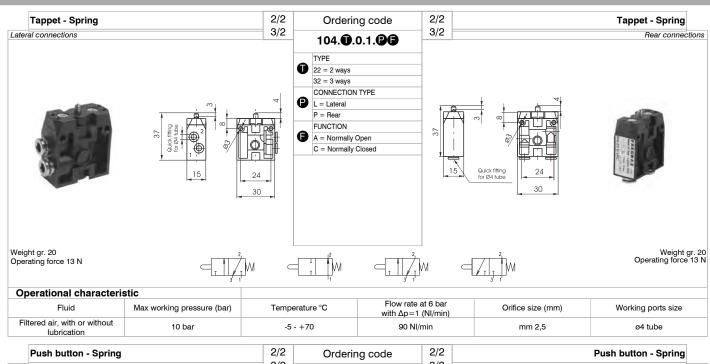
These valves have an average life of 15 million cycles depending on the application and air quality, filtered and lubricated air using specified lubricants will dramatically reduce the wear of the seals and ensures long and trouble free operation.

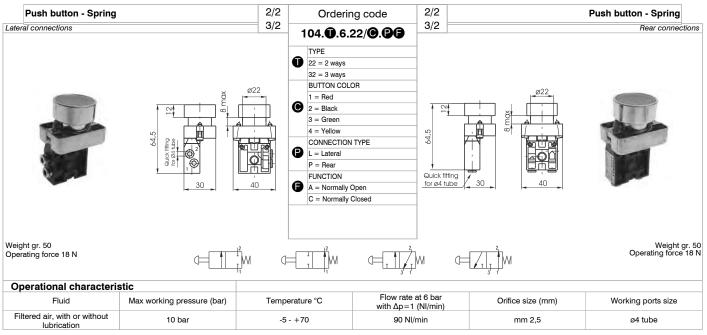
Please ensure that the valve is being used according with the manufacturers specification, such as air pressure and temperature and that exhaust ports 3 & 5 are protected against the possible ingress of dirt or debris.

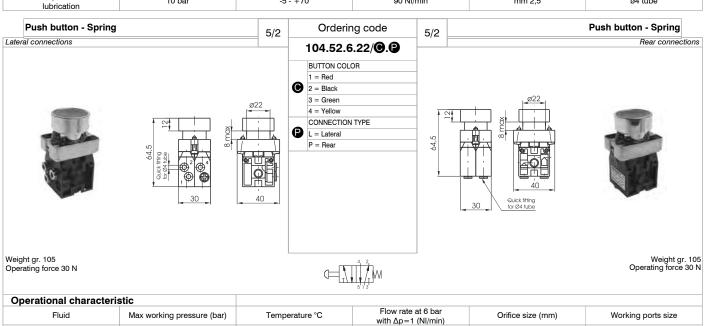
Repair kits including the spool complete with seals are available for overhauling the valves; however, although this is a simple operation it should be carried out by a competent person.

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









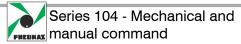
Filtered air, with or without

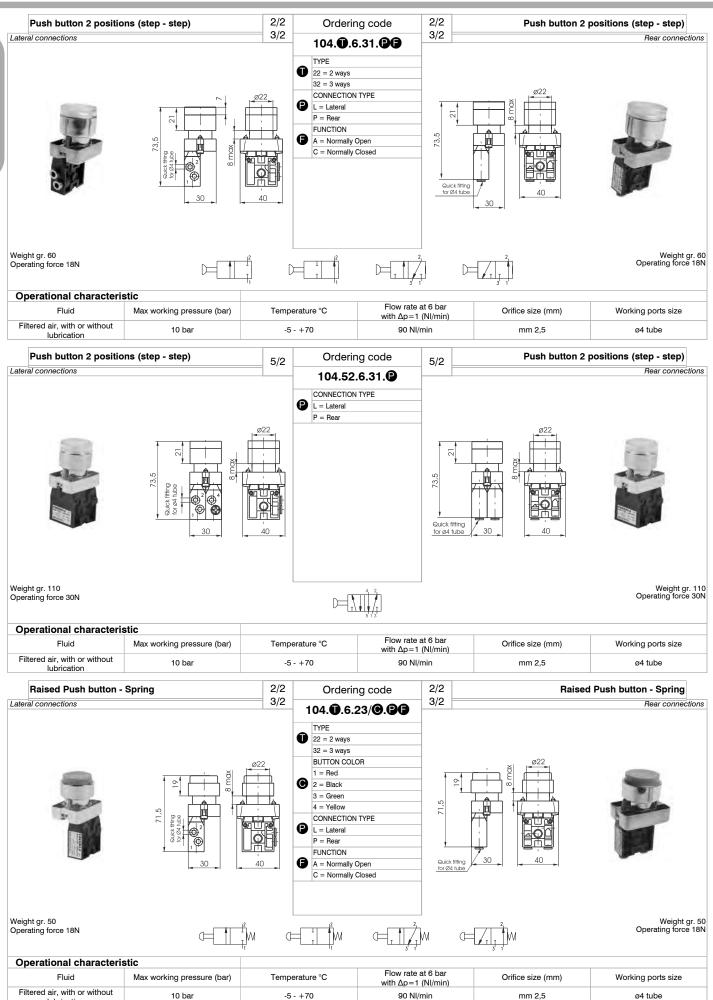
lubrication

90 NI/min

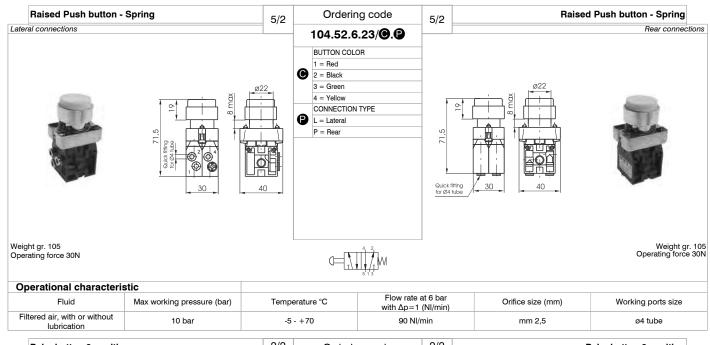
ø4 tube

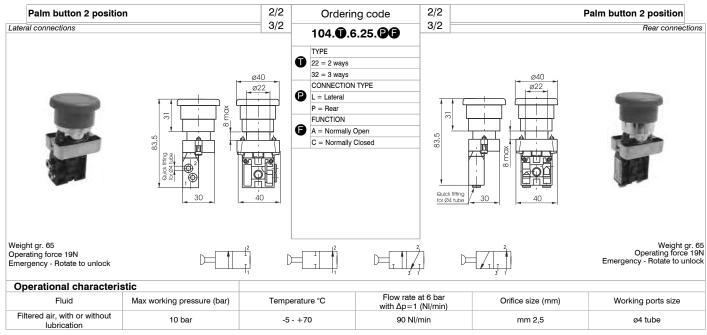
mm 2,5

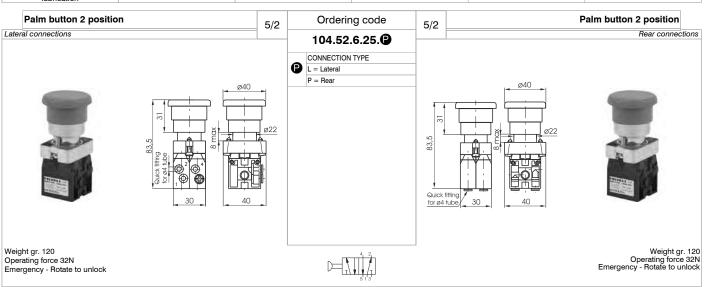


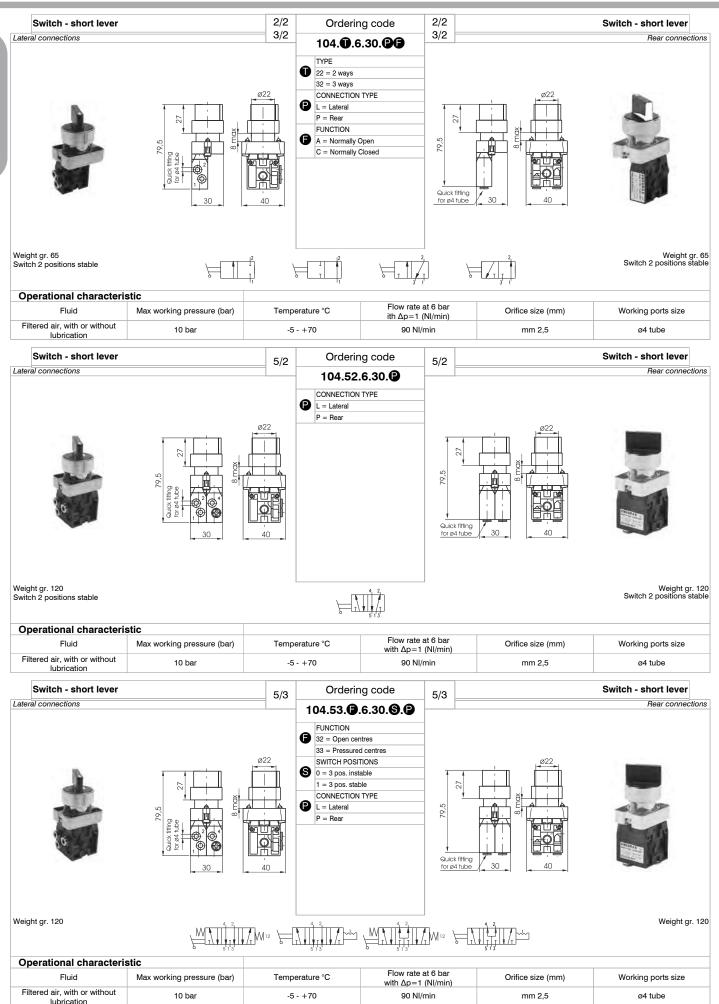


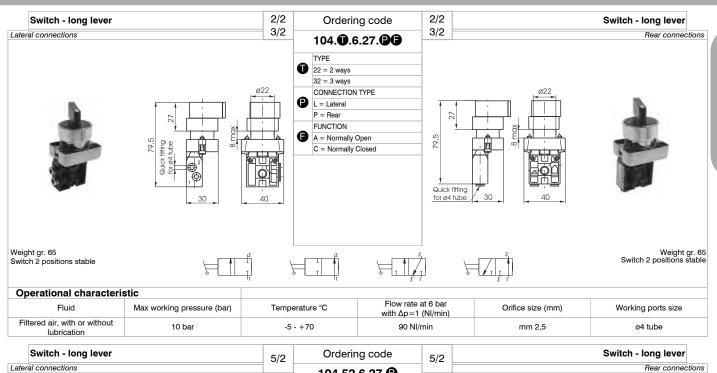


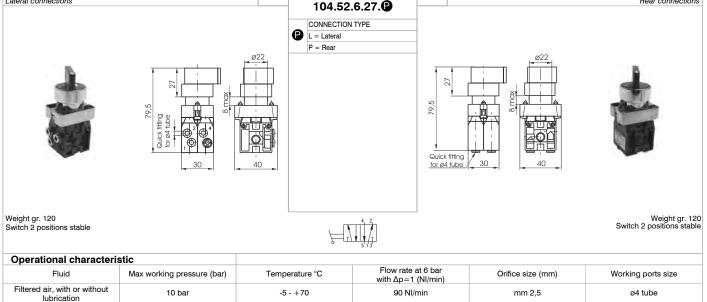


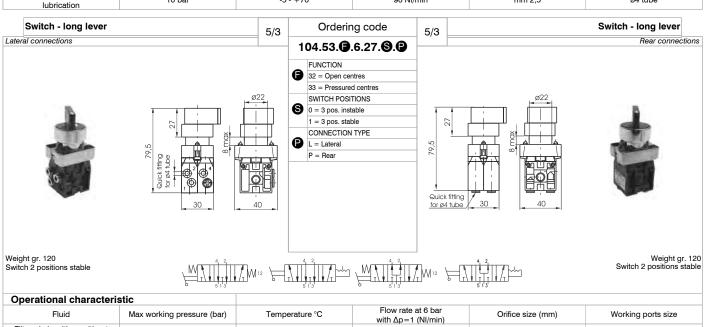






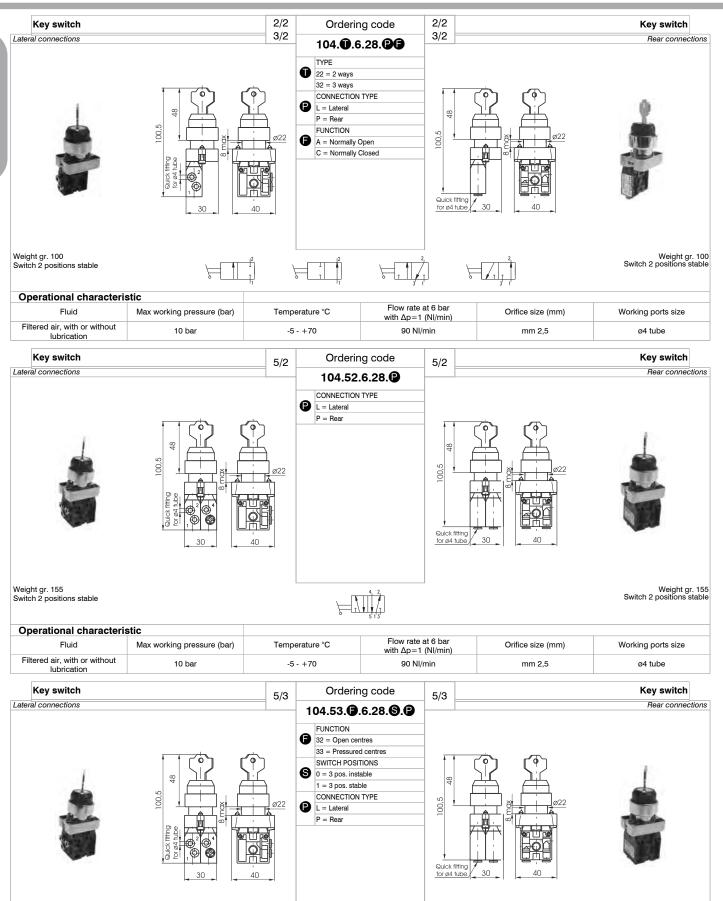


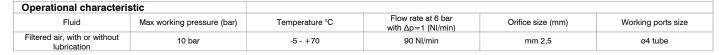




Filtered air, with or without 90 NI/min mm 2,5 ø4 tube lubrication

Weight gr. 155 Switch 2 positions stable



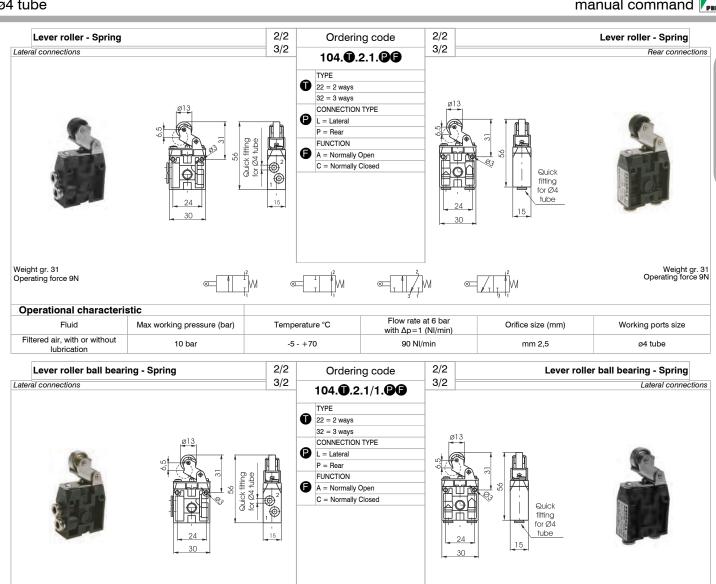


Weight gr. 155 Switch 2 positions stable

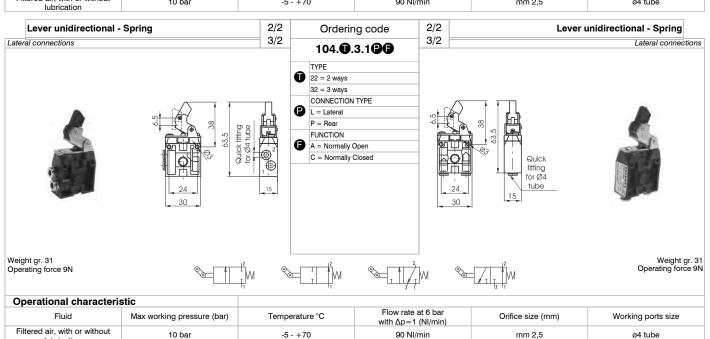
Weight gr. 46

Operating force 9N

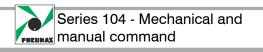
lubrication



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 air, with or without lubrication	10 bar	-5 - +70	90 NI/min	mm 2,5	ø4 tube



Weight gr. 46 Operating force 9N



Complete lever roller ball bearing operator Complete lever roller operator Ordering code Ordering code 104.2.1 104.2.1/1 Complete lever unidirectional Fixing plate Ordering code Ordering code 104.3.1 104.00 Completewith fixing screws Push button Ordering code 104.6.22/ BUTTON COLOR 1 = Red 2 = Black 3 = Green 4 = Yellow Raised Push button Ordering code 104.6.23/ BUTTON COLOR 1 = Red 2 = Black 3 = Green 4 = Yellow Palm button 2 position Push button 2 positions Ordering code Ordering code 104.6.31 104.6.25 (step - step) Emergency - Rotate to unlock Switch - short lever Switch - short lever Ordering code Ordering code 104.6.30. 104.6.30 SWITCH POSITIONS 0 = 3 pos. instable 1 = 3 pos. stable Switch 3 positions Switch 2 positions stable

