

Series 104

General

The micro valves 104 series are a cost effective solution with reduced overall dimensions, easy to install and manage.

Their main characteristic is the possibility to choose between the version with lateral or rear pneumatic connections realized with quick fitting for Ø4mm 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 level undirectional) and pneumatic.

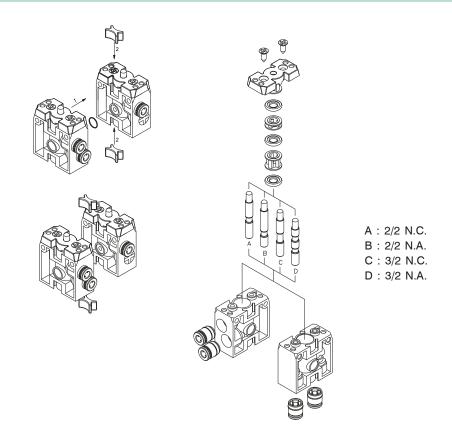
It is also possible to combine the 2 and 3 ways valves with electrical switches, normally closed or open.

Construction characteristics

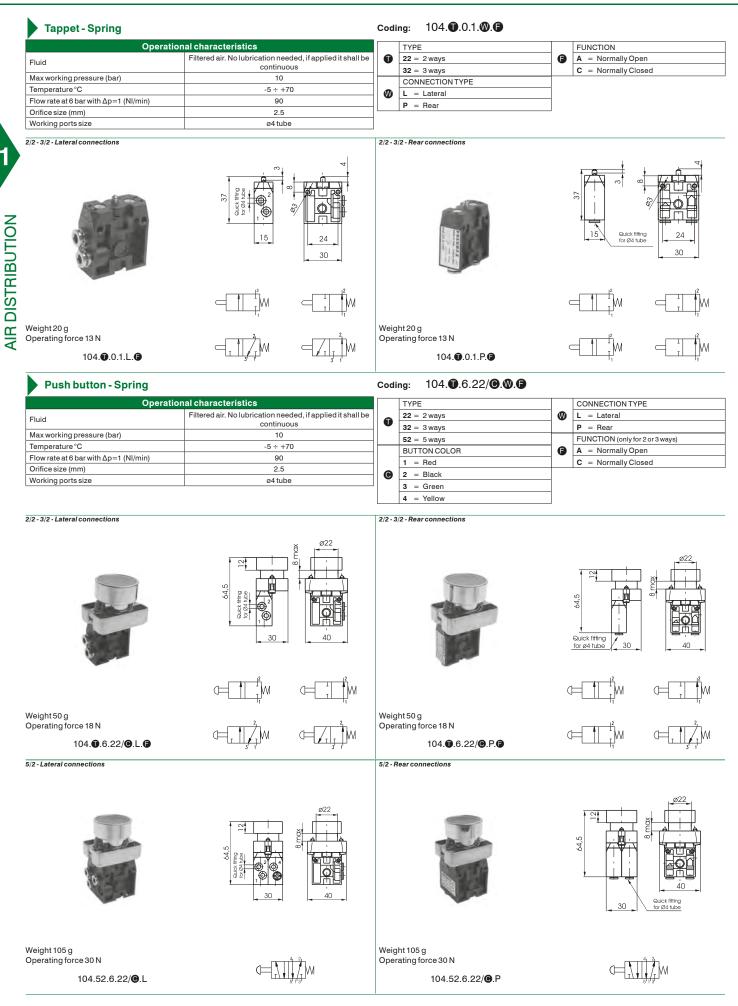
Body and cover	Technopolymer
Operators	Plastic material for buttons and switches
Seals	NBR
Spacer	Technopolymer
Spools	Steel
Springs	Spring steel
Pistons	Aluminium (for pneumatic command version)

Use and maintenance

This valves have an average life of 15 million cycles depending on the application and air quality. Filtered and lubricated air using specified lubricants will 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. **ATTENTION:** use hydraulic oil class H for lubrication such as MAGNA GC 32 (Castrol).

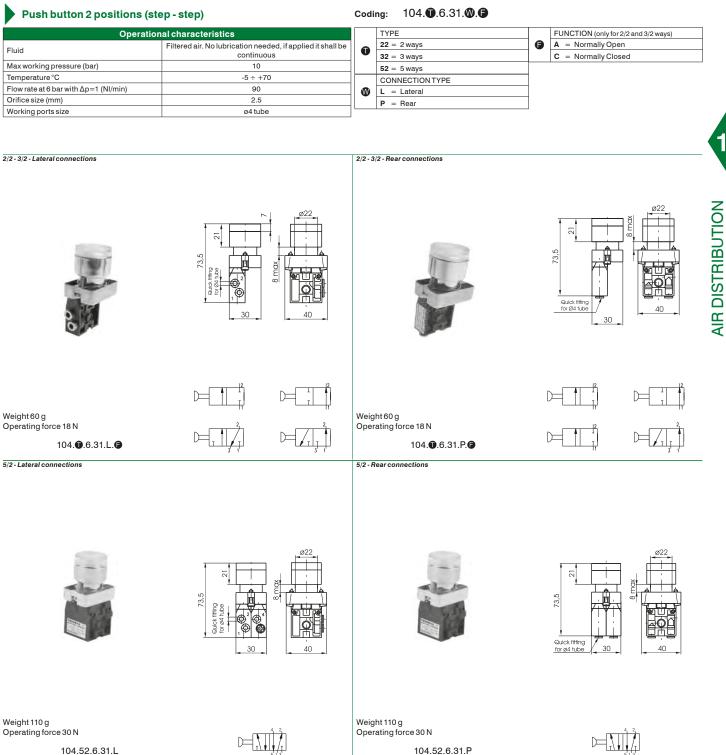








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Coding: 104.0.6.23/0.0.6 **Raised Push button - Spring Operational characteristics** TYPE CONNECTION TYPE W Filtered air. No lubrication needed, if applied it shall be 22 = 2 ways L = Lateral Fluid Û continuous 32 = 3 ways P = Rear Max working pressure (bar) 10 52 = 5 ways FUNCTION (only for 2 or 3 ways) Temperature °C -5 ÷ +70 BUTTON COLOR 6 A = Normally Open Flow rate at 6 bar with $\Delta p{=}1$ (NI/min) 90 1 = Red C = Normally Closed Orifice size (mm) 2.5 O 2 = Black ø4 tube Working ports size 3 = Green 4 = Yellow 2/2 - 3/2 - Lateral connections 2/2 - 3/2 - Rear connections 0 0 2'12 71,5 Quick for *QV* 30 ٨r Quick fitting for Ø4 tube 30 40 Œ ŢM, 1W Æ Weight 50 g Weight 50 g Operating force 18 N Operating force 18 N Œ Œ 104.**0**.6.23/**O**.L.**D** 104.**0**.6.23/**O**.P.**6** 5/2 - Lateral connections 5/2 - Rear connections Ø22 0 0 71,5 71,5 Britti 30 <u>4</u>0 Quick fitting for Ø4 tube 40 Weight 105 g Weight 105 g Operating force 30 N Operating force 30 N 104.52.6.23/**G**.L 104.52.6.23/**G**.P

Overall dimensions and technical information are provided solely for informative purposes and may be modified without notice

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AIR DISTRIBUTION

Palm button 2 position

Filtered air. No lubrication needed, if applied it shall be

continuous

10

-5 ÷ +70

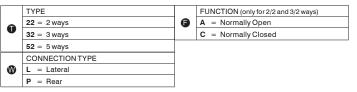
90

2.5

ø4 tube

Operational characteristics

Coding: 104.0.6.25.0.6



2/2 - 3/2 - Lateral connections

Max working pressure (bar)

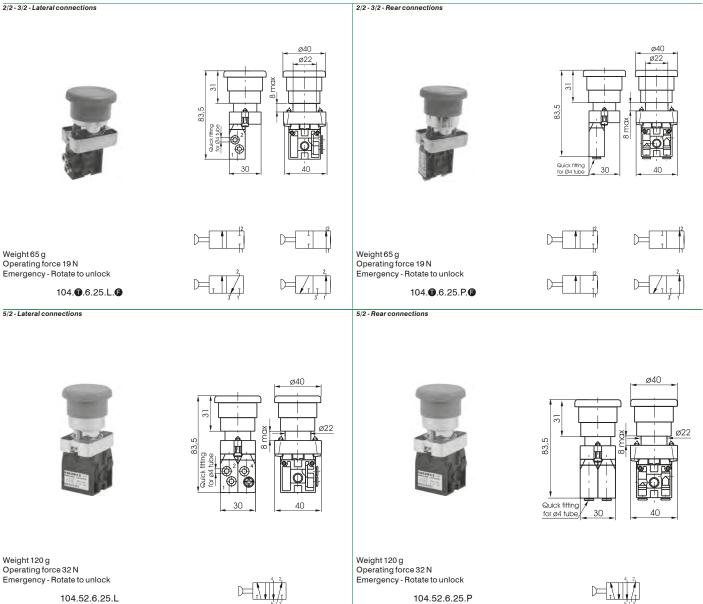
Flow rate at 6 bar with $\Delta p{=}1$ (NI/min)

Temperature °C

Orifice size (mm)

Working ports size

Fluid





Fluid

Filtered air. No lubrication needed, if applied it shall be

continuous

10

-5 ÷ +70

90

2.5

ø4 tube

Operational characteristics

Switch - short lever

Max working pressure (bar)

Temperature °C

Orifice size (mm)

Coding: 104.**1**.**6**.30.**9**.**0**2

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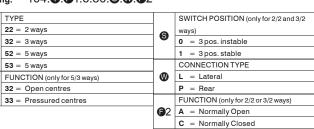
G1

2/2 - 3/2 - Rear connections

Weight 65 g

Switch 2 positions stable

5/2 - Rear connections



79,5

79,5

Quick fitting

Quick fitting for ø4 tube

30

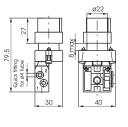
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Working ports size

Flow rate at 6 bar with $\Delta p=1$ (NI/min)

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79,5 Quick fitting

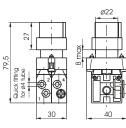
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Weight 65 g Switch 2 positions stable

104.**①**.6.30.L.**⑤**

5/2 - Lateral connections





Weight 120 g Switch 2 positions stable

5/3 - Lateral connections







104.**0**.6.30.P.**6**

Weight 120 g Switch 2 positions stable 104.52.6.30.P

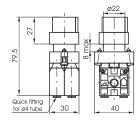


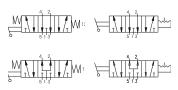
Weight 120 g

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104.53.**3**.6.30.**9**.P

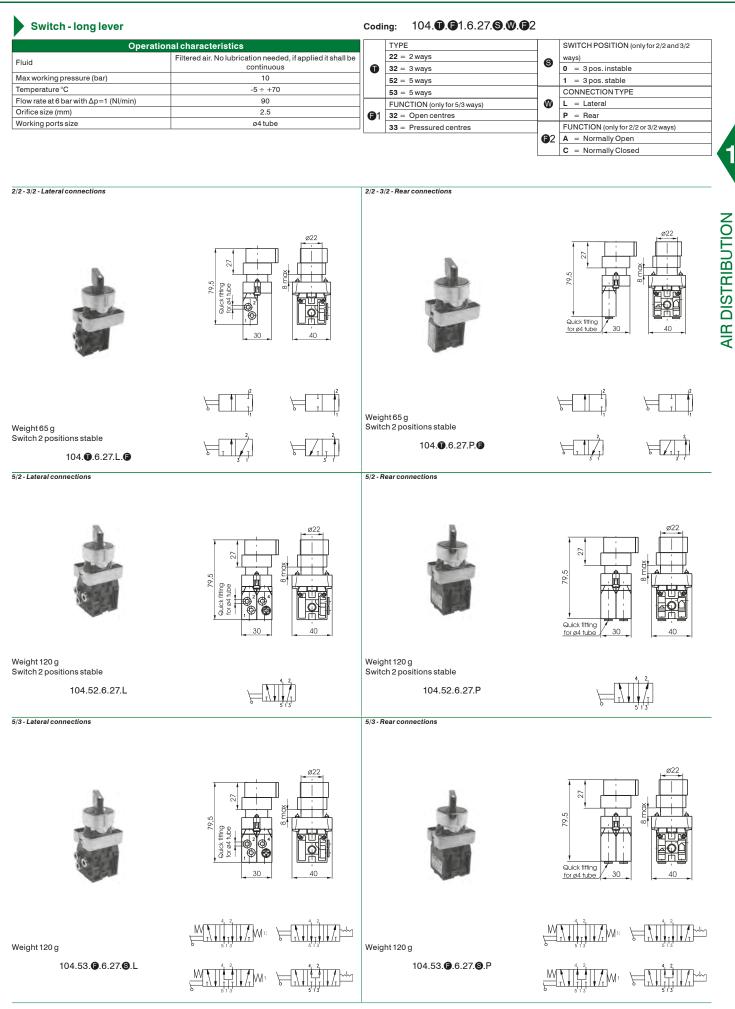




Weight 120 g

104.53.**6**.6.30.**9**.L



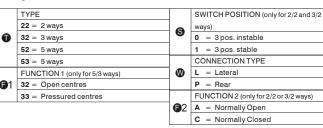


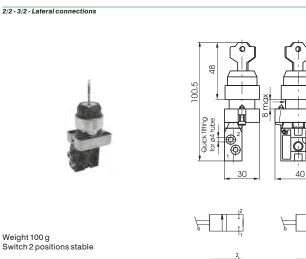


Key switch

Operational characteristics		
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous	0
Max working pressure (bar)	10	
Temperature °C	-5 ÷ +70	
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	90	
Orifice size (mm)	2.5	G 1
Working ports size	ø4 tube	

104.0.01.6.28.0.02 Coding:





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48

Quick fitting for ø4 tube

30

100,5

104.**0**.6.28.L.**9**

5/2 - Lateral connections



Weight 155 g Switch 2 positions stable

104.52.6.28.L

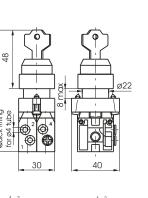


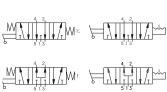
5/3 - Lateral connections



48 100,5 ø22 Quick fitting for ø4 tube £7 30 40

Weight 155 g 104.53.**3**.6.28.**3**.L





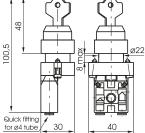


2/2 - 3/2 - Rear connections

ø22

Ó

ø22



Weight 100 g Switch 2 positions stable 104.**0**.6.28.P.**6**

5/2 - Rear connections

Weight 155 g

Weight 155 g

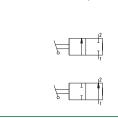
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Switch 2 positions stable

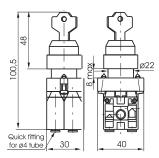
5/3 - Rear connections

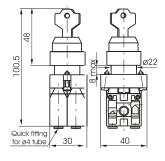
104.52.6.28.P

104.53.**3**.6.28.**9**.P

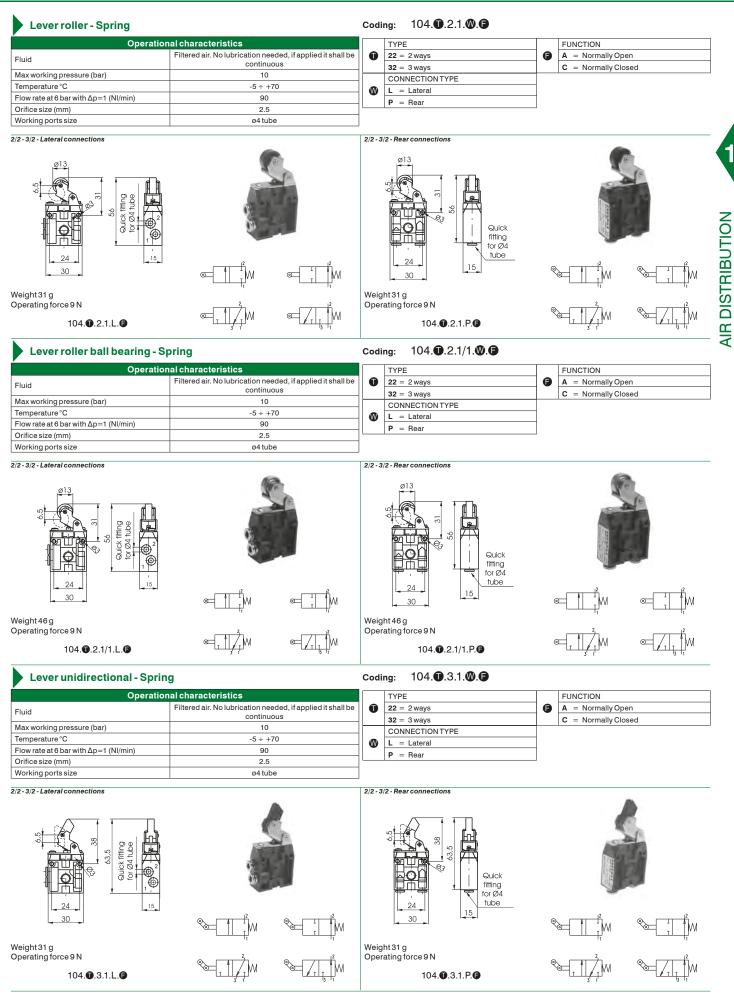












Spool valves and solenoid valves Series 104 - Accessories

PNEUMAX

Complete lever roller operator Coding: 104.2.1	Complete lever roller ball bearing operator Coding: 104.2.1/1
Complete lever unidirectional Coding: 104.3.1	Fixing plate Coding: 104.00
Bush button Coding: 104.6.22/© BUTTON COLOR 1 = Red 2 = Black 3 = Green 4 = Yellow	Raised Push button Coding: 104.6.23/© BUTTON COLOR 1 = Red 2 = Black 3 = Green 4 = Yellow
Push button 2 positions Coding: 104.6.31 (step - step)	Palm button 2 position Coding: 104.6.25 Emergency - Rotate to unlock
Switch - short lever Coding: 104.6.30. SWITCH POSITION (only for 3 position) 0 = 3 pos. instable 1 = 3 pos. instable Switch 2 positions stable 104.6.30 Switch 3 positions 104.6.30.	Switch - long lever Coding: 104.6.27. Switch POSITION (only for 3 position) 0 = 3 pos. instable 1 = 3 pos. stable Switch 2 positions stable 104.6.27 Switch 3 positions 104.6.27.
Key switch Coding: 104.6.28.\$ Image: Switch POSITION (only for 3 position) Image: Switch 2 positions stable 1 3 pos. stable 1 3 pos. stable 1 104.6.28 Switch 3 positions 104.6.28 Switch 3 positions 104.6.28	Joystick selector switch Coding: 104.6.39.
Contact electric element Coding: 104. FUNCTION NO = Normally Open NC = Normally Closed	Complete Pneumatic Operator Coding: 104.11
Push button protection cover Coding: 104.02	



Coding: 104.0.11.1.0.6 Pneumatic - Spring **Operational characteristics** TYPE Filtered air. No lubrication needed, if applied it shall be Ū 22 = 2 ways continuous **32** = 3 ways Max working pressure (bar) 10 CONNECTION TYPE Temperature °C -5 ÷ +50 W L = Lateral Flow rate at 6 bar with $\Delta p{=}1$ (NI/min) 90

24

M5

Ы

1 M 10

M۱

Overall dimensions and technical information are provided solely for informative purposes and may be modified without notice

Weight 25 g Minimum piloting pressure 2,5 bar

104.32.11.1.P.**@**

2.5

ø4 tube

M5

П

15

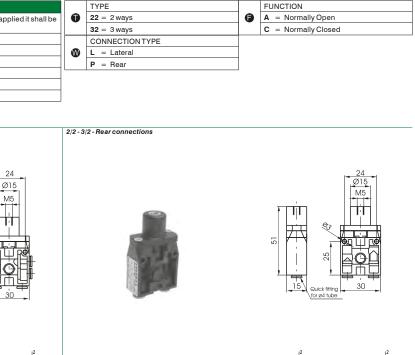
M 10

12 ->

2 ->

5

fitting Quick fi for Ø41





Fluid

Orifice size (mm)

Pilot ports size

Working ports size

2/2 - 3/2 - Lateral connections

104.22.11.1.L.G

AIR DISTRIBUTION

M 10

ΪM,

12 ->

2-

1

1 | 11