Manual lever valves with spool - MC Series

Connections: 1/8" - 1/4" - 3/8"

MC SERIES



Spool valves
High mechanical strength
Anodised aluminium body Thermoplastic polymer or anodised aluminium bases
3/2 - 5/2 - 5/3 manual operation
ATEX 2014/34/EU certificates available

TECHNICAL FEATURES

Function		3/2 - 5/2 - 5/3	
Operation		Manual: Manual control - Monostable mechanical spring return, bistable, three positions	
Materials		Body and cover in anodised aluminium alloy, base in thermoplastic polymer (PBT), Internal components in steel - aluminium - brass - NBR gaskets	
Note on materials		Compliant with REACH (1907/2006/EC and subsequent amendments)	
Connections		Size A: 1/8" Gas (Available with 1/4" Gas connections) Size B: 1/4" Gas (Available with 3/8" Gas connections)	
Threads		Cylindrical Gas (BSPP)	
Operating temperature		0°C ÷ 80°C (-20°C with dry air, to avoid ice formation)	
Operating pressure		0 ÷ 10 bar	
Air flow rate			
Connection		Size A - 1/8", 1/4"	Size B - 1/4", 3/8"
Nominal diameter		5 mm	8 mm
Supply pressure	5 bar	460 Nl/min	840 Nl/min
(with ΔP 1 bar)	6 bar	500 Nl/min	930 Nl/min
	7 bar	540 Nl/min	1020 Nl/min
		See flow rate diagram page 3.6.05.6	
Fluid		Filtered air, lubrication-free, compliant with ISO 8573-1:2010 [7:4:4]	
Lubrication		Not required (if required in the pneumatic circuit, it must be continuous)	

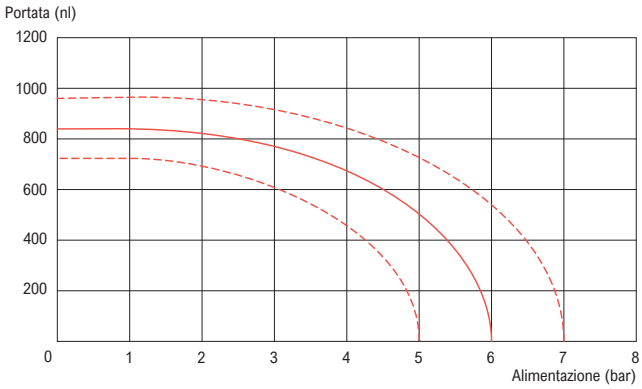
ATEX CERTIFICATION

Valve marking	CE Ex	II 2G Ex h IIC T6 Gb (Zone 1 and Zone 2) II 2D Ex h IIIC 85°C Db (Zone 21 and Zone 22)
Operating pressure in ATEX environment	0.5 ÷ 10 bar	
ATEX ambient temperature	-20°C ≤ Ta ≤ +60°C	
CE marking	In compliance with Directive 2014/34/EU (see declaration of conformity)	

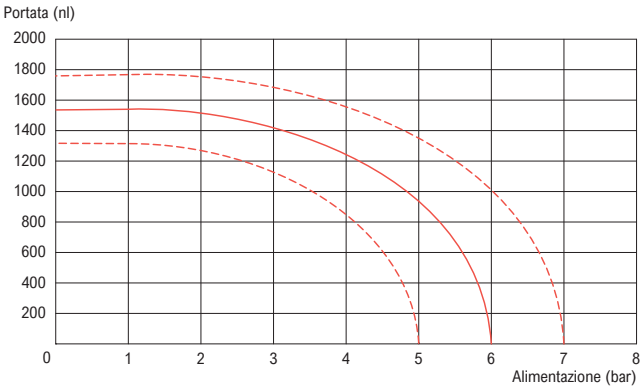
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FLOW DIAGRAMS - MANUAL VALVES

FLOW RATE DIAGRAM - SIZE "A" - 1/8", 1/4"

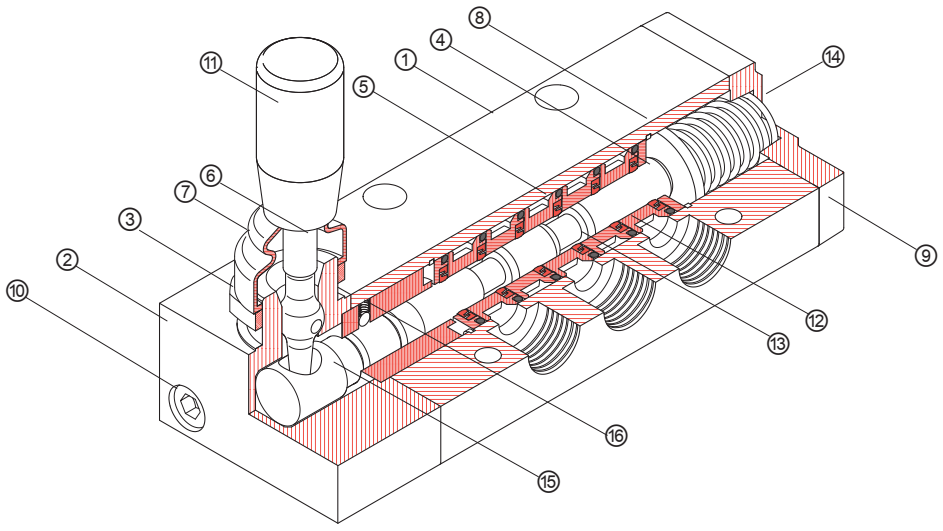


FLOW RATE DIAGRAM - SIZE "B" - 1/4", 3/8"



MATERIALS - MANUAL LEVER VALVES

POS.	DESCRIPTION	MATERIALS	POS.	DESCRIPTION	MATERIALS
①	Body	Anodised drawn aluminium	⑨	Base	Polybutylene terephthalate PBT
②	Cover	Anodised aluminium	⑩	Screw	Galvanised steel
③	Ring nut	Nickel-plated OT58 brass	⑪	Grip	Phenolic-based duroplast (PF)
④	Spool	Nickel-plated aluminium	⑫	O-ring	Nitrile rubber (NBR)
⑤	Spacers	OT58 brass	⑬	Sealing gasket	Nitrile rubber (NBR)
⑥	Rod	Nickel-plated steel	⑭	Spring	AISI 302 steel (X10CrNi18-09)
⑦	Bellows	Nitrile rubber (NBR)	⑮	Extension	Galvanised steel
⑧	Seeger ring	C75 steel	⑯	Ball	Hardened steel



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CODING KEY - MANUAL LEVER VALVES

Operation	Function	Size	Version	Pneumatic connections	Certifications
MC	33	80	1	0	

MC = Lever manual

80 = Size A - Standard 1/8" Gas
40 = Size B - Standard 1/4" Gas

0 = Standard
1 = 1/4" Gas
8 = 3/8" Gas

NULL = None
EX = For compressed air in potentially explosive atmosphere (ATEX)

33 = 3/2 Normally closed

13 = 5/2 Monostable 5/2 Bistable

51 = 5/3 Closed centres

53 = 5/3 Open centres

1 = Monostable 5/3 Mechanical spring return

4 = Monostable 3/2, 5/2 Mechanical spring return

2 = Bistable 3/2, 5/2 Three stable positions 5/3

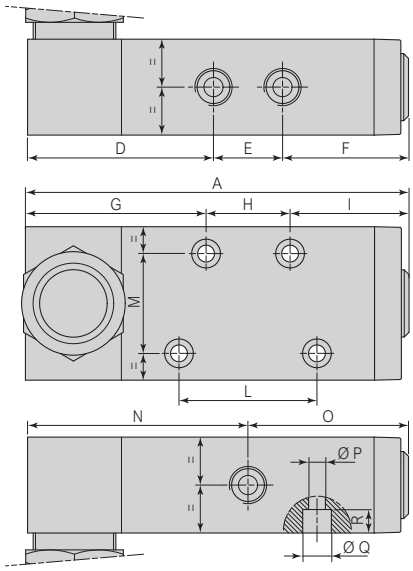
POSSIBLE CONFIGURATIONS

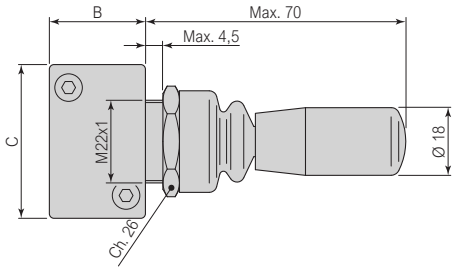
Operation	Function	Size	Version	Pneumatic connections	Certifications
MC Lever manual	33 3/2 Normally closed 13 5/2 Monostable 5/2 Bistable 51 5/3 Closed centres 53 5/3 Open centres	80 Size A Standard 1/8" Gas 40 Size B Standard 1/4" Gas	2 Bistable 3/2 5/2 Three stable positions 5/3 4 Monostable 3/2 5/2 Mechanical return 1 Monostable 5/3 Mechanical return 2 Bistable 3/2 5/2 Three stable positions 5/3	0 1/8" Gas 1 1/4" Gas 0 1/4" Gas 8 3/8" Gas	None EX ATEX

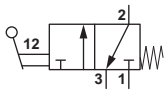
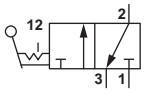
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DIMENSIONS - 3/2 MANUAL LEVER VALVES

MANUAL LEVER OPERATION - MONOSTABLE WITH MECHANICAL SPRING RETURN - BISTABLE

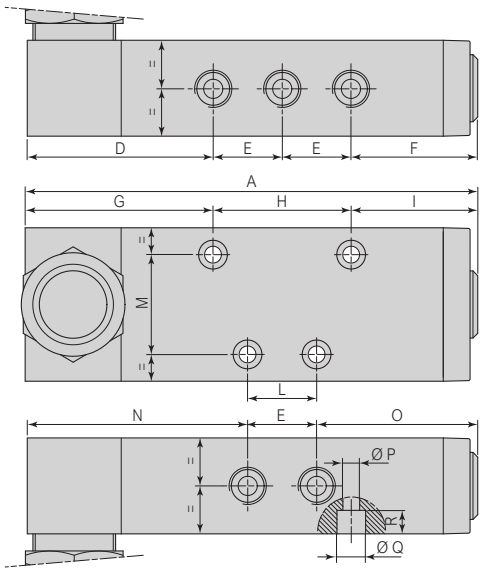


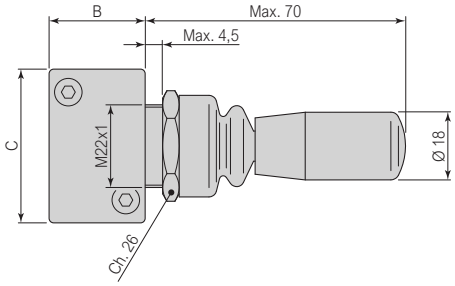


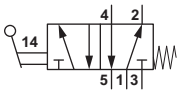
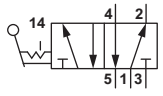
Symbol	Size	Connections	Code	A	B	C	D	E	F	G	H	I	L	M	N	O	Ø P	Ø Q	R
	A	Gas 1/8"	MC338040	100	25	40	49	18	33	47	22	31	36	26	58	42	4.5	7.5	6
		Gas 1/4"	MC338041	100	25	40	49	18	33	47	22	31	40	26	58	42	4.5	7.5	6
	B	Gas 1/4"	MC334040	127	30	52	62.75	22	42.25	58.75	30	38.25	50	40	73.75	53.25	5.5	9	7
		Gas 3/8"	MC334048	127	30	52	62.75	22	42.25	58.75	30	38.25	50	40	73.75	53.25	5.5	9	7
	A	Gas 1/8"	MC338020	100	25	40	49	18	33	47	22	31	36	26	58	42	4.5	7.5	6
		Gas 1/4"	MC338021	100	25	40	49	18	33	47	22	31	40	26	58	42	4.5	7.5	6
	B	Gas 1/4"	MC334020	127	30	52	62.75	22	42.25	58.75	30	38.25	50	40	73.75	53.25	5.5	9	7
		Gas 3/8"	MC334028	127	30	52	62.75	22	42.25	58.75	30	38.25	50	40	73.75	53.25	5.5	9	7

DIMENSIONS - 5/2 MANUAL LEVER VALVES

MANUAL LEVER OPERATION - MONOSTABLE WITH MECHANICAL SPRING RETURN - BISTABLE



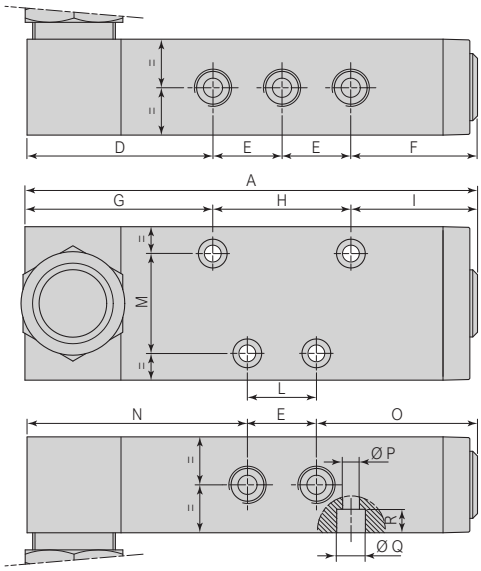


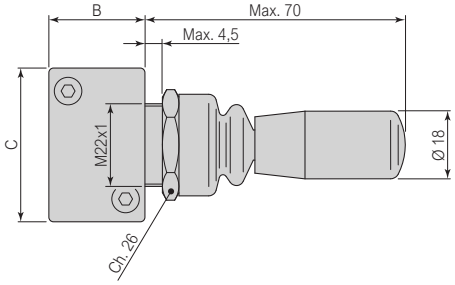
Symbol	Size	Connections	Code	A	B	C	D	E	F	G	H	I	L	M	N	O	Ø P	Ø Q	R
	A	Gas 1/8"	MC138040	118	25	40	49	18	33	49	36	33	18	26	58	42	4.5	7.5	6
		Gas 1/4"	MC138041	118	25	40	49	18	33	47	40	31	57	26	58	42	4.5	7.5	6
	B	Gas 1/4"	MC134040	149	30	52	62.75	22	42.25	54.75	60	34.25	22	40	73.75	53.25	5.5	9	7
		Gas 3/8"	MC134048	149	30	52	62.75	22	42.25	59.75	50	39.25	70	40	73.75	53.25	5.5	9	7
	A	Gas 1/8"	MC138020	118	25	40	49	18	33	49	36	33	18	26	58	42	4.5	7.5	6
		Gas 1/4"	MC138021	118	25	40	49	18	33	47	40	31	57	26	58	42	4.5	7.5	6
	B	Gas 1/4"	MC134020	149	30	52	62.75	22	42.25	54.75	60	34.25	22	40	73.75	53.25	5.5	9	7
		Gas 3/8"	MC134028	149	30	52	62.75	22	42.25	59.75	50	39.25	70	40	73.75	53.25	5.5	9	7

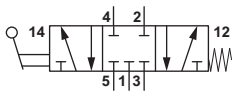
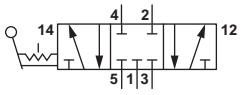
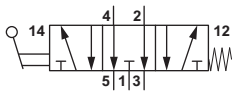
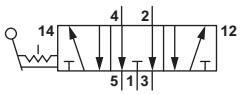
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DIMENSIONS - 5/3 MANUAL LEVER VALVES

MANUAL LEVER OPERATION - CLOSED CENTRES - OPEN CENTRES - THREE MONOSTABLE POSITIONS - THREE STABLE POSITIONS





Symbol	Size	Connections	Code	A	B	C	D	E	F	G	H	I	L	M	N	O	Ø P	Ø Q	R
	A	Gas 1/8"	MC518010	118	25	40	49	18	33	49	36	33	18	26	58	42	4.5	7.5	6
		Gas 1/4"	MC518011	118	25	40	49	18	33	47	40	31	57	26	58	42	4.5	7.5	6
	B	Gas 1/4"	MC514010	149	30	52	62.75	22	42.25	54.75	60	34.25	22	40	73.75	53.25	5.5	9	7
		Gas 3/8"	MC514018	149	30	52	62.75	22	42.25	59.75	50	39.25	70	40	73.75	53.25	5.5	9	7
	A	Gas 1/8"	MC518020	118	25	40	49	18	33	49	36	33	18	26	58	42	4.5	7.5	6
		Gas 1/4"	MC518021	118	25	40	49	18	33	47	40	31	57	26	58	42	4.5	7.5	6
	B	Gas 1/4"	MC514020	149	30	52	62.75	22	42.25	54.75	60	34.25	22	40	73.75	53.25	5.5	9	7
		Gas 3/8"	MC514028	149	30	52	62.75	22	42.25	59.75	50	39.25	70	40	73.75	53.25	5.5	9	7
	A	Gas 1/8"	MC538010	118	25	40	49	18	33	49	36	33	18	26	58	42	4.5	7.5	6
		Gas 1/4"	MC538011	118	25	40	49	18	33	47	40	31	57	26	58	42	4.5	7.5	6
	B	Gas 1/4"	MC534010	149	30	52	62.75	22	42.25	54.75	60	34.25	22	40	73.75	53.25	5.5	9	7
		Gas 3/8"	MC534018	149	30	52	62.75	22	42.25	59.75	50	39.25	70	40	73.75	53.25	5.5	9	7
	A	Gas 1/8"	MC538020	118	25	40	49	18	33	49	36	33	18	26	58	42	4.5	7.5	6
		Gas 1/4"	MC538021	118	25	40	49	18	33	47	40	31	57	26	58	42	4.5	7.5	6
	B	Gas 1/4"	MC534020	149	30	52	62.75	22	42.25	54.75	60	34.25	22	40	73.75	53.25	5.5	9	7
		Gas 3/8"	MC534028	149	30	52	62.75	22	42.25	59.75	50	39.25	70	40	73.75	53.25	5.5	9	7

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