

**high flow rate**  
**compact design**  
**low weight**  
**pressure balanced**  
**bidirectional flow**  
**maintenance-free**  
**high durability**

FMX® valves are characterized by high flow rate with compact design and low weight. The externally controlled 2/2-way valve can be controlled via a 3/2-way pilot valve as well as a valve cluster. The pneumatic cylinder has three "T" grooves that can be used to add on accessories such as mounting brackets and limit switches. The FMX® valve series offers a manifold option as well; The inlet A-port on the 2/2-way valve is designed to be quickly and easily installed into the manifold strip.



## technical data

2/2-way valve

type

externally controlled

orifice mm

FMX-2

FMX-3

FMX-4

FMX-5

port connection threads

G 3/8 | G 1/2

G 1/2 | G 3/4

G 3/4 | G 1

G 1 | G 1 1/4

Kv value m<sup>3</sup>/h

3,7 | 4,3

8,5 | 10,5

15,4 | 17,0

23,7 | 24,6

weight kg

0,6

1

1,5

2,2

flow direction

A ⇌ B | B ⇌ A

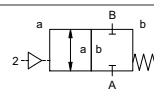
pressure range

0-16 bar / 0-25 bar | 0-16 bar / 0-25 bar

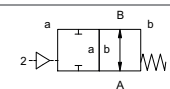
[0-40 bar upon request]

function

NC - normally closed



NO - normally open



operating principle

pressure balanced, with spring return

body material

1.4301 / 1.4404 stainless steel

seal materials seat / dynamic / static

PTFE / FKM, EPDM, PU, H-Ecopur, PTFE / FKM, EPDM

vacuum leak rate

< 10<sup>-4</sup> mbar•l•s<sup>-1</sup>

media

gaseous - liquid

media temperature

-20 to +120 °C (consider seal materials)

ambient temperature

-20 to +80 °C

switching cycles 1/min

660

550

410

380

switching time opening ms

30

30

35

35

switching time closing ms

35

40

60

70

control

pneumatic actuation, 3/2-way pilot valve optional

actuator connection

G 1/8

actuation pressure

NC 3-8 bar | NO 4-8 bar

air consumption cm<sup>3</sup>/stroke

2

4

8

11

explosion proof

Ex II 2G Ex h IIC T-20°C...+120°C Gb Ex II 2D Ex h IIC T-20°C...+120°C Db

## accessories

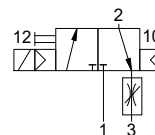
pilot valve

3/2-way pilot valve

flow rate 280 l/min

pressure range 2-10 bar G 1/8

temperature range -10 to +50 °C



coil / illuminated plug

Form B 24V DC - 4,8W | 110V AC - 8,4W | 230V AC - 7,9W

M12x1 Desina 24V DC - 4,8W

M12x1 VDMA 24V DC - 4,8W

protection IP65

energized duty rating 100%

mounting

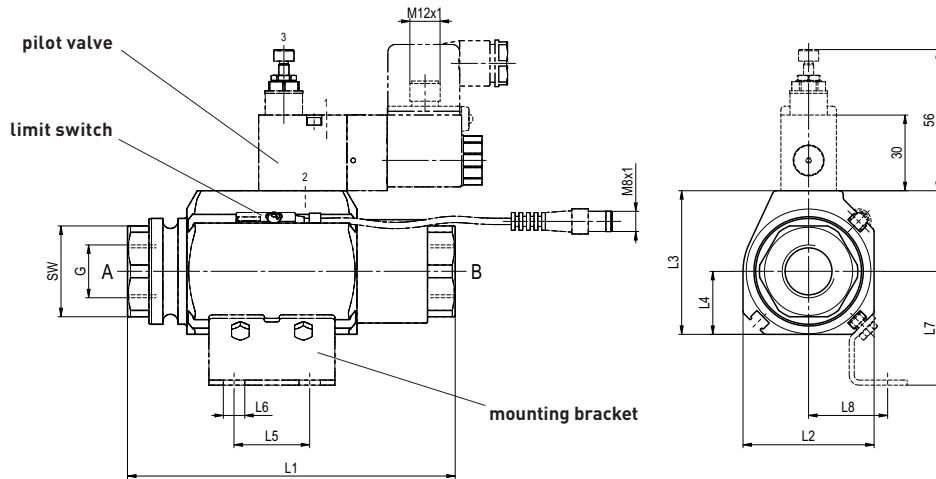
mounting bracket

limit switches

magnetic, lead cable 5 / 10 meters optional

## dimensions

type	FMX-2	FMX-3	FMX-4	FMX-5
thread G	3/8   1/2	1/2   3/4	3/4   1	1   1 1/4
SW mm	27	36	41	50
L1 mm	110	130	150	160
L2 mm	42,5	52	60	66
L3 mm	48	57	64	71
L4 mm	20	25	28	33
L5 mm	25	30	30	30
L6 mm	6,5	8,5	8,5	8,5
L7 mm	33	45	47	51
L8 mm	24	31,5	33,5	37



## valve manifold

type	FMX-2	FMX-3	FMX-4	FMX-5
thread G	1	1 1/4	1 1/2	2
slots	2   3   4   5	2   3   4   5	2   3   4   5	2   3   4   5
L9 mm	123   170   217   264	139   195   251   307	150   215   280   345	170   245   320   395
L10 mm	38	41,5	42,5	47,5
L11 mm	47	56	65	75
L12 mm	152	187	213	236
L13 mm	53	59,5	71	75,5
L14 mm	50	55	70	75
L15 mm	30	30	33	38
L16 mm	21	28	33	38
L17 mm	8	8	10	11
Ød	6,6 (M6)	6,6 (M6)	9 (M8)	11 (M10)
body material	aluminium, 1.4404 stainless steel			

