

- > **2/2 NC**
Media separated
Cartridge or manifold
mounting
- > **Low internal volume,**
virtually no unswept
volume
- > **Very compact design**
(ø 8 x 21 mm)
- > **Low power consumption (0,5 W)**
- > **Long life up to 30 million cycles**
- > **100% ED operation up to 50°C fluid temperature**



Technical features

Medium:

Neutral or aggressive gases and liquids

Operation:

Direct acting 2-way valves, normally closed

Operating pressure:

0 ... 2,1 bar (0 ... 30 psi) at port 1
 0 ... 0,2 bar (0 ... 2,9 psi) at port 2
 0,5 bar (7,2 psi) maximum back pressure at port 2

Mounting:

Cartridge or manifold

Size:

8 mm

Orifice:

0,8 mm

Response time:

< 15 ms

Response time measured according to ISO 12238

Life expectancy:

≥30 Mio. cycles

Ambient/media temperature:

-10 ... +50 °C (+14 ... +122°F)
 Air supply must be dry enough to avoid ice formation at temperatures below +2 °C (+35°F).

Materials:

Body in contact with media: PEEK
 Seat seals: EPDM or FFPM

Electrical details

Voltage:	12 & 24 V d.c.
Rating:	100 % E.D.
Voltage tolerance	± 10%
Power consumption:	0.5 [W]
Electrical insulation	500 V a.c.
Insulation class	F (155°C)

Following options on request

kv
Operating pressure
Medium temperature
Ambient temperature
Power consumption
Electric connection
Voltage (3, 5 or 6 V d.c.)
Manifold for cartridge version
Sub-base material

Pulse width modulation (PWM) control

A PWM can be used to control the valve and should be set as follows:

	Definition	Value to be applied
Hit voltage	Voltage used for the valve to commute	Valve nominal voltage
Holding voltage	Voltage applied to the valve after commutation	Set duty cycle to guarantee specified holding voltage. 50% of nominal voltage can be used if no value specified.
Hit time	Maximum time required to ensure full valve commutation	40 ms at T > 15 °C *1)
PWM frequency		~20 kHz

*1) Please contact us for application outside of those conditions.

Technical data - standard models

Symbol	Mounting option	Voltage (V d.c.)	Seal Material	Drawing No.	Model
	Manifold	12	EPDM	2	14-213EM01-B5+AWF
	Manifold	12	FFPM	2	14-213EM01-B6+AWF
	Cartridge	12	EPDM	1	14-213CM01-B5+AWF
	Cartridge	12	FFPM	1	14-213CM01-B6+AWF
	Manifold	24	EPDM	2	14-213EM01-B5+AYJ
	Manifold	24	FFPM	2	14-213EM01-B6+AYJ
	Cartridge	24	EPDM	1	14-213CM01-B5+AYJ
	Manifold	24	FFPM	1	14-213CM01-B6+AYJ

Accessories

Manifold (PEEK)

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S140.0361 (M5 ports)

S140.0362 (1/4-28 UNF ports)

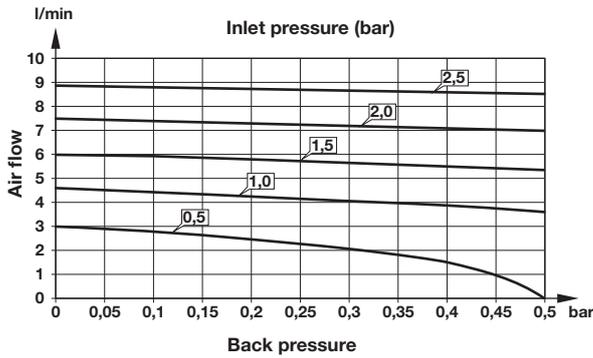
Electrical connection

300 mm flying leads mounted with 4 mm (or 2 x 2 mm) pitch SIL socket housing (Harwin M22-3010300)

S141.0466

*1) Two valve mounting screws are in scope of delivery

Typically flow rate vs back pressure



Typically response time vs temperature

