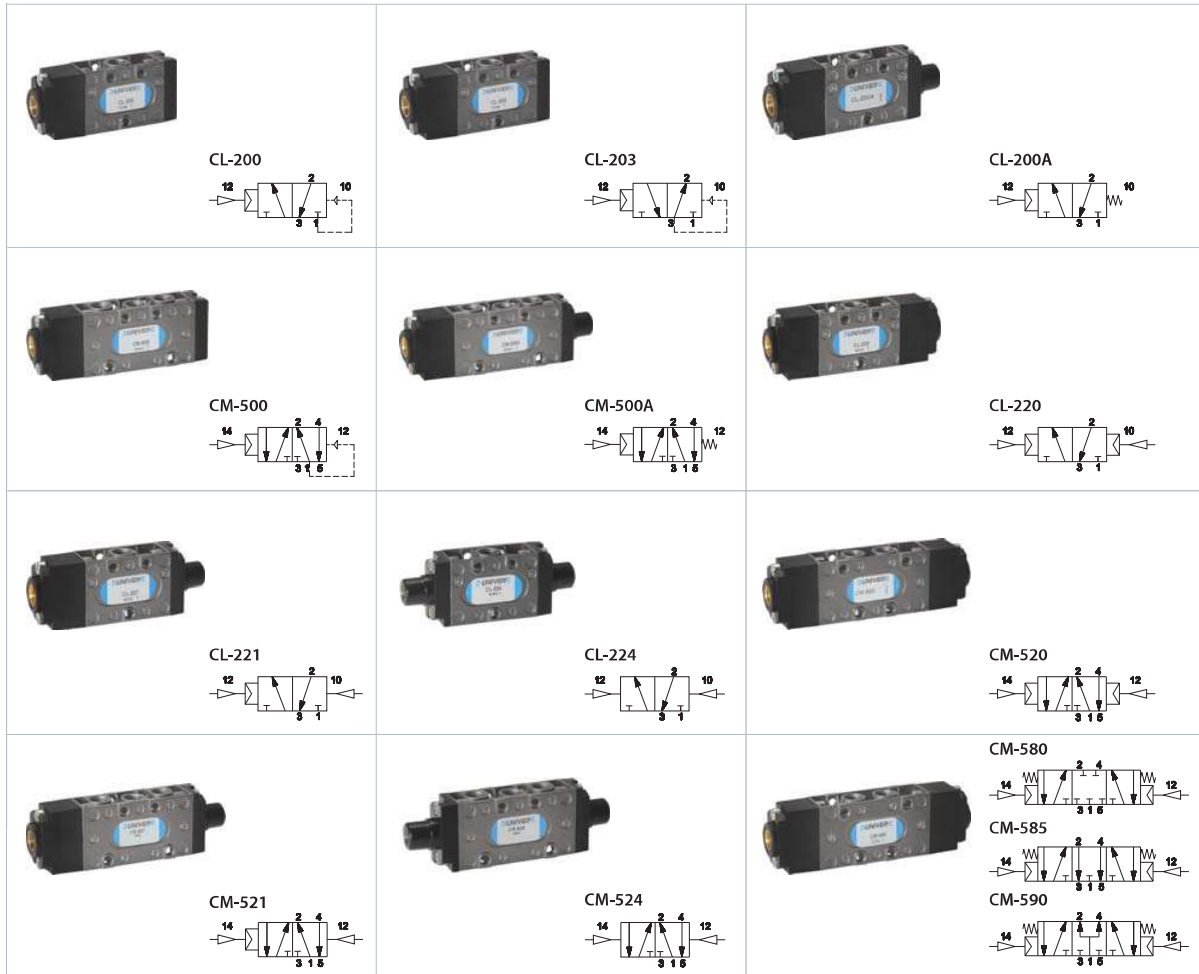


G1/8 Valves with pneumatic control



	Control	Return	Pressure bar	Flow rate (NI/min)	Ø mm	Weight Kg	Times (ms)		Part no.	Composition (a)			Tot L. mm
							En.	De-en.		Control	Body	Return	
SINGLE IMPULSE													
3/2 NC	pneumatic amplified	pneumatic spring	2,3÷10	890	6,5	0,20	11	14	CL-200	B	1	E	82,5
	3/2 NO	pneumatic amplified	pneumatic spring	2,3÷10	890	6,5	0,20	11	14	CL-203	B	1	E
3/2 NC-NO	pneumatic amplified	mechanical spring	2,5÷10	890	6,5	0,21	9	17	CL-200A	B	1	D	95
5/2	pneumatic amplified	pneumatic spring	2,5÷10	890	6,5	0,20	10	15	CM-500	B	2	E	99
	pneumatic amplified	mechanical spring	3÷10	890	6,5	0,19	10	18	CM-500A	B	2	D	111,5
DOUBLE IMPULSE													
3/2 NC-NO	pneumatic amplified	pneumatic amplified	1÷10	890	6,5	0,16	6	6	CL-220	B	1	F	97,5
	pneumatic amplified	pneumatic not amplified	1,7÷10	890	6,5	0,15	6	8	CL-221	B	1	G	95
	pneumatic non amplified	pneumatic not amplified	1,7÷10	890	6,5	0,14	8	8	CL-224	C	1	G	92,5
5/2	pneumatic amplified	pneumatic amplified	1,2÷10	890	6,5	0,18	7	7	CM-520	B	2	F	114
	pneumatic amplified	pneumatic not amplified	2÷10	890	6,5	0,19	7	9	CM-521	B	2	G	111,5
	pneumatic non amplified	pneumatic not amplified	2÷10	890	6,5	0,20	9	9	CM-524	C	2	G	109
5/3 c.c.	pneumatic amplified	pneumatic amplified	2,5÷10	890	6,5	0,21	8	12	CM-580	B	2	F	114
5/3 o.c.	pneumatic amplified	pneumatic amplified	2,5÷10	890	6,5	0,21	8	12	CM-585	B	2	F	114
5/3 p.c.	pneumatic amplified	pneumatic amplified	2,5÷10	890	6,5	0,21	8	12	CM-590	B	2	F	114

o.c. = open centres c.c. = closed centres p.c. = pressurized centres
To get 3/2 NO version, supply the valve from port 3

(a) = see page 3_23

3
Spool system valves

G1/4 Valves with pneumatic control

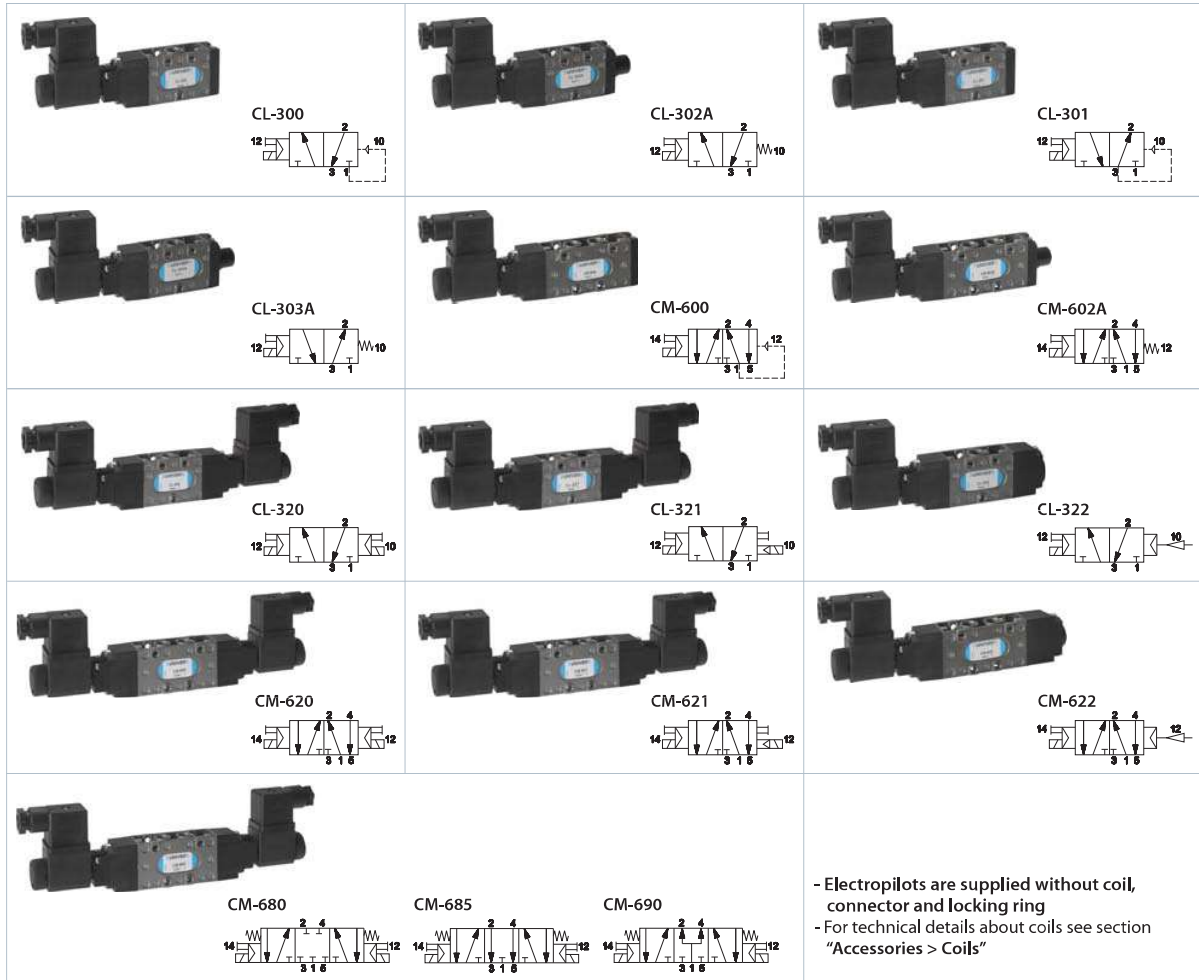


	Control	Return	Pressure bar	Flow rate (NI/min)	Ø mm	Weight Kg	Times (ms)		Part no.	Composition (a)			Tot L. mm
							En.	De-en.		Control	Body	Return	
SINGLE IMPULSE													
3/2 NC	pneumatic amplified	pneumatic spring	2÷10	1480	8,5	0,23	13	16	CL-9200	B	1	E	103
3/2 NO	pneumatic amplified	pneumatic spring	2÷10	1480	8,5	0,23	13	16	CL-9203	B	1	E	103
3/2 NC-NO	pneumatic amplified	mechanical spring	2÷10	1480	8,5	0,24	10	19	CL-9200A	B	1	D	114
5/2	pneumatic amplified	pneumatic spring	2÷10	1480	8,5	0,26	13	16	CM-9500	B	2	E	120,5
	pneumatic amplified	mechanical spring	2÷10	1480	8,5	0,17	11	20	CM-9500A	B	2	D	131,5
DOUBLE													
3/2 NC-NO	pneumatic amplified	pneumatic amplified	1÷10	1480	8,5	0,21	8	8	CL-9220	B	1	F	117
	pneumatic amplified	pneumatic not amplified	1,5÷10	1480	8,5	0,22	8	10	CL-9221	B	1	G	103
	pneumatic not amplified	pneumatic not amplified	1,5÷10	1480	8,5	0,24	10	10	CL-9224	C	1	G	89
5/2	pneumatic amplified	pneumatic amplified	1,5÷10	1480	8,5	0,24	9	9	CM-9520	B	2	F	134,5
	pneumatic amplified	pneumatic not amplified	1,8÷10	1480	8,5	0,25	9	10	CM-9521	B	2	G	120,5
	pneumatic not amplified	pneumatic not amplified	1,8÷10	1480	8,5	0,27	10	10	CM-9524	C	2	G	198,5
5/3 c.c.	pneumatic amplified	pneumatic amplified	2,8÷10	1480	8,5	0,30	10	13	CM-9580	B	2	F	134,5
5/3 o.c.	pneumatic amplified	pneumatic amplified	2,8÷10	1480	8,5	0,30	10	13	CM-9585	B	2	F	134,5
5/3 p.c.	pneumatic amplified	pneumatic amplified	1,8÷10	1480	8,5	0,30	10	13	CM-9590	B	2	F	134,5

o.c. = open centres c.c. = closed centres p.c. = pressurized centres
To get 3/2 NO version, supply the valve from port 3

(a) = see page 3_23

G1/8 Valves with electric control



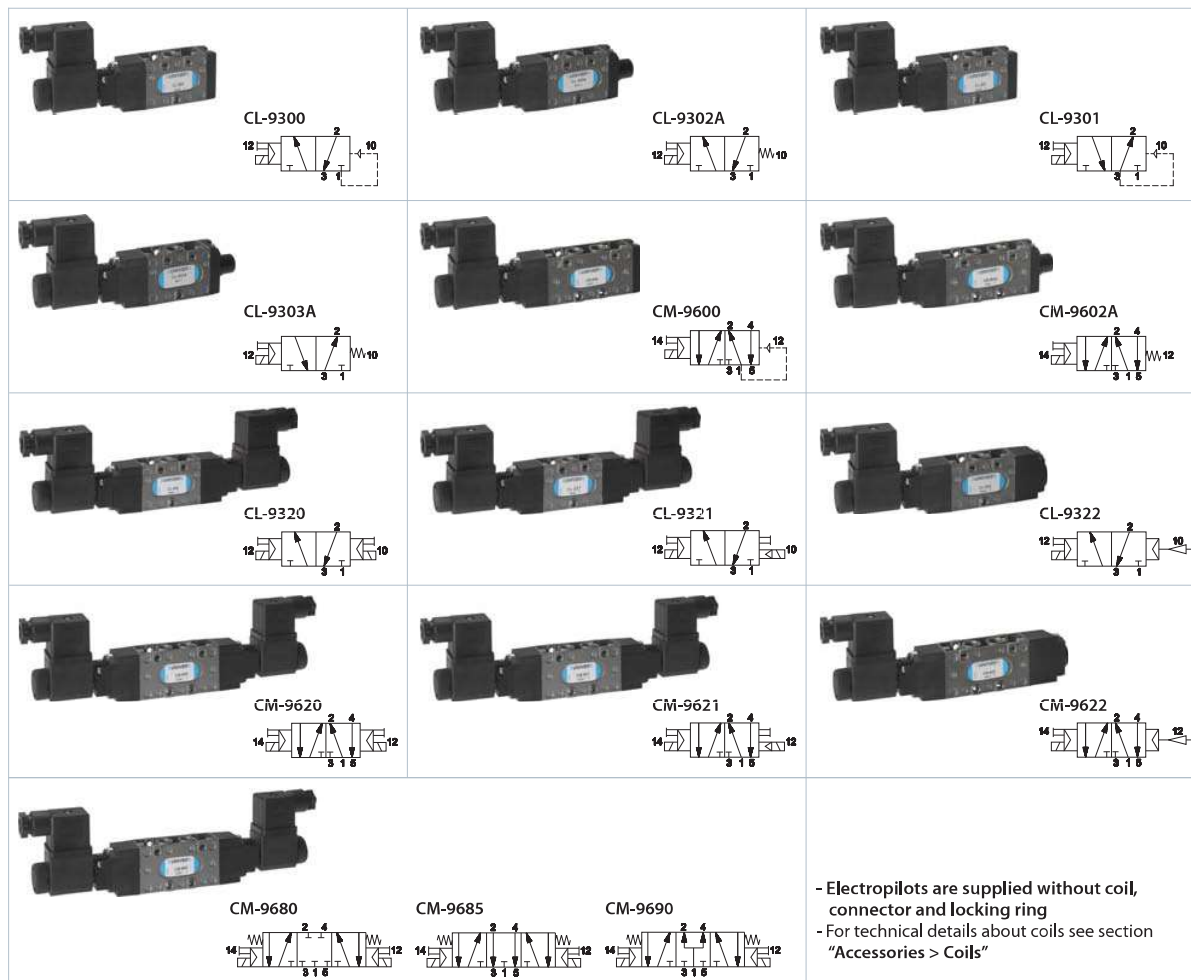
- Electropilots are supplied without coil, connector and locking ring
 - For technical details about coils see section "Accessories > Coils"

	Control	Return	Pressure bar	Flow rate (NI/min)	Ø mm	Weight Kg	Times (ms)		Part no.	Composition (a)			Tot L. mm
							En.	De-en.		Control	Body	Return	
SINGLE IMPULSE													
3/2 NC	electrical amplified	pneumatic spring	2,3÷10	890	6,5	0,20	23	19	CL-300	A	1	E	140,5
	electrical amplified	mechanical spring	2,5÷10	890	6,5	0,21	20	24	CL-302A	A	1	D	153
3/2 NO	electrical amplified	pneumatic spring	2,3÷10	890	6,5	0,20	23	19	CL-301	A	1	E	140,5
	electrical amplified	mechanical spring	2,5÷10	890	6,5	0,21	20	24	CL-303A	A	1	D	153
5/2	electrical amplified	pneumatic spring	2,5÷10	890	6,5	0,24	24	20	CM-600	A	2	E	157
	electrical amplified	mechanical spring	3÷10	890	6,5	0,25	21	25	CM-602A	A	2	D	169,5
DOUBLE IMPULSE													
3/2 NC-NO	electrical amplified	electrical amplified	1÷10	890	6,5	0,24	17	17	CL-320	A	1	H	213,5
	electrical amplified	electrical not amplified	1,7÷10	890	6,5	0,24	17	20	CL-321	A	1	H	213,5
	electrical amplified	pneumatic amplified	2,5÷10	890	6,5	0,21	20	7	CL-322	A	1	F	155,5
5/2	electrical amplified	electrical amplified	1,2÷10	890	6,5	0,28	20	20	CM-620	A	2	H	230
	electrical amplified	electrical not amplified	2÷10	890	6,5	0,28	20	23	CM-621	A	2	H	230
	electrical amplified	pneumatic amplified	1,2÷10	890	6,5	0,24	20	8	CM-622	A	2	F	172
5/3 c.c.	electrical amplified	electrical amplified	2,5÷10	890	6,5	0,21	18	24	CM-680	A	2	H	230
5/3 o.c.	electrical amplified	electrical amplified	2,5÷10	890	6,5	0,21	18	24	CM-685	A	2	H	230
5/3 p.c.	electrical amplified	electrical amplified	2,5÷10	890	6,5	0,21	18	24	CM-690	A	2	H	230

o.c. = open centres c.c. = closed centres p.c. = pressurized centres
 To get 3/2 NO version, supply the valve from port 3

(a) = see page 3_23

G1/4 Valves with electric control



- Electropilots are supplied without coil, connector and locking ring
 - For technical details about coils see section "Accessories > Coils"

	Control	Return	Pressione bar	Portata (NI/min)	Ø mm	Weight Kg	Times (ms)		Part no.	Composition (a)			Tot L. mm
							En.	De-en.		Control	Body	Return	
3/2 NC	electrical amplified	pneumatic spring	2÷10	1480	8,5	0,27	24	28	CL-9300	A	1	E	161
	electrical amplified	mechanical spring	2÷10	1480	8,5	0,28	22	35	CL-9302A	A	1	D	172
	electrical amplified	pneumatic spring	2÷10	1480	8,5	0,27	24	28	CL-9301	A	1	E	161
	electrical amplified	mechanical spring	2÷10	1480	8,5	0,28	22	35	CL-9303A	A	1	D	172
3/2 NO	electrical amplified	pneumatic spring	2÷10	1480	8,5	0,30	25	32	CM-9600	A	2	E	178,5
	electrical amplified	mechanical spring	2÷10	1480	8,5	0,31	22	43	CM-9602A	A	2	D	189,5
3/2 NC_NO	electrical amplified	electrical amplified	2÷10	1480	8,5	0,29	18	18	CL-9320	A	1	H	233
	electrical amplified	elettrico not amplified	1,5÷10	1480	8,5	0,30	18	22	CL-9321	A	1	H	233
	electrical amplified	pneumatic amplified	2÷10	1480	8,5	0,26	22	8	CL-9322	A	1	F	175
	5/2	electrical amplified	electrical amplified	1,5÷10	1480	8,5	0,32	22	22	CM-9620	A	2	H
electrical amplified		elettrico not amplified	1,8÷10	1480	8,5	0,32	22	25	CM-9621	A	2	H	250,5
electrical amplified		pneumatic amplified	1,5÷10	1480	8,5	0,29	22	10	CM-9622	A	2	F	192,5
5/3 c.c.	electrical amplified	electrical amplified	2,8÷10	1480	6,5	0,30	20	35	CM-9680	A	2	H	250,5
5/3 o.c.	electrical amplified	electrical amplified	2,8÷10	1480	6,5	0,30	20	35	CM-9685	A	2	H	250,5
5/3 p.c.	electrical amplified	electrical amplified	2,8÷10	1480	6,5	0,30	20	35	CM-9690	A	2	H	250,5

o.c. = open centres c.c. = closed centres p.c. = pressurized centres
 To get 3/2 NO version, supply the valve from port 3

(a) = see pages 3_23

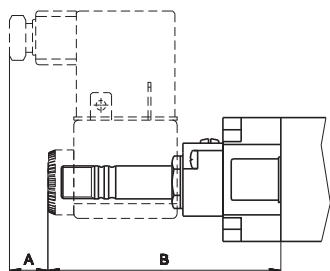
Composition

Control

Body

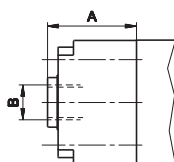
Return

A G1/8 - G1/4 ELECTRIC/AMPLIFIED



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

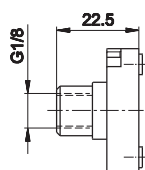
B G1/8 - G1/4 PNEUMATIC AMPLIFIED



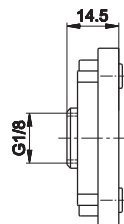
	A	B
G1/8	25	G1/8
G1/4	28,5	G1/8

C G1/8 - G1/4 PNEUMATIC NOT AMPLIFIED

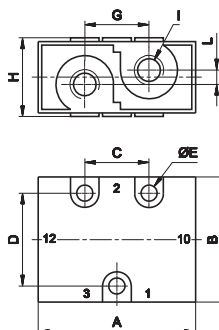
>> G1/8



>> G1/4



1 3/2 NC-NO G1/8 - G1/4



>> NC

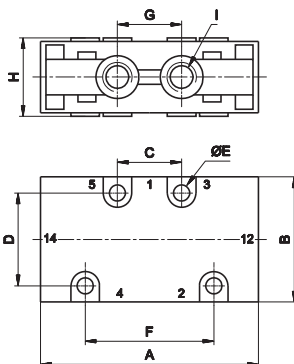
- 1 = Supply port
- 2 = Use
- 3 = Exhaust
- 12 = Control
- 10 = Return

>> NO

- 1 = Exhaust
- 2 = Use
- 3 = Supply port
- 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

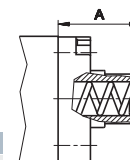
2 5/2 G1/8 - G1/4



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

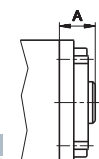
	A	B	C	D	E	F	G	H	I
G1/8	64	35	18	26	4,5	36	18	22	G1/8
G1/4	77,5	48	22	38	5,5	48	22	26	G1/4

D G1/8 - G1/4 MECHANICAL SPRING



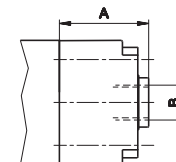
	A
G1/8	22,5
G1/4	25,5

E G1/8 - G1/4 PNEUMATIC SPRING



	A
G1/8	10
G1/4	14,5

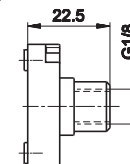
F G1/8 - G1/4 PNEUMATIC AMPLIFIED



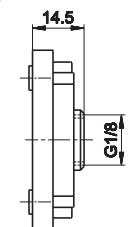
	A	B
G1/8	25	G1/8
G1/4	28,5	G1/8

G G1/8 - G1/4 PNEUMATIC NOT AMPLIFIED

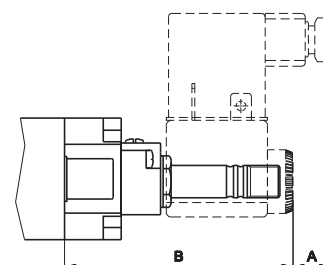
>> G1/8



>> G1/4



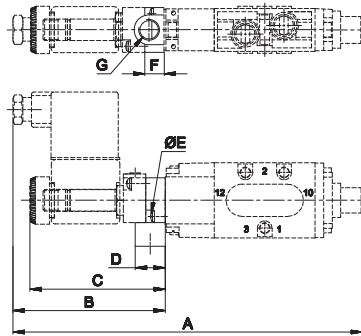
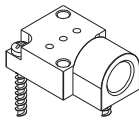
H G1/8 - G1/4 ELECTRIC AMPLIFIED



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

Spool system valves

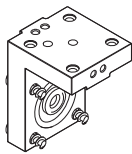
AM-5148



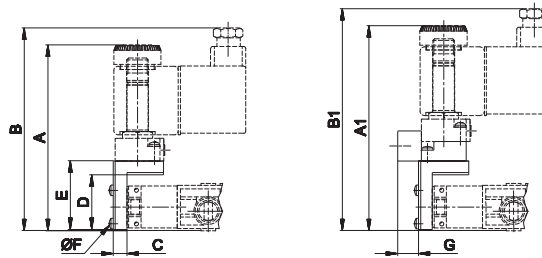
	G1/8	G1/4
A	163	175,5
B	71	71
C	63	63
D	14	14
E	2,9x10	2,9x10
F	9	9
G	G1/8	G1/8

Plate for external servoassistance
weight: 0,03 Kg

AM-5151



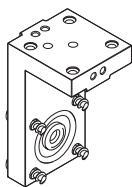
AM-5151 + AM-5148



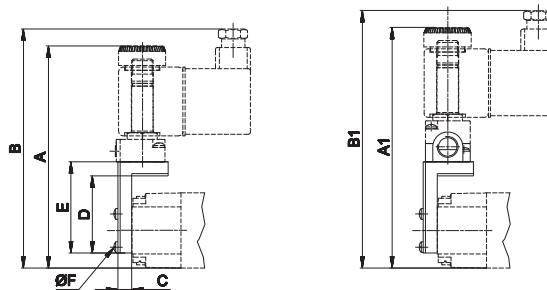
	G1/8	G1/4
A	86,7	88,7
A1	95,7	97,7
B	94,5	96,5
B1	103,5	105,5
C	6,5	6,5
D	25,5	25,5
E	32	32
F	2,9x10	2,9x10
G	9,7	9,7

"H" option angle plate
weight: 0,035 Kg

AM-5152



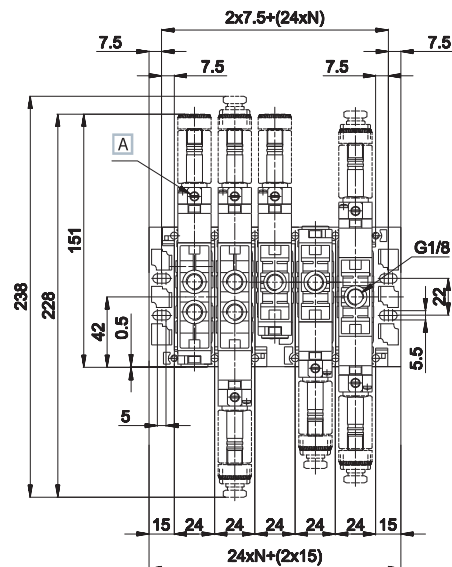
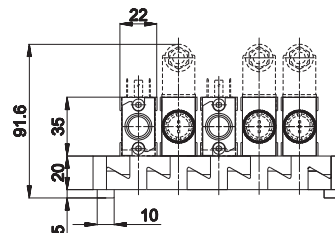
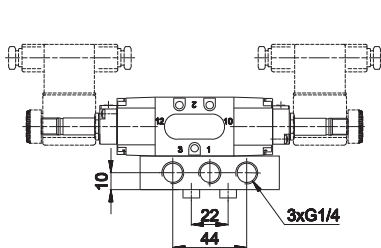
AM-5152 + AM-5148



	G1/8	G1/4
A	103,5	110
A1	112,2	118,7
B	111,5	118
B1	120	126,5
C	6,5	6,5
D	36	36
E	42,5	42,5
F	2,9x10	2,9x10

"P" option angle plate
weight: 0,05 Kg

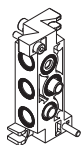
G1/8 Modular subbase "CLIPS" for 3/2 - 5/2 - 5/3 valves



- >> 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
- A** Manual override

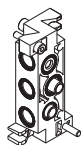
When assembling the manifold put the sub-base on a flat surface and tighten the special screw supplied. This will give perfect alignment.

CP-100 CP-101 CP-105



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

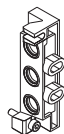
standard supplied: screws, seals, exhausts regulator and fixing coupling



N E W

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

standard supplied: screws, seals and fixing coupling of valve



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

standard supplied: screws and seals

CP-110 CP-111 CP-112 CP-113



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

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



separatori pressioni differenziali
connessione: G1/8
materiale: alluminio
peso: 0,013 Kg



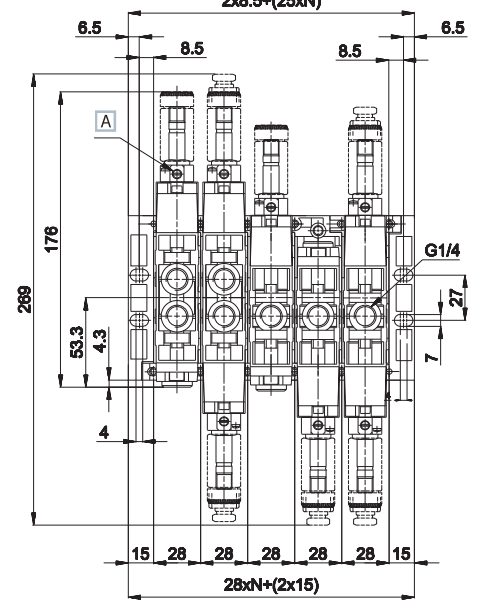
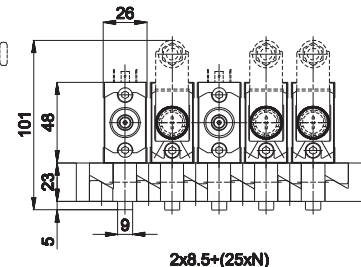
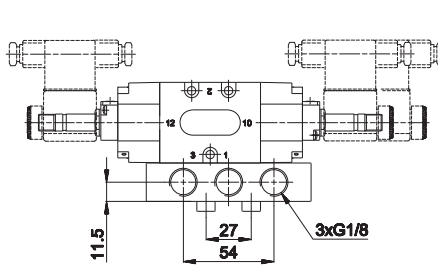
cap for 3/2 valve mounting
connections: G1/8
material: aluminium
weight: 0,010 Kg

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



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

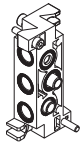
G1/4 Modular subbase "CLIPS" for 3/2 - 5/2 - 5/3 valves



- >> 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
- A Manual override

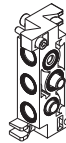
When assembling the manifold put the sub-base on a flat surface and tighten the special screw supplied. This will give perfect alignment.

CP-9100 CP-9101 CP-9105



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

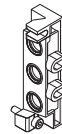
standard supplied: screws, seals, exhaust regulator and fixing coupling



N E W

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

standard supplied: screws, seals and fixing coupling of valve



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

standard supplied: screws and seals

CP-9110 CP-9111 CP-9112 CP-9113



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

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



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



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

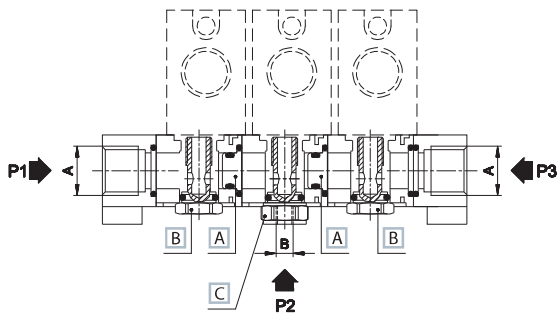
Cap for mounting of 3/2 NC-NO valves on "CLIPS" sub-base to close non-used way. Standard sub-base with adjustment screw. The screw head has a slot for screwdrivers. Upon request: adjustment screw with



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

Assembly examples

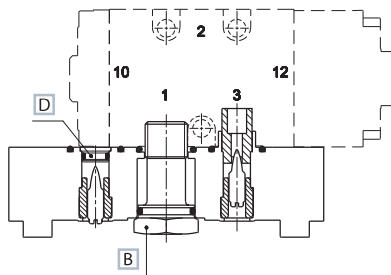
■ Manifold 3 pressures



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

- A Separator of differential pressures CP-111/CP-9111
- B Fixing coupling for valve inside the sub-base
- C Coupling CP-110/CP-9110

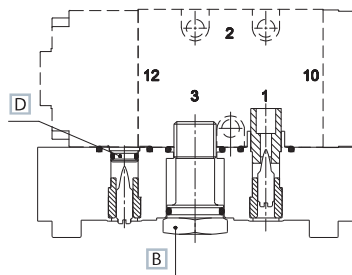
■ Mounting of 3/2 NC valve



- B Fixing coupling for valve inside the sub-base
- D Cap for valve mounting CP-112/CP-9112

- | | |
|-----------------|-----------------|
| >> NC | >> NO |
| 1 = Supply port | 1 = Exhaust |
| 2 = Use | 2 = Use |
| 3 = Exhaust | 3 = Supply port |
| 12 = Control | 12 = Control |
| 10 = Return | 10 = Return |

■ Mounting of 3/2 NO valve



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.