



UNIVERSAL Valves G1/8 - G1/4

- UNIVERSAL Modular System: possibility to create a lot of different valves with short number of basis elements
- Control: manual, mechanical, pneumatic, electric
- Traditional UNIVER spool system: fluctuating seals of special compount to reduce frinction and prevent sticking
- High flow rate, high cycle life, suitable for vacuum application
- Modular sub-bases



Fluid	50 µm filtered air, with or without lubrication
Ambient temperature	-10 ÷ +50 °C
Fluid temperature	max +50 °C
Commutation system	spool
Ways/Positions	3/2 NC, 3/2 NO, 3/2 NC-NO, 5/2, 5/3
Pressure	max 10 bar
Control	indirect electro-pneumatic, pneumatic, manual, mechanical
Return	pneumatic spring, mechanical spring
Connections	G1/8 G1/4
Nominal Ø mm	6,5 8,5
Nominal flow rate (NL/min)	890 1480
Valve body	G1/8 = die-cast zamak G1/4 = aluminium
Seals	nitrile rubber
Actuators	technopolymer/aluminium
Spool	aluminium
Sub-base	zamak
Electropilot	AA
Coil	U1
Power consumption	3,5 W (DC) - 5 VA (AC)
Connector	AM 5110
Voltage	12 V DC - 24 V DC - 24 V AC - 110 V AC - 230 V AC
Manual override	impulse screw - 2 positions



Reference standard

II 2G Ex h IICT5 Gb

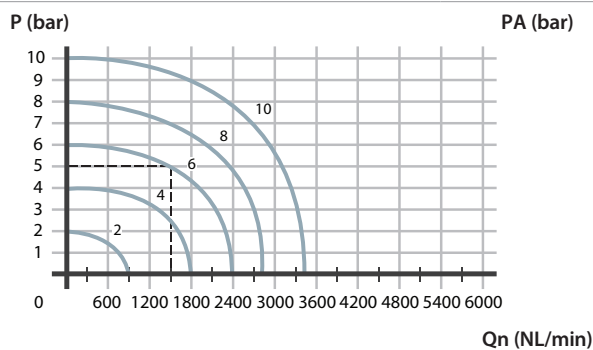


II 2D Ex h IIICT100°C Db

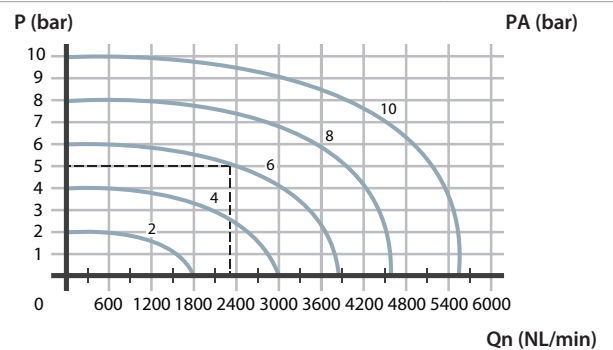


FLOW RATE CHARACTERISTICS

G1/8



G1/4



PA (bar) = apply pressure

PA (bar) = apply pressure

Qn (NL/min) = Flow rate



Key



Screwdriver adjustment

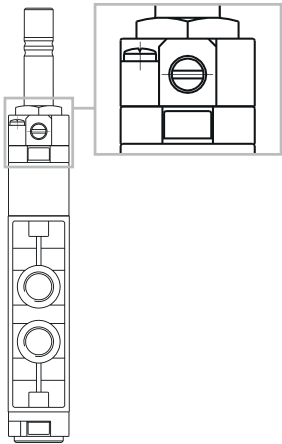


Manual adjustment

MANUAL CONTROL STANDARD



2-POSITION SCREWDRIVER

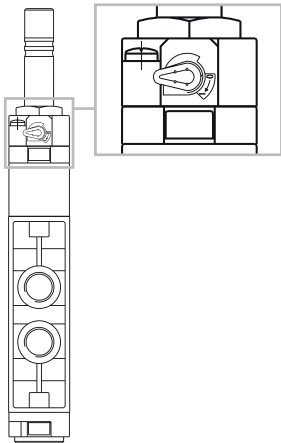


MANUAL CONTROLS ON REQUEST



LEVER

LETTER TO BE ADDED AT THE END
OF THE ELECTROPILOT CODE

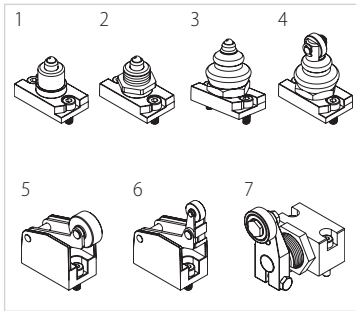


R
EXAMPLE::
CM-622R

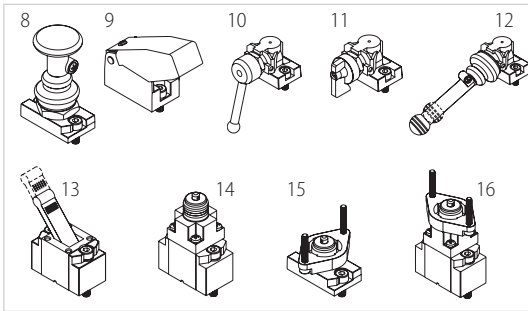
Red technopolymer

MODULAR SYSTEM UNIVERSAL SERIES

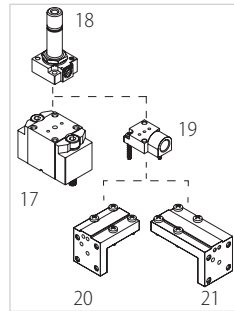
MECHANICAL



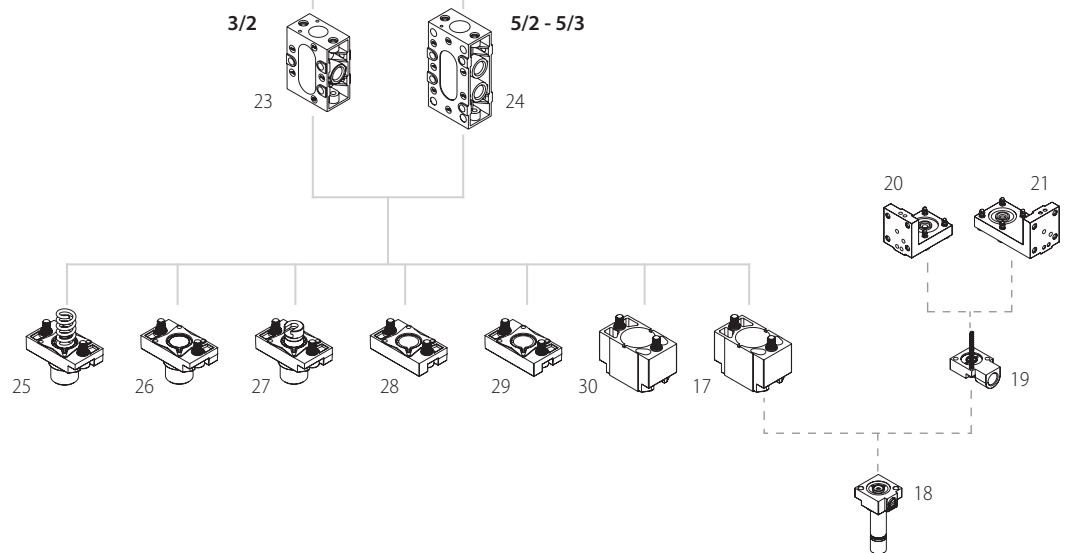
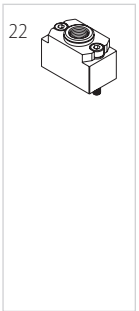
MANUAL



ELECTRICAL



PNEUMATIC



MECHANICAL CONTROL

1. Ball push
2. Ball push for screw panel mounting
3. Ball push with dust protection
4. Roller with dust protection
5. Roller lever
6. One-way roller lever
7. Two-way side roller lever

MANUAL OVERRIDE

8. Push-pull
9. Push button
10. Rotating lever
11. Selector
12. 90° short/Long lever
13. Short/Long lever
14. Threaded indirect oforation
15. Panel direct oforation
16. Panel indirect oforation

ELECTRICAL CONTROL

17. Electrical amplified
18. U1 electropilot
19. Plate for external pilot supply
20. Angle plate for "H" solenoid option
21. Angle plate for "P" solenoid option

CONTROL PNEUMATIC

22. Pneumatic amplified

BODY

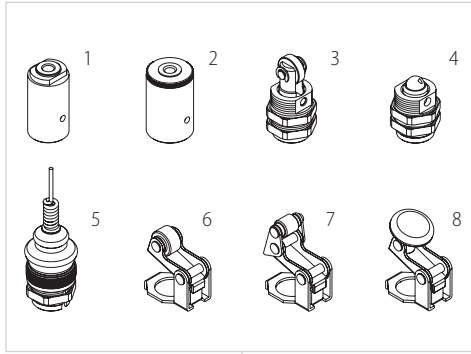
23. Body 3/2
24. Body 5/2

RETURN

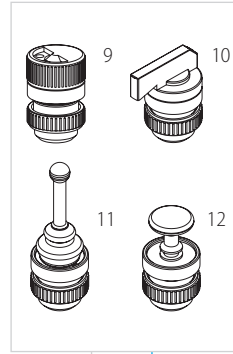
25. Mechanical spring
26. Pneumatic unamplified (differential)
27. Bottom plate - 2/3 positions
28. Bottom plate
29. Pneumatic spring
30. Pneumatic amplified

MODULAR SYSTEM ACTUATORS/BUTTONS

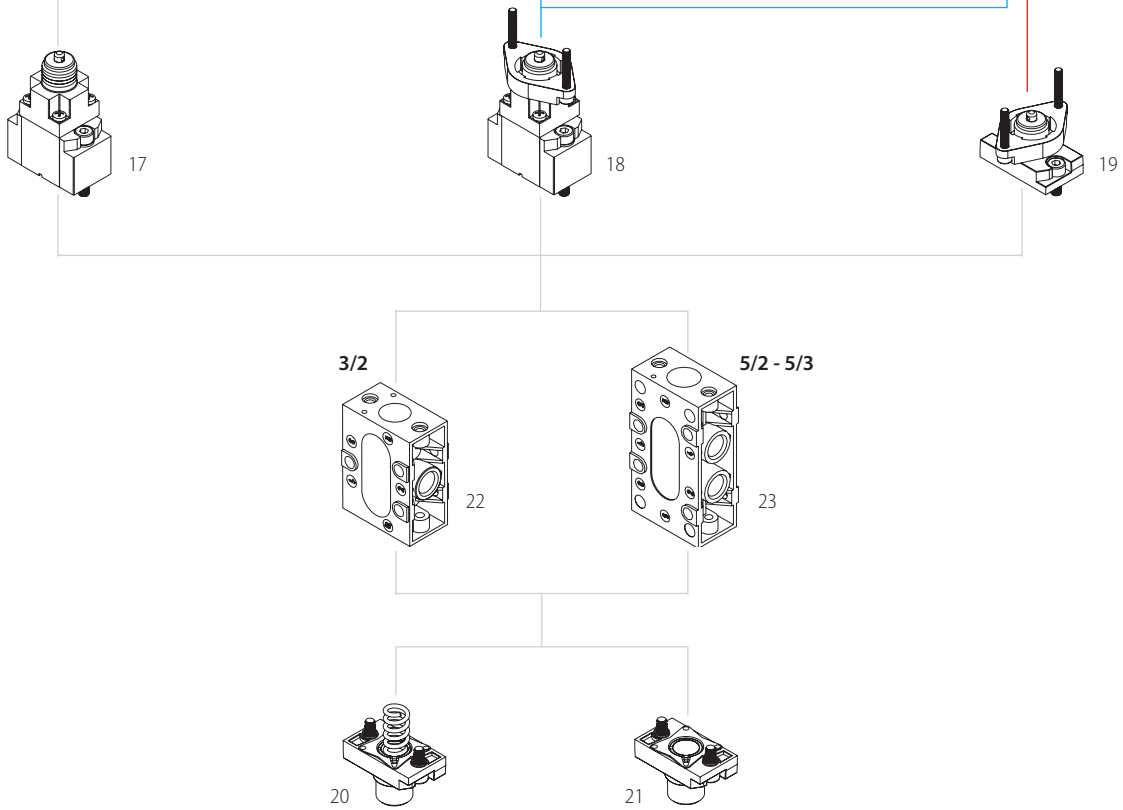
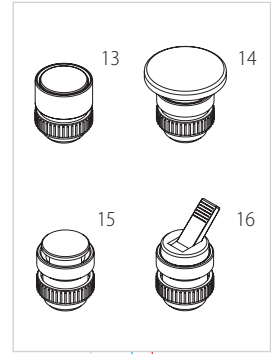
PNEUMATIC/MACHANICAL



MANUAL



MANUAL



PNEUMATIC/MACHANICAL ACTUATORS

1. Pneumatic actuators
2. Pneumatic actuators amplified
3. Roller operator 1 position
4. Ball operator 1 position
5. Operator with omni-directional antenna 1 position
6. Roller lever operator 1 position
7. Articulated roller lever operator 1 position
8. Key operator 1 position

MANUAL PUSH

9. Rotating selector
10. Rotating lever selector
11. Omni-directional lever
12. Push pull actuators

OVERRIDE

17. Threaded indirect operation
18. Indirect operation for panel mounting
19. Direct operation for panel mounting

RETURN

20. Mechanical spring
21. Pneumatic not amplified

BODY

22. 3/2 Body
23. 5/2 Body

VALVES WITH DIRECT MECHANICAL OPERATION

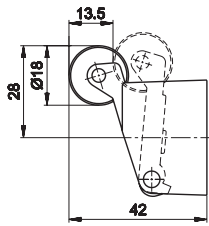
CONTROL

BODY

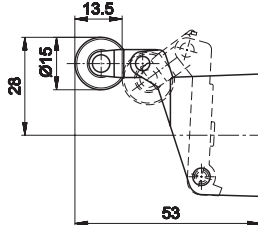
RETURN

1/8

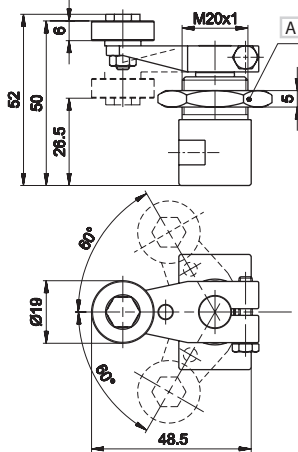
A ROLLER LEVER



B UNI-DIRECTIONAL ROLLER LEVER

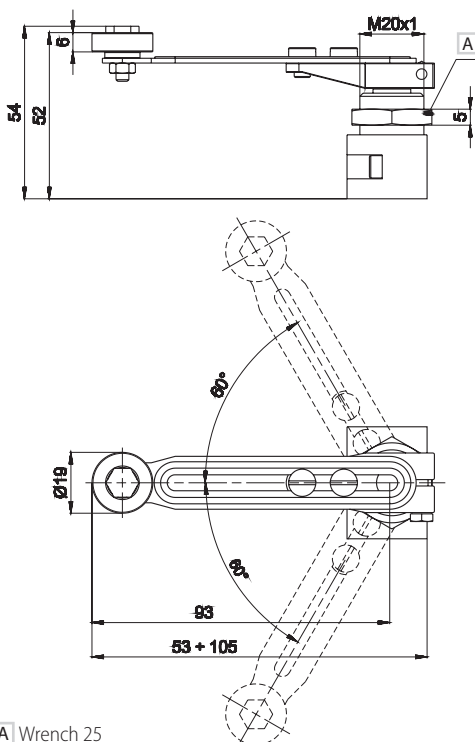


C BIDIRECTIONAL SIDE ROLLER LEVER



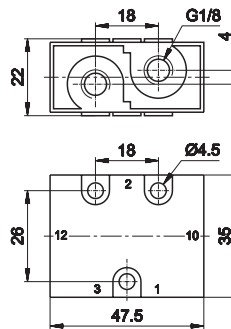
A Chiave 25

D ADJUSTABLE BIDIRECTIONAL SIDE ROLLER LEVER



A Wrench 25

1 3/2 NC-NO



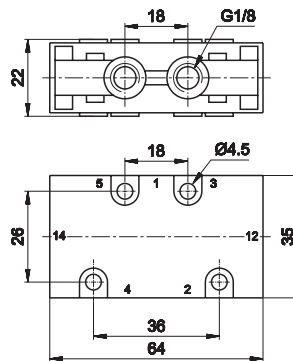
NC

1 = Supply port
2 = Use
3 = Exhaust
12 = Control
10 = Return

NO

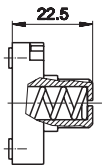
1 = Exhaust
2 = Use
3 = Supply port
12 = Control
10 = Return

2 5/2

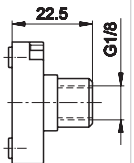


1 = Supply port
2 - 4 = Use
3 - 5 = Exhaust
14 = Control
12 = Return

I MECHANICAL SPRING



L PNEUMATIC NOT AMPLIFIED



VALVES WITH DIRECT MECHANICAL OPERATION

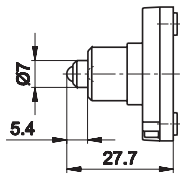
CONTROL

BODY

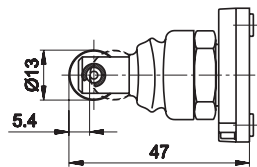
RETURN

1/8

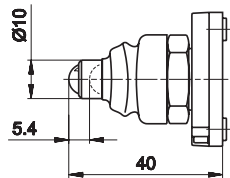
E BALL-PUSH



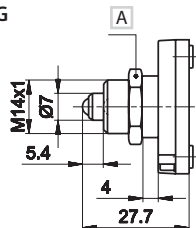
F ROLLER WITH DUST PROTECTION



G BALL-PUSH WITH DUST PROTECTION

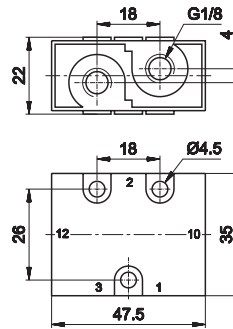


H BALL-PUSH FOR SCREW
PANEL MOUNTING



A Wrench 18

1 3/2 NC-NO



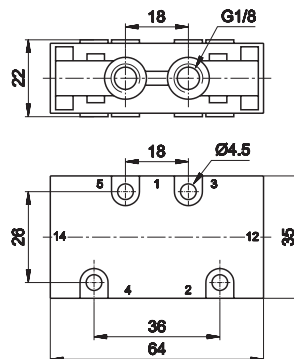
NC

1 = Supply port
2 = Use
3 = Exhaust
12 = Control
10 = Return

NO

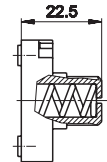
1 = Exhaust
2 = Use
3 = Supply port
12 = Control
10 = Return

2 5/2

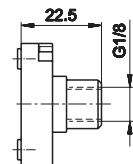


1 = Supply port
2 - 4 = Use
3 - 5 = Exhaust
14 = Control
12 = Return

I MECHANICAL SPRING



L PNEUMATIC NOT AMPLIFIED



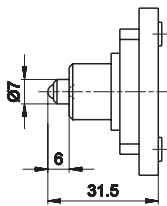
VALVES WITH DIRECT MECHANICAL OPERATION

CONTROL

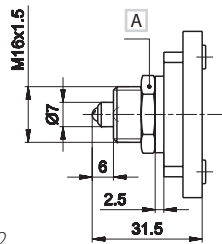
BODY

RETURN

E BALL VALVE

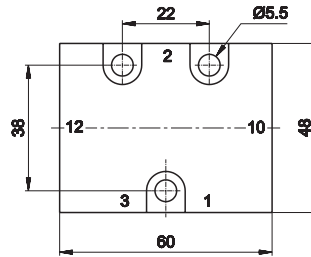
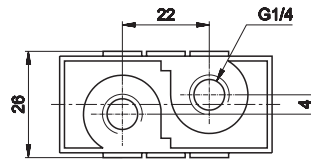


H BALL VALVE WITH FLANGE MOUNTING



A Wrench 22

1 3/2 NC-NO



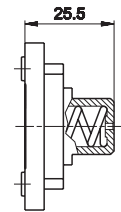
NC

1 = Supply port
2 = Use
3 = Exhaust
12 = Control
10 = Return

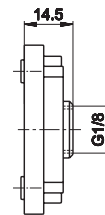
NO

1 = Supply port
2 = Use
3 = Exhaust
12 = Control
10 = Return

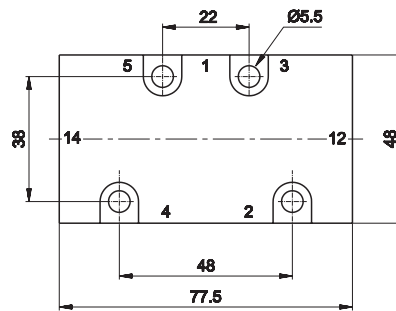
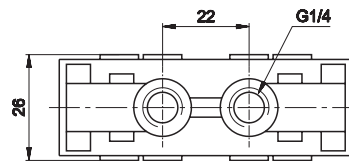
I MECHANICAL SPRING



L NON-AMPLIFIED PNEUMATIC

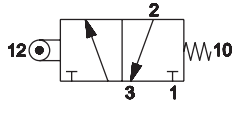
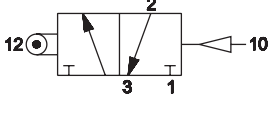
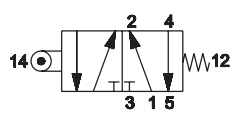
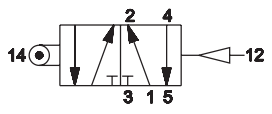
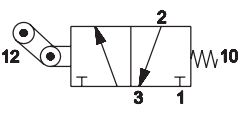
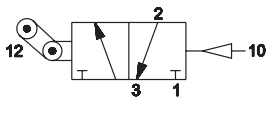
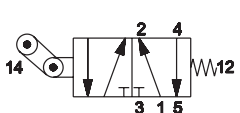
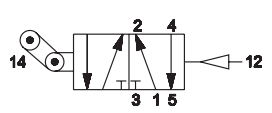
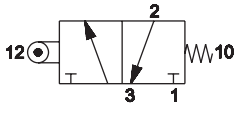
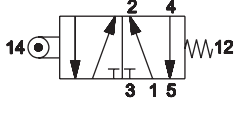


2 5/2



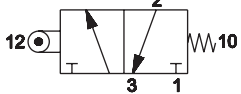
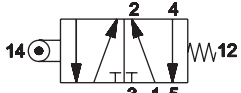
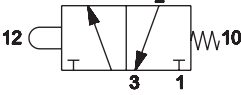
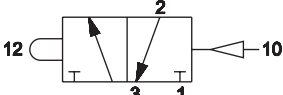
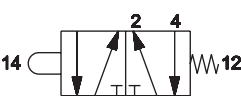
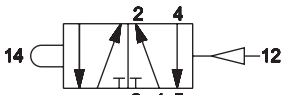
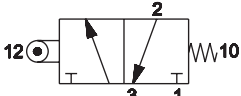
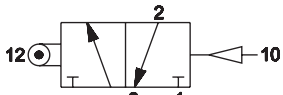
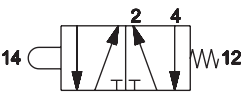
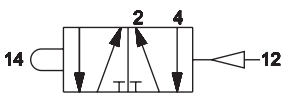
1 = Supply port
2 - 4 = Use
3 - 5 = Exhaust
14 = Control
12 = Return

VALVES WITH DIRECT MECHANICAL OPERATION

	Code	Way	Thread	Return	Flow rate (NI/min)	Ø mm	Weight kg	Force N	Composition			tot. L mm	
									Control	Body	Return		
ROLLER LEVER													
	CL-100A	3/2 NC - NO	G1/8	mechanical spring	890	6,5	0,21	23	A	1	I	112	
	CL-100P	3/2 NC - NO	G1/8	pneumatic not amplified	890	6,5	0,21	6	A	1	L	112	
	CM-400A	5/2	G1/8	mechanical spring	890	6,5	0,25	23	A	2	I	129	
	CM-400P	5/2	G1/8	pneumatic not amplified	890	6,5	0,25	6	A	2	L	129	
ONE-WAY ROLLER LEVER													
	CL-101A	3/2 NC - NO	G1/8	mechanical spring	890	6,5	0,22	18	B	1	I	123	
	CL-101P	3/2 NC - NO	G1/8	pneumatic not amplified	890	6,5	0,22	6	B	1	L	123	
	CM-401A	5/2	G1/8	mechanical spring	890	6,5	0,26	18	B	2	I	139,5	
	CM-401P	5/2	G1/8	pneumatic not amplified	890	6,5	0,26	6	B	2	L	139,5	
TWO-WAY SIDE ROLLER LEVER													
	CL-106A	3/2 NC - NO	G1/8	mechanical spring	890	6,5	0,30	25	C	1	I	118,5	
	CM-406A	5/2	G1/8	mechanical spring	890	6,5	0,34	25	C	2	I	135	

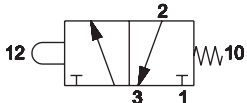
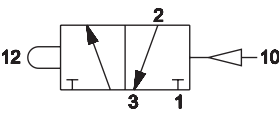
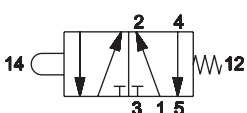
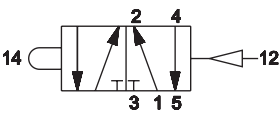
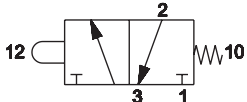
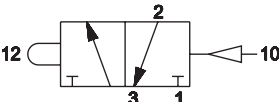
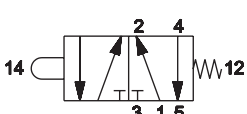
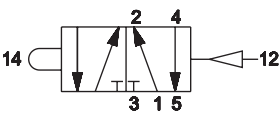
To get 3/2 NO version, supply the valve from port 3

VALVES WITH DIRECT MECHANICAL OPERATION

	Code	Way	Thread	Return	Flow rate (NI/min)	Ø mm	Weight kg	Force N	Control	Body	Return	tot. L mm	
TWO-WAY ADJUSTABLE ROLLER LEVER													
	CL-106AL	3/2 NC - NO	G1/8	mechanical spring	890	6,5	0,30	25	D	1	I	123÷175	
	CM-406AL	5/2	G1/8	mechanical spring	890	6,5	0,34	25	D	2	I	139,5÷191,5	
BALL-PUSH													
	CL-102A	3/2 NC - NO	G1/8	mechanical spring	890	6,5	0,19	64	E	1	I	97,7	
	CL-9102A	3/2 NC - NO	G1/4	mechanical spring	1480	8,5	0,26	68	E	1	I	117	
	CL-102P	3/2 NC - NO	G1/8	pneumatic not amplifi ed	890	6,5	0,19	25	E	1	L	97,7	
	CL-9102P	3/2 NC - NO	G1/4	pneumatic not amplifi ed	1480	8,5	0,26	26	E	1	L	106	
	CM-402A	5/2	G1/8	mechanical spring	890	6,5	0,23	64	E	2	I	114,2	
	CM-9402A	5/2	G1/4	mechanical spring	1480	8,5	0,28	68	E	2	I	134,5	
	CM-402P	5/2	G1/8	pneumatic not amplifi ed	890	6,5	0,23	25	E	2	L	114,2	
	CM-9402P	5/2	G1/4	pneumatic not amplifi ed	1480	8,5	0,28	26	E	2	L	123,5	
WITH ROLLER NEEDLE AND DUST COVER													
	CL-105A	3/2 NC - NO	G1/8	mechanical spring	890	6,5	0,19	64	F	1	I	117	
	CL-105P	3/2 NC - NO	G1/8	pneumatic not amplifi ed	890	6,5	0,18	25	F	1	L	117	
	CM-405A	5/2	G1/8	mechanical spring	890	6,5	0,23	68	F	2	I	133,5	
	CM-405P	5/2	G1/8	pneumatic not amplifi ed	890	6,5	0,22	26	F	2	L	133,5	

To get 3/2 NO version, supply the valve from port 3

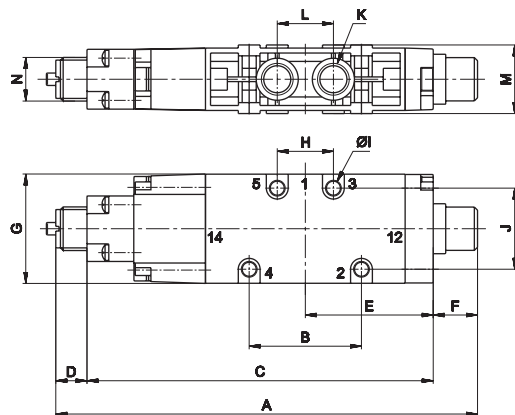
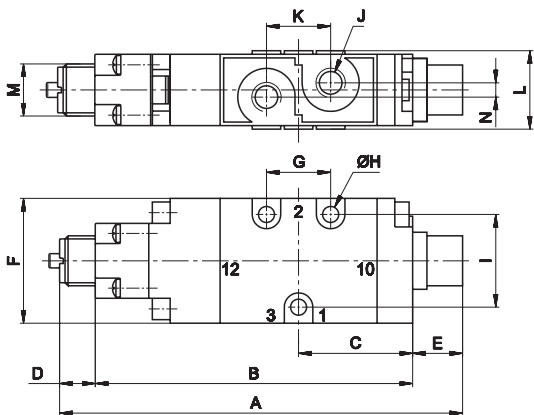
VALVES WITH DIRECT MECHANICAL OPERATION

	Code	Way	Thread	Return	Flow rate (NI/min)	Ø mm	Weight kg	Force N	Composition	Body	Return	tot. L mm	
ROLLER WITH DUST PROTECTION													
	CL-104A	3/2 NC - NO	G1/8	mechanical spring	890	6,5	0,19	64	G	1	I	110	
	CL-104P	3/2 NC - NO	G1/8	pneumatic not amplified	890	6,5	0,18	25	G	1	L	110	
	CM-404A	5/2	G1/8	mechanical spring	890	6,5	0,23	68	G	2	I	126,5	
	CM-404P	5/2	G1/8	pneumatic not amplified	890	6,5	0,22	26	G	2	L	126,5	
BALL-PUSH WITH DUST PROTECTION													
	CL-103A	3/2 NC - NO	G1/8	mechanical spring	890	6,5	0,19	64	H	1	I	97,7	
	CL-9103A	3/2 NC - NO	G1/4	mechanical spring	1480	8,5	0,26	68	H	1	I	117	
	CL-103P	3/2 NC - NO	G1/8	pneumatic not amplified	890	6,5	0,18	25	H	1	L	97,7	
	CL-9103P	3/2 NC - NO	G1/4	pneumatic not amplified	1480	8,5	0,24	26	H	1	L	106	
	CM-403A	5/2	G1/8	mechanical spring	890	6,5	0,23	68	H	2	I	114,2	
	CM-9403A	5/2	G1/4	mechanical spring	1480	8,5	0,28	68	H	2	I	134,5	
	CM-403P	5/2	G1/8	pneumatic not amplified	890	6,5	0,22	25	H	2	L	114,2	
	CM-9403P	5/2	G1/4	pneumatic not amplified	1480	8,5	0,26	26	H	2	L	123,5	

To get 3/2 NO version, supply the valve from port 3

VALVES WITH INDIRECT MECHANICAL OPERATOR FOR PNEUMATIC AND MECHANICAL ACTUATORS

	Code	Way	Thread	Return	Pressure bar	Flow rate (NI/min)	Ø mm	Weight kg	Force N	
PUNTALE A SFERA										
	CL-110A	3/2 NC	G 1/8	mechanical spring	2,5÷10	890	6,5	0,19	11	
	CL-9110A	3/2 NC	G 1/4	mechanical spring	2÷10	1480	8,5	0,26	11	
	CL-110P	3/2 NC	G 1/8	pneumatic not amplified	1÷10	890	6,5	0,18	11	
	CL-9110P	3/2 NC	G 1/4	pneumatic not amplified	1÷10	1480	8,5	0,24	11	
	CM-410A	5/2	G 1/8	mechanical spring	3÷10	890	6,5	0,23	11	
	CM-9410A	5/2	G 1/4	mechanical spring	2÷10	1480	8,5	0,28	11	
	CM-410P	5/2	G 1/8	pneumatic not amplified	1,2÷10	890	6,5	0,22	11	
	CM-9410P	5/2	G 1/4	pneumatic not amplified	1,2÷10	1480	8,5	0,26	11	
PUNTALE A SFERA SENSIBILE										
	CL-111A	3/2 NC	G 1/8	mechanical spring	2,5÷10	890	6,5	0,19	3	
	CL-9111A	3/2 NC	G 1/4	mechanical spring	2÷10	1480	8,5	0,26	3	
	CL-111P	3/2 NC	G 1/8	pneumatic not amplified	1÷10	890	6,5	0,18	3	
	CL-9111P	3/2 NC	G 1/4	pneumatic not amplified	1÷10	1480	8,5	0,24	3	
	CM-411A	5/2	G 1/8	mechanical spring	3÷10	890	6,5	0,23	3	
	CM-9411A	5/2	G 1/4	mechanical spring	2÷10	1480	8,5	0,28	3	
	CL-411P	5/2	G 1/8	pneumatic not amplified	1,2÷10	890	6,5	0,22	3	
	CL-9411P	5/2	G 1/4	pneumatic not amplified	1,2÷10	1480	8,5	0,26	3	

3/2 NC
5/2


	A	B	C	D	E	F	G	H	I	J	K	L	M	N
G1/8	116	92	32	10	14	35	18	4,5	26	G1/8	18	22	M14x1	4
G1/4	136,5	112	41	10	14,5	48	22	5,5	38	G1/4	22	26	M14x1	4

1 = Supply port
2 = Use
3 = Exhaust

12 = Control
10 = Return

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
G1/8	135	36	111	10	41	14	35	18	4,5	26	G1/8	18	22	M14x1
G1/4	154	48	129,5	10	49,7	14,5	48	22	5,5	38	G1/4	22	26	M14x1

1 = Supply port
2 = Use
3 = Exhaust

12 = Control
10 = Return

VALVES WITH INDIRECT MECHANICAL OPERATOR FOR PNEUMATIC AND MECHANICAL ACTUATORS
PNEUMATIC AND MECHANICAL ACTUATORS

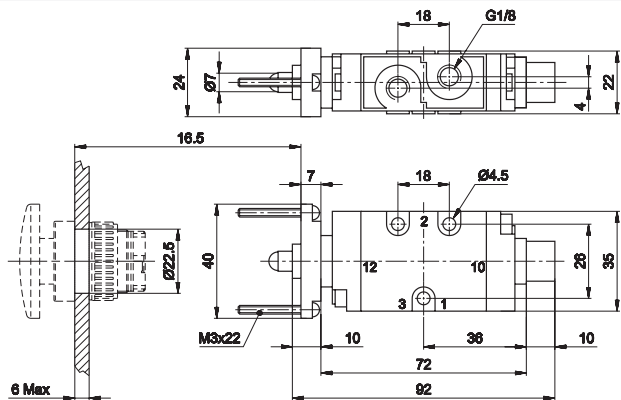
	AI-3550	Pneumatic operator	
	AI-3551	Amplified pneumatic operator	
	AI-3560	Roller operator 1 position	
	AI-3562	Ball-push operator 1 position	
	AI-3563	Operator with omni-directional antenna 1 position	
	AI-3570	Roller lever operator 1 position	
	AI-3571	Articulated roller operator 1 position Complete actuation with stroke 2,5 mm, max stroke 4,7 mm	
	AI-3572	Key operator 1 position	

MANUAL ACTUATORS

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

DIRECT-ACTING VALVES FOR PANEL-MOUNTED ACTUATORS

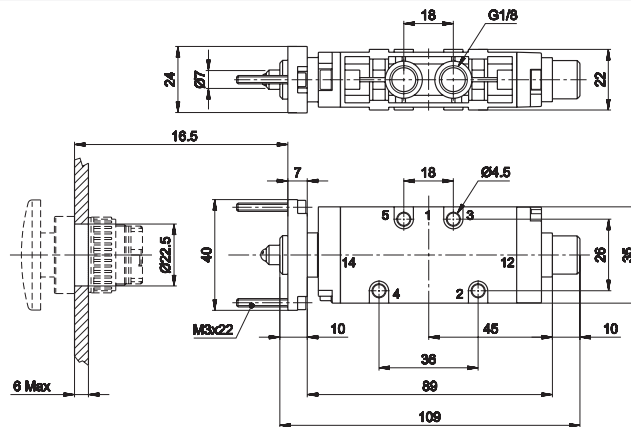
	Code	Way	Thread	Return	Pressure bar	Flow rate (NI/min)	Ø mm	Weight kg	Force N	
BALL-PUSH										
	CL-112A	3/2 NC - NO	G1/8	mechanical spring	0 ÷ 10	890	6,5	0,19	64	
	CL-112P	3/2 NC - NO	G1/8	pneumatic not amplified	0 ÷ 10	890	6,5	0,18	25	
	CM-412A	5/2	G1/8	mechanical spring	0 ÷ 10	890	6,5	0,23	64	
	CM-412P	5/2	G1/8	pneumatic not amplified	0 ÷ 10	890	6,5	0,22	25	

3/2 NC-NO

NC

1 = Supply port
2 = Use
3 = Exhaust
12 = Control
10 = Return

NO

1 = Exhaust
2 = Use
3 = Supply port
12 = Control
10 = Return

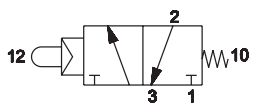
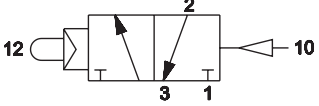
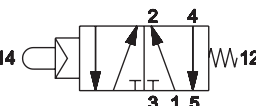
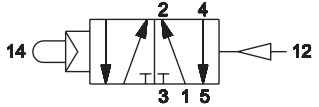
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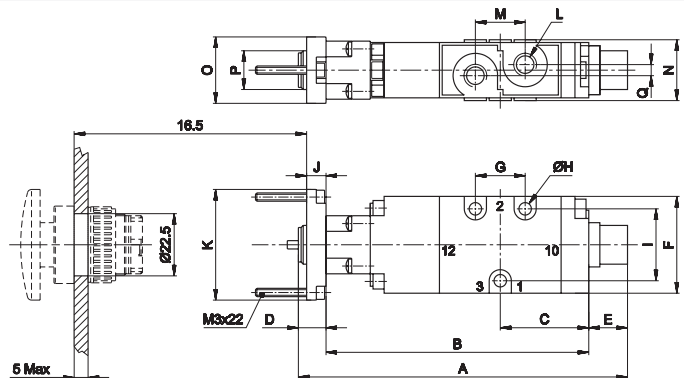
1 = Supply port
2 - 4 = Use
3 - 5 = Exhaust
14 = Control
12 = Return

MANUAL ACTUATORS

	AI-3511Q	■ BLACK	Recessed button	
	AI-3512Q	■ RED		
	AI-3513Q	■ GREEN		
	AI-3514Q	■ RED	Head button	
	AI-3516Q	■ BLACK		
	AI-3514QD	■ RED		
	AI-3516QD	■ BLACK		
	AI-3515Q	■ GREEN	Button	
	AI-3517Q	■ RED		
	AI-3519Q	■ BLACK		
	AI-3524Q	■ BLACK	Lever operator	

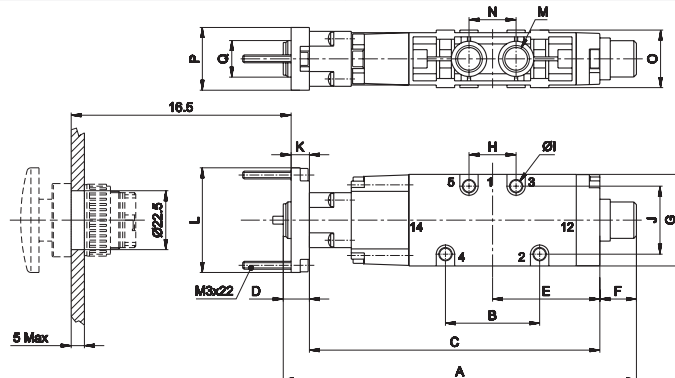
VALVOLE AD AZIONAMENTO INDIRETTO PER ATTUATORI DA QUADRO

	Code	Way	Thread	Return	Pressure bar	Flow rate (NI/min)	Ø mm	Weight kg	Force N	
	CL-113A	3/2 NC	G 1/8	molla meccanica	2,5÷10	890	6,5	0,20	11	
	CL-9113A	3/2 NC	G 1/4	molla meccanica	2÷10	1480	8,5	0,27	11	
	CL-113P	3/2 NC	G 1/8	pneumatico non amplificato	1÷10	890	6,5	0,19	11	
	CL-9113P	3/2 NC	G 1/4	pneumatico non amplificato	1÷10	1480	8,5	0,26	11	
	CM-413A	5/2	G 1/8	molla meccanica	3÷10	890	6,5	0,24	11	
	CM-9413A	5/2	G 1/4	molla meccanica	2÷10	1480	8,5	0,25	11	
	CL-413P	5/2	G 1/8	pneumatico non amplificato	1,2÷10	890	6,5	0,23	11	
	CL-9413P	5/2	G 1/4	pneumatico non amplificato	1,2÷10	1480	8,5	0,28	11	

3/2 NC


	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
G1/8	116	92	32	10	14	35	18	4,5	26	7	40	G1/8	18	22	24	M14x1	4
G1/4	136,5	112	41	10	14,5	48	22	5,5	38	7	40	G1/4	22	26	24	M14x1	4

1 = Supply port
2 = Use
3 = Exhaust
12 = Control
10 = Return

5/2


	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
G1/8	135	36	111	10	41	14	35	18	4,5	22	7	40	G1/8	18	22	24	M14x1
G1/4	154	48	129,5	10	49,7	14,5	48	22	5,5	26	7	40	G1/4	22	26	24	M14x1

1 = Supply port
2 = Use
3 = Exhaust
12 = Control
10 = Return

MANUAL ACTUATORS

	AI-3511Q	■ BLACK	Recessed button	
	AI-3512Q	■ RED		
	AI-3513Q	■ GREEN		
	AI-3514Q	■ RED	Head button	
	AI-3516Q	■ BLACK		
	AI-3514QD	■ RED		
	AI-3515Q	■ GREEN	Button	
	AI-3517Q	■ RED		
	AI-3519Q	■ BLACK		
	AI-3520Q	■ BLACK	Accident prevention rotating selector	
	AI-3521Q	■ BLACK		

MANUAL ACTUATORS

	AI-3522Q	■ BLACK	Rotating lever selector	
	AI-3523Q	■ BLACK		
	AI-3524Q	■ BLACK	Lever operator	
	AI-3525Q	■ BLACK		
	AI-3525Q	■ BLACK	Omni-directional operator	
	AI-3526Q	■ BLACK		
	AI-3526Q	■ BLACK	Push-pull operator	

MANUALLY OPERATED VALVES

CONTROL

BODY

RETURN

A PUSH-PULL

	A	B	C	D	E	F
G1/8	51	5,4	4	M14x1	16	18
G1/4	52,5	6	2,5	M16x1,5	22	22

B BUTTON

C LONG/SHORT LEVER

A Short lever
B Long lever

	A	A1	B	B1	C
G1/8	56	42	38,5	24	22,5

	A	B	C
G1/4	58,5	32	26

D ROTATING LEVER

SELECTOR

	A	A1	B	B1	C	D	E	F
G1/8	89	42	32	29	22	M16x1,5	22	27
G1/4	89	42	32	29	24	M18x1,5	25	27,5

E 90° LEVER

A Leva corta
B Leva lunga

	A	B	C	D	E	F
G1/8	62	85	22	M16x1,5	21,5	22
G1/4	90	110	24	M18x1,5	29	25

1 3/2 NC-NO

NC

1 = Supply port
2 = Use
3 = Exhaust
12 = Control
10 = Return

NO

1 = Supply port
2 = Use
3 = Exhaust
12 = Control
10 = Return

	A	B	C	D	E	G	H	I	L
G1/8	47,5	35	18	26	4,5	18	22	G1/8	4
G1/4	60	48	22	38	5,5	22	26	G1/4	4

2 5/2 - 5/3

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

	A	B	C	D	E	F	G	H	I
G1/8	64	35	18	26	4,5	36	18	22	G1/8
G1/4	77,5	48	22	38	5,5	48	22	26	G1/4

F MECHANICAL SPRING

A

G1/8 22,5

G1/4 25,5

G 2/3 POSITION

A

G1/8 22,5

G1/4 25,5

H BOTTOM PLATE WITHOUT SPRING

A

G1/8 22,5

G1/4 25,5

I PNEUMATIC NOT AMPLIFIED

G1/8

G1/4

MANUALLY OPERATED VALVES

	Code	Way	Thread	Return	Flow rate (NI/min)	Ø mm	Weight kg	Force N	Composition			tot. L mm	
									Control	Body	Return		
PUSH-PULL													
	CL-120	3/2 NC - NO	G1/8	push-pull	890	6,5	0,19	25	A	1	H	108,5	
	CL-9120	3/2 NC - NO	G1/4	push-pull	1480	8,5	0,26	26	A	1	H	127	
	CM-420	5/2	G1/8	push-pull	890	6,5	0,22	25	A	2	H	125	
	CM-9420	5/2	G1/4	push-pull	1480	8,5	0,26	26	A	2	H	144,5	
	CL-120A	3/2 NC - NO	G1/8	mechanical spring	890	6,5	0,19	25	A	1	F	121	
	CL-9120A	3/2 NC - NO	G1/4	mechanical spring	1480	8,5	0,26	26	A	1	F	138	
	CL-120P	3/2 NC - NO	G1/8	pneumatic not amplified	890	6,5	0,18	25	A	1	I	121	
	CL-9120P	3/2 NC - NO	G1/4	pneumatic not amplified	1480	8,5	0,24	26	A	1	I	127	
	CM-420A	5/2	G1/8	mechanical spring	890	6,5	0,22	25	A	2	F	137,5	
	CM-9420A	5/2	G1/4	mechanical spring	1480	8,5	0,26	26	A	2	F	155,5	
	CM-420P	5/2	G1/8	pneumatic not amplified	890	6,5	0,21	25	A	2	I	137,5	
	CM-9420P	5/2	G1/4	pneumatic not amplified	1480	8,5	0,24	26	A	2	I	144,5	

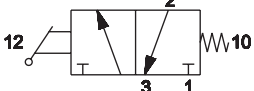
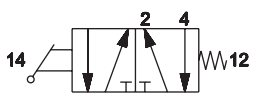
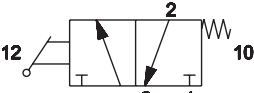
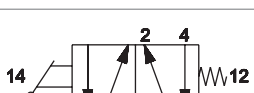
valves are supplied without operator button

BUTTON

	CL-126A	3/2 NC - NO	G1/8	mechanical spring	890	6,5	0,20	15	B	1	F	100		STANDARD ■ ROSSO
	CM-426A	5/2	G1/8	mechanical spring	890	6,5	0,23	15	B	2	F	116,5		

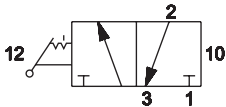
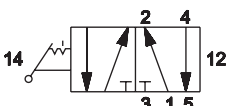
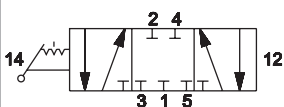
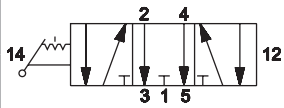
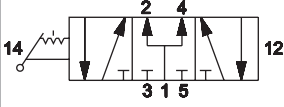
To get 3/2 NO version, supply the valve from port 3

MANUALLY OPERATED VALVES

	Code	Way	Thread	Return	Flow rate (NI/min)	Ø mm	Weight kg	Force N	Control	Body	Return	tot. L mm		
LONG LEVER														
	CL-118R	3/2 NC - NO	G1/8	mechanical spring	890	6,5	0,17	10	C	1	F	126		LONG LEVER STANDARD ■ RED
	CL-9118R	3/2 NC - NO	G1/4	mechanical spring	1480	8,5	0,23	11	C	1	F	144		
	CL-121R	3/2 NC - NO	G1/8	lever	890	6,5	0,16	10	C	1	G	126		
	CL-9121R	3/2 NC - NO	G1/4	lever	1480	8,5	0,22	11	C	1	G	144		
	CM-418R	5/2	G1/8	mechanical spring	890	6,5	0,21	10	C	2	F	142,5		LONG LEVER UPON REQUEST ■ YELLOW ■ BLACK
	CM-9418R	5/2	G1/4	mechanical spring	1480	8,5	0,25	11	C	2	F	161,5		
	CM-421R	5/2	G1/8	lever	890	6,5	0,20	10	C	2	G	142,5		
	CM-9421R	5/2	G1/4	lever	1480	8,5	0,24	11	C	2	G	161,5		
SHORT LEVER														
	CL-119R	3/2 NC - NO	G1/8	mechanical spring	890	6,5	0,17	20	C	1	F	112		SHORT LEVER STANDARD ■ RED
	CL-122R	3/2 NC - NO	G1/8	lever	890	6,5	0,16	20	C	1	G	112		
	CM-419R	5/2	G1/8	mechanical spring	890	6,5	0,21	20	C	2	F	128,5		SHORT LEVER UPON REQUEST ■ YELLOW ■ BLACK ■ GREEN
	CM-422R	5/2	G1/8	lever	890	6,5	0,20	20	C	2	G	128,5		

To get 3/2 NO version, supply the valve from port 3

VALVOLE AD AZIONAMENTO MANUALE

	Code	Way	Thread	Return	Flow rate (NI/min)	Ø mm	Weight kg	Force N	Control	Body	Return	tot. L mm	
ROTATING LEVER													
	CL-130	3/2 NC - NO	G1/8	rotating lever	890	6,5	0,22	27	D	1	G	97	
	CL-9130	3/2 NC - NO	G1/4	rotating lever	1480	8,5	0,25	29	D	1	G	113	
	CM-430	5/2	G1/8	rotating lever	890	6,5	0,25	27	D	2	G	113,5	
	CM-9430	5/2	G1/4	rotating lever	1480	8,5	0,27	29	D	2	G	130,5	
	CM-430E	5/3 C.C.	G1/8	rotating lever	890	6,5	0,25	27	D	2	G	113,5	
	CM-9430E	5/3 C.C.	G1/4	rotating lever	1480	8,5	0,27	29	D	2	G	130,5	
	CM-435E	5/3 O.C	G1/8	rotating lever	890	6,5	0,24	27	D	2	G	113,5	
	CM-9435E	5/3 O.C	G1/4	rotating lever	1480	8,5	0,26	29	D	2	G	130,5	
	CM-440E	5/3 P.C.	G1/8	rotating lever	890	6,5	0,24	27	D	2	G	113,5	
	CM-9440E	5/3 P.C.	G1/4	rotating lever	1480	8,5	0,26	29	D	2	G	130,5	



■ RED
CP-915R



■ RED
CP-916R



■ RED
CP-915R

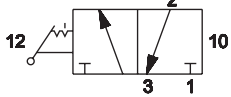
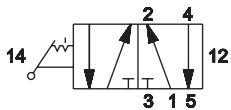
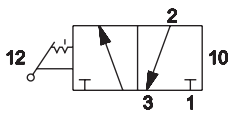
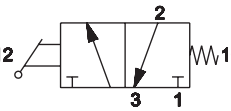
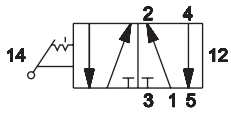
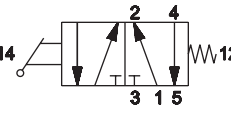
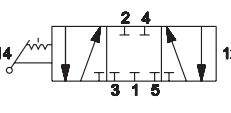
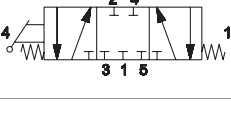
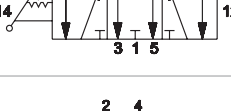
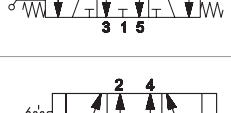
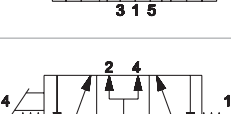


■ RED
CP-916R

C.C. = closed centres **O.C.** = open centres **P.C.** = pressurized centres

Valves are supplied without operator

MANUALLY OPERATED VALVES

	Code	Way	Thread	Return	Flow rate (NI/min)	Ø mm	Weight kg	Force N	Composition	Control	Body	Return	tot. L mm	
90° LEVER - 3 POSITION														
	CL-123	3/2 NC - NO	G1/8	lever	890	6,5	0,17	2,5÷4	E	1	H	79,5		
	CL-9123	3/2 NC - NO	G1/4	lever	1480	8,5	0,23	2,7÷4,5	E	1	H	99,5		
	CM-423	5/2	G1/8	lever	890	6,5	0,23	2,5÷4	E	2	H	96		
	CM-9423	5/2	G1/4	lever	1480	8,5	0,28	2,7÷4,5	E	2	H	117,5		
	CL-123D	3/2 NC - NO	G1/8	lever	890	6,5	0,17	3,5÷5	E	1	G	92		
	CL-9123D	3/2 NC - NO	G1/4	lever	1480	8,5	0,23	3,6÷5,2	E	1	G	110,5		
	CL-123A	3/2 NC - NO	G1/8	mechanical spring	890	6,5	0,18	9 ÷ 13	E	1	F	92		 LONG LEVER
	CL-9123A	3/2 NC - NO	G1/4	mechanical spring	1480	8,5	0,24	10÷14	E	1	F	110,5		
	CM-423D	5/2	G1/8	lever	890	6,5	0,23	3,5÷5	E	2	G	108,5		 RED CP-913R
	CM-9423D	5/2	G1/4	lever	1480	8,5	0,28	3,6÷5,2	E	2	G	128		
	CM-423A	5/2	G1/8	mechanical spring	890	6,5	0,23	9 ÷ 13	E	2	F	108,5		 SHORT LEVER
	CM-9423A	5/2	G1/4	mechanical spring	1480	8,5	0,28	10÷14	E	2	F	128		
	CM-423E	5/3 C.C.	G1/8	lever	890	6,5	0,23	3,5 ÷ 5	E	2	G	108,5		 YELLOW CP-912G
	CM-9423E	5/3 C.C.	G1/4	lever	1480	8,5	0,28	3,6÷5,2	E	2	G	128		
	CM-423F	5/3 C.C.	G1/8	lever with spring	890	6,5	0,23	6,5 ÷ 10	E	2	F	108,5		 RED CP-912R
	CM-9423F	5/3 C.C.	G1/4	lever with spring	1480	8,5	0,28	6,7÷11	E	2	G	128		
	CM-424E	5/3 O.C.	G1/8	lever	890	6,5	0,23	3,5 ÷ 5	E	2	G	108,5		 BLACK CP-912N
	CM-9424E	5/3 O.C.	G1/4	lever	1480	8,5	0,28	3,6÷5,2	E	2	G	128		
	CM-424F	5/3 O.C.	G1/8	lever with spring	890	6,5	0,23	6,5 ÷ 10	E	2	F	108,5		
	CM-9424F	5/3 O.C.	G1/4	lever with spring	1480	8,5	0,28	6,7÷11	E	2	G	128		
	CM-425E	5/3 P.C.	G1/8	lever	890	6,5	0,23	3,5 ÷ 5	E	2	G	108,5		
	CM-9425E	5/3 P.C.	G1/4	lever	1480	8,5	0,28	3,6÷5,2	E	2	G	128		
	CM-425F	5/3 P.C.	G1/8	lever with spring	890	6,5	0,23	6,5 ÷ 10	E	2	F	108,5		
	CM-9425F	5/3 P.C.	G1/4	lever with spring	1480	8,50	0,28	6,7÷11	E	2	G	128		

 LONG LEVER

 RED
CP-913R

 SHORT LEVER

 YELLOW
CP-912G

 RED
CP-912R

 BLACK
CP-912N

C.C. = closed centres **O.C.** = open centres **P.C.** = pressurized centres

Valves are supplied without operator

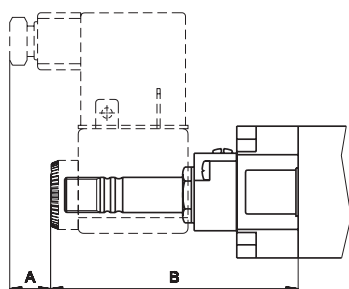
To get 3/2 NO version, supply the valve from port 3

VALVES WITH PNEUMATIC / ELECTRIC CONTROL

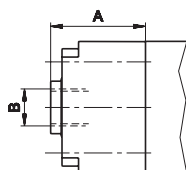
CONTROL

BODY

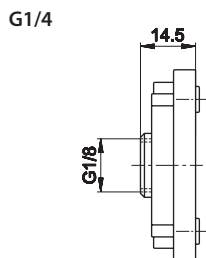
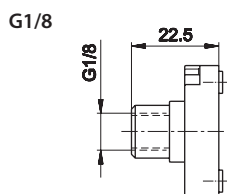
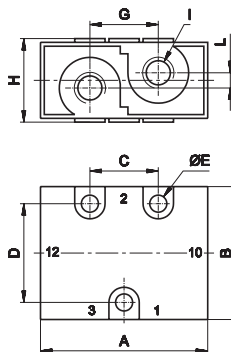
RETURN

A ELECTRIC/AMPLIFIED


	A	B
G1/8	10	77
G1/4	10	80

B PNEUMATIC AMPLIFIED


	A	B
G1/8	25	G1/8
G1/4	28,5	G1/8

C PNEUMATIC NOT AMPLIFIED

1 3/2 NC-NO


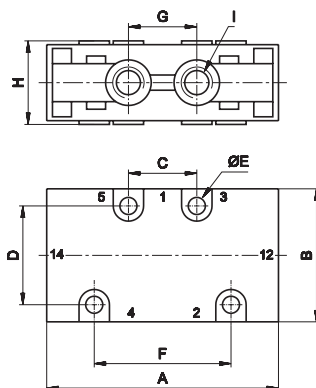
NC

 1 = Supply port
 2 = Use
 3 = Exhaust
 12 = Control
 10 = Return

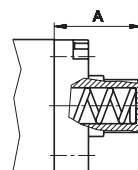
NO

 1 = Supply port
 2 = Use
 3 = Exhaust
 12 = Control
 10 = Return

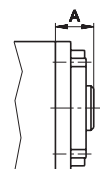
	A	B	C	D	E	G	H	I	L
G1/8	47,5	35	18	26	4,5	18	22	G1/8	4
G1/4	60	48	22	38	5,5	22	26	G1/4	4

2 5/2

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

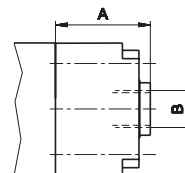
	A	B	C	D	E	F	G	H	I
G1/8	64	35	18	26	4,5	36	18	22	G1/8
G1/4	77,5	48	22	38	5,5	48	22	26	G1/4

D MECHANICAL SPRING


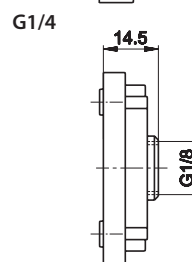
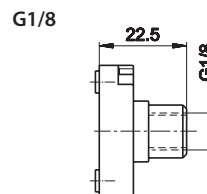
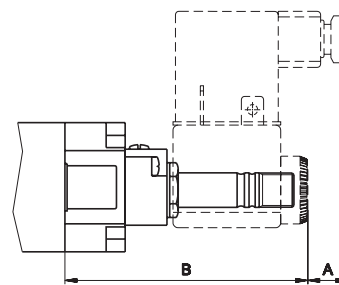
	A
G1/8	22,5
G1/4	25,5

E PNEUMATIC SPRING


	A
G1/8	10
G1/4	14,5

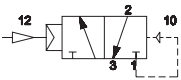
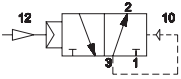
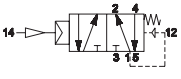
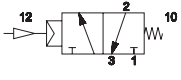
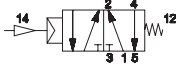
F PNEUMATIC AMPLIFIED


	A	B
G1/8	25	G1/8
G1/4	28,5	G1/8

G PNEUMATIC NOT AMPLIFIED

H ELECTRIC AMPLIFIED


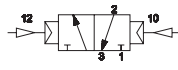
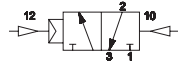
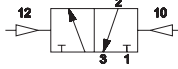
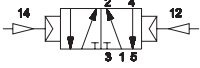
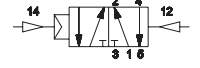
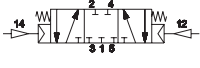
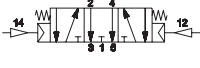
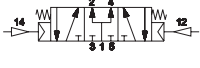
	A	B
G1/8	10	73
G1/4	10	76,5

VALVES WITH PNEUMATIC CONTROL

	Code	Way	Thread	Control	Return	Press. Flow rate		Ø	Weight	Resp. Time (ms)		Composition			tot. L	
						bar	(Nl/min)	mm	kg	Ecc.	Diss.	Control	Body	Return	mm	
SINGLE IMPULSE																
	CL-200	3/2 NC	G1/8	pneumatic amplified,	pneumatic spring	2,3÷10	890	6,5	0,20	11	14	B	1	E	82,5	
	CL-9200	3/2 NC	G1/4	pneumatic amplified,	pneumatic spring	2÷10	1480	8,5	0,23	13	16	B	1	E	103	
	CL-203	3/2 NO	G1/8	pneumatic amplified,	pneumatic spring	2,3÷10	890	6,5	0,20	11	14	B	1	E	82,5	
	CL-9203	3/2 NO	G1/4	pneumatic amplified,	pneumatic spring	2÷10	1480	8,5	0,23	13	16	B	1	E	103	
	CM-500	5/2	G1/8	pneumatic amplified,	pneumatic spring	2,5÷10	890	6,5	0,20	10	15	B	2	E	99	
	CM-9500	5/2	G1/4	pneumatic amplified,	pneumatic spring	2÷10	1480	8,5	0,26	13	16	B	2	E	120,5	
	CL-200A	3/2 NC - NO	G1/8	pneumatic amplified,	pneumatic spring	2,5÷10	890	6,5	0,21	9	17	B	1	D	95	
	CL-9200A	3/2 NC - NO	G1/4	pneumatic amplified,	pneumatic spring	2÷10	1480	8,5	0,24	10	19	B	1	D	114	
	CM-500A	5/2	G1/8	pneumatic amplified,	mechanical spring	3÷10	890	6,5	0,19	10	18	B	2	D	111,5	
	CM-9500A	5/2	G1/4	pneumatic amplified,	mechanical spring	2÷10	1480	8,5	0,26	11	20	B	2	D	131,5	

To get 3/2 NO version, supply the valve from port 3

VALVOLE AD AZIONAMENTO PNEUMATICO

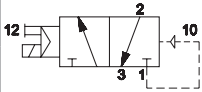
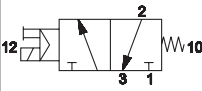
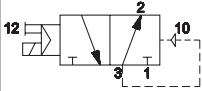
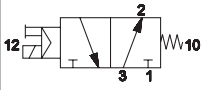
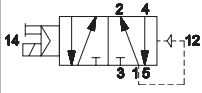
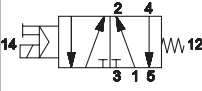
	Code	Way	Thread	Control	Return	Press.	Flow rate	Ø	Weight	Resp. Time (ms)		Composition			tot. L	
						bar	(Nl/min)	mm	kg	Ecc.	Diss.	Control	Body	Return	mm	
DOUBLE IMPULSE																
	CL-220	3/2 NC - NO	G1/8	pneumatic amplified	pneumatic amplified	1÷10	890	6,5	0,16	6	6	B	1	F	97,5	
	CL-9220	3/2 NC - NO	G1/4	pneumatic amplified	pneumatic amplified	1÷10	1480	8,5	0,21	8	8	B	1	F	117	
	CL-221	3/2 NC - NO	G1/8	pneumatic amplified	pneumatic not amplified	1,7÷10	890	6,5	0,15	6	8	B	1	G	95	
	CL-9221	3/2 NC - NO	G1/4	pneumatic amplified	pneumatic not amplified	1,5÷10	1480	8,5	0,22	8	10	B	1	G	103	
	CL-224	3/2 NC - NO	G1/8	pneumatic not amplified	pneumatic not amplified	1,7÷10	890	6,5	0,14	8	8	C	1	G	92,5	
	CL-9224	3/2 NC - NO	G1/4	pneumatic not amplified	pneumatic not amplified	1,5÷10	1480	8,5	0,24	10	10	C	1	G	89	
	CM-520	5/2	G1/8	pneumatic amplified	pneumatic amplified	1,2÷10	890	6,5	0,18	7	7	B	2	F	114	
	CM-9520	5/2	G1/4	pneumatic amplified	pneumatic amplified	1,5÷10	1480	8,5	0,24	9	9	B	2	F	134,5	
	CM-521	5/2	G1/8	pneumatic amplified	pneumatic not amplified	2÷10	890	6,5	0,19	7	9	B	2	G	111,5	
	CM-9521	5/2	G1/4	pneumatic amplified	pneumatic not amplified	1,8÷10	1480	8,5	0,25	9	10	B	2	G	120,5	
	CM-524	5/2	G1/8	pneumatic not amplified	pneumatic not amplified	2÷10	890	6,5	0,20	9	9	C	2	G	109	
	CM-9524	5/2	G1/4	pneumatic not amplified	pneumatic not amplified	1,8÷10	1480	8,5	0,27	10	10	C	2	G	198,5	
	CM-580	5/3 C.C.	G1/8	pneumatic amplified	pneumatic amplified	2,5÷10	890	6,5	0,21	8	12	B	2	F	114	
	CM-9580	5/3 C.C.	G1/4	pneumatic amplified	pneumatic amplified	2,8÷10	1480	8,5	0,30	10	13	B	2	F	134,5	
	CM-585	5/3 O.C.	G1/8	pneumatic amplified	pneumatic amplified	2,5÷10	890	6,5	0,21	8	12	B	2	F	114	
	CM-9585	5/3 O.C.	G1/4	pneumatic amplified	pneumatic amplified	2,8÷10	1480	8,5	0,30	10	13	B	2	F	134,5	
	CM-590	5/3 P.C.	G1/8	pneumatic amplified	pneumatic amplified	2,5÷10	890	6,5	0,21	8	12	B	2	F	114	
	CM-9590	5/3 P.C.	G1/4	pneumatic amplified	pneumatic amplified	2,8÷10	1480	8,5	0,30	10	13	B	2	F	134,5	

C.C. = closed centres O.C. = open centres P.C. = pressurized centres

To get 3/2 NO version, supply the valve from port 3

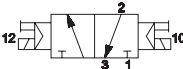
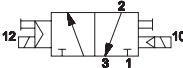
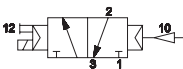
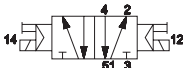
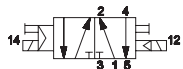
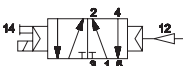
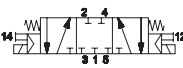
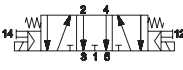
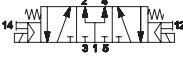
MEMBER OF

VALVES WITH ELECTRIC CONTROL

	Code	Way	Thread	Control	Return	Press.	Flow rate	Ø	Weight	Resp. Time (ms)	Composition			tot. L		
						bar	(NI/min)	mm	kg	Ecc.	Diss.	Control	Body	Return	mm	
SINGLE IMPULSE																
	CL-300	3/2 NC	G1/8	electrical amplified	pneumatic spring	2,3÷10	890	6,5	0,20	23	19	A	1	E	140,5	
	CL-9300	3/2 NC	G1/4	electrical amplified	pneumatic spring	2÷10	1480	8,5	0,27	24	28	A	1	E	161	
	CL-302A	3/2 NC	G1/8	electrical amplified	mechanical spring	2,5÷10	890	6,5	0,21	20	24	A	1	D	153	
	CL-9302A	3/2 NC	G1/4	electrical amplified	mechanical spring	2÷10	1480	8,5	0,28	22	35	A	1	D	172	
	CL-301	3/2 NO	G1/8	electrical amplified	pneumatic spring	2,3÷10	890	6,5	0,20	23	19	A	1	E	140,5	
	CL-9301	3/2 NO	G1/4	electrical amplified	pneumatic spring	2÷10	1480	8,5	0,27	24	28	A	1	E	161	
	CL-303A	3/2 NO	G1/8	electrical amplified	mechanical spring	2,5÷10	890	6,5	0,21	20	24	A	1	D	153	
	CL-9303A	3/2 NO	G1/4	electrical amplified	mechanical spring	2÷10	1480	8,5	0,28	22	35	A	1	D	172	
	CM-600	5/2	G1/8	electrical amplified	pneumatic spring	2,5÷10	890	6,5	0,24	24	20	A	2	E	157	
	CM-9600	5/2	G1/4	electrical amplified	pneumatic spring	2÷10	1480	8,5	0,30	25	32	A	2	E	178,5	
	CM-602A	5/2	G1/8	electrical amplified	mechanical spring	3÷10	890	6,5	0,25	21	25	A	2	D	169,5	
	CM-9602A	5/2	G1/4	electrical amplified	mechanical spring	2÷10	1480	8,5	0,31	22	43	A	2	D	189,5	

To get 3/2 NO version, supply the valve from port 3
 The solenoid valves are supplied without a coil or connector

VALVES WITH ELECTRIC CONTROL

	Code	Way	Thread	Control	Return	Press.	Flow rate	Ø	Weight	Resp. Time (ms)		Composition			tot. L	
						bar	(l/min)	mm	kg	Ecc.	Diss.	Control	Body	Return		
DOUBLE IMPULSE																
	CL-320	3/2 NC - NO	G1/8	electrical amplified	electrical amplified	1÷10	890	6,5	0,24	17	17	A	1	H	213,5	
	CL-9320	3/2 NC - NO	G1/4	electrical amplified	electrical amplified	2÷10	1480	8,5	0,29	18	18	A	1	H	233	
	CL-321	3/2 NC - NO	G1/8	electrical amplified	electrical not amplified	1,7÷10	890	6,5	0,24	17	20	A	1	H	213,5	
	CL-9321	3/2 NC - NO	G1/4	electrical amplified	electrical not amplified	1,5÷10	1480	8,5	0,30	18	22	A	1	H	233	
	CL-322	3/2 NC - NO	G1/8	electrical amplified	pneumatic amplified	2,5÷10	890	6,5	0,21	20	7	A	1	F	155,5	
	CL-9322	3/2 NC - NO	G1/4	electrical amplified	pneumatic amplified	2÷10	1480	8,5	0,26	22	8	A	1	F	175	
	CM-620	5/2	G1/8	electrical amplified	electrical amplified	1,2÷10	890	6,5	0,28	20	20	A	2	H	230	
	CM-9620	5/2	G1/4	electrical amplified	electrical amplified	1,5÷10	1480	8,5	0,32	22	22	A	2	H	250,5	
	CM-621	5/2	G1/8	electrical amplified	electrical not amplified	2÷10	890	6,5	0,28	20	23	A	2	H	230	
	CM-9621	5/2	G1/4	electrical amplified	electrical not amplified	1,8÷10	1480	8,5	0,32	22	25	A	2	H	250,5	
	CM-622	5/2	G1/8	electrical amplified	pneumatic amplified	1,2÷10	890	6,5	0,24	20	8	A	2	F	172	
	CM-9622	5/2	G1/4	electrical amplified	pneumatic amplified	1,5÷10	1480	8,5	0,29	22	10	A	2	F	192,5	
	CM-680	5/3 C.C.	G1/8	electrical amplified	electrical amplified	2,5÷10	890	6,5	0,21	18	24	A	2	H	230	
	CM-9680	5/3 C.C.	G1/4	electrical amplified	electrical amplified	2,8÷10	1480	8,5	0,30	20	35	A	2	H	250,5	
	CM-685	5/3 O.C.	G1/8	electrical amplified	electrical amplified	2,5÷10	890	6,5	0,21	18	24	A	2	H	230	
	CM-9685	5/3 O.C.	G1/4	electrical amplified	electrical amplified	2,8÷10	1480	8,5	0,30	20	35	A	2	H	250,5	
	CM-690	5/3 P.C.	G1/8	electrical amplified	electrical amplified	2,5÷10	890	6,5	0,21	18	24	A	2	H	230	
	CM-9690	5/3 P.C.	G1/4	electrical amplified	electrical amplified	2,8÷10	1480	8,5	0,30	20	35	A	2	H	250,5	

C.C. = closed centres O.C. = open centres P.C. = pressurized centres

To get 3/2 NO version, supply the valve from port 3
The solenoid valves are supplied without a coil or connector

COILS

CSA/UL

Possibility of replacement without intervention in the pneumatic circuit

Other voltages available upon request

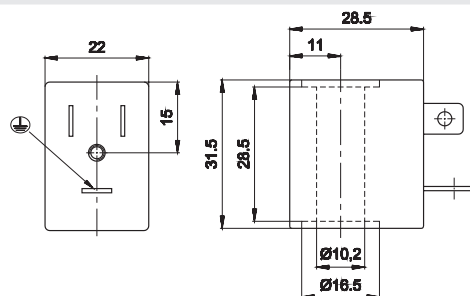
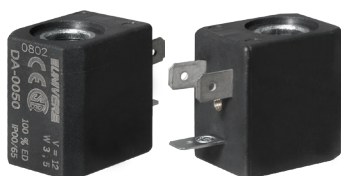
360° rotation on the pilot. Coil winding: H class

Ambient temperature: -10 ÷ +45 °C. Fluid temperature: -10 ÷ +95 °C.

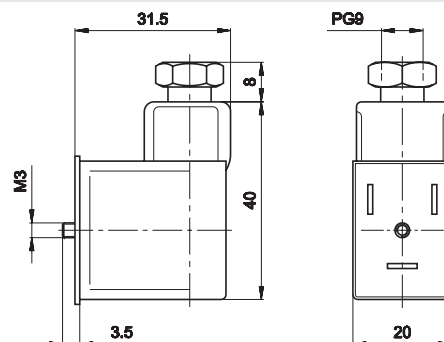
The solenoid valves functioning with 100V-230V must be incorporated (EN60204-1)

Under continuous service a maximum temperature will not compromise the functioning of the coil provided that the working position is ventilated.

Protection class IP65, if used with connector.


U1 22 MM COIL


Code	Duty cycle ED (a) %	Power consumption W		Tolerance tension %	Rated voltage	Weight Kg
		Hold	Inrush			
DA-0050	100	3,5	3,5	±10	12 V DC	0,06
DA-0051	100	3,5	3,5	±10	24 V DC	0,06
DA-0106	100	5,4 VA (Max)	7,8 VA (Max)	±10	24 V AC/50-60 HZ	0,06
DA-0108	100	5,4 VA (Max)	7,8 VA (Max)	±10	110 V AC/50-60 HZ	0,06
DA-0124	100	5,4 VA (Max)	7,8 VA (Max)	±10	230 V AC/50-60 HZ	0,06

CONNECTOR FOR COIL U1


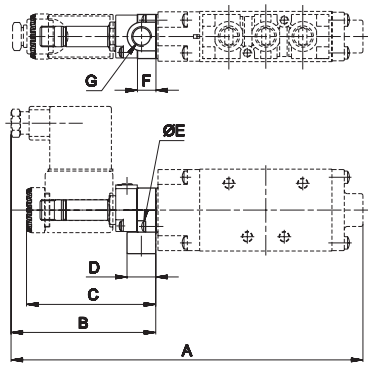
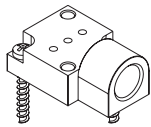
Code	Series coils	Protection rating	Cable connection	Guidance
AM-5110	U1	IP65	PG9	180°

LED available upon request.

(a) = 110V - 230V solenoid valves must be built-in (EN-60204-1)

Under continuous service a maximum temperature will not compromise the functioning of the coil provided that the working position is ventilated

LATE FOR EXTERNAL PILOT

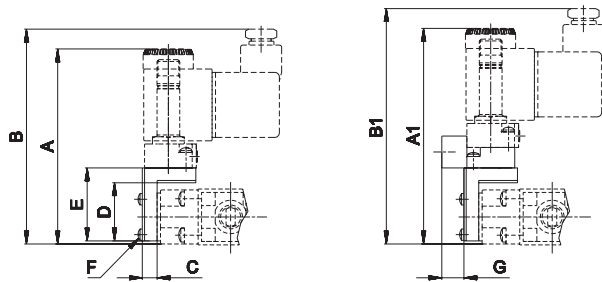
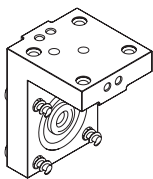


AM-5148

Plate for external servoassisted pilot weight: 0,03 Kg

	A	B	C	D	E	F	G
G1/8	171,5	70,5	63	14	2,9X10	9	G1/8
G1/4	186	70,5	63	14	2,9X10	9	G1/8

ANGLE PLATE FOR "H"

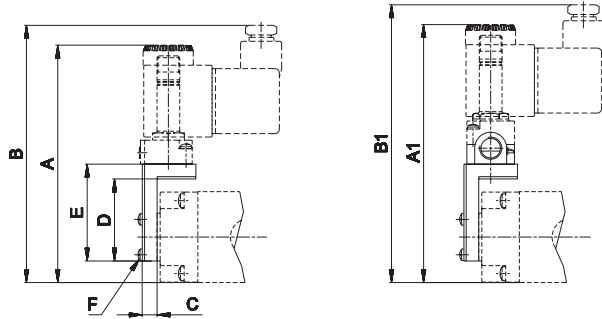
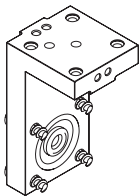


AM-5151 + AM-5148

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

	A	A1	B	B1	C	D	E	F	G
G1/8	87,7	96,7	95,5	104,5	6,5	25,5	32	2,9X10	9,7
G1/4	88,7	97,7	96,5	105,5	6,5	25,5	32	2,9X10	9,7

ANGLE PLATE FOR "P"

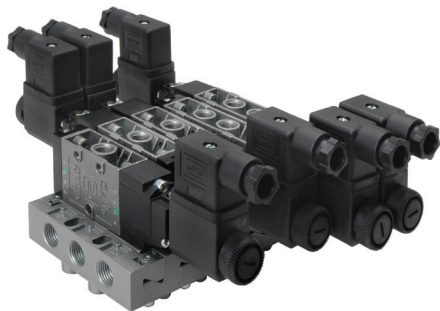


AM-5152 + AM-5148

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

	A	A1	B	B1	C	D	E	F
G1/8	106	115	113,5	122,5	6,5	36	42,5	2,9X10
G1/4	111	120	118,5	127,5	6,5	36	42,5	2,9X10

G1/8 MODULAR SUBBASE "CLIPS"



A Manual override

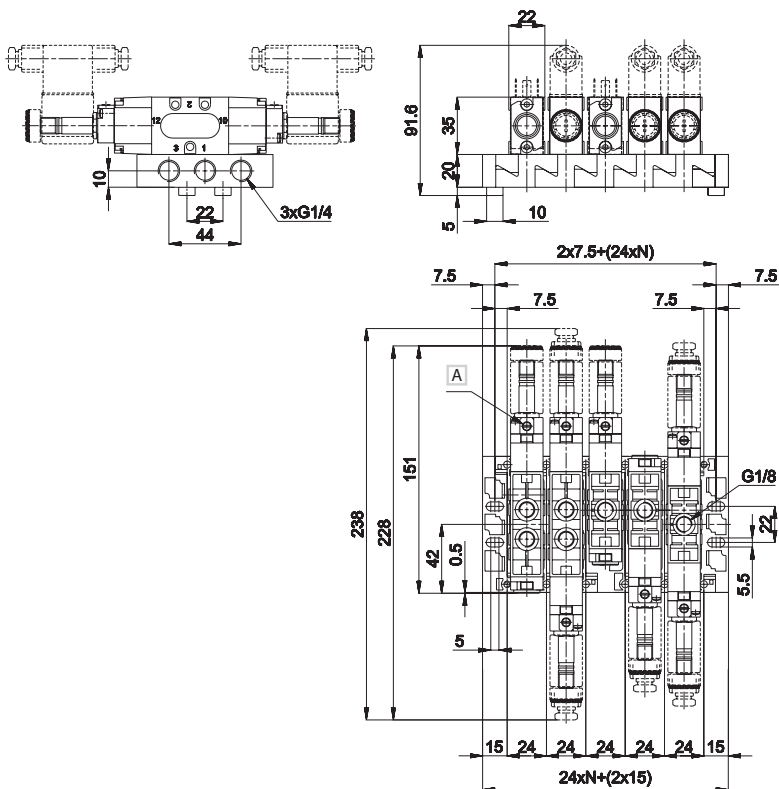
NC

- 1 = Supply port
2 = Use
3 = Exhaust
12 = Control
10 = Return

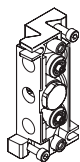
NO

- 1 = Exhaust
2 = Use
3 = Supply port
12 = Control
10 = Return

N = Number of valve places



When assembling the manifold put the sub-base on a flat surface and tighten the special screw supplied. This will give perfect alignment.



CP-100

modular sub-base with
regulated and conveyed
exhausts connections: G1/8
material: zamak
weight: 0,136 Kg

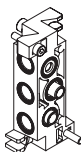
standard supplied: screws,
seals, exhausts regulator
and fixing coupling



CP-110

coupling
connections: G1/8
material: brass
weight: 0,028 Kg

For each additional pressure, one coupling and two separators must be ordered.



CP-101

modular sub-base
without exhaust regulator
connections: G1/8
material: zamak
weight: 0,136 Kg

standard supplied: screws,
seals and fixing coupling
of valve



CP-111

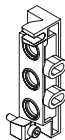
pressure separator
connections: G1/8
material: aluminium
weight: 0,013 Kg



CP-112

cap for 3/2 valve mounting
connections: G1/8
material: aluminium
weight: 0,010 Kg

Cap for mounting of 3/2
NC-NO valves on "CLIPS"
sub-base to
close non-used way.
Standard sub-base with
adjustment screw.
The screw head has a slot for
screwdrivers.
Upon request:
adjustment screw with
crimped head.



CP-105

inlet plate
side connections
connections: G1/4
material: zamak
weight: 0,086 Kg

standard supplied: screws
and seals



CP-113

adjustment screw
connections: G1/8
material: brass
weight: 0,006 Kg

G1/4 MODULAR SUBBASE "CLIPS"



A Manual override

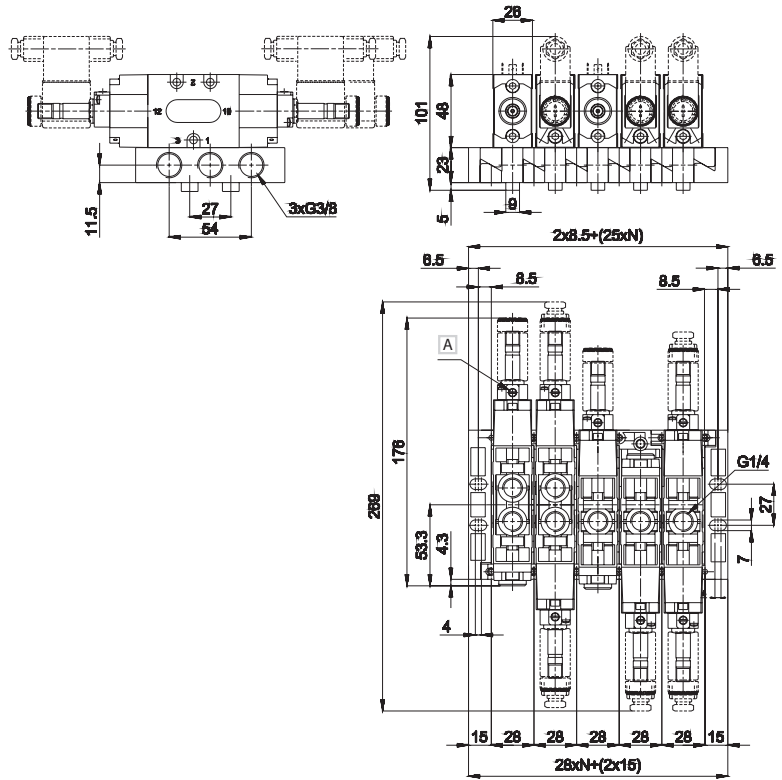
NC

1 = Supply port
2 = Use
3 = Exhaust
12 = Control
10 = Return

NO

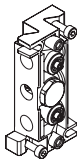
1 = Exhaust
2 = Use
3 = Supply port
12 = Control
10 = Return

N = Number of valve places



1/4

When assembling the manifold put the sub-base on a flat surface and tighten the special screw supplied. This will give perfect alignment.



CP-9100

modular sub-base
regulated and conveyed
exhausts
connections: G1/4
material: zamak
weight: 0,210 Kg

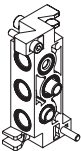
standard supplied: screws,
seals, exhaust regulator and
fixing coupling



CP-9110

coupling
connections: G1/4
material: brass
weight: 0,028 Kg

For each additional pressure,
one coupling and two
separators must be ordered.



CP-9101

modular sub-base
without exhaust regulator
connections: G1/4
material: zamak
weight: 0,210 Kg

standard supplied: screws,
seals and fixing coupling
of valve



CP-9111

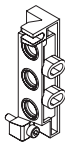
pressure separator
connections: G1/4
material: aluminium
weight: 0,013 Kg



CP-9112

cap for 3/2 valve mounting
connections: G1/4
material: aluminium
weight: 0,010 Kg

Cap for mounting of 3/2
NC-NO valves on "CLIPS"
sub-base to
close non-used way.
Standard sub-base with
adjustment screw.
The screw head has a slot for
screwdrivers. Upon request:
adjustment screw with
crimped head.



CP-9105

inlet plate
side connections
connections: G3/8
material: zamak
weight: 0,120 Kg

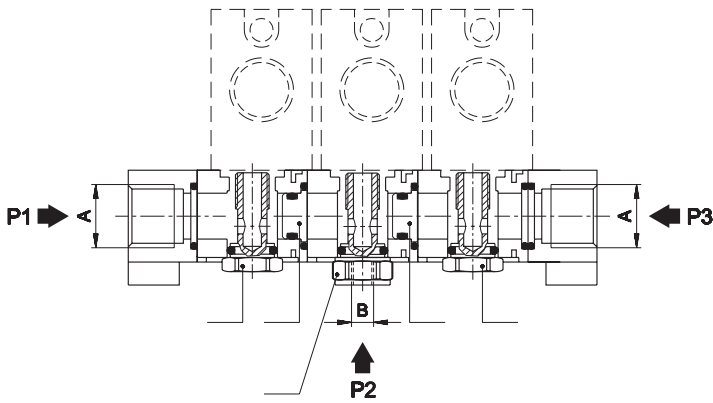
standard supplied: screws
and seals



CP-9113

adjustment screw
connections: G1/4
material: ottone
weight: 0,006 Kg

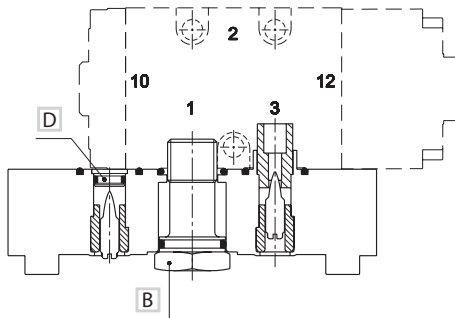
ASSEMBLY EXAMPLES MANIFOLD 3 PRESSURES



- 1 Separator of differential pressures [CP-111/CP-9111](#)
- 2 Fixing coupling for valve inside the sub-base
- 3 Coupling [CP-110/CP-9110](#)

	A	B
G1/8	G1/4	G1/8
G1/4	G3/8	G1/4

MOUNTING OF 3/2 NC VALVE

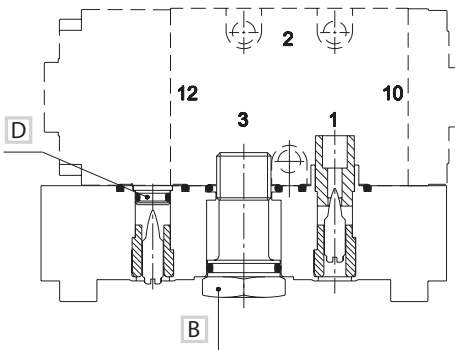


NC

- 1 = Supply port
- 2 = Use
- 3 = Exhaust
- 12 = Control
- 10 = Return

- B** Fixing coupling for valve inside the sub-base
- D** Cap for valve mounting [CP-112/CP-9112](#)

MOUNTING OF 3/2 NO VALVE



NO

- 1 = Exhaust
- 2 = Use
- 3 = Supply port
- 12 = Control
- 10 = Return

- B** Fixing coupling for valve inside the sub-base
- D** Cap for valve mounting [CP-112/CP-9112](#)

In case there should be no need to regulate exhaust, plastic insert has to be removed whilst the adjustment screw must remain in its place.