

# Series TC shut-off micro-valves

2/2-way - Normally Closed (NC)

SERIES TC SHUT-OFF MICRO-VALVES



- » Compact design
- » High performance
- » Ease of installation
- » Compatibility between materials used and several gaseous fluids
- » Suitable for applications with oxygen

The principle of the Series TC1-V shut-off micro-valves is based on the actuation of a poppet by means of an operating pressure applied above it.

The poppet, once actuated, moves away from the tightening seal, permitting the flow of the intercepted fluid.

By removing the actuation pressure, the poppet repositions itself on the tightening seal by means of a spring positioned below that closes the flow of the fluid.

For its realization the most suitable materials for contact with fluids were selected. The body in PPS and the FKM tightening seals guarantee full compatibility with a wide range of gaseous fluids.

## GENERAL DATA

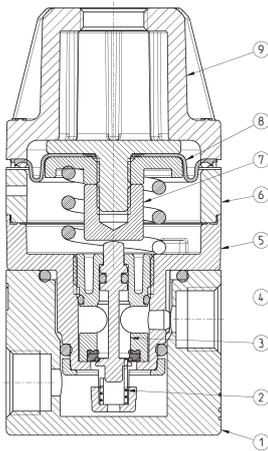
<b>Construction</b>	compact with pre-formed diaphragm
<b>Materials</b>	see the TABLE OF MATERIALS
<b>Ports</b>	cartridge construction in manifold - G1/8 or 1/8NPTF (only for aluminium body version)
<b>Mounting</b>	in-line or cartridge (any position)
<b>Operating temperature</b>	-5°C ÷ 50°C
<b>Inlet pressure</b>	0 ÷ 10 bar
<b>Pilot pressure</b>	0.6 ÷ 10 bar
<b>Nominal flow</b>	240 Nl/min (6 bar ΔP 1 bar)
<b>Medium</b>	air, inert/medical gases and oxygen

## CODING EXAMPLE

TC	1	-	V	36	-	C	-	V	-	OX2
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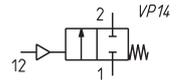
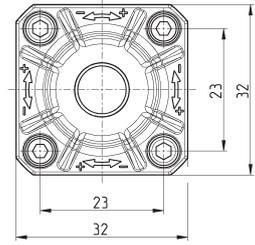
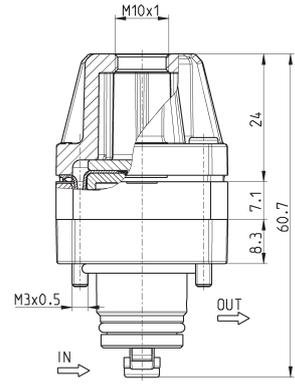
<b>TC</b>	SERIES
<b>1</b>	SIZE
<b>V</b>	VALVE
<b>36</b>	CONSTRUCTION: 36 = pneumatic command
<b>C</b>	PORTS: C = Cartridge 1/8 = G1/8 1/8TF = 1/8NPTF
<b>V</b>	SEALS MATERIAL: V = FKM
<b>OX2</b>	VERSIONS: OX1 = for oxygen (non-volatile residue lower than 550 mg/m <sup>2</sup> ) OX2 = for oxygen (non-volatile residue lower than 33 mg/m <sup>2</sup> )

## Series TC shut-off micro-valves - materials



PARTS	MATERIALS
1. Base body	Anodized aluminium
2. Lower spring	Stainless steel
3. Insert	PPS
4. Poppet	Stainless steel
5. Body	PPS
6 Intermediate body	Anodized aluminium
7. Valve guide	Polyamide
8. Diaphragm	FKM
9. Bell	Polyamide
Seals	FKM

**Series TC cartridge shut-off micro-valves**

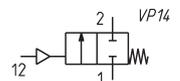
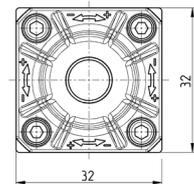
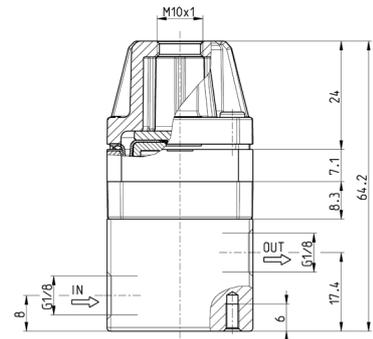
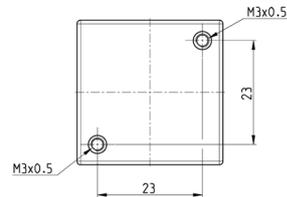


Mod.
TC1-V36-C-V-OX1
TC1-V36-C-V-OX2

**Series TC shut-off micro-valves with aluminium body**

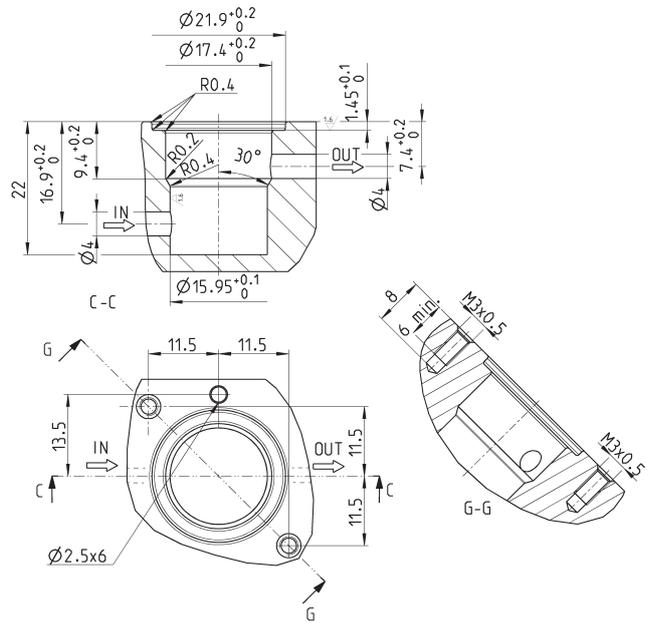


\* to choose the type of thread (G1/8 or 1/8 NPTF)  
see the Coding example



Mod.
TC1-V36-1/8-V-OX1
TC1-V36-1/8-V-OX2

Seat dimensions for Series TC cartridge valve



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