

DN 0,4 mm; 0 -7 bar; sub-base; flow rate: up to 4.5 l/min



Design/Function

The valve consists of a plastic body, a frictionless rocker armature with spring and a DC coil.

The innovative rocker alternately opens or closes two connections when switched. The de-energized position is spring set.

The simple design ensures that the valves can be switched with a minimal rocker movement combining low wear under absolute non-lube conditions.

The valves can be driven by a PLC with their low power consumption.

A manual override, which can be operated from both sides of the valve allows easy maintenance and commissioning.

Advantages/Benefits

EEx-ia-IIC T6 approved

- Long service life, under absolute non-lube conditions
- Simple design, robust and frictionless
- Compact size
- PLC-compatible; low power and high drop-out voltage

Applications

Fluids

- Lubricated, non-lubricated, dry air
- Neutral gases
- For technical vacuum

Applications

- Direct-acting single valve
- Pilot valve
- Actuator control
- Logic control circuits
- Manifold assembly





Technical data

Circuit Functions

Symbol

C 3/2-way valve, when de-energized, port A exhausted



Specifications

Opening

Closing

Orifice DN	N Flow QNn-value air ²⁾		Manifold	Pressure range ¹⁾	Weight	Electr. power consumption	
[mm]	[l/min] 1→2	[l/min] 2→3		[bar]	[g]	[W]	
0.4	4.5	4.5	Burkert, sub-base, below	0 - 7	13	0.5	
0.4	4.5	4.5	Burkert, sub-base, sidewards (for MP01)	0 - 7	15	0.5	

 $^{1)}$ All pressures quoted are gauge pressures with respect to the prevailing atmospheric pressure. $^{2)}$ Measured with 6 bar upstream pressure and 1 bar pressure drop across the valve at +20 °C.

30 ms

42 ms

Valve specifications		Solenoid specifications	i
Body material	PA (Polyamide)	Nominal voltages	24 V DC
Seal material	FPM (Viton)	Voltage tolerance	±10 %
Fluids	lubricated and unlubricated	Power consumption	0.5 W
	dry air, neutral gases, (5-μm-filter recommended)	Electr. control	PLC-controllable
FluidsIubricated and unlubricated dry air, neutral gases, (5-μm-filter recommended) for technical vacuumPower consumption 	1000 c.p.m.		
Ambient temp.	–10 up to +55 °C	Duty cycle	100% continuously rated
Fluid temp.	–10 up to +55 °C	Rating	IP 40 with rectangular plug
Port connection	 BURKERT sub-base (below) 	Type of protection	EEx i IIC T6
	• BURKERT sub-base (sidewards) for module MP01	Electr. connection Standard:	(see drawing) rectangular plug
Response times ³⁾			

Electrical specifications

Power supply only from certified intrinsically safe circuits with following max. values:

³⁾ The response times of a volume of approx. 1 cm ³ switching on until pressu	3/2-way valve are determined using an end . The times are measured at outlet A from re rise to 90% /pressure drops to 10%.	Power supply only from certified intrinsically safe circ with following max. values:			
Delay time: Time from el the pressure change.	ectrical switch on until the beginning of	Explosion group	IIC		
		Max. safety voltage	U = 28 V		
Installation		Max. safety current	I = 115 mA		
Installation	as required, but preferably with solenoid system upright	Consumption of energy for block mounting	P = 0.7 W (ambient temp. +40 °C)		
Manifolding	with common supply max. 12 valves on special manifolds (as accessory)	Consumption of energy for single mounting	P = 0.7 W (ambient temp. +55 °C) P = 0.8 W		
Coil spacing	11 mm		(ambient temp. +50 °C)		



Dimensions [mm]

Module sub-base (side) for MP01



BURKERT sub-base (below)



Dimensions MP01-modules please see data sheet type 6510/11



Ordering chart type 6104 Ex

The valve package includes 2 clamps, 2mounting screws* and 1 manifold seal

Circuit-	DN	Q _{Nn} - Value	e air	Pressure	Port connection	Voltage	Power	Item-No.	Item No.
function**)							Consumption	with	
	[mm]	[l/min]	[l/min]	[bar]		[V/DC]	[W]	manual	
		1→2	2→3					override	
С	0.4	4.0	5.0	0 - 7	Sub-base for MP01 (sidewards)	24	0.5	139 410 U	-
					Sub-base (below)	24	0.5	139 409 G	140 191 S
*) Fixing screws: Burkert Sub-bas		se (below): M1,6	6x5						

Module sub-base : Plastic body MP01

Ordering Chart (Accessories)

Component	Remarks	Item-No.
Seal for sub-base (below)	min. ordering quantity 20 pces.	639 222 G
Seal for sub-base (1-2-3 side)	min. ordering quantity 20 pces.	639 217 B
Single manifold	for sub-base (below), M3	639 873 D
Single manifold	for sub-base 1-2-3 (side)	639 234 C
Multiple manifold	for Burkert- and module-subbase	on request
Rectangular plug	straight, with 3 m cable	133 486 F
Rectangular plug	2 flying leads, 300 mm long	644 068 N

Dimensions for single manifolds [mm]



Single manifold (below)



Single manifold 1-2-3 (side)