

series M

Minivalves manually and mechanically actuated

DESCRIPTION

Minivalves series "M" are produced in the 2/2 and 3/2 pneumatic functions in both side and bottom ported versions, with push-in fittings on body valve for pipe Ø 4 mm or M5 threaded connections; the version G 1/8 bottom ported is also available. Thanks to the suitable adapter types MCS-SA and MCS-SAD these minivalves support the Ø 22 mm actuators for panel mounting. The same actuators can control 1 or 2 minivalves, thus it's possible to obtain the 3/2, 5/2, 5/3 open centre and the 5/3 pressure centre pneumatic functions. They are in compliance with ATEX directive, 2GD category, upon request.



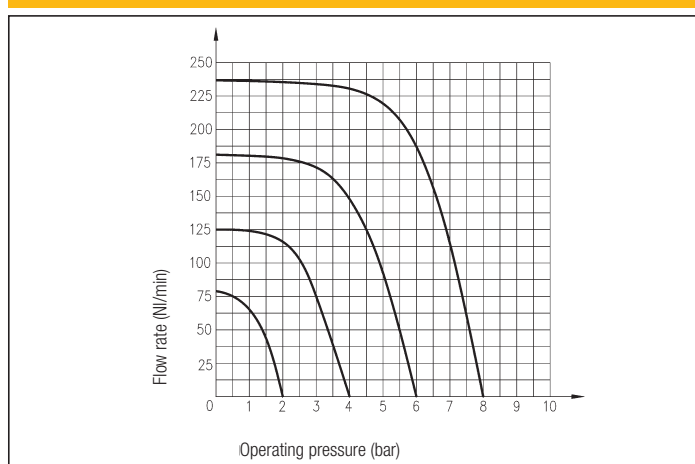
TECHNICAL DATA

Operating pressure	2 ÷ 10 bar
Working temperature	0 ÷ +60 °C (-20 °C with dry air)
Fluid	Compressed air, filtered, continuous lubricated, unlubricated or dry lubricated
Port size	Push-in fittings for pipe Ø 4 mm - M5 - G 1/8
Nominal diameter	2,5 mm
Controls	
Mechanical	Plunger; roller lever; unidirectional roller lever
Manual	Tapper; actuators for panel mounting

MATERIALS

Body	Anodized aluminium alloy
Bushing and guide	Nickel - plated brass
Springs	Stainless steel
Seals	NBR rubber
Connections	Nickel - plated brass, plastic material
Controls	
Tapper; Swivel	Glass stiffened polyamide
Plunger; Roller	Nickel - plated brass
Lever	Steel

FLOW CHART - M



2 AND 3 PORT N.C. - N.O.

Symbol	Function	Controls		Actuation force at 6 bar (N)	Flow rate at 6 bar ΔP = 1 bar (NL/min)	Weight (g)	Port size	TYPE*
		Pilot	Return					
	2/2 N.O. monostable	Plunger	Mechanical spring	13	83	40	Ø4 bottom ported Ø4 side ported M5 bottom threaded M5 side threaded G 1/8 bottom ported	MHAS4 MHAS4/L MHASM5 MHASM5/L MHAS1/8
	2/2 N.C. monostable	Plunger	Mechanical spring	13	83	40	Ø4 bottom ported Ø4 side ported M5 bottom threaded M5 side threaded G 1/8 bottom ported	MHCS4 MHCS4/L MHCSM5 MHCSM5/L MHCS1/8
	3/2 N.O. monostable	Plunger	Mechanical spring	13	83	40	Ø4 bottom ported Ø4 side ported M5 bottom threaded M5 side threaded G 1/8 bottom ported	MAS4 MAS4/L MASM5 MASM5/L MAS1/8
	3/2 N.C. monostable	Plunger	Mechanical spring	13	83	40	Ø4 bottom ported Ø4 side ported M5 bottom threaded M5 side threaded G 1/8 bottom ported	MCS4 MCS4/L MCSM5 MCSM5/L MCS1/8
	2/2 N.O. monostable	Plunger for panel mounting	Mechanical spring	13	83	60	Ø4 bottom ported Ø4 side ported M5 bottom threaded M5 side threaded G 1/8 bottom ported	MHAP4 MHAP4/L MHAPM5 MHAPM5/L MHAP1/8
	2/2 N.C. monostable	Plunger for panel mounting	Mechanical spring	13	83	60	Ø4 bottom ported Ø4 side ported M5 bottom threaded M5 side threaded G 1/8 bottom ported	MHCP4 MHCP4/L MHCPM5 MHCPM5/L MHCP1/8
	3/2 N.O. monostable	Plunger for panel mounting	Mechanical spring	13	83	60	Ø4 bottom ported Ø4 side ported M5 bottom threaded M5 side threaded G 1/8 bottom ported	MAP4 MAP4/L MAPM5 MAPM5/L MAP1/8

*EX Consistent with the ATEX directive II 2GD c T5 T100°C -20°C ≤ Ta ≤ 60°C E.G.: MCS4/EX

Minivalves manually and mechanically actuated

series **M**

3

2 AND 3 PORT N.C. - N.O.

Symbol	Function	Controls		Actuation force at 6 bar (N)	Flow rate at 6 bar $\Delta P = 1 \text{ bar (Nl/min)}$	Weight (g)	Port size	TYPE*
		Pilot	Return					
	3/2 N.C. monostable	Plunger for panel mounting	Mechanical spring	13	83	60	Ø4 bottom ported Ø4 side ported M5 bottom threaded M5 side threaded G 1/8 bottom ported	MCP4 MCP4/L MCPM5 MCPM5/L MCP1/8
	2/2 N.O. monostable	Roller lever	Mechanical spring	7	83	50	Ø4 bottom ported Ø4 side ported M5 bottom threaded M5 side threaded G 1/8 bottom ported	MHALR4 MHALR4/L MHALRM5 MHALRM5/L MHALR1/8
	2/2 N.C. monostable	Roller lever	Mechanical spring	7	83	50	Ø4 bottom ported Ø4 side ported M5 bottom threaded M5 side threaded G 1/8 bottom ported	MHCLR4 MHCLR4/L MHCLRM5 MHCLRM5/L MHCLR1/8
	3/2 N.O. monostable	Roller lever	Mechanical spring	7	83	50	Ø4 bottom ported Ø4 side ported M5 bottom threaded M5 side threaded G 1/8 bottom ported	MALR4 MALR4/L MALRM5 MALRM5/L MALR1/8
	3/2 N.C. monostable	Roller lever	Mechanical spring	7	83	50	Ø4 bottom ported Ø4 side ported M5 bottom threaded M5 side threaded G 1/8 bottom ported	MCLR4 MCLR4/L MCLRM5 MCLRM5/L MCLR1/8
	2/2 N.O. monostable	Unidirectional roller lever	Mechanical spring	7	83	50	Ø4 bottom ported Ø4 side ported M5 bottom threaded M5 side threaded G 1/8 bottom ported	MHALRU4 MHALRU4/L MHALRUM5 MHALRUM5/L MHALRU1/8
	2/2 N.C. monostable	Unidirectional roller lever	Mechanical spring	7	83	50	Ø4 bottom ported Ø4 side ported M5 bottom threaded M5 side threaded G 1/8 bottom ported	MHCLU4 MHCLU4/L MHCLRUM5 MHCLRUM5/L MHCLU1/8
	3/2 N.O. monostable	Unidirectional roller lever	Mechanical spring	7	83	50	Ø4 bottom ported Ø4 side ported M5 bottom threaded M5 side threaded G 1/8 bottom ported	MALRU4 MALRU4/L MALRUM5 MALRUM5/L MALRU1/8
	3/2 N.C. monostable	Unidirectional roller lever	Mechanical spring	7	83	50	Ø4 bottom ported Ø4 side ported M5 bottom threaded M5 side threaded G 1/8 bottom ported	MCLRU4 MCLRU4/L MCLRUM5 MCLRUM5/L MCLRU1/8
	2/2 N.O. monostable	Tapper	Mechanical spring	7	83	50	Ø4 bottom ported Ø4 side ported M5 bottom threaded M5 side threaded G 1/8 bottom ported	MHAT4 MHAT4/L MHATM5 MHATM5/L MHAT1/8
	2/2 N.C. monostable	Tapper	Mechanical spring	7	83	50	Ø4 bottom ported Ø4 side ported M5 bottom threaded M5 side threaded G 1/8 bottom ported	MHCT4 MHCT4/L MHCTM5 MHCTM5/L MHCT1/8
	3/2 N.O. monostable	Tapper	Mechanical spring	7	83	50	Ø4 bottom ported Ø4 side ported M5 bottom threaded M5 side threaded G 1/8 bottom ported	MAT4 MAT4/L MATM5 MATM5/L MAT1/8
	3/2 N.C. monostable	Tapper	Mechanical spring	7	83	50	Ø4 bottom ported Ø4 side ported M5 bottom threaded M5 side threaded G 1/8 bottom ported	MCT4 MCT4/L MCTM5 MCTM5/L MCT1/8

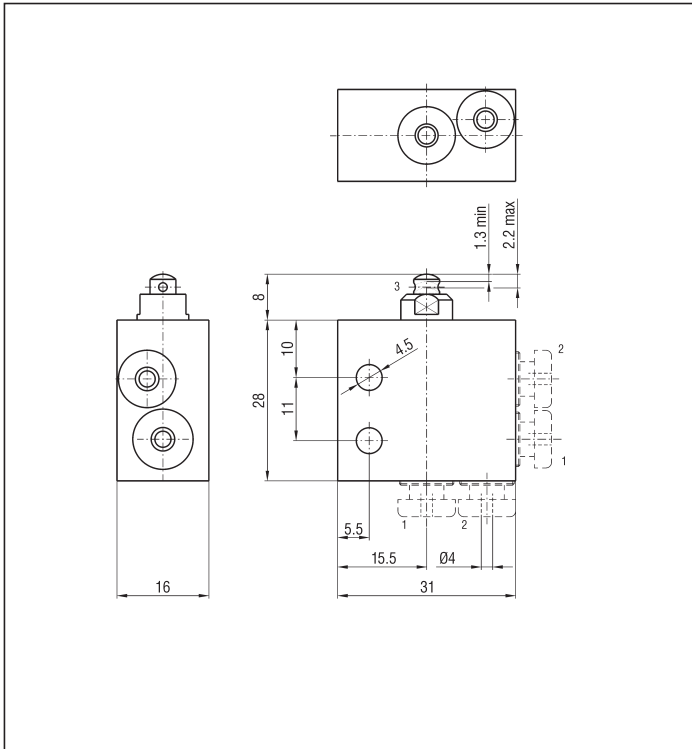
*/EX Consistent with the ATEX directive II 2GD c T5 T100°C -20°C ≤ Ta ≤ 60°C E.G.: MCLR4/EX

series M

Minivalves manually and mechanically actuated

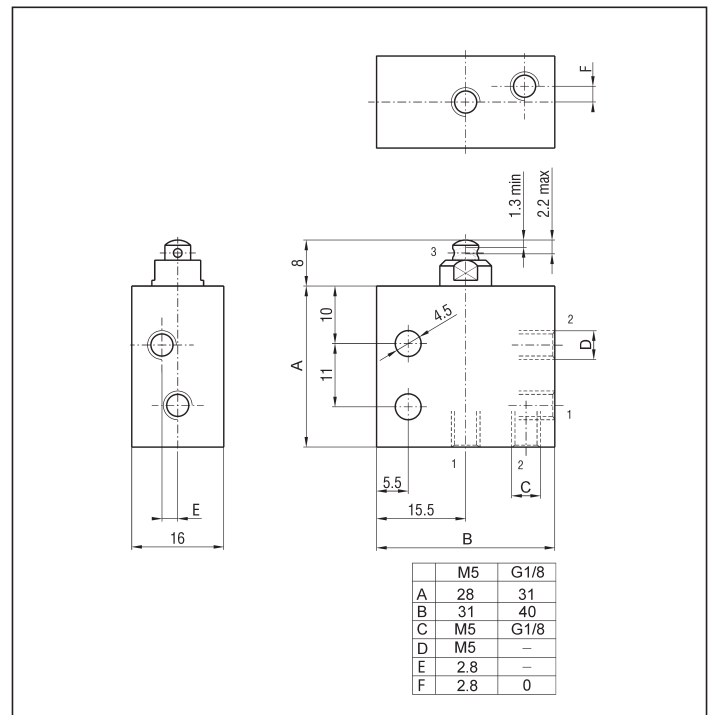
3

PLUNGER - Ø 4 mm SIDE AND BOTTOM PORTED



P.S.: DO NOT EXCEED THE MAXIMUM ACTUATION STROKE

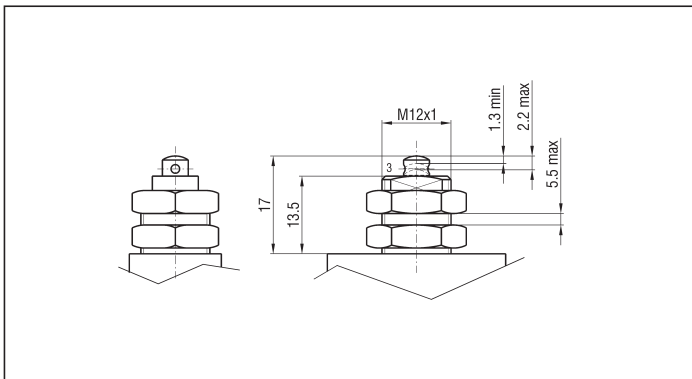
PLUNGER - M5 THREADED CONNECTIONS SIDE AND BOTTOM PORTED - G 1/8 BOTTOM PORTED



P.S.: DO NOT EXCEED THE MAXIMUM ACTUATION STROKE

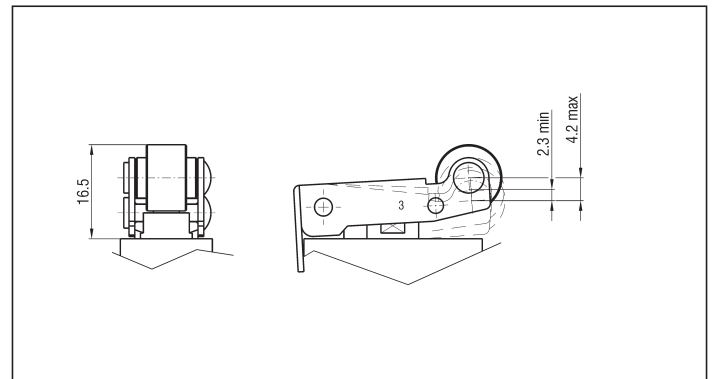
CONTROLS

PLUNGER FOR PANEL MOUNTING

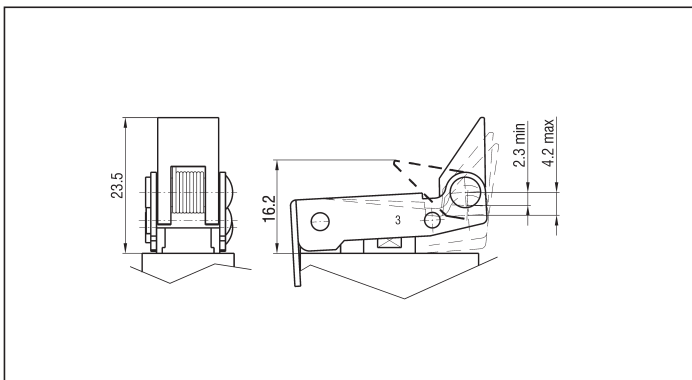


P.S.: DO NOT EXCEED THE MAXIMUM ACTUATION STROKE

ROLLER LEVER



UNIDIRECTIONAL ROLLER LEVER



TAPPER

