

AC

MIXED threaded valves G1/8 - G 1/4 - G1/2

- Mixed commutation system (spool - poppet)
- High flow rate
- Quick response time
- High cycles
- Control: manual, mechanical, pneumatic, electric
- Modular sub-bases

Available ATEX version upon request

CE Ex II 2Gc IIC T5 II 2Dc T100°C

CE Ex II 3 GD c nA II T5-10°C ≤ Ta ≤ 45°C



TECHNICAL CHARACTERISTICS

Ambient temperature	-10 ÷ +45 °C		
Fluid temperature	max +50 °C		
Fluid	50 µm filtered air, with or without lubrication		
Commutation system	poppet mixed system		
Ways/Positions	5/2		
Pressure	10 bar max		
Control	pneumatic, electric, mechanical		
Return	pneumomechanical spring, pneumatic, electric		
Connections	G1/8	G1/4	G1/2
Nominal Ø (mm)	6	8	15
Nominal flow rate (NI/min)	1080	1600	4600

CONSTRUCTIVE CHARACTERISTICS

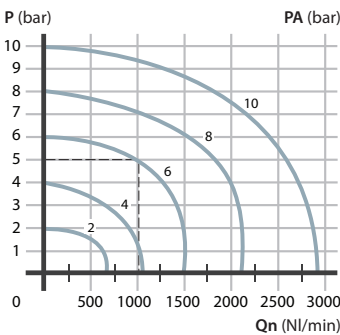
Valve body	die-cast aluminium
Seals	nitrile rubber, polyurethane
Actuators	technopolymer
Spool	aluminium

ELECTRIC CHARACTERISTICS

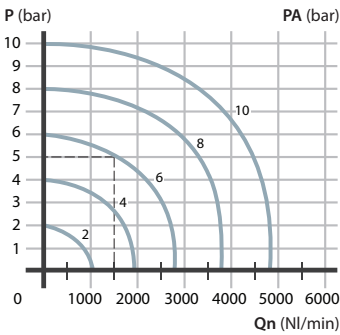
	G1/8	G1/4	G1/2
Electropilot	U1		U2
Coil	DA		DB
Power consumption	3,5 W (DC) - 5 VA (AC)		11 W (DC) - 10 VA (AC)
Connector	AM 5110		AM 5111
Voltage	12 V DC - 24 V DC - 24 V AC - 110 V AC - 230 V AC		
Manual override	impulse screw - 2 positions		

Flow rate characteristics

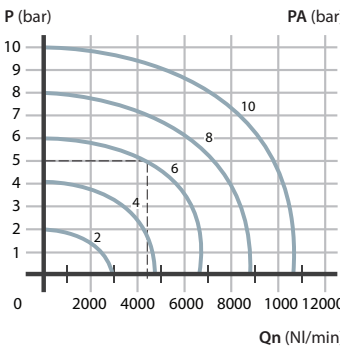
>> G1/8



>> G1/4



>> G1/2



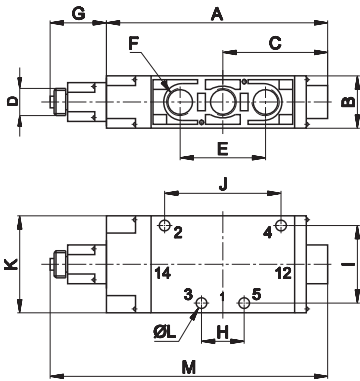
P = Working pressure
PA = Supply pressure
Qn = Flow rate

Subject to change

POPPET VALVES 3.4

1

Indirect mechanical control for use with
pneumatic, mechanical and manual actuators



	G1/8	G1/4	G1/2
A	99	114	163
B	25	27	40
C	47	54	83
D	M14x1	M14x1	M14x1
E	36	44	80
F	G1/8	G1/4	G1/2
G	27	27	27
H	18	22	40
I	26	40	50
J	36	60	108
K	40	50	63
L	4,5	5,5	6,5
M	126	141	190

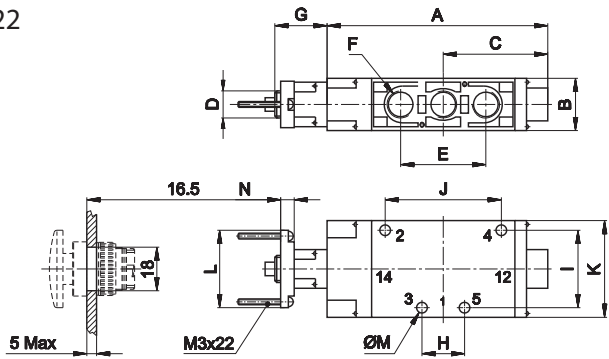
1 = Supply port
2 - 4 = Use
3 - 5 = Exhaust
14 = Control
12 = Return

Symbol	Connection	Control	Return	Pressure bar	Weight Kg	Part no.
	G1/8	14	12	1,8÷10	0,27	AC-7010
	G1/4	ball pushrod	pneumomechanical spring	2,3÷10	0,28	AC-8010
	G1/2			2÷10	0,33	AC-9010

MANUAL ACTUATORS				PNEUMATIC AND MECHANICAL ACTUATORS		
	Recessed button	■ BLACK ■ RED ■ GREEN	AI-3511 AI-3512 AI-3513		Pneumatic actuator	AI-3550
	Head button	■ RED ■ BLACK ■ RED ■ BLACK	AI-3514 AI-3516 AI-3514D AI-3516D		Amplified pneumatic actuator	AI-3551
	Button	■ GREEN ■ RED ■ BLACK	AI-3515 AI-3517 AI-3519		Roller operator 1 position	AI-3560
	Rotating selector	■ BLACK ■ BLACK	AI-3520 AI-3521		Ball-push operator 1 position	AI-3562
	Rotating lever selector	■ BLACK ■ BLACK	AI-3522 AI-3523		Operator with omni-directional antenna 1 position	AI-3563
	Lever operator	■ BLACK	AI-3524		Roller lever operator 1 position	AI-3570
	Omni-directional operator	■ BLACK	AI-3525		Articulated roller lever operator 1 position Complete actuation with stroke 2,5 mm, max stroke 4,7 mm	AI-3571
	Push-pull operator	■ BLACK	AI-3526		Key operator 1 position	AI-3572

For actuator dimensions refer to section "Accessories>Actuators and buttons"

Indirect control
for panel mounting actuators Ø 22



	G1/8	G1/4	G1/2
A	99	114	163
B	25	27	40
C	47	54	83
D	M14x1	M14x1	M14x1
E	36	44	80
F	G1/8	G1/4	G1/2
G	27	27	27
H	18	22	40
I	26	40	50
J	36	60	108
K	40	50	63
L	40	40	40
M	4,5	5,5	6,5
N	7	7	7

1 = Supply port
2 - 4 = Use
3 - 5 = Exhaust
14 = Control
12 = Return

Symbol	Connection	Control	Return	Pressure	Weight	Part no.
		14	12	bar	Kg	
	G1/8	ball pushrod	pneumomechanical spring	1,8÷10	0,28	AC-7013
	G1/4			2,3÷10	0,29	AC-8013
	G1/2			2÷10	0,84	AC-9013
	G1/8	ball pushrod	pneumatic amplified	1÷10	0,29	AC-7013P
	G1/4			1÷10	0,28	AC-8013P
	G1/2			1÷10	0,83	AC-9013P

MANUAL ACTUATORS

	Recessed button	■ BLACK ■ RED ■ GREEN	AI-3511 AI-3512 AI-3513	
	Head button	■ RED ■ BLACK ■ RED ■ BLACK	AI-3514 AI-3516 AI-3514D AI-3516D	
	Button	■ GREEN ■ RED ■ BLACK	AI-3515 AI-3517 AI-3519	
	Rotating selector	■ BLACK ■ BLACK	AI-3520 AI-3521	
	Rotating lever selector	■ BLACK ■ BLACK	AI-3522 AI-3523	
	Lever operator	■ BLACK	AI-3524	
	Omni-directional operator	■ BLACK	AI-3525	
	Push-pull operator	■ BLACK	AI-3526	

For actuator dimensions refer to section“Accessories>Actuators and buttons”

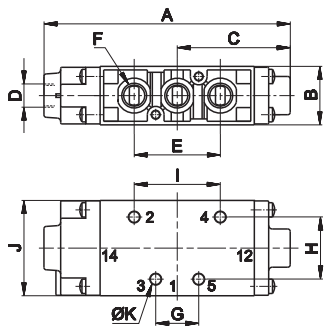
Subject to change

Single/double **pneumatic impulse**



Symbol	Connection	Control	Return	Pressure	Times (ms)		Weight	Part no.
		14	12	bar	En.	De-en.	Kg	
SINGLE PNEUMATIC IMPULSE								
	G1/8	pneumatic amplified	pneumomechanical spring	1,8÷10	8	10	0,22	AC-7100
	G1/4			2,3÷10	10	10	0,23	AC-8100
	G1/2			2÷10	10	10	0,76	AC-9100
DOUBLE PNEUMATIC IMPULSE								
	G1/8	pneumatic amplified	pneumatic amplified	1÷10	5	10	0,23	AC-7120
	G1/4			0,8÷10	6	6	0,21	AC-8120
	G1/2			0,8÷10	8	8	0,77	AC-9120

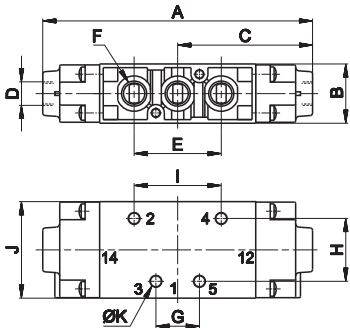
Single pneumatic impulse



- 1 = Supply port
- 2 - 4 = Use
- 3 - 5 = Exhaust
- 14 = Control
- 12 = Return

	A	B	C	D	E	F	G	H	I	J	K
G1/8	103	25	47	G1/8	36	G1/8	18	26	36	40	4,5
G1/4	117	27	54	G1/8	44	G1/4	22	40	60	50	5,5
G1/2	165	40	82,5	G1/8	80	G1/2	40	50	108	63	6,5

Double pneumatic impulse



- 1 = Supply port
- 2 - 4 = Use
- 3 - 5 = Exhaust
- 14 = Control
- 12 = Return

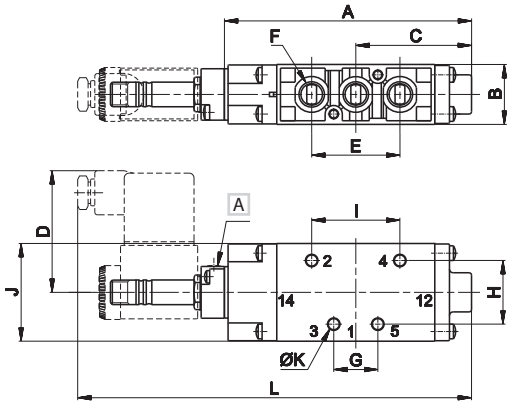
	A	B	C	D	E	F	G	H	I	J	K
G1/8	112	25	56	G1/8	36	G1/8	18	26	36	40	4,5
G1/4	126,5	25	63	G1/8	44	G1/4	22	40	60	50	5,5
G1/2	165	40	82,5	G1/8	80	G1/2	40	50	108	63	6,5

Single/double electric impulse



Symbol	Connection	Control	Return	Pressure	Times (ms)		Weight	Part no.
		14	12	bar	En.	De-en.	Kg	
SINGLE ELECTRIC IMPULSE								
	G1/8	electric amplified	pneumomechanical spring	1,8÷10	18	20	0,27	AC-7500
	G1/4			2,3÷10	22	22	0,28	AC-8500
	G1/2			2÷10	23	30	1,1	AC-9500
DOUBLE ELECTRIC IMPULSE								
	G1/8	electric amplified	electric amplified	1÷10	14	14	0,33	AC-7520
	G1/4			0,8÷10	14	14	0,31	AC-8520
	G1/2			0,8÷10	16	16	1,1	AC-9520

Single electric impulse

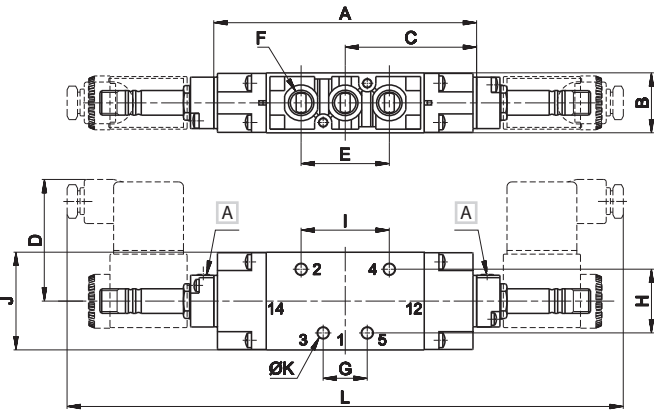


A Manual override

- 1 = Supply port
2 - 4 = Use
3 - 5 = Exhaust
14 = Control
12 = Return

	A	B	C	D	E	F	G	H	I	J	K	L
G1/8	101	25	47	50	36	G1/8	18	26	36	40	4,5	164
G1/4	116	27	54	50	44	G1/4	22	40	60	50	5,5	180
G1/2	165	40	83	48	80	G1/2	40	50	108	63	6,5	241

Double electric impulse



A Manual override

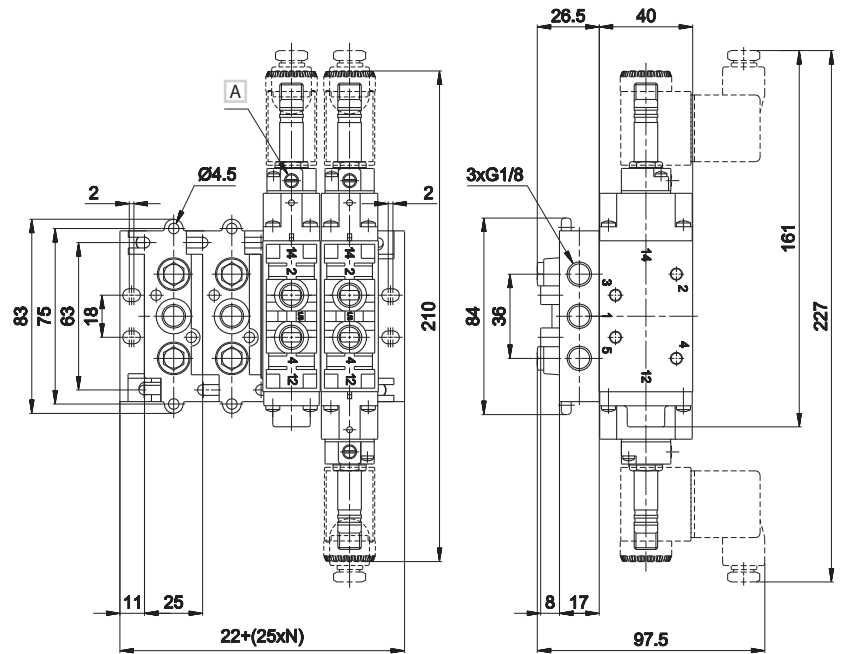
- 1 = Supply port
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14 = Control
12 = Return

	A	B	C	D	E	F	G	H	I	J	K	L
G1/8	107	25	53,5	50	36	G1/8	18	26	36	40	4,5	227
G1/4	124	27	62	50	44	G1/4	22	40	60	50	5,5	252
G1/2	164	40	80,5	48	80	G1/2	40	50	108	63	6,5	317

For technical data of coils, refer to section "Accessories>Coils"
For external servoassisted pilot, use AM - 5148 plates (refer to next pages)
Electrovalves are supplied without coil, connector and locking ring

Subject to change

Modular sub-base G1/8

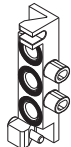
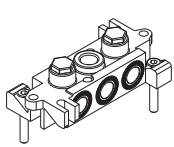


A Manual override

1 = Supply port
2 - 4 = Use
3 - 5 = Exhaust
14 = Control
12 = Return

AC-7900

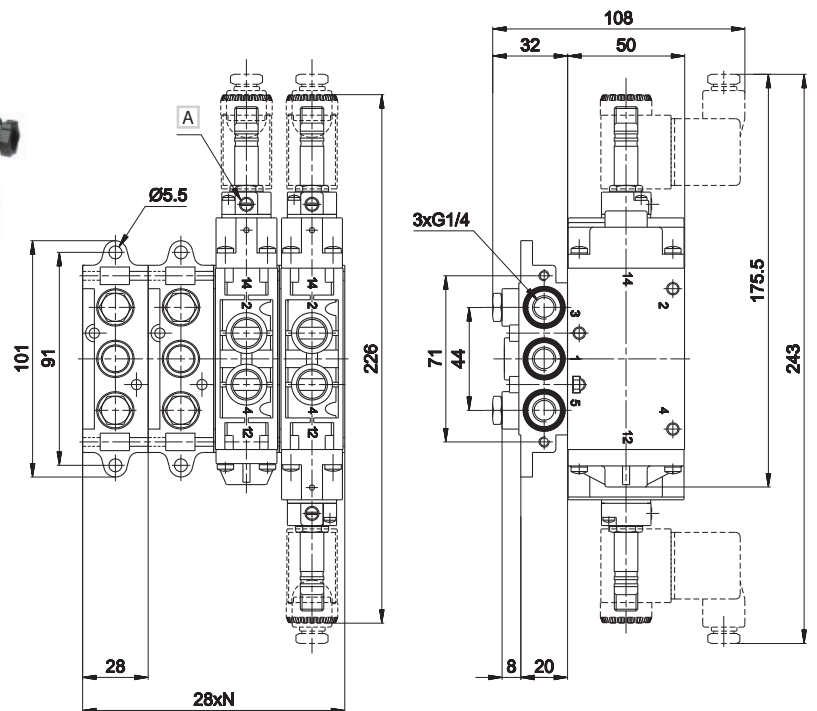
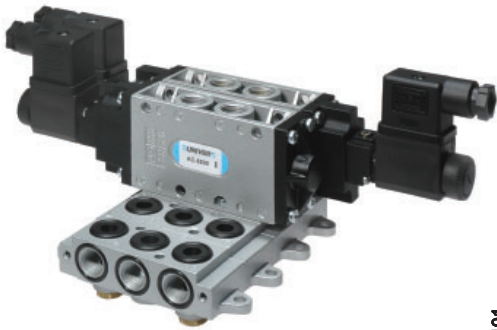
AC-7905



Sub-base with connections
G1/8
weight: 0,15 Kg

Inlet plate **MIXED**
system 5/2 - G1/8
weight: 0,06 Kg

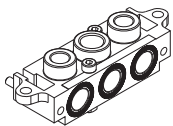
Modular sub-base G1/4



A Manual override

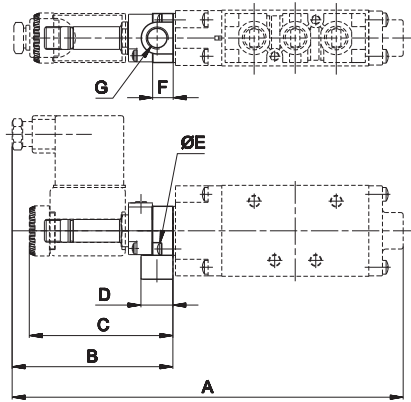
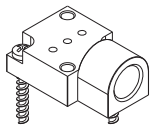
1 = Supply port
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3 - 5 = Exhaust
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12 = Return

AC-8900



Sub-base with threaded connections **G1/4**
Screws included
weight: 0,22 Kg

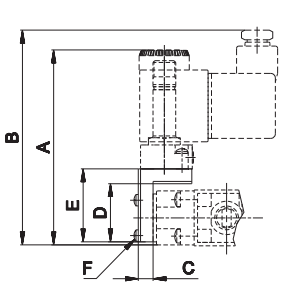
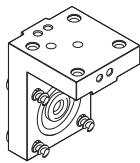
AM-5148



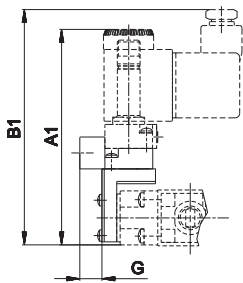
	G1/8	G1/4
A	171,5	186
B	70,5	70,5
C	63	63
D	14	14
E	2,9x10	2,9x10
F	9	9
G	G1/8	G1/8

Plate for external servoassisted pilot
weight: 0,03 Kg

AM-5151



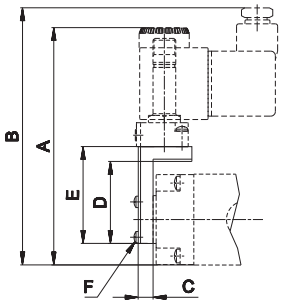
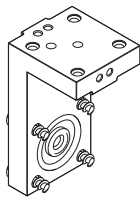
AM-5151 + AM-5148



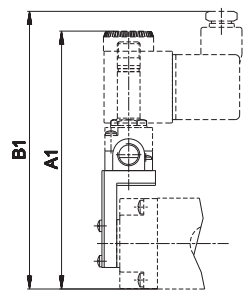
	G1/8	G1/4
A	87,7	88,7
A1	96,7	97,7
B	95,5	96,5
B1	104,5	105,5
C	6,5	6,5
D	25,5	25,5
E	32	32
F	2,9x10	2,9x10
G	9,7	9,7

"H" option solenoid square
weight: 0,035 Kg

AM-5152



AM-5152 + AM-5148



	G1/8	G1/4
A	106	111
A1	115	120
B	113,5	118,5
B1	122,5	127,5
C	6,5	6,5
D	36	36
E	42,5	42,5
F	2,9x10	2,9x10

"P" option solenoid square
weight: 0,05 Kg