

# CL-CM

## UNIVERSAL Distributors G1/8 - G1/4

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



### TECHNICAL CHARACTERISTICS

Ambient temperature	-10 ÷ +45 °C	
Fluid temperature	max +50 °C	
Fluid	filtered air 50 µm not dehumidified, lubricated or not	
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 (NI/min)	890	1480

### CONSTRUCTIVE CHARACTERISTICS

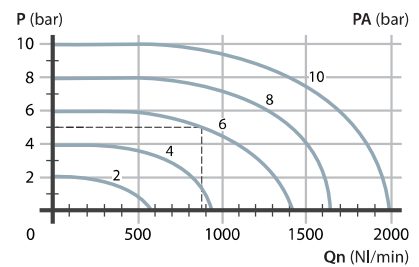
Valve body	G1/8 = die-cast zamak G1/4 = aluminium
Seals	nitrile rubber
Actuators	technopolymer/aluminium
Spool	aluminium
Sub-base	zamak

### ELECTRIC CHARACTERISTICS

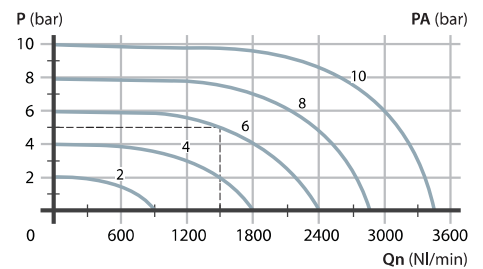
Electropilot	U1
Coil	DA
Power consumption	3,5 W (DC) - 5 VA (AC)
Connector	AM 5110
Voltage	12 V DC - 24 V DC - 24 V AC - 110 V AC - 230 V AC
Manual override	with 2 positions screw

### Flow rate characteristics

>> G1/8

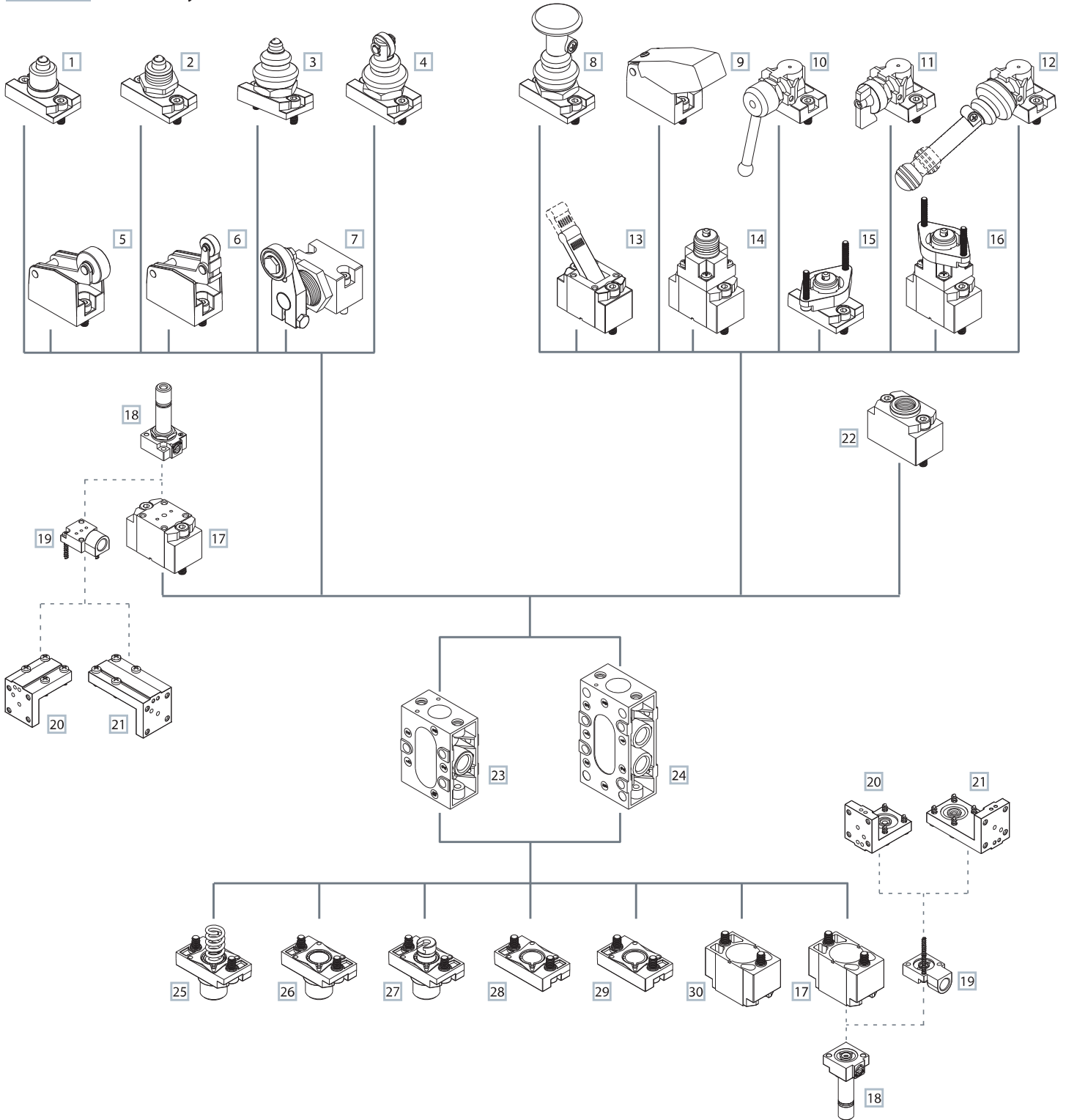


>> G1/4



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

Modular system UNIVERSAL series



**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 Uni-directional roller lever
- 7 Bidirectional side roller lever

**MANUAL CONTROL**

- 8 Push-pull
- 9 Push
- 10 Rotating lever
- 11 Selector

12 90° short/long lever

- 13 Short/long lever
- 14 Threaded indirect operation
- 15 Direction operation for panel mounting
- 16 Indirect control for panel mounting

**ELECTRIC CONTROL**

- 17 Electric amplified
- 18 U1 electropilot
- 19 Plate for external servoassistance
- 20 "H" option angle plate
- 21 "P" option angle plate

**PNEUMATIC CONTROL**

- 22 Pneumatic amplified

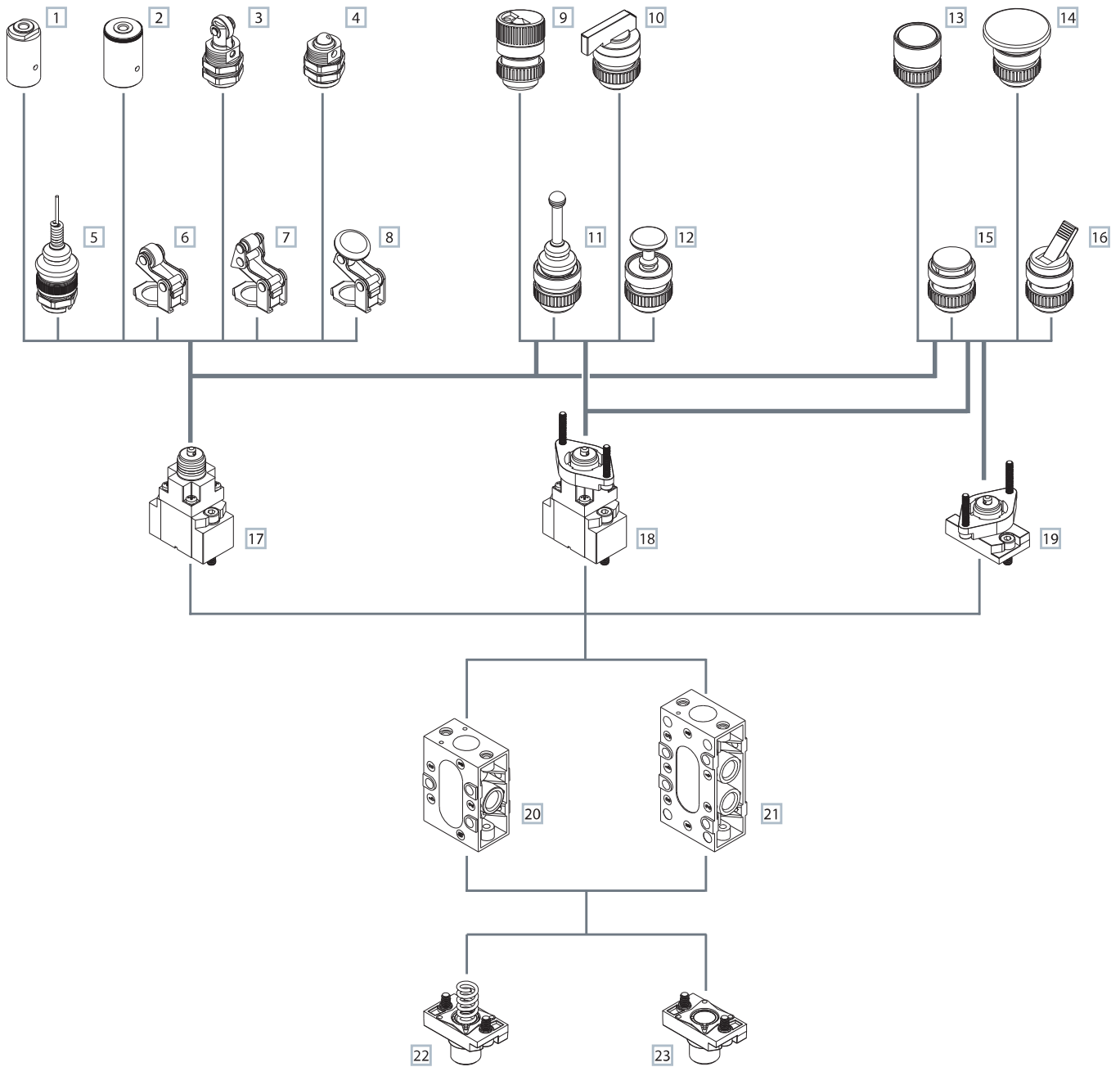
**BODY**

- 23 3/2 body
- 24 5/2 body

**RETURN**

- 25 Mechanical spring
- 26 Pneumatic not amplified
- 27 2/3 positions plate
- 28 Bottom plate
- 29 Pneumatic spring
- 30 Pneumatic amplified

Modular system actuators/buttons



**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

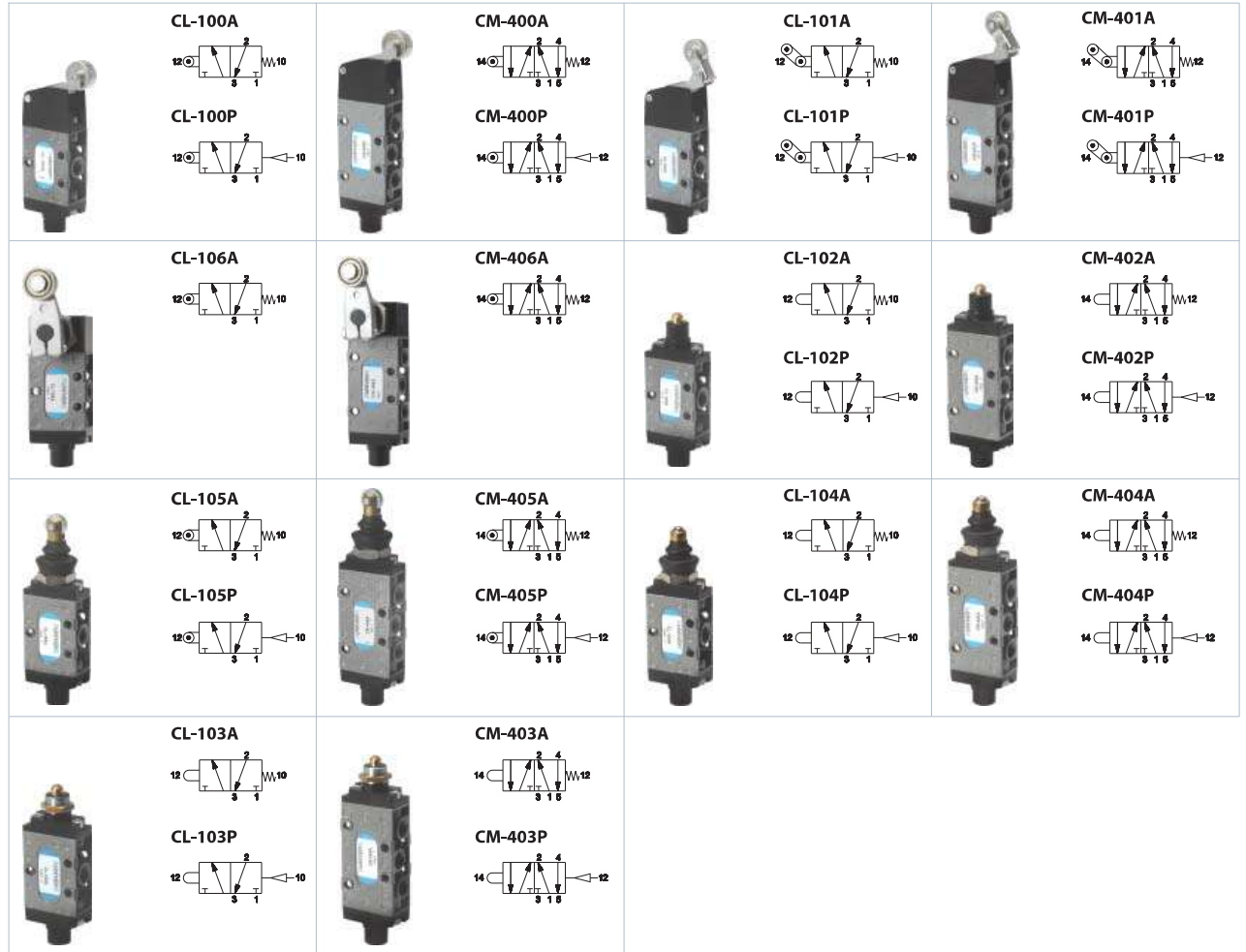
**MANUAL PUSH**

- 9 Rotating selector
- 10 Rotating lever selector
- 11 Omni-directional lever
- 12 Push pull actuators
- 13 Recessed button
- 14 Head button
- 15 Button
- 16 Lever operator

**OVERRIDE**

- 17 Threaded indirect operation
  - 18 Indirect operation for panel mounting
  - 19 Direct operation for panel mounting
- BODY**
- 22 3/2 Body
  - 24 5/2 Body
- RETURN**
- 20 Mechanical spring
  - 21 Pneumatic not amplified

G1/8 Valves with direct mechanical operation



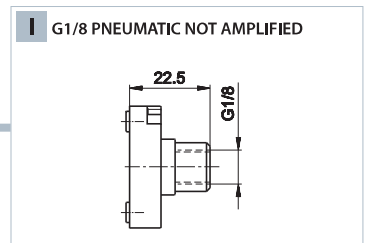
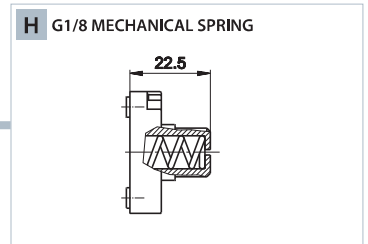
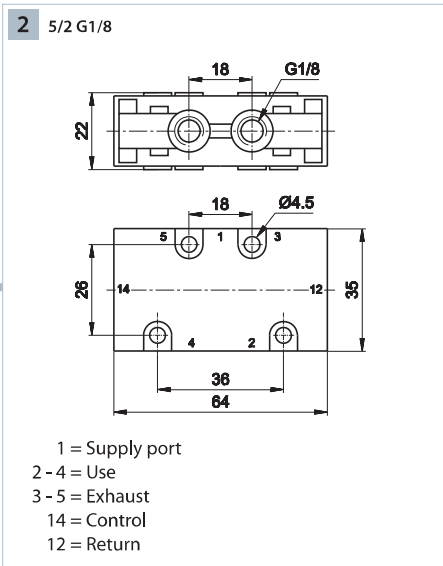
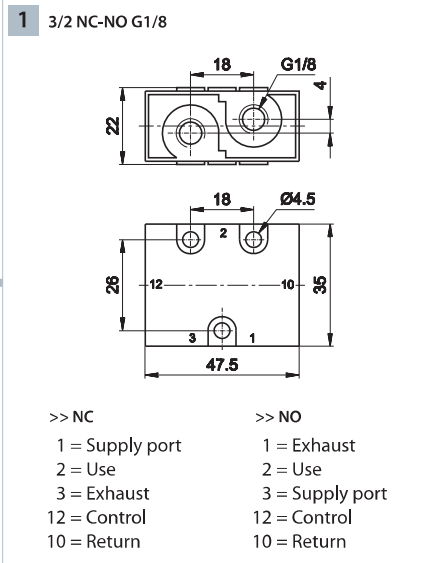
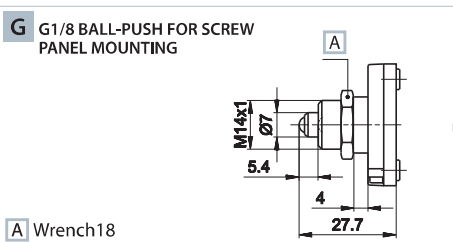
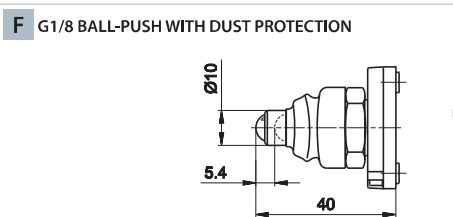
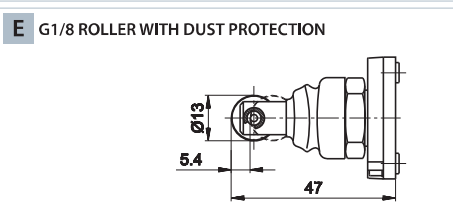
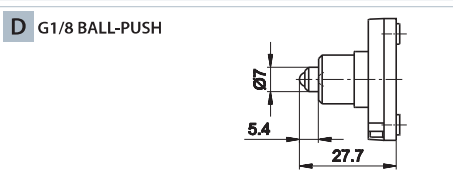
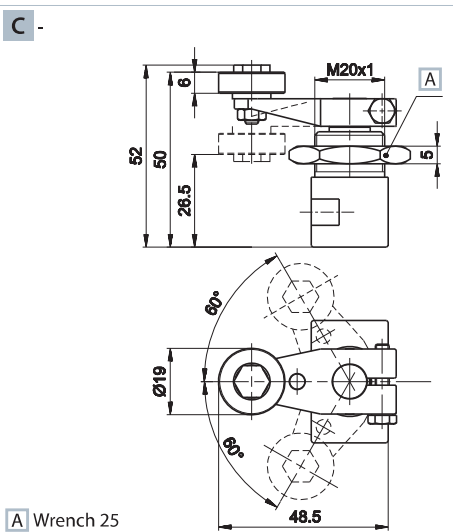
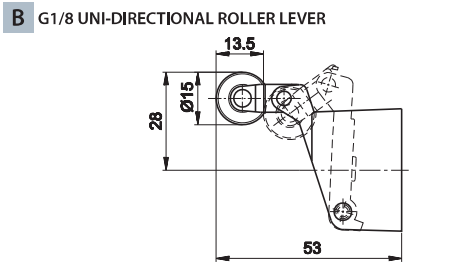
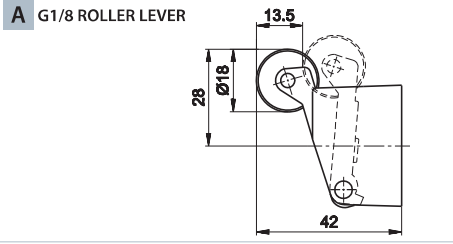
	Return	Flow rate (NI/min)	Ø mm	Weight Kg	Force N	Part no.	Composition (a)			Tot L. mm
							Control	Body	Return	
<b>ROLLER LEVER</b>										
3/2 NC-NO	mechanical spring	890	6,5	0,21	23	CL-100A	A	1	H	112
	pneumatic not amplified	890	6,5	0,21	6	CL-100P	A	1	I	112
5/2	mechanical spring	890	6,5	0,25	23	CM-400A	A	2	H	129
	pneumatic not amplified	890	6,5	0,25	6	CM-400P	A	2	I	129
<b>UNI-DIRECTIONAL ROLLER LEVER</b>										
3/2 NC-NO	mechanical spring	890	6,5	0,22	18	CL-101A	B	1	H	123
	pneumatic not amplified	890	6,5	0,22	6	CL-101P	B	1	I	123
5/2	mechanical spring	890	6,5	0,26	18	CM-401A	B	2	H	139,5
	pneumatic not amplified	890	6,5	0,26	6	CM-401P	B	2	I	139,5
<b>BIDIRECTIONAL SIDE ROLLER LEVER</b>										
3/2 NC-NO	mechanical spring	890	6,5	0,30	25	CL-106A	C	1	H	118,5
5/2	mechanical spring	890	6,5	0,34	25	CM-406A	C	2	H	135
<b>BALL-PUSH</b>										
3/2 NC-NO	mechanical spring	890	6,5	0,19	64	CL-102A	D	1	H	97,7
	pneumatic not amplified	890	6,5	0,19	25	CL-102P	D	1	I	97,7
5/2	mechanical spring	890	6,5	0,23	64	CM-402A	D	2	H	114,2
	pneumatic not amplified	890	6,5	0,23	25	CM-402P	D	2	I	114,2
<b>ROLLER WITH DUST PROTECTION</b>										
3/2 NC-NO	mechanical spring	890	6,5	0,19	64	CL-105A	E	1	H	117
	pneumatic not amplified	890	6,5	0,18	25	CL-105P	E	1	I	117
5/2	mechanical spring	890	6,5	0,23	68	CM-405A	E	2	H	133,5
	pneumatic not amplified	890	6,5	0,22	26	CM-405P	E	2	I	133,5
<b>BALL-PUSH WITH DUST PROTECTION</b>										
3/2 NC-NO	mechanical spring	890	6,5	0,19	64	CL-104A	F	1	H	110
	pneumatic not amplified	890	6,5	0,18	25	CL-104P	F	1	I	110
5/2	mechanical spring	890	6,5	0,23	68	CM-404A	F	2	H	126,5
	pneumatic not amplified	890	6,5	0,22	26	CM-404P	F	2	I	126,5
<b>BALL-PUSH FOR SCREW PANEL MOUNTING</b>										
3/2 NC-NO	mechanical spring	890	6,5	0,19	64	CL-103A	G	1	H	97,7
	pneumatic not amplified	890	6,5	0,18	25	CL-103P	G	1	I	97,7
5/2	mechanical spring	890	6,5	0,23	68	CM-403A	G	2	H	114,2
	pneumatic not amplified	890	6,5	0,22	25	CM-403P	G	2	I	114,2

To get 3/2 NO version, supply the valve from port 3  
Pressure 0 ÷ 10 bar for all part numbers

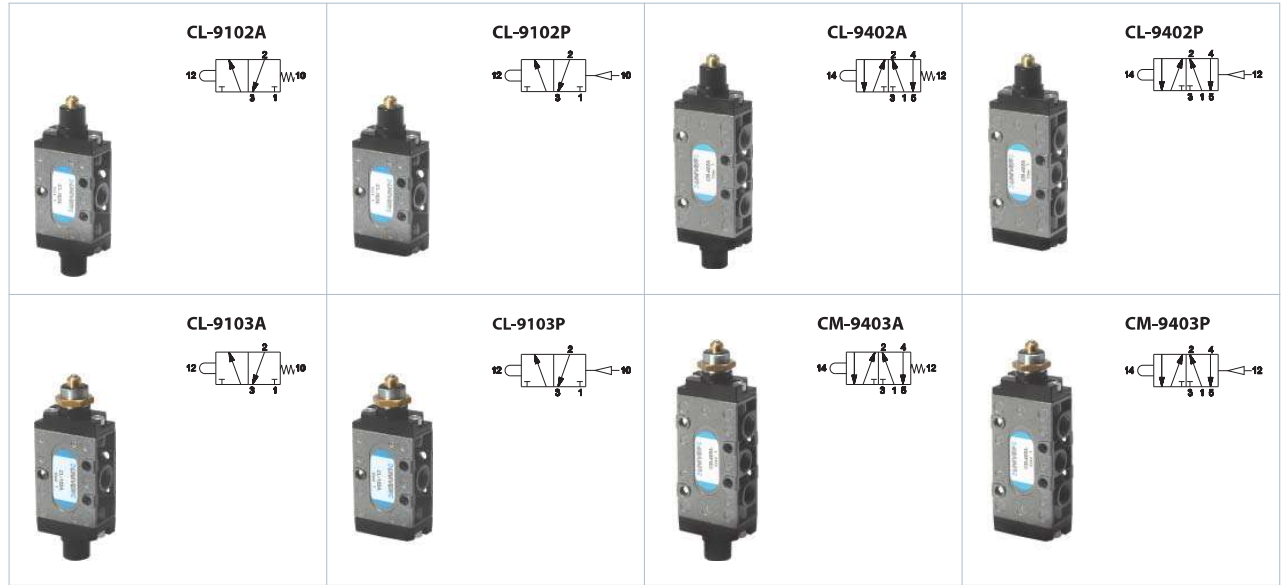
(a) = see page 3\_7

Composition

CONTROL BODY RETURN



**G1/4 Valves with direct mechanical operation**



	Return	Flow rate (NI/min)	Ø mm	Weight Kg	Force N	Part no.	Composition (a)			Tot L. mm
							Control	Body	Return	
<b>BALL-PUSH</b>										
3/2 NC-NO	mechanical spring	1480	8,5	0,26	68	<b>CL-9102A</b>	D	1	H	117
	pneumatic not amplified	1480	8,5	0,26	26	<b>CL-9102P</b>	D	1	I	106
5/2	mechanical spring	1480	8,5	0,28	68	<b>CM-9402A</b>	D	2	H	134,5
	pneumatic not amplified	1480	8,5	0,28	26	<b>CM-9402P</b>	D	2	I	123,5
<b>BALL-PUSH FOR SCREW PANEL MOUNTING</b>										
3/2 NC-NO	mechanical spring	1480	8,5	0,26	68	<b>CL-9103A</b>	G	1	H	117
	pneumatic not amplified	1480	8,5	0,24	26	<b>CL-9103P</b>	G	1	I	106
5/2	mechanical spring	1480	6,5	0,28	64	<b>CM-9403A</b>	G	2	H	134,5
	pneumatic not amplified	1480	6,5	0,26	26	<b>CM-9403P</b>	G	2	I	123,5

To get 3/2 NO version, supply the valve from port 3  
 Pressure 0 ÷ 10 bar for all part numbers

(a) = see page 3\_9

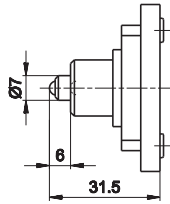
Composition

CONTROL

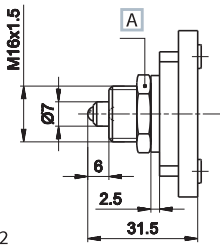
BODY

RETURN

D G1/4 BALL-PUSH

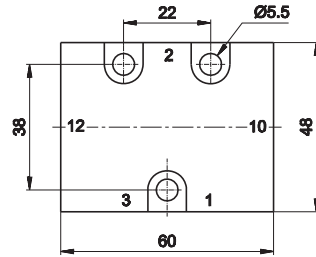
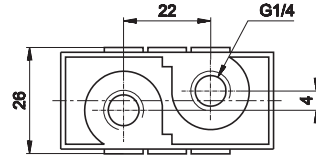


G G1/4 BALL-PUSH FOR SCREW PANEL MOUNTING



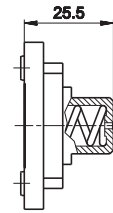
A Wrench 22

1 3/2 NC-NO G1/4

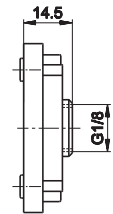


- |                 |                 |
|-----------------|-----------------|
| >> NC           | >> NO           |
| 1 = Supply port | 1 = Exhaust     |
| 2 = Use         | 2 = Use         |
| 3 = Exhaust     | 3 = Supply port |
| 12 = Control    | 12 = Control    |
| 10 = Return     | 10 = Return 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

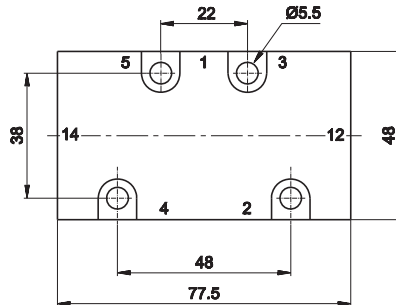
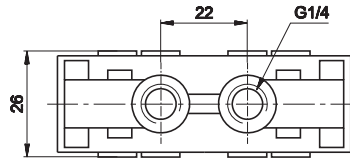
H G1/4 MECHANICAL SPRING



I G1/4 PNEUMATIC SPRING

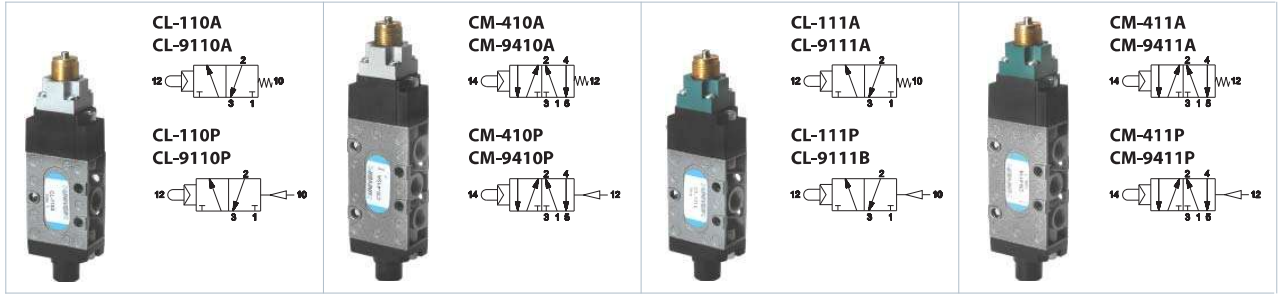


2 5/2 G1/4



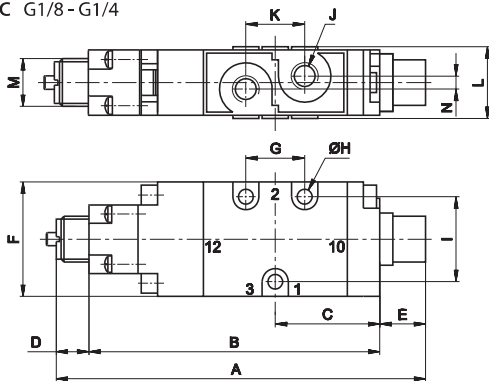
- 1 = Supply port
- 2 - 4 = Use
- 3 - 5 = Exhaust
- 14 = Control
- 12 = Return

G1/8 - G1/4 Valves with direct mechanical operator for pneumatic and mechanical actuators



	Thread	Return	Pressure bar	Flow rate (NI/min)	Ø mm	Weight Kg	Force N	Part no.
<b>BALL-PUSH</b>								
3/2 NC	G1/8	mechanical spring	2,5±10	890	6,5	0,19	11	CL-110A
	G1/8	pneumatic not amplified	1÷10	890	6,5	0,18	11	CL-110P
	G1/4	mechanical spring	2÷10	1480	8,5	0,26	11	CL-9110A
	G1/4	pneumatic not amplified	1÷10	1480	8,5	0,24	11	CL-9110P
5/2	G1/8	mechanical spring	3÷10	890	6,5	0,23	11	CM-410A
	G1/8	pneumatic not amplified	1,2÷10	890	6,5	0,22	11	CM-410P
	G1/4	mechanical spring	2÷10	1480	8,5	0,28	11	CM-9410A
	G1/4	pneumatic not amplified	1,2÷10	1480	8,5	0,26	11	CM-9410P
<b>SENSITIVE BALL-PUSH</b>								
3/2 NC	G1/8	mechanical spring	2,5±10	890	6,5	0,19	3	CL-111A
	G1/8	pneumatic not amplified	1÷10	890	6,5	0,18	3	CL-111P
	G1/4	mechanical spring	2÷10	1480	8,5	0,26	3	CL-9111A
	G1/4	pneumatic not amplified	1÷10	1480	8,5	0,24	3	CL-9111P
5/2	G1/8	mechanical spring	3÷10	890	6,5	0,23	3	CM-411A
	G1/8	pneumatic not amplified	1,2÷10	890	6,5	0,22	3	CM-411P
	G1/4	mechanical spring	2÷10	1480	8,5	0,28	3	CM-9411A
	G1/4	pneumatic not amplified	1,2÷10	1480	8,5	0,26	3	CM-9411P

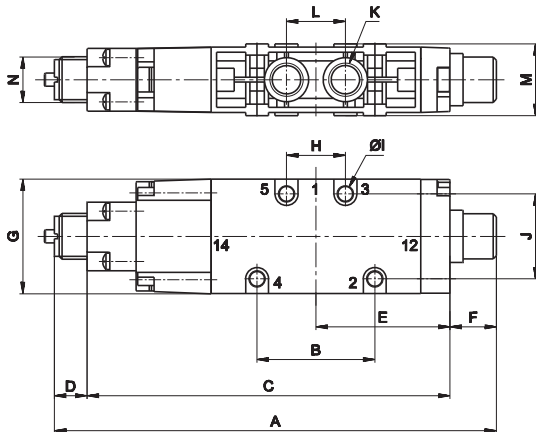
3/2 NC G1/8 - G1/4



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	116	92	32	10	14	35	22	4,5	26	G1/8	22	22	M14x1	4
G1/4	136,5	112	41	10	14,5	48	18	5,5	38	G1/4	18	26	M14x1	4

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	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

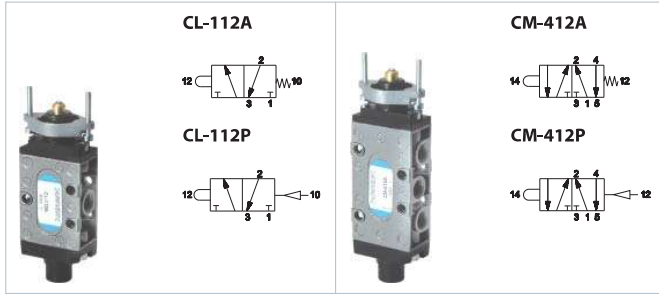


G1/8 - G1/4 Valves with direct mechanical operator for pneumatic and mechanical actuators

PNEUMATIC AND MECHANICAL ACTUATORS			MANUAL ACTUATORS		
	Pneumatic operator	AI-3550 		Recessed button	<ul style="list-style-type: none"> <li>■ BLACK AI-3511</li> <li>■ RED AI-3512</li> <li>■ GREEN AI-3513</li> </ul>
	Amplified pneumatic operator	AI-3551 		Head button	<ul style="list-style-type: none"> <li>■ RED AI-3514</li> <li>■ BLACK AI-3516</li> <li>■ RED AI-3514D</li> <li>■ BLACK AI-3516D</li> </ul>
	Roller operator 1 position	AI-3560 		Button	<ul style="list-style-type: none"> <li>■ GREEN AI-3515</li> <li>■ RED AI-3517</li> <li>■ BLACK AI-3519</li> </ul>
	Ball-push operator 1 position	AI-3562 		Accident prevention rotating selector	<ul style="list-style-type: none"> <li>■ BLACK AI-3520</li> <li>■ BLACK AI-3521</li> </ul>
	Operator with omni-directional antenna 1 position	AI-3563 		Rotating lever selector	<ul style="list-style-type: none"> <li>■ BLACK AI-3522</li> <li>■ BLACK AI-3523</li> </ul>
	Roller lever operator 1 position	AI-3570 		Lever operator	<ul style="list-style-type: none"> <li>■ BLACK AI-3524</li> </ul>
	Articulated roller operator 1 position Complete actuation with stroke 2,5 mm, max stroke 4,7 mm	AI-3571 		Omni-directional operator	<ul style="list-style-type: none"> <li>■ BLACK AI-3525</li> </ul>
	Key operator 1 position	AI-3572 		Push-pull operator	<ul style="list-style-type: none"> <li>■ BLACK AI-3526</li> </ul>

For actuators dimensions see section "Accessories>Actuators"

G1/8 Valves with direct operator for panel mounting actuators

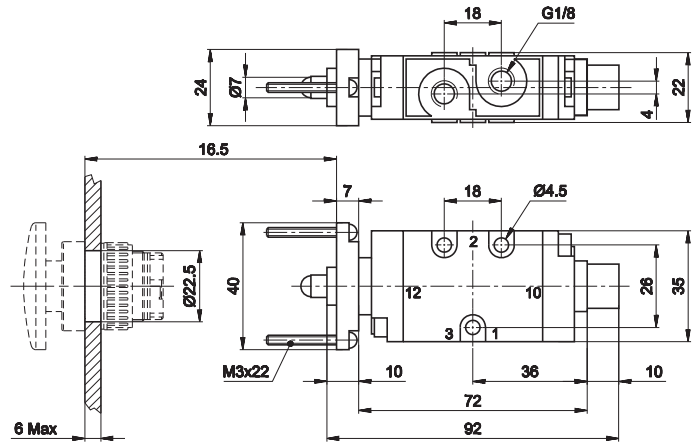


	Return	Pressure bar	Flow rate (NI/min)	Ø mm	Weight Kg	Force N	Part no.
3/2 NC-NO  5/2	<b>BALL-PUSH</b>						
	mechanical spring	0÷10	890	6,5	0,19	64	CL-112A
	pneumatic not amplified	0÷10	890	6,5	0,18	25	CL-112P
	mechanical spring	0÷10	890	6,5	0,23	64	CM-412A
	pneumatic not amplified	0÷10	890	6,5	0,22	25	CM-412P

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

	Recessed button	<ul style="list-style-type: none"> <li>YELLOW AI-3511Q</li> <li>RED AI-3512Q</li> <li>GREEN AI-3513Q</li> </ul>	
	Head button	<ul style="list-style-type: none"> <li>RED AI-3514Q</li> <li>BLACK AI-3516Q</li> </ul>	
	Button	<ul style="list-style-type: none"> <li>GREEN AI-3515Q</li> <li>RED AI-3517Q</li> <li>BLACK AI-3519Q</li> </ul>	
	Lever operator	<ul style="list-style-type: none"> <li>BLACK AI-3524Q</li> </ul>	

3/2 NC-NO G1/8



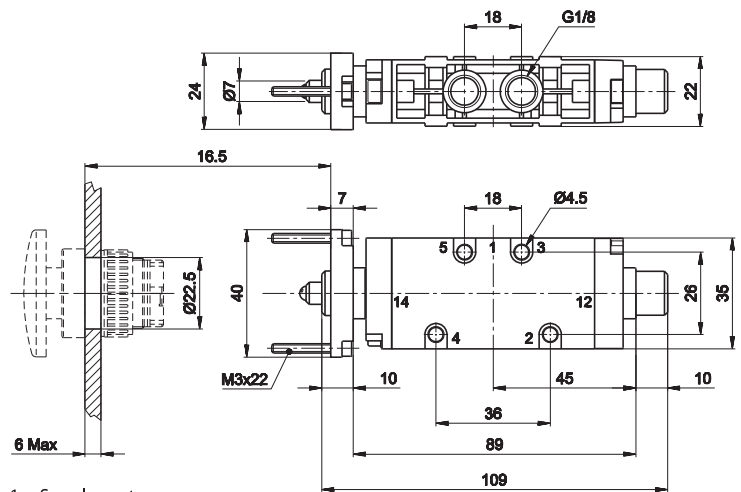
>> NC

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

>> NO

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

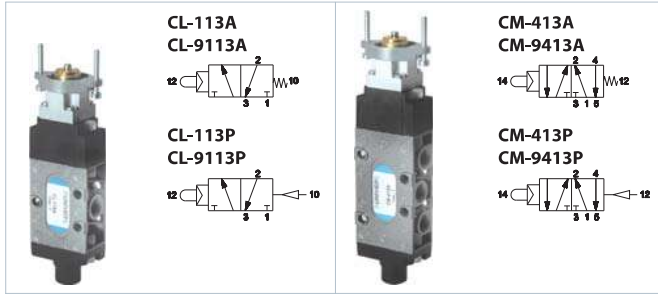
5/2 G1/8



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

For actuator dimensions see section "Accessories>Buttons"

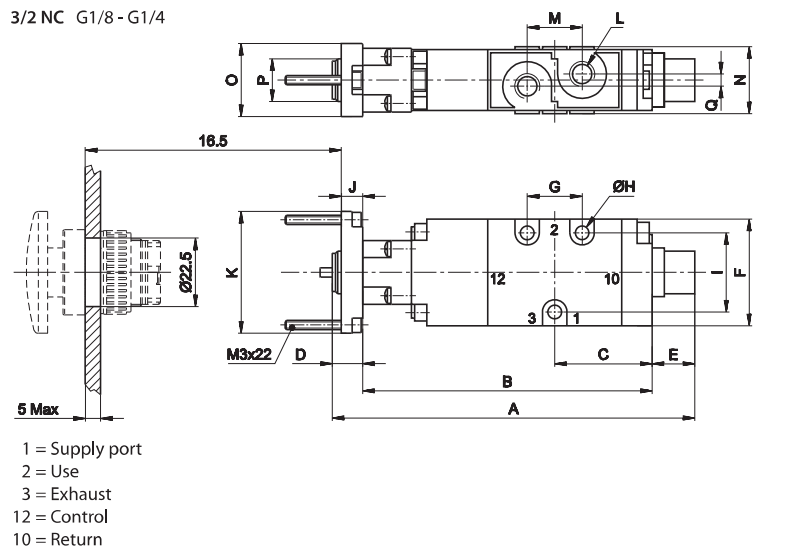
G1/8 - G1/4 Valves with indirect operator for panel mounting actuators



	Thread	Return	Pressione bar	Flow rate (NI/min)	Ø mm	Weight Kg	Force N	Part no.
3/2 NC	<b>BALL-PUSH</b>							
	G1/8	mechanical spring	2,5÷10	890	6,5	0,20	11	CL-113A
	G1/8	pneumatic non amplified	1÷10	890	6,5	0,19	11	CL-113P
	G1/4	mechanical spring	2÷10	1480	8,5	0,27	11	CL-9113A
	G1/4	pneumatic non amplified	1÷10	1480	8,5	0,26	11	CL-9113P
5/2	G1/8	mechanical spring	3÷10	890	6,5	0,24	11	CM-413A
	G1/8	pneumatic non amplified	1,2÷10	890	6,5	0,23	11	CM-413P
	G1/4	mechanical spring	2÷10	1480	6,5	0,29	11	CM-9413A
	G1/4	pneumatic non amplified	1,2÷10	1480	6,5	0,28	11	CM-9413P

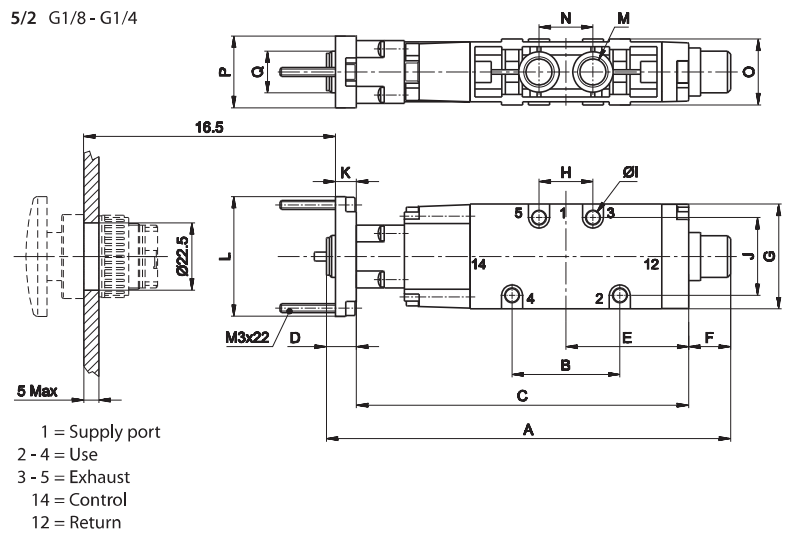
	Recessed button	<ul style="list-style-type: none"> <li>■BLACK AI-3511Q</li> <li>■RED AI-3512Q</li> <li>■GREEN AI-3513Q</li> </ul>	
	Head button	<ul style="list-style-type: none"> <li>■RED AI-3514Q</li> <li>■BLACK AI-3516Q</li> <li>■RED AI-3514QD</li> <li>■BLACK AI-3516QD</li> </ul>	
	Button	<ul style="list-style-type: none"> <li>■GREEN AI-3515Q</li> <li>■RED AI-3517Q</li> <li>■BLACK AI-3519Q</li> </ul>	
	Accident prevention rotating selector	<ul style="list-style-type: none"> <li>■BLACK AI-3520Q</li> <li>■BLACK AI-3521Q</li> </ul>	
	Lever operator	<ul style="list-style-type: none"> <li>■BLACK AI-3524Q</li> </ul>	
	Rotating lever selector	<ul style="list-style-type: none"> <li>■BLACK AI-3523Q</li> <li>■BLACK AI-3522Q</li> </ul>	
	Omni-directional lever	<ul style="list-style-type: none"> <li>■BLACK AI-3525Q</li> </ul>	
	Push-pull operator	<ul style="list-style-type: none"> <li>■BLACK AI-3526Q</li> </ul>	

3/2 NC G1/8 - G1/4



	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

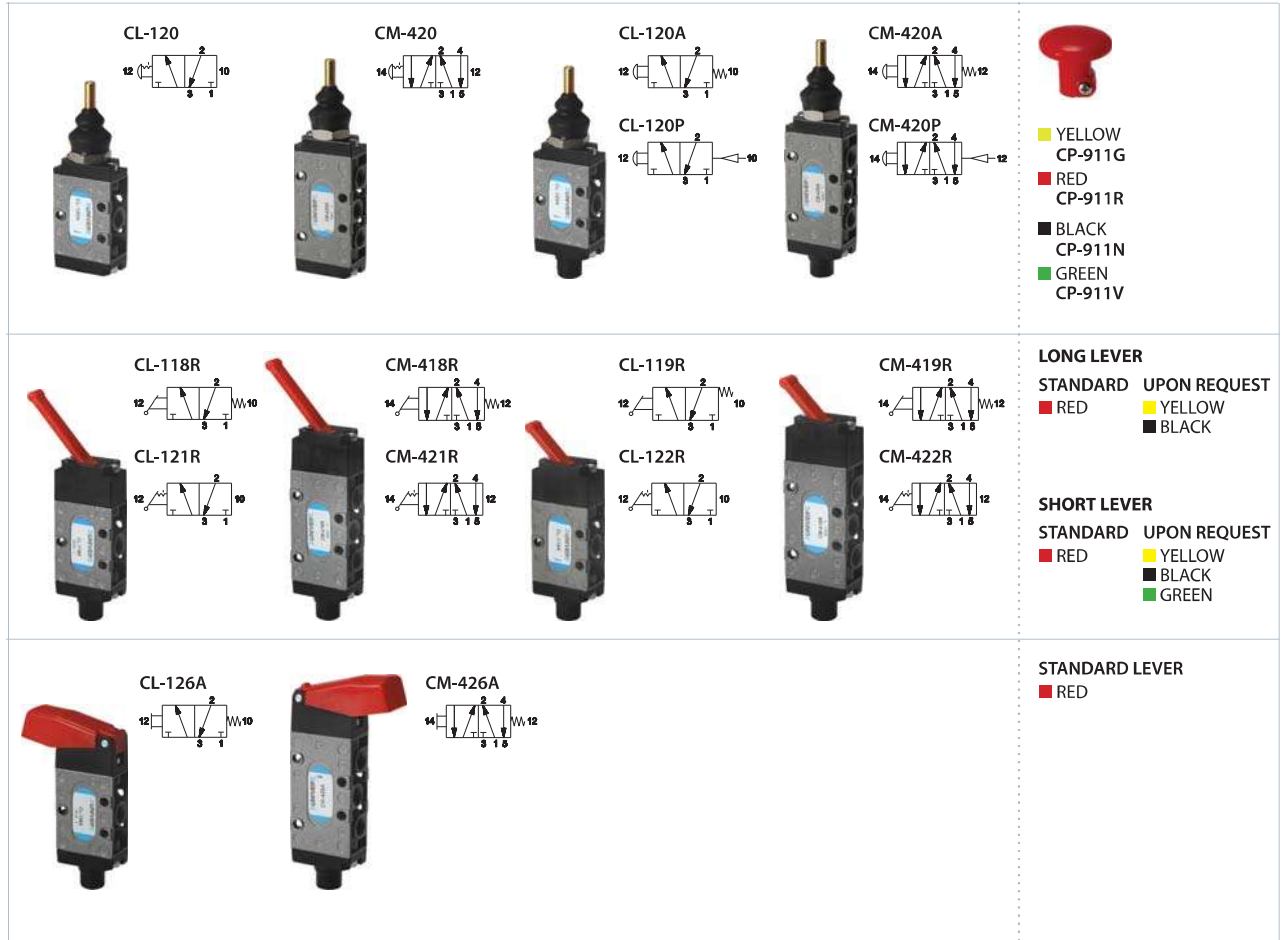
5/2 G1/8 - G1/4



	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

For actuator dimensions see section "Accessories>Buttons"

G1/8 Manually operated valves



	Return	Flow rate (NI/min)	Ø mm	Weight Kg	Force N	Part no.	Composition (a)			Tot L. mm
							Control	Body	Return	
<b>PUSH-PULL (b)</b>										
3/2 NC-NO	push-pull	890	6,5	0,19	25	<b>CL-120</b>	A	1	H	108,5
5/2	push-pull	890	6,5	0,22	25	<b>CM-420</b>	A	2	H	125
3/2 NC-NO	mechanical spring	890	6,5	0,19	25	<b>CL-120A</b>	A	1	F	121
5/2	mechanical spring	890	6,5	0,22	25	<b>CM-420A</b>	A	2	F	137,5
3/2 NC-NO	pneumatic not amplified	890	6,5	0,18	25	<b>CL-120P</b>	A	1	I	121
5/2	pneumatic not amplified	890	6,5	0,21	25	<b>CM-420P</b>	A	2	I	137,5
<b>BUTTON</b>										
3/2 NC-NO	mechanical spring	890	6,5	0,20	15	<b>CL-126A</b>	B	1	F	100
5/2	mechanical spring	890	6,5	0,23	15	<b>CM-426A</b>	B	2	F	116,5
<b>LONG LEVER (STANDARD RED COLOUR)</b>										
3/2 NC-NO	mechanical spring	890	6,5	0,17	10	<b>CL-118R</b>	C	1	F	126
5/2	mechanical spring	890	6,5	0,21	10	<b>CM-418R</b>	C	2	F	142,5
3/2 NC-NO	lever	890	6,5	0,16	10	<b>CL-121R</b>	C	1	G	126
5/2	lever	890	6,5	0,20	10	<b>CM-421R</b>	C	2	G	142,5
<b>SHORT LEVER (STANDARD RED COLOUR)</b>										
3/2 NC-NO	mechanical spring	890	6,5	0,17	20	<b>CL-119R</b>	C	1	F	112
5/2	mechanical spring	890	6,5	0,21	20	<b>CM-419R</b>	C	2	F	128,5
3/2 NC-NO	lever	890	6,5	0,16	20	<b>CL-122R</b>	C	1	G	112
5/2	lever	890	6,5	0,20	20	<b>CM-422R</b>	C	2	G	128,5

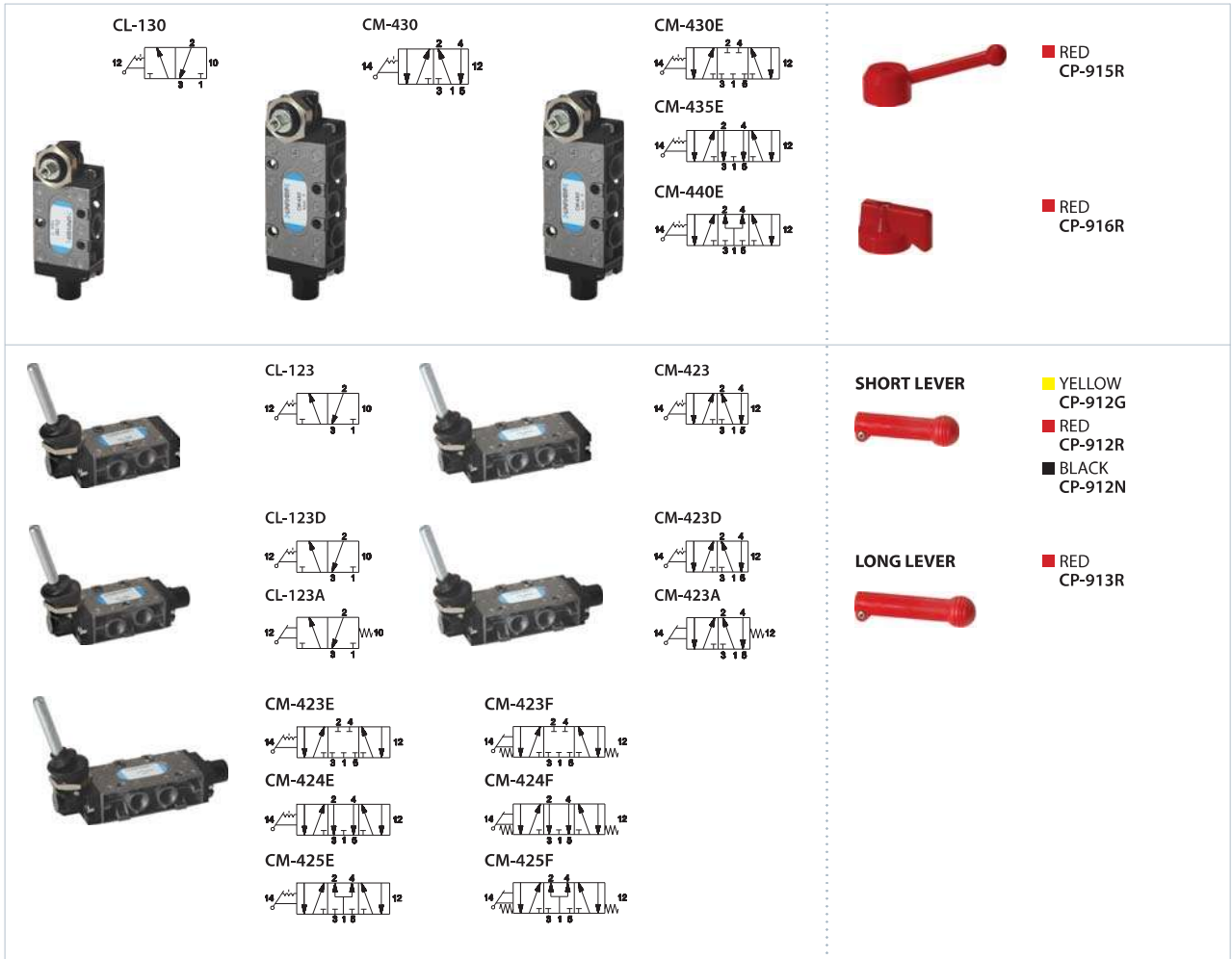
To get 3/2 NO version, supply the valve from port 3

(b) = valves are supplied without operator Pressure 0 ÷ 10 bar for all part numbers

(a) = see pages 3\_18

Overall dimensions include operator

G1/8 Manually operated valves



	Return	Flow rate (Nl/min)	Ø mm	Weight Kg	Force N	Part no.	Composition (a)			Tot L. mm
							Control	Body	Return	
<b>ROTATING LEVER (SELECTOR UPON REQUEST) (b)</b>										
3/2 NC-NO	rotating lever	890	6,5	0,22	27	<b>CL-130</b>	D	1	G	97
5/2	rotating lever	890	6,5	0,25	27	<b>CM-430</b>	D	2	G	113,5
5/3 c.c.	rotating lever	890	6,5	0,25	27	<b>CM-430E</b>	D	2	G	113,5
5/3 o.c.	rotating lever	890	6,5	0,24	27	<b>CM-435E</b>	D	2	G	113,5
5/3 p.c.	rotating lever	890	6,5	0,24	27	<b>CM-440E</b>	D	2	G	113,5
<b>90° LEVER - 3 POSITION (b)</b>										
3/2 NC-NO	lever	890	6,5	0,17	2,5÷4	<b>CL-123</b>	E	1	H	79,5
5/2	lever	890	6,5	0,23	2,5÷4	<b>CM-423</b>	E	2	H	96
3/2 NC-NO	lever	890	6,5	0,17	3,5÷5	<b>CL-123D</b>	E	1	G	92
5/2	lever	890	6,5	0,23	3,5÷5	<b>CM-423D</b>	E	2	G	108,5
3/2 NC-NO	mechanical spring	890	6,5	0,18	9÷13	<b>CL-123A</b>	E	1	F	92
5/2	mechanical spring	890	6,5	0,23	9÷13	<b>CM-423A</b>	E	2	F	108,5
5/3 c.c.	lever	890	6,5	0,23	3,5÷5	<b>CM-423E</b>	E	2	G	108,5
	lever	890	6,5	0,23	6,5÷10	<b>CM-423F</b>	E	2	G	108,5
5/3 o.c.	lever	890	6,5	0,23	3,5÷3	<b>CM-424E</b>	E	2	G	108,5
	lever	890	6,5	0,23	6,5÷10	<b>CM-424F</b>	E	2	G	108,5
5/3 p.c.	lever	890	6,5	0,23	7,5÷5	<b>CM-425E</b>	E	2	G	108,5
	lever	890	6,5	0,23	6,5÷10	<b>CM-425F</b>	E	2	G	108,5

o.c. = open centres c.c. = closed centres p.c. = pressurized centres

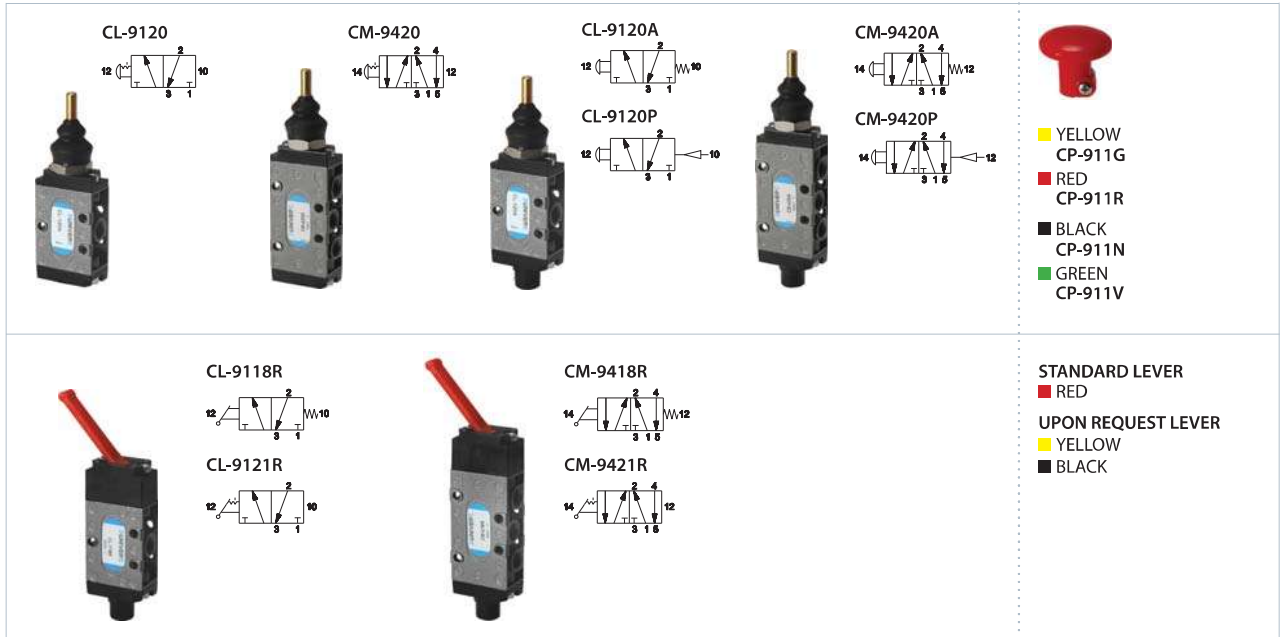
To get 3/2 NO version, supply the valve from port 3

(b) = valves are supplied without operator Pressure 0 ÷ 10 bar for all part numbers

(a) = see pages 3\_18

Overall dimensions include operator

G1/4 Manually operated valves

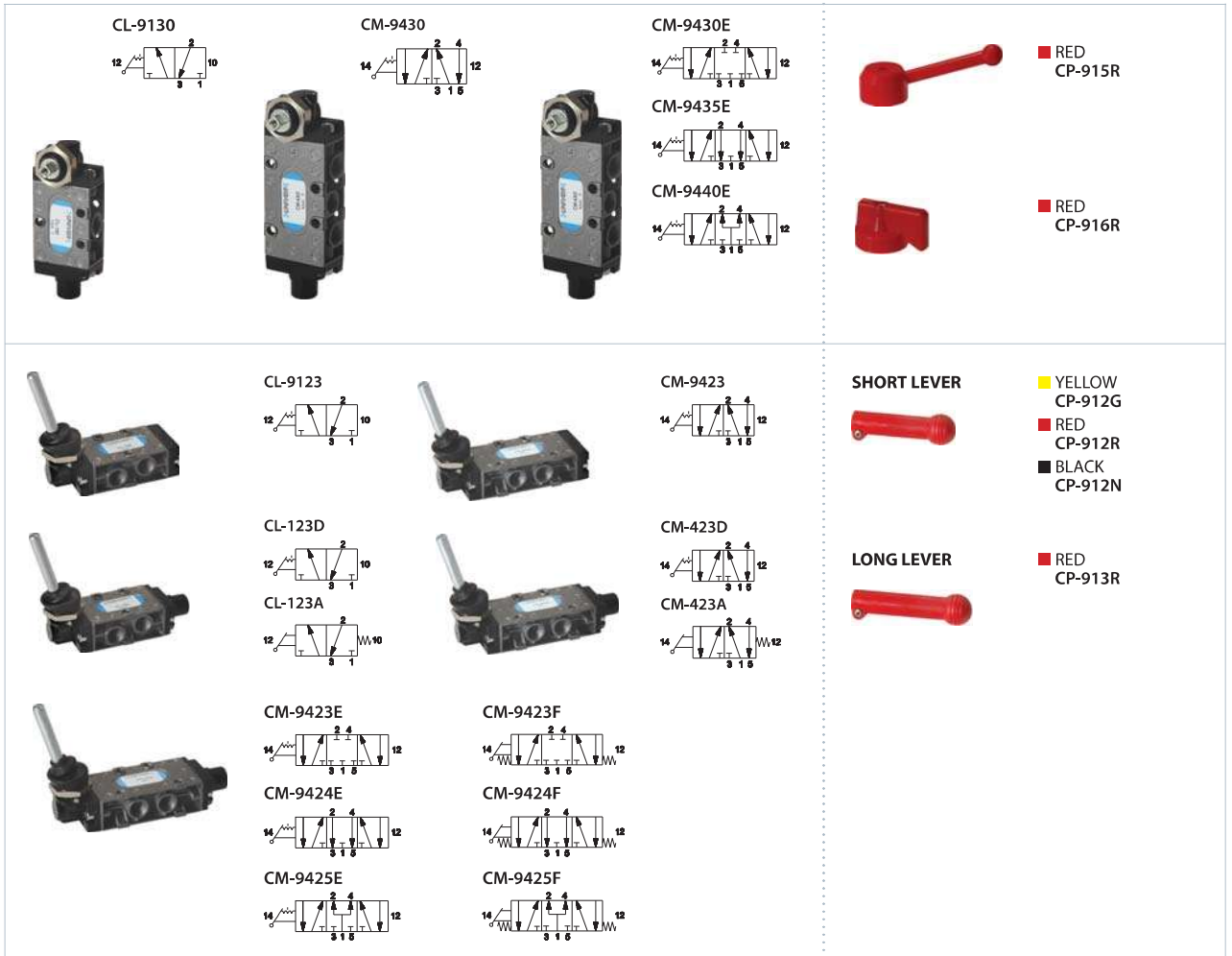


Return	Flow rate (Nl/min)	Ø mm	Weight Kg	Force N	Part no.	Composition (a)			Tot L. mm	
						Control	Body	Return		
<b>PUSH-PULL<sup>(b)</sup></b>										
3/2 NC-NO	push-pull	1480	8,5	0,26	26	<b>CL-9120</b>	A	1	H	127
5/2	push-pull	1480	8,5	0,26	26	<b>CM-9420</b>	A	2	H	144,5
3/2 NC-NO	mechanical spring	1480	8,5	0,26	26	<b>CL-9120A</b>	A	1	F	138
5/2	mechanical spring	1480	8,5	0,26	26	<b>CM-9420A</b>	A	2	F	155,5
3/2 NC-NO	pneumatic not amplified	1480	8,5	0,24	26	<b>CL-9120P</b>	A	1	I	127
5/2	pneumatic not amplified	1480	8,5	0,24	26	<b>CM-9420P</b>	A	2	I	144,5
<b>LONG LEVER (standard red colour)</b>										
3/2 NC-NO	mechanical spring	1480	8,5	0,23	11	<b>CL-9118R</b>	C	1	F	144
5/2	mechanical spring	1480	8,5	0,25	11	<b>CM-9418R</b>	C	2	F	161,5
3/2 NC-NO	lever	1480	8,5	0,22	11	<b>CL-9121R</b>	C	1	G	144
5/2	lever	1480	8,5	0,24	11	<b>CM-9421R</b>	C	2	G	161,5

To get 3/2 NO version, supply the valve from port 3  
 (b) = valves are supplied without operator Pressure 0 ÷ 10 bar for all part numbers

(a) = see pages 3\_18  
 Overall dimensions include operator

G1/4 Manually operated valves



	Return	Flow rate (Nl/min)	Ø mm	Weight Kg	Force N	Part no.	Composition (a)			Tot L. mm
							Control	Body	Return	
<b>ROTATING LEVER (SELECTOR UPON REQUEST)</b>										
3/2 NC-NO	rotating lever	1480	8,5	0,25	29	<b>CL-9130</b>	D	1	G	113
5/2	rotating lever	1490	8,5	0,27	29	<b>CM-9430</b>	D	2	G	130,5
5/3 c.c.	rotating lever	1480	8,5	0,27	29	<b>CM-9430E</b>	D	2	G	130,5
5/3 o.c.	rotating lever	1480	8,5	0,26	29	<b>CM-9435E</b>	D	2	G	130,5
5/3 p.c.	rotating lever	1480	8,5	0,26	29	<b>CM-9440E</b>	D	2	G	130,5
<b>90° LEVER - 3 POSITION (b)</b>										
3/2 NC-NO	lever	1480	8,5	0,23	2,7÷4,5	<b>CL-9123</b>	E	1	H	99,5
5/2	lever	1480	8,5	0,28	2,7÷4,5	<b>CM-9423</b>	E	2	H	117,5
3/2 NC-NO	lever	1480	8,5	0,23	3,6÷5,2	<b>CL-9123D</b>	E	1	G	110,5
5/2	lever	1480	8,5	0,28	3,6÷5,2	<b>CM-9423D</b>	E	2	G	128
3/2 NC-NO	mechanical spring	1480	8,5	0,24	10÷14	<b>CL-9123A</b>	E	1	F	110,5
5/2	mechanical spring	1480	8,5	0,28	10÷14	<b>CM-9423A</b>	E	2	F	128
5/3 c.c.	lever	1480	8,5	0,28	3,6÷5,2	<b>CM-9423E</b>	E	2	G	128
	lever	1480	8,5	0,28	6,7÷11	<b>CM-9423F</b>	E	2	G	128
5/3 o.c.	lever	1480	8,5	0,28	3,6÷5,2	<b>CM-9424E</b>	E	2	G	128
	lever	1480	8,5	0,28	6,7÷11	<b>CM-9424F</b>	E	2	G	128
5/3 p.c.	lever	1480	8,5	0,28	3,6÷5,2	<b>CM-9425E</b>	E	2	G	128
	lever	1480	8,5	0,28	6,7÷11	<b>CM-9425F</b>	E	2	G	128

o.c. = open centres c.c. = closed centres p.c. = pressurized centres  
 To get 3/2 NO version, supply the valve from port 3  
 (b) = valves are supplied without operator Pressure 0 ÷ 10 bar for all part numbers

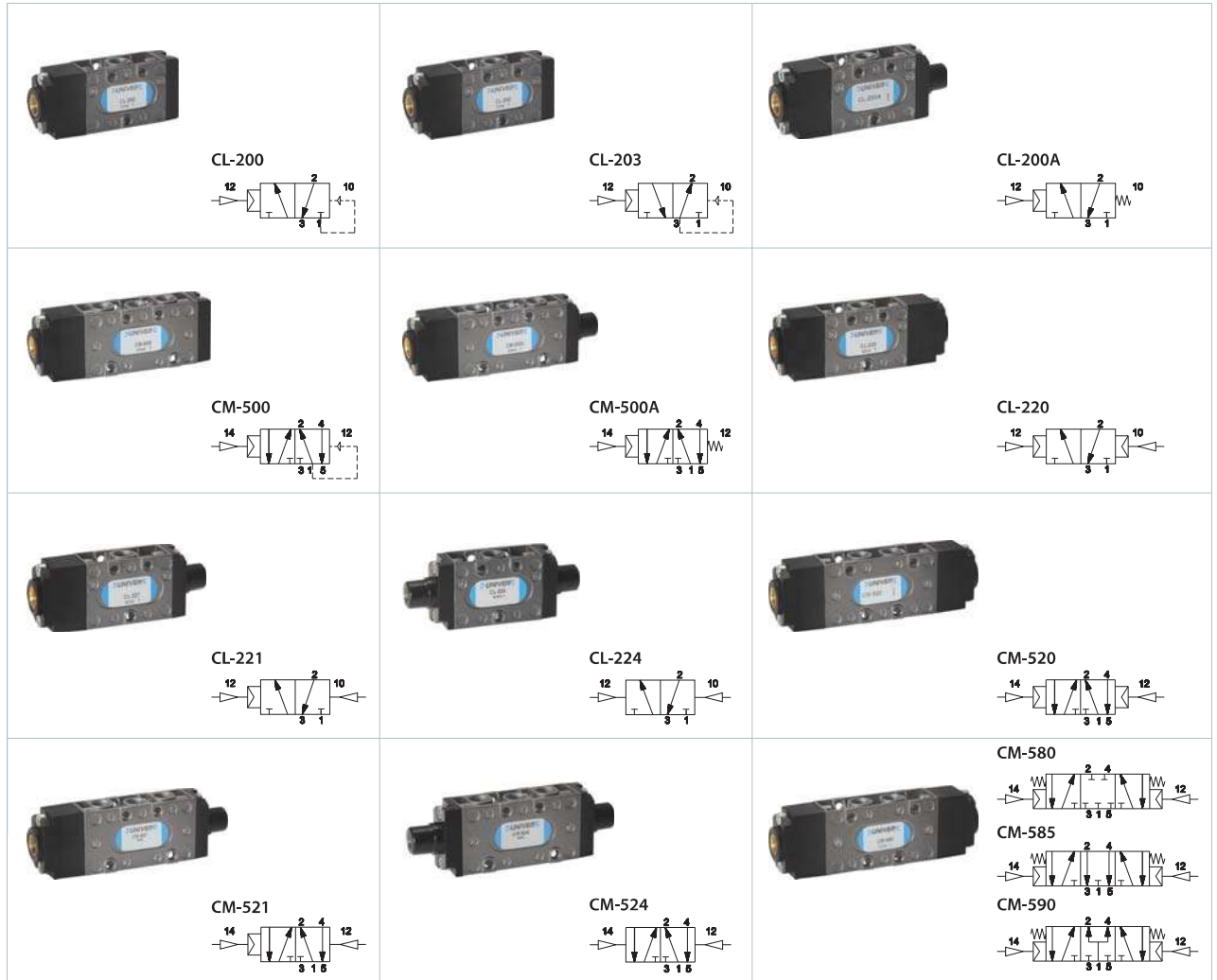
(a) = see pages 3\_18  
 Overall dimensions include operator

Composition

Control		Body		Return				
<b>A</b> G1/8 - G1/4 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>B</b> G1/8 BUTTON								
<b>C</b> G1/8 - G1/4 LONG/SHORT LEVER								
A	A1	B	B1	C				
G1/8	56	42	38,5	24	22,5			
G1/4	58,5	32			26			
<b>D</b> G1/8 - G1/4 ROTATING LEVER      G1/8 - G1/4 SELECTOR								
	A	A1	B	B1	C			
G1/8	89	42	32	29	22			
G1/4	89	42	32	29	24			
	D	E	F					
G1/8		22	27					
G1/4		25	27,5					
<b>E</b> G1/8 - G1/4 90° LEVER								
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			
<b>1</b> 3/2 NC-NO G1/8 - G1/4								
	A	B	C	D	E			
G1/8	47,5	35	18	26	4,5			
G1/4	60	48	22	38	5,5			
	G	H	I	L				
G1/8		18	22		4			
G1/4		26			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								
<b>2</b> 5/2 - 5/3 G1/8 - G1/4								
	A	B	C	D	E			
G1/8	64	35	18	26	4,5			
G1/4	77,5	48	22	38	5,5			
	F	G	H	I				
G1/8		36	18	22				
G1/4		48	22	26				
1 = Supply port 2 - 4 = Use 3 - 5 = Exhaust 14 = Control 12 = Return								
<b>F</b> G1/8 - G1/4 MECHANICAL SPRING								
	<table border="1"> <tr><td>A</td></tr> <tr><td>G1/8 22,5</td></tr> <tr><td>G1/4 25,5</td></tr> </table>					A	G1/8 22,5	G1/4 25,5
A								
G1/8 22,5								
G1/4 25,5								
<b>G</b> G1/8 - G1/4 2/3 POSITION								
	<table border="1"> <tr><td>A</td></tr> <tr><td>G1/8 22,5</td></tr> <tr><td>G1/4 25,5</td></tr> </table>					A	G1/8 22,5	G1/4 25,5
A								
G1/8 22,5								
G1/4 25,5								
<b>H</b> BOTTOM PLATE WITHOUT SPRING G1/8 - G1/4								
	<table border="1"> <tr><td>A</td></tr> <tr><td>G1/8 10</td></tr> <tr><td>G1/4 14,5</td></tr> </table>					A	G1/8 10	G1/4 14,5
A								
G1/8 10								
G1/4 14,5								
<b>I</b> G1/8 - G1/4 PNEUMATIC NOT AMPLIFIED								
	>> G1/8 							
	>> G1/4 							



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	
<b>SINGLE IMPULSE</b>													
3/2 NC	pneumatic amplified	pneumatic spring	2,3÷10	890	6,5	0,20	11	14	<b>CL-200</b>	B	1	E	82,5
3/2 NO	pneumatic amplified	pneumatic spring	2,3÷10	890	6,5	0,20	11	14	<b>CL-203</b>	B	1	E	82,5
3/2 NC-NO	pneumatic amplified	mechanical spring	2,5÷10	890	6,5	0,21	9	17	<b>CL-200A</b>	B	1	D	95
5/2	pneumatic amplified	pneumatic spring	2,5÷10	890	6,5	0,20	10	15	<b>CM-500</b>	B	2	E	99
	pneumatic amplified	mechanical spring	3÷10	890	6,5	0,19	10	18	<b>CM-500A</b>	B	2	D	111,5
<b>DOUBLE IMPULSE</b>													
3/2 NC-NO	pneumatic amplified	pneumatic amplified	1÷10	890	6,5	0,16	6	6	<b>CL-220</b>	B	1	F	97,5
	pneumatic amplified	pneumatic not amplified	1,7÷10	890	6,5	0,15	6	8	<b>CL-221</b>	B	1	G	95
	pneumatic non amplified	pneumatic not amplified	1,7÷10	890	6,5	0,14	8	8	<b>CL-224</b>	C	1	G	92,5
5/2	pneumatic amplified	pneumatic amplified	1,2÷10	890	6,5	0,18	7	7	<b>CM-520</b>	B	2	F	114
	pneumatic amplified	pneumatic not amplified	2÷10	890	6,5	0,19	7	9	<b>CM-521</b>	B	2	G	111,5
	pneumatic non amplified	pneumatic not amplified	2÷10	890	6,5	0,20	9	9	<b>CM-524</b>	C	2	G	109
5/3 c.c.	pneumatic amplified	pneumatic amplified	2,5÷10	890	6,5	0,21	8	12	<b>CM-580</b>	B	2	F	114
5/3 o.c.	pneumatic amplified	pneumatic amplified	2,5÷10	890	6,5	0,21	8	12	<b>CM-585</b>	B	2	F	114
5/3 p.c.	pneumatic amplified	pneumatic amplified	2,5÷10	890	6,5	0,21	8	12	<b>CM-590</b>	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

G1/4 Valves with pneumatic control

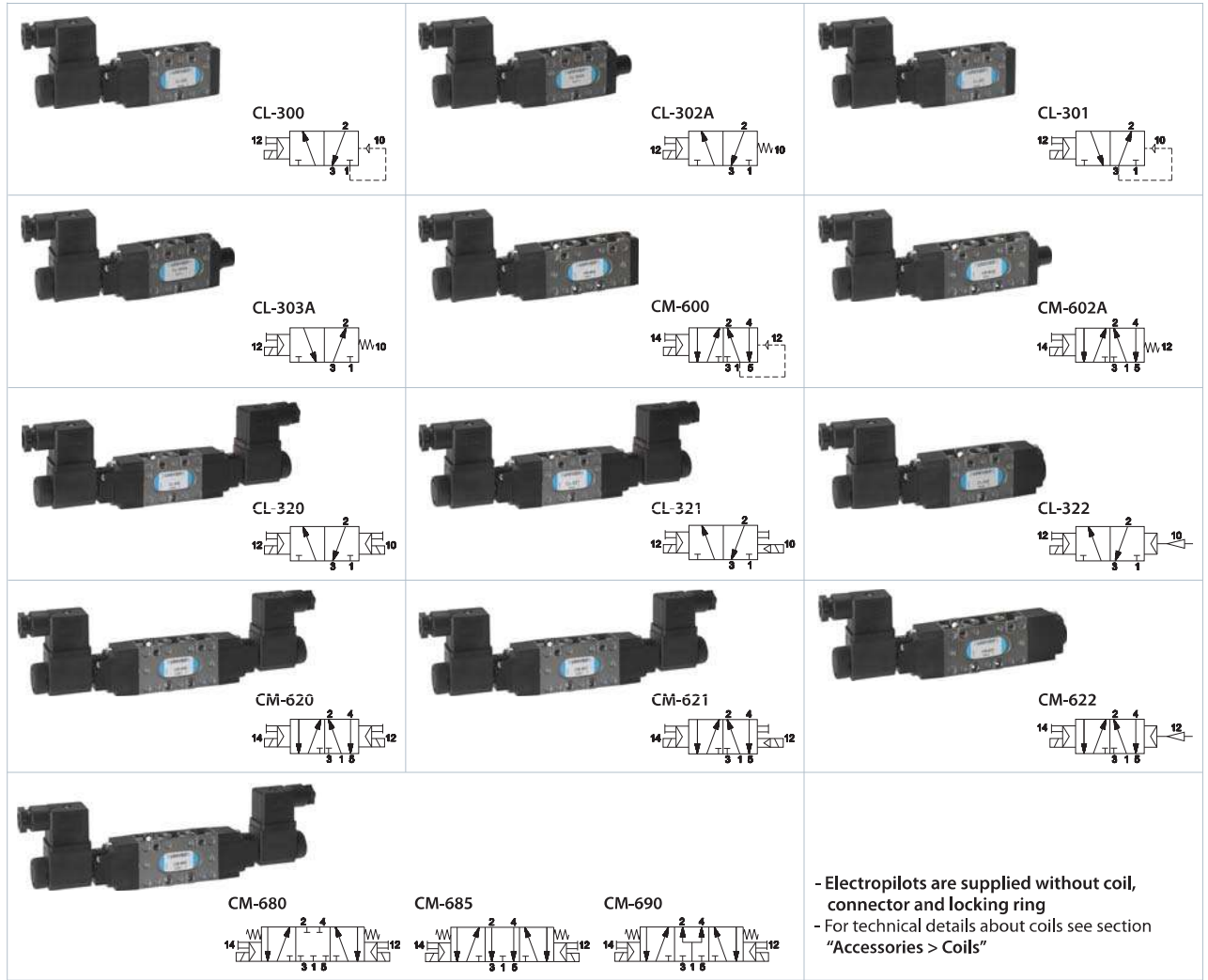


	Control	Return	Pressure bar	Flow rate (NI/min)	Ø mm	Weight Kg	Times (ms)		Part no.	Composition (a)			Tot L. mm
							En.	De-en.		Control	Body	Return	
<b>SINGLE IMPULSE</b>													
3/2 NC	pneumatic amplified	pneumatic spring	2÷10	1480	8,5	0,23	13	16	<b>CL-9200</b>	B	1	E	103
3/2 NO	pneumatic amplified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



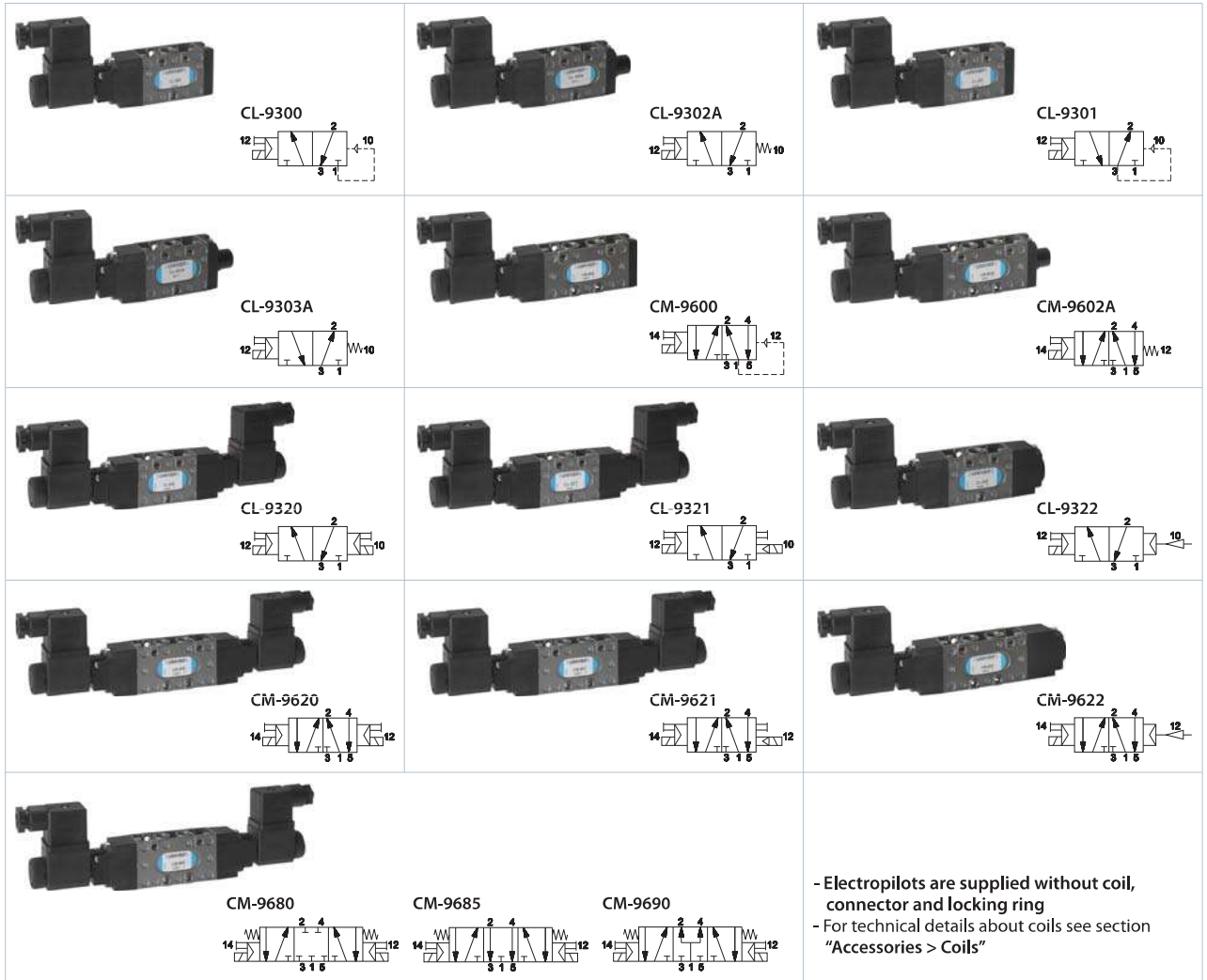
- Electropilots are supplied without coil, connector and locking ring  
 - For technical details about coils see section "Accessories > Coils"

	Control	Return	Pressure bar	Flow rate (Nl/min)	Ø mm	Weight Kg	Times (ms)		Part no.	Composition (a)			Tot L. mm
							En.	De-en.		Control	Body	Return	
<b>SINGLE IMPULSE</b>													
3/2 NC	electrical amplified	pneumatic spring	2,3÷10	890	6,5	0,20	23	19	<b>CL-300</b>	A	1	E	140,5
	electrical amplified	mechanical spring	2,5÷10	890	6,5	0,21	20	24	<b>CL-302A</b>	A	1	D	153
3/2 NO	electrical amplified	pneumatic spring	2,3÷10	890	6,5	0,20	23	19	<b>CL-301</b>	A	1	E	140,5
	electrical amplified	mechanical spring	2,5÷10	890	6,5	0,21	20	24	<b>CL-303A</b>	A	1	D	153
5/2	electrical amplified	pneumatic spring	2,5÷10	890	6,5	0,24	24	20	<b>CM-600</b>	A	2	E	157
	electrical amplified	mechanical spring	3÷10	890	6,5	0,25	21	25	<b>CM-602A</b>	A	2	D	169,5
<b>DOUBLE IMPULSE</b>													
3/2 NC-NO	electrical amplified	electrical amplified	1÷10	890	6,5	0,24	17	17	<b>CL-320</b>	A	1	H	213,5
	electrical amplified	electrical not amplified	1,7÷10	890	6,5	0,24	17	20	<b>CL-321</b>	A	1	H	213,5
	electrical amplified	pneumatic amplified	2,5÷10	890	6,5	0,21	20	7	<b>CL-322</b>	A	1	F	155,5
5/2	electrical amplified	electrical amplified	1,2÷10	890	6,5	0,28	20	20	<b>CM-620</b>	A	2	H	230
	electrical amplified	electrical not amplified	2÷10	890	6,5	0,28	20	23	<b>CM-621</b>	A	2	H	230
	electrical amplified	pneumatic amplified	1,2÷10	890	6,5	0,24	20	8	<b>CM-622</b>	A	2	F	172
5/3 c.c.	electrical amplified	electrical amplified	2,5÷10	890	6,5	0,21	18	24	<b>CM-680</b>	A	2	H	230
5/3 o.c.	electrical amplified	electrical amplified	2,5÷10	890	6,5	0,21	18	24	<b>CM-685</b>	A	2	H	230
5/3 p.c.	electrical amplified	electrical amplified	2,5÷10	890	6,5	0,21	18	24	<b>CM-690</b>	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	
<b>SINGLE IMPULSE</b>													
3/2 NC	electrical amplified	pneumatic spring	2÷10	1480	8,5	0,27	24	28	<b>CL-9300</b>	A	1	E	161
	electrical amplified	mechanical spring	2÷10	1480	8,5	0,28	22	35	<b>CL-9302A</b>	A	1	D	172
3/2 NO	electrical amplified	pneumatic spring	2÷10	1480	8,5	0,27	24	28	<b>CL-9301</b>	A	1	E	161
	electrical amplified	mechanical spring	2÷10	1480	8,5	0,28	22	35	<b>CL-9303A</b>	A	1	D	172
5/2	electrical amplified	pneumatic spring	2÷10	1480	8,5	0,30	25	32	<b>CM-9600</b>	A	2	E	178,5
	electrical amplified	mechanical spring	2÷10	1480	8,5	0,31	22	43	<b>CM-9602A</b>	A	2	D	189,5
<b>DOUBLE IMPULSE</b>													
3/2 NC_NO	electrical amplified	electrical amplified	2÷10	1480	8,5	0,29	18	18	<b>CL-9320</b>	A	1	H	233
	electrical amplified	elettrico not amplified	1,5÷10	1480	8,5	0,30	18	22	<b>CL-9321</b>	A	1	H	233
	electrical amplified	pneumatic amplified	2÷10	1480	8,5	0,26	22	8	<b>CL-9322</b>	A	1	F	175
5/2	electrical amplified	electrical amplified	1,5÷10	1480	8,5	0,32	22	22	<b>CM-9620</b>	A	2	H	250,5
	electrical amplified	elettrico not amplified	1,8÷10	1480	8,5	0,32	22	25	<b>CM-9621</b>	A	2	H	250,5
	electrical amplified	pneumatic amplified	1,5÷10	1480	8,5	0,29	22	10	<b>CM-9622</b>	A	2	F	192,5
5/3 c.c.	electrical amplified	electrical amplified	2,8÷10	1480	6,5	0,30	20	35	<b>CM-9680</b>	A	2	H	250,5
5/3 o.c.	electrical amplified	electrical amplified	2,8÷10	1480	6,5	0,30	20	35	<b>CM-9685</b>	A	2	H	250,5
5/3 p.c.	electrical amplified	electrical amplified	2,8÷10	1480	6,5	0,30	20	35	<b>CM-9690</b>	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

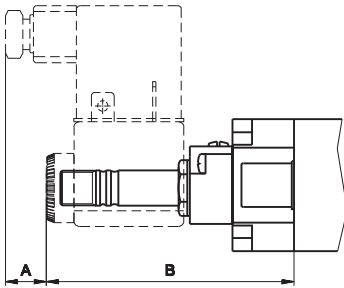
Composition

Control

Body

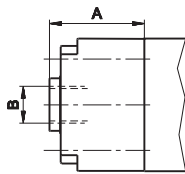
Return

**A** G1/8 - G1/4 ELECTRIC/AMPLIFIED



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

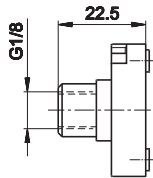
**B** G1/8 - G1/4 PNEUMATIC AMPLIFIED



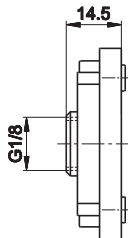
	A	B
G1/8	25	G1/8
G1/4	28,5	G1/8

**C** G1/8 - G1/4 PNEUMATIC NOT AMPLIFIED

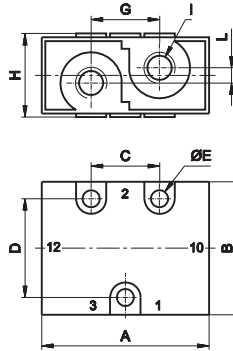
>> G1/8



>> G1/4



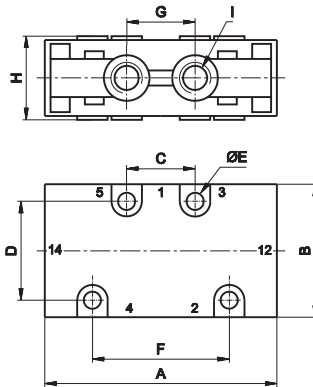
**1** 3/2 NC-NO G1/8 - G1/4



- >> 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

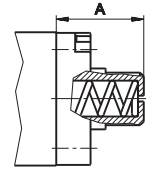
**2** 5/2 G1/8 - G1/4



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

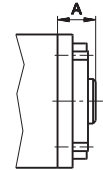
	A	B	C	D	E	F	G	H	I
G1/8	64	35	18	26	4,5	36	18	22	G1/8
G1/4	77,5	48	22	38	5,5	48	22	26	G1/4

**D** G1/8 - G1/4 MECHANICAL SPRING



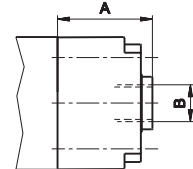
	A
G1/8	22,5
G1/4	25,5

**E** G1/8 - G1/4 PNEUMATIC SPRING



	A
G1/8	10
G1/4	14,5

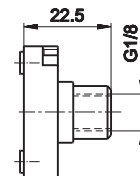
**F** G1/8 - G1/4 PNEUMATIC AMPLIFIED



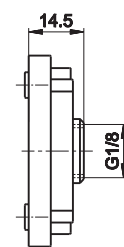
	A	B
G1/8	25	G1/8
G1/4	28,5	G1/8

**G** G1/8 - G1/4 PNEUMATIC NOT AMPLIFIED

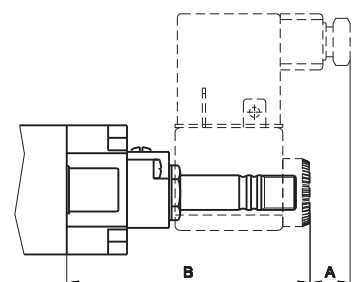
>> G1/8



>> G1/4

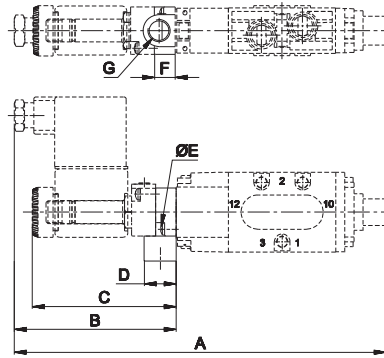
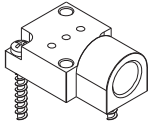


**H** G1/8 - G1/4 ELECTRIC AMPLIFIED



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

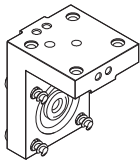
AM-5148



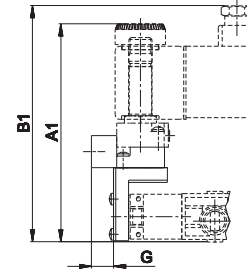
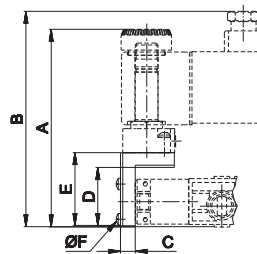
	G1/8	G1/4
A	163	175,5
B	71	71
C	63	63
D	14	14
E	2,9x10	2,9x10
F	9	9
G	G1/8	G1/8

Plate for external servoassistance  
weight: 0,03 Kg

AM-5151



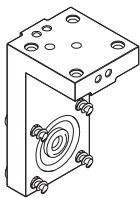
AM-5151 + AM-5148



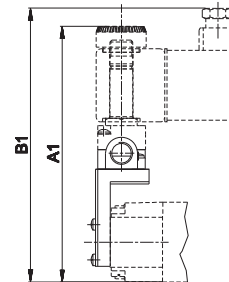
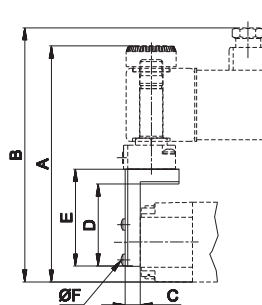
	G1/8	G1/4
A	86,7	88,7
A1	95,7	97,7
B	94,5	96,5
B1	103,5	105,5
C	6,5	6,5
D	25,5	25,5
E	32	32
F	2,9x10	2,9x10
G	9,7	9,7

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

AM-5152



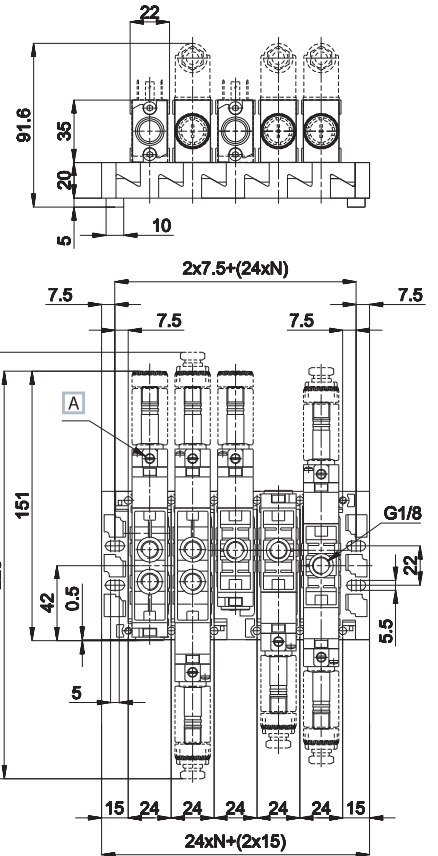
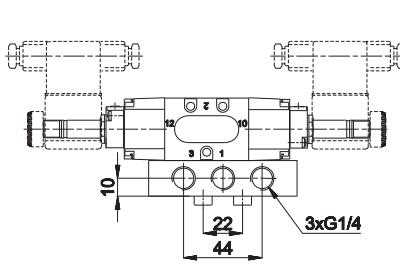
AM-5152 + AM-5148



	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



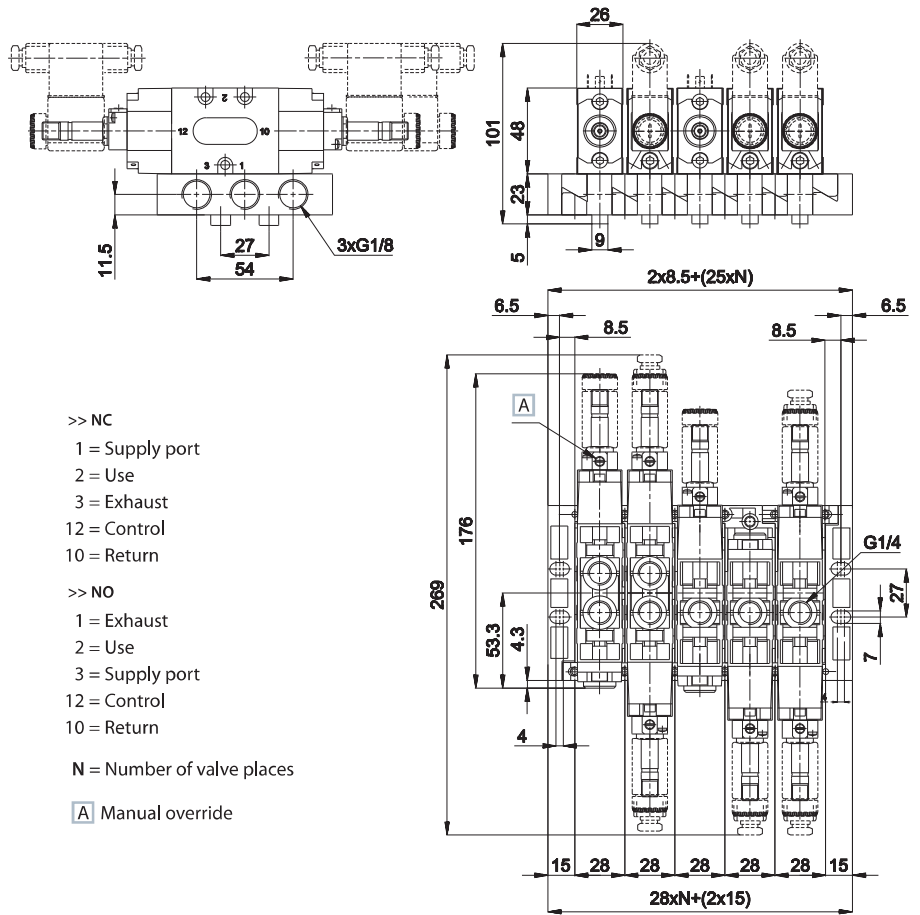
- >> NC
  - 1 = Supply port
  - 2 = Use
  - 3 = Exhaust
  - 12 = Control
  - 10 = Return
- >> NO
  - 1 = Exhaust
  - 2 = Use
  - 3 = Supply port
  - 12 = Control
  - 10 = Return
- N = Number of valve places
- A** Manual override

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
	<b>NEW</b>	
modular sub-base with regulated and conveyed exhausts connections: G1/8 material: zamak weight: 0,136 Kg	modular sub-base <b>without exhaust regulator</b> connections: G1/8 material: zamak weight: 0,136 Kg	inlet plate side connections connections: G1/4 material: zamak weight: 0,086 Kg
standard supplied: screws, seals, exhausts regulator and fixing coupling	standard supplied: screws, seals and fixing coupling of valve	standard supplied: screws and seals

CP-110	CP-111	CP-112	CP-113
coupling connections: G1/8 material: brass weight: 0,028 Kg	separatore pressioni differenziali connessione: G1/8 materiale: alluminio peso: 0,013 Kg	cap for 3/2 valve mounting connections: G1/8 material: alluminio weight: 0,010 Kg	adjustment screw connections: G1/8 material: brass weight: 0,006 Kg
For each additional pressure, one coupling and two separators must be ordered.		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	

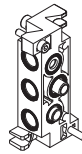
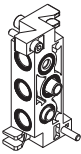
G1/4 Modular subbase "CLIPS" for 3/2 - 5/2 - 5/3 valves



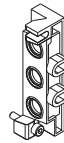
- >> NC
  - 1 = Supply port
  - 2 = Use
  - 3 = Exhaust
  - 12 = Control
  - 10 = Return
- >> NO
  - 1 = Exhaust
  - 2 = Use
  - 3 = Supply port
  - 12 = Control
  - 10 = Return
- N = Number of valve places
- A Manual override

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



NEW



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

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

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

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

standard supplied: screws, seals and fixing coupling of valve

standard supplied: screws and seals

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



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

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

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

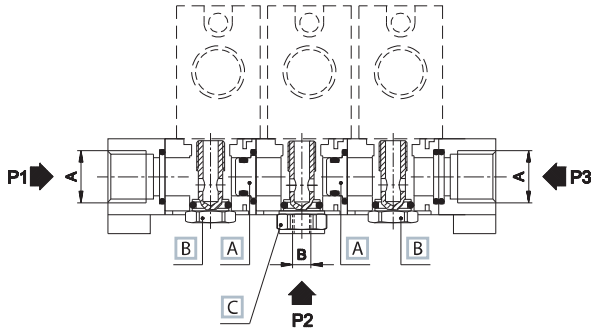
For each additional pressure, one coupling and two separators must be ordered.

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



**Assembly examples**

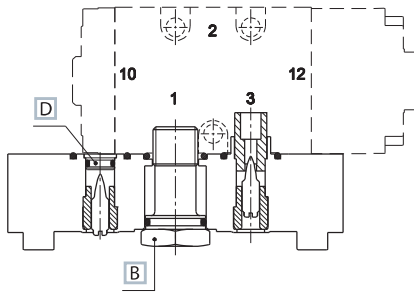
■ Manifold 3 pressures



	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

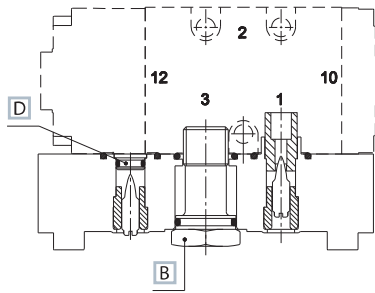
■ Mounting of 3/2 NC valve



- 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.

