

# Poppet valves manually and mechanically actuated G 1/8 - G 1/4 - G 1/2

Series **CA**

## DESCRIPTION

Valves series "CA" are produced in the 3/2, 3/3, 5/2 and 5/3 pneumatic functions. The poppet kind of construction and the very rugged control allow the valve to stand high stress. The push-button and mushroom controls are available only in the 3/2 monostable pneumatic functions for the size G 1/8.



**3**

## TECHNICAL DATA

|                     |  |
|---------------------|--|
| Operating pressure  | 0 ÷ 12 bar   |
| Working temperature | 0 ÷ +70 °C (-20 °C with dry air)   |
| Medium              | Filtered and lubricated compressed air   |
| Life                | 50 million operations at 6 bar (in optimal use conditions)                     |
| Port size           | G 1/8 - G 1/4 - G 1/2  |
| Nominal diameter    | G 1/8 = 6 mm<br>G 1/4 = 8 mm<br>G 1/2 = 12 mm                                  |
| <b>Controls</b>     |  |
| Mechanical          | Plunger; roller lever; short roller lever; unidirectional roller lever         |
| Manual              | Tapper; push-button; mushroom; vertical knob; lateral knob; lateral hand-wheel |

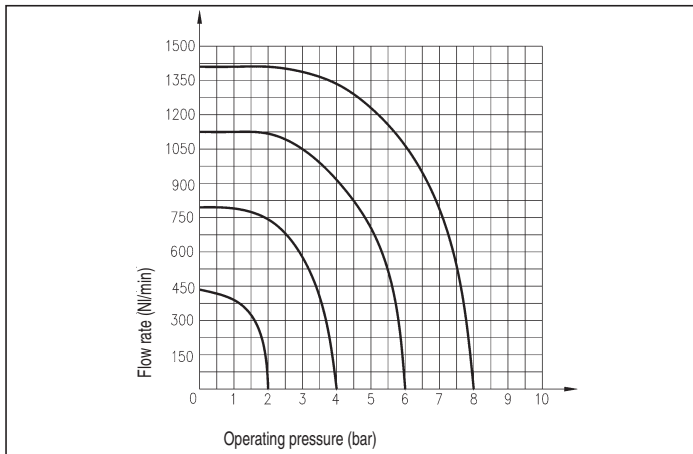
## MATERIALS

|                                |  |
|--------------------------------|--|
| Control rod                    | Hardened and nickel - plated steel           |
| Body                           | Anodized aluminium alloy                     |
| Springs                        | Stainless steel                              |
| Seals                          | NBR rubber                                   |
| Piston                         | Acetal resin                                 |
| Guide bushing                  | Brass  |
| Bottom plug                    | Nickel - plated brass                        |
| <b>Controls</b>                |  |
| Lever                          | Steel  |
| Plunger                        | Nickel - plated brass                        |
| Knobs; handgrips; push-buttons | Plastic material                             |
| Roller                         | Ball bearing (plastic material upon request) |

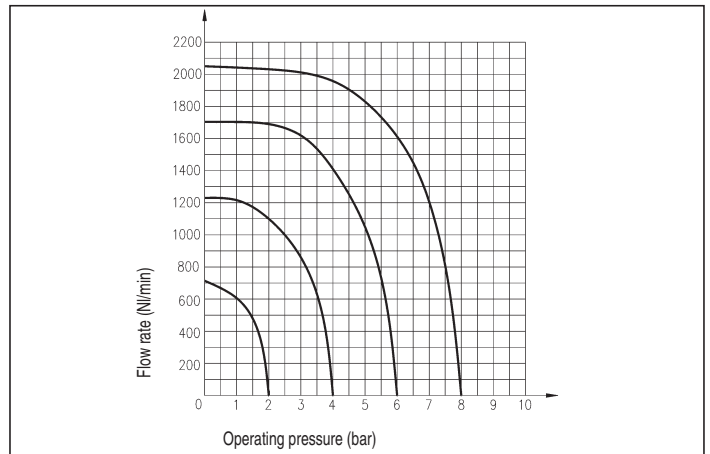
## SPARE PARTS

See valves series "UK" on page 2.56

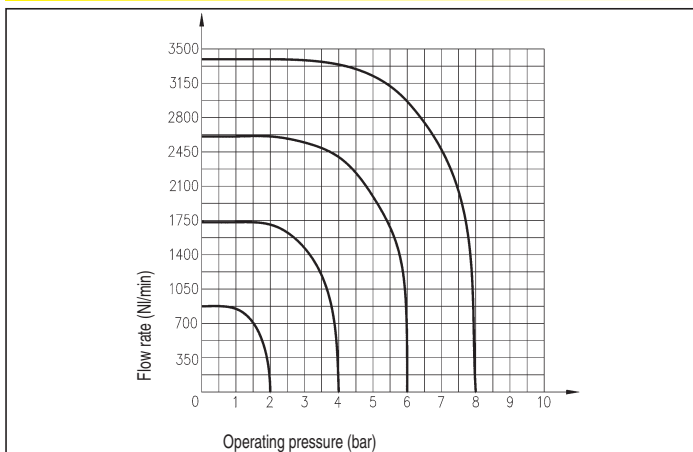
## FLOW CHART - CA G 1/8 - 5/2



## FLOW CHART - CA G 1/4 - 5/2



## FLOW CHART - CA G 1/2 - 5/2



**MECHANICALLY ACTUATED VALVES G 1/8 - G 1/4 - G 1/2**

| Symbol | Function            | Controls                    |                   | Actuation force at 6 bar (N) | Flow rate at 6 bar $\Delta P = 1$ bar (Nl/min) | Weight (g)         | Port size         | TYPE    |                     |         |                   |       |
|--------|---------------------|-----------------------------|-------------------|------------------------------|--|--------------------|-------------------|---------|---------------------|---------|-------------------|-------|
|        |                     | Pilot                       | Return            |                              |  |                    |                   |         |                     |         |                   |       |
|        | 3/2 N.O. monostable | Plunger                     | Mechanical spring | 38                           | 740  | 70                 | G 1/8             | AS 8    |                     |         |                   |       |
|        |                     |                             |                   | 60                           | 950  | 150                | G 1/4             | AS4     |                     |         |                   |       |
|        |                     |                             |                   | 88                           | 2200   | 300                | G 1/2             | AS2     |                     |         |                   |       |
|        | 3/2 N.C. monostable | Plunger                     | Mechanical spring | 36                           | 815  | 70                 | G 1/8             | CS8     |                     |         |                   |       |
|        |                     |                             |                   | 64                           | 950  | 150                | G 1/4             | CS4     |                     |         |                   |       |
|        |                     |                             |                   | 85                           | 2250   | 300                | G 1/2             | CS2     |                     |         |                   |       |
|        | 3/2 N.O. monostable | Roller lever                | Mechanical spring | 23                           | 740  | 95                 | G 1/8             | ALR8    |                     |         |                   |       |
|        |                     |                             |                   | 35                           | 950  | 215                | G 1/4             | ALR4    |                     |         |                   |       |
|        |                     |                             |                   | 53                           | 2200   | 415                | G 1/2             | ALR2    |                     |         |                   |       |
|        | 3/2 N.C. monostable | Roller lever                | Mechanical spring | 24                           | 815  | 95                 | G 1/8             | CLR8    |                     |         |                   |       |
|        |                     |                             |                   | 34                           | 950  | 215                | G 1/4             | CLR4    |                     |         |                   |       |
|        |                     |                             |                   | 52                           | 2250   | 415                | G 1/2             | CLR2    |                     |         |                   |       |
|        | 3/2 N.O. monostable | Unidirectional roller lever | Mechanical spring | 30                           | 740  | 100                | G 1/8             | ALRU8   |                     |         |                   |       |
|        |                     |                             |                   | 53                           | 950  | 200                | G 1/4             | ALRU4   |                     |         |                   |       |
|        |                     |                             |                   | 64                           | 2200   | 405                | G 1/2             | ALRU2   |                     |         |                   |       |
|        | 3/2 N.C. monostable | Unidirectional roller lever | Mechanical spring | 26                           | 815  | 100                | G 1/8             | CLRU8   |                     |         |                   |       |
|        |                     |                             |                   | 50                           | 950  | 200                | G 1/4             | CLRU4   |                     |         |                   |       |
|        |                     |                             |                   | 63                           | 2250   | 405                | G 1/2             | CLRU2   |                     |         |                   |       |
|        | 3/2 N.O. monostable | Short roller lever          | Mechanical spring | 35                           | 740  | 110                | G 1/8             | AR8     |                     |         |                   |       |
|        |                     |                             |                   |                              | 3/2 N.C. monostable                            | Short roller lever | Mechanical spring | 33      | 815                 | 110     | G 1/8             | CR8   |
|        |                     |                             |                   |                              |  |                    |                   |         | 3/2 N.C. monostable | Plunger | Mechanical spring | 48    |
| 162    | 950                 | 150                         | G 1/4             | FCS4*                        |  |                    |                   |         |                     |         |                   |       |
|        | 3/2 N.C. monostable | Roller lever                | Mechanical spring | 25                           | 815  | 95                 | G 1/8             | FCLR8*  |                     |         |                   |       |
|        |                     |                             |                   | 70                           | 950  | 215                | G 1/4             | FCLR4*  |                     |         |                   |       |
|        | 3/2 N.C. monostable | Unidirectional roller lever | Mechanical spring | 27                           | 815  | 95                 | G 1/8             | FCLRU8* |                     |         |                   |       |
|        |                     |                             |                   | 80                           | 950  | 215                | G 1/4             | FCLRU4* |                     |         |                   |       |
|        | 3/2 N.C. monostable | Short roller lever          | Mechanical spring | 69                           | 815  | 110                | G 1/8             | FCR8*   |                     |         |                   |       |
|        |                     |                             |                   |                              | 5/2 monostable                                 | Plunger            | Mechanical spring | 62      | 650                 | 140     | G 1/8             | CASS8 |
|        |                     |                             |                   |                              |  |                    |                   | 103     | 1040                | 305     | G 1/4             | CASS4 |
| 120    | 2050                | 600                         | G 1/2             |                              |  |                    |                   | CASS2   |                     |         |                   |       |
|        | 5/2 monostable      | Roller lever                | Mechanical spring | 38                           | 650  | 190                | G 1/8             | CAIR8   |                     |         |                   |       |
|        |                     |                             |                   | 64                           | 1040   | 405                | G 1/4             | CAIR4   |                     |         |                   |       |
|        |                     |                             |                   | 45                           | 2050   | 765                | G 1/2             | CAIR2   |                     |         |                   |       |
|        | 5/2 monostable      | Unidirectional roller lever | Mechanical spring | 43                           | 650  | 190                | G 1/8             | CAIRU8  |                     |         |                   |       |
|        |                     |                             |                   | 68                           | 1040   | 405                | G 1/4             | CAIRU4  |                     |         |                   |       |
|        |                     |                             |                   | 94                           | 2050   | 775                | G 1/2             | CAIRU2  |                     |         |                   |       |

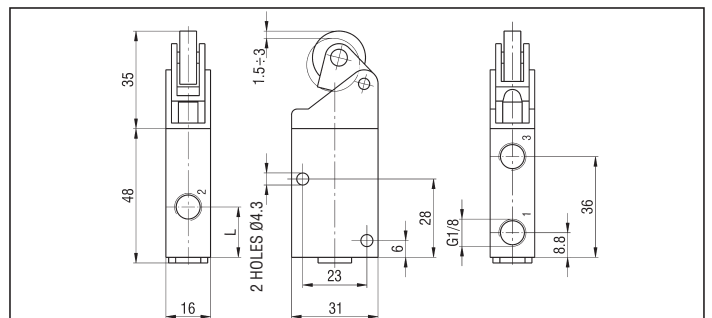
P.S.: ADD THE LETTER "N" AFTER THE LETTER "R" IN THE TYPE TO ORDER THE VALVES WITH PLASTIC ROLLER (AVAILABLE ONLY FOR THE SIZES G 1/8 AND G 1/4).

E.G.: CLRN8

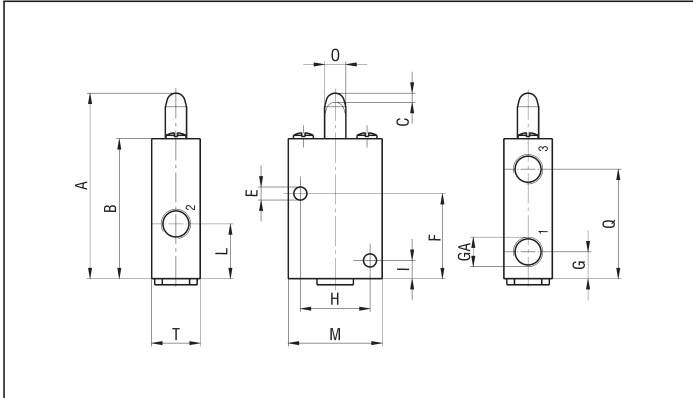
PUT THE LETTER "H" BEFORE THE TYPE TO ORDER THE 2/2 N.O. AND 2/2 N.C. VALVES. E.G.: HAS 4.

\* THE WAYS AREN'T COMMUNICATING IN THE INTERMEDIATE PHASE OF ACTUATION.

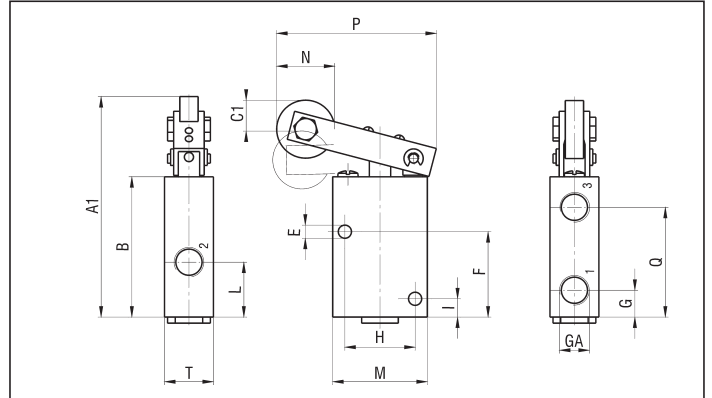
**3/2 SHORT ROLLER LEVER**



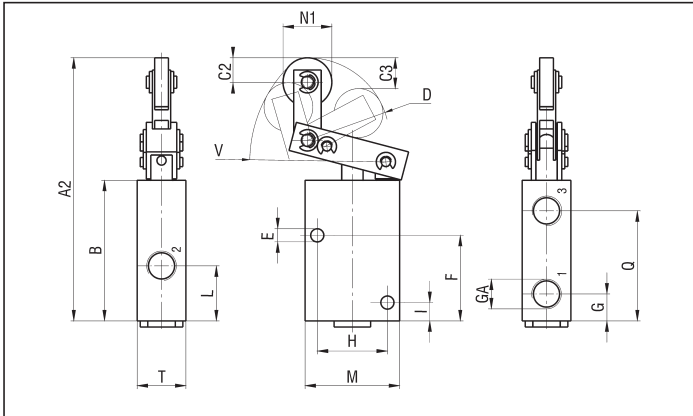
3/2 PLUNGER



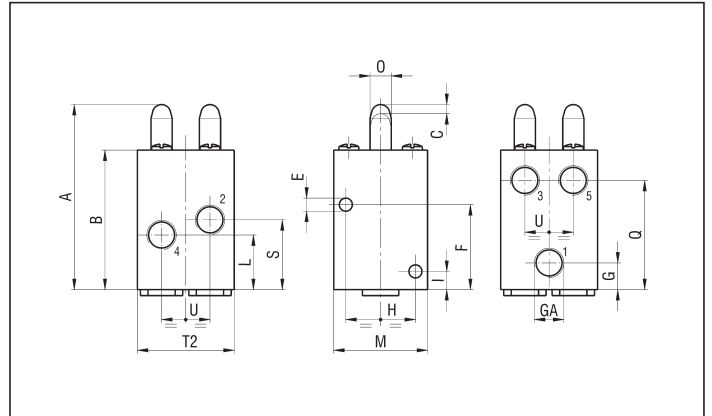
3/2 ROLLER LEVER



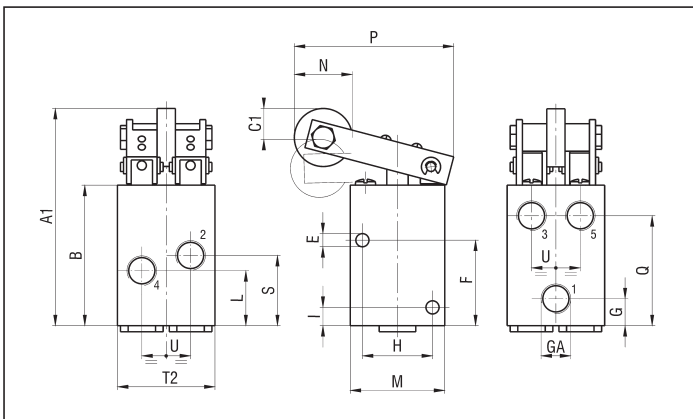
3/2 UNIDIRECTIONAL ROLLER LEVER



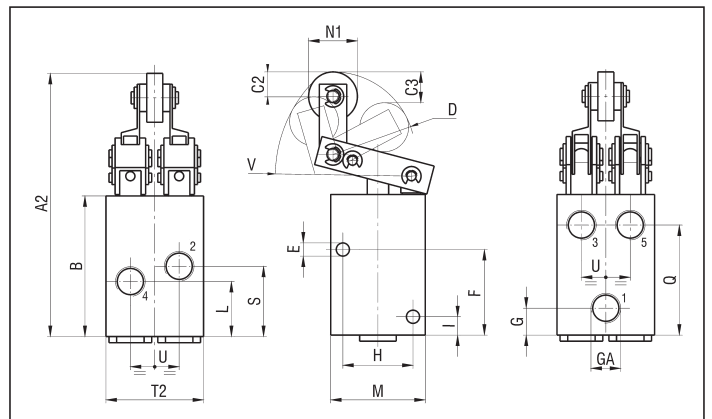
5/2 PLUNGER



5/2 ROLLER LEVER



5/2 UNIDIRECTIONAL ROLLER LEVER



| GA    | A   | A1  | A2  | B  | C    |      | C1   |      | C2   |      | C3 | D    | E   | F  |
|-------|-----|-----|-----|----|------|------|------|------|------|------|----|------|-----|----|
|       |     |     |     |    | min. | max. | min. | max. | min. | max. |    |      |     |    |
| G 1/8 | 59  | 74  | 88  | 46 | 1,5  | 3    | 5,5  | 10   | 5    | 8    | 10 | 27   | 4,3 | 28 |
| G 1/4 | 75  | 95  | 111 | 60 | 2    | 4    | 7,5  | 13,5 | 5    | 8    | 12 | 35   | 5,3 | 35 |
| G 1/2 | 100 | 123 | 142 | 80 | 3    | 5,5  | 10,5 | 15,5 | 7    | 10   | 14 | 42,5 | 6,4 | 49 |

| GA    | G    | H  | I  | L    |      | M  | N  | N1 | O   | P    | Q    | S  | T  | T2 |
|-------|------|----|----|------|------|----|----|----|-----|------|------|----|----|----|
|       |      |    |    | N.O. | N.C. |    |    |    |     |      |      |    |    |    |
| G 1/8 | 8,8  | 23 | 6  | 23   | 18   | 31 | 19 | 16 | 6,9 | 53   | 36   | 23 | 16 | 32 |
| G 1/4 | 11,5 | 30 | 8  | 30   | 25,5 | 40 | 26 | 19 | 9   | 69   | 46   | 30 | 20 | 40 |
| G 1/2 | 15   | 38 | 10 | 40   | 30   | 50 | 32 | 24 | 12  | 80,5 | 63,3 | 40 | 25 | 50 |

| GA    | U  | V  |
|-------|----|----|
| G 1/8 | 16 | 46 |
| G 1/4 | 20 | 54 |
| G 1/2 | 25 | 70 |

**3 PORT MANUALLY ACTUATED G 1/8 - G 1/4 - G 1/2**

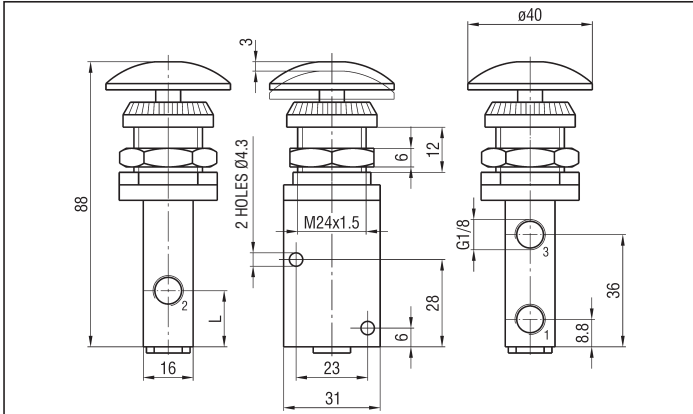
| Symbol | Function            | Controls           |                    | Flow rate at 6 bar $\Delta P = 1$ bar (Nl/min) | Weight (g) | Port size | TYPE  |
|--------|---------------------|--------------------|--------------------|--|------------|-----------|-------|
|        |                     | Pilot              | Return             |  |            |           |       |
|        | 3/2 N.O. monostable | Tapper             | Mechanical spring  | 740  | 90         | G 1/8     | AT8   |
|        |                     |                    |                    | 950  | 195        | G 1/4     | AT4   |
|        |                     |                    |                    | 2200   | 415        | G 1/2     | AT2   |
|        | 3/2 N.C. monostable | Tapper             | Mechanical spring  | 815  | 90         | G 1/8     | CT8   |
|        |                     |                    |                    | 950  | 205        | G 1/4     | CT4   |
|        |                     |                    |                    | 2250   | 425        | G 1/2     | CT2   |
|        | 3/2 N.O. monostable | Push-button        | Mechanical spring  | 740  | 125        | G 1/8     | AQB8* |
|        | 3/2 N.C. monostable | Push-button        | Mechanical spring  | 815  | 125        | G 1/8     | CQB8* |
|        | 3/2 N.O. monostable | Mushroom           | Mechanical spring  | 740  | 125        | G 1/8     | AQF8* |
|        | 3/2 N.C. monostable | Mushroom           | Mechanical spring  | 815  | 125        | G 1/8     | CQF8* |
|        | 3/2 N.O. monostable | Vertical knob      | Mechanical spring  | 740  | 185        | G 1/8     | AM8   |
|        |                     |                    |                    | 950  | 355        | G 1/4     | AM4   |
|        |                     |                    |                    | 2200   | 655        | G 1/2     | AM2   |
|        | 3/2 N.C. monostable | Vertical knob      | Mechanical spring  | 815  | 185        | G 1/8     | CM8   |
|        |                     |                    |                    | 950  | 355        | G 1/4     | CM4   |
|        |                     |                    |                    | 2250   | 655        | G 1/2     | CM2   |
|        | 3/2 N.O. bistable   | Vertical knob      | Vertical knob      | 740  | 180        | G 1/8     | AM8F  |
|        |                     |                    |                    | 950  | 345        | G 1/4     | AM4F  |
|        |                     |                    |                    | 2200   | 645        | G 1/2     | AM2F  |
|        | 3/2 N.C. bistable   | Vertical knob      | Vertical knob      | 815  | 180        | G 1/8     | CM8F  |
|        |                     |                    |                    | 950  | 345        | G 1/4     | CM4F  |
|        |                     |                    |                    | 2250   | 645        | G 1/2     | CM2F  |
|        | 3/2 N.O. monostable | Lateral knob       | Mechanical spring  | 740  | 240        | G 1/8     | AML8  |
|        |                     |                    |                    | 950  | 400        | G 1/4     | AML4  |
|        | 3/2 N.C. monostable | Lateral knob       | Mechanical spring  | 815  | 240        | G 1/8     | CML8  |
|        |                     |                    |                    | 950  | 400        | G 1/4     | CML4  |
|        | 3/2 N.O. bistable   | Lateral knob       | Lateral knob       | 740  | 245        | G 1/8     | AML8F |
|        |                     |                    |                    | 950  | 390        | G 1/4     | AML4F |
|        | 3/2 N.C. bistable   | Lateral knob       | Lateral knob       | 815  | 245        | G 1/8     | CML8F |
|        |                     |                    |                    | 950  | 390        | G 1/4     | CML4F |
|        | 3/2 N.O. monostable | Lateral hand-wheel | Mechanical spring  | 740  | 270        | G 1/8     | AVL8  |
|        |                     |                    |                    | 950  | 415        | G 1/4     | AVL4  |
|        | 3/2 N.C. monostable | Lateral hand-wheel | Mechanical spring  | 815  | 270        | G 1/8     | CVL8  |
|        |                     |                    |                    | 950  | 415        | G 1/4     | CVL4  |
|        | 3/2 N.O. bistable   | Lateral hand-wheel | Lateral hand-wheel | 740  | 265        | G 1/8     | AVL8F |
|        |                     |                    |                    | 950  | 405        | G 1/4     | AVL4F |
|        | 3/2 N.C. bistable   | Lateral hand-wheel | Lateral hand-wheel | 815  | 265        | G 1/8     | CVL8F |
|        |                     |                    |                    | 950  | 405        | G 1/4     | CVL4F |

\* PUSH-BUTTON COLOR: N = BLACK; R = RED; V = GREEN.

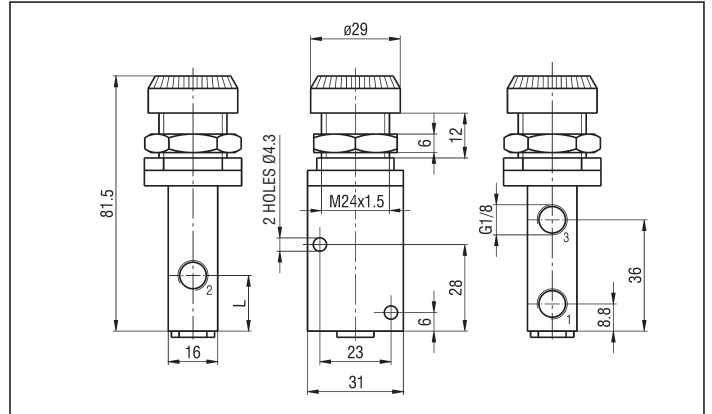
P.S.: THE VERSION WITH BLACK VERTICAL KNOB IS AVAILABLE ONLY IN THE SIZES G 1/8 AND G 1/4; TO ORDER THIS VERSION ADD THE SUFFIX "/E" TO THE TYPE. E.G.: CM8/E; AM8/E

PUT THE LETTER "H" BEFORE THE TYPE TO ORDER THE 2/2 N.O. AND 2/2 N.C. VALVES. E.G.: HCLM 4.

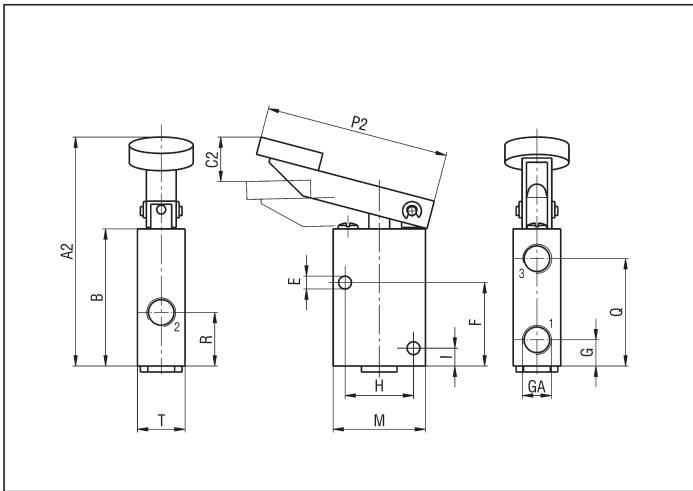
3/2 MUSHROOM



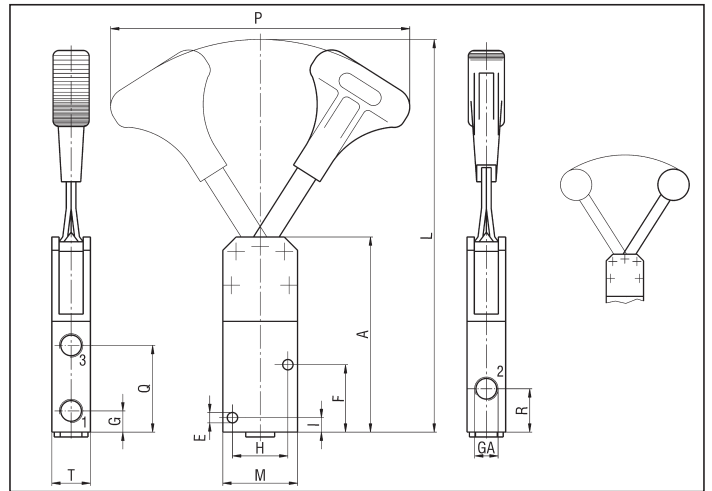
3/2 PUSH-BUTTON



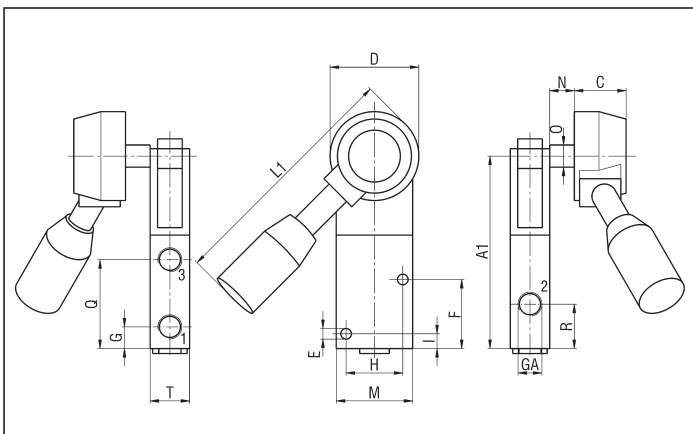
3/2 TAPPER



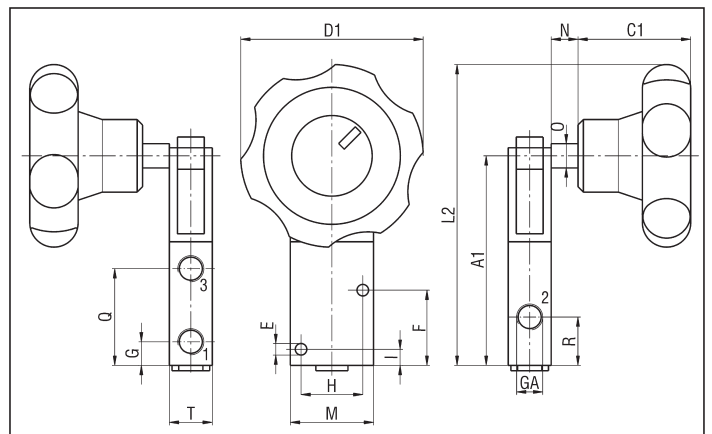
3/2 VERTICAL KNOB



3/2 LATERAL KNOB



3/2 LATERAL HAND-WHEEL



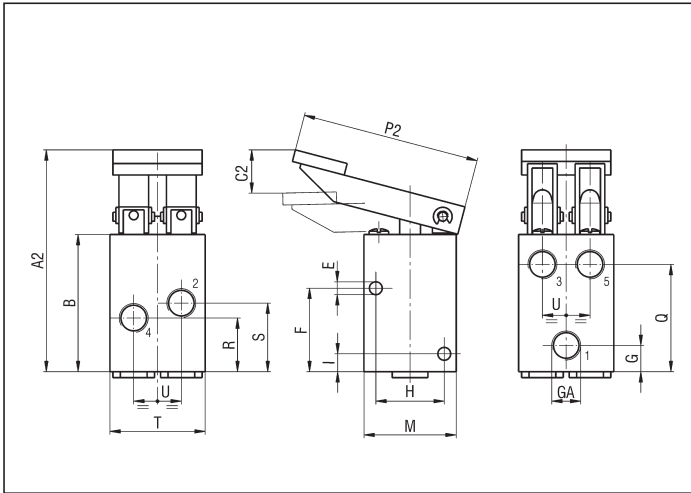
| GA    | A   | A1  | A2  | B  | C  | C1 | C2   |      | D  | D1 | E   | F  | G    | H  |
|-------|-----|-----|-----|----|----|----|------|------|----|----|-----|----|------|----|
|       |     |     |     |    |    |    | min. | max. |    |    |     |    |      |    |
| G 1/8 | 80  | 77  | 78  | 46 | 20 | 42 | 8    | 15,5 | 36 | 70 | 4,3 | 28 | 8,8  | 23 |
| G 1/4 | 100 | 95  | 98  | 60 | 20 | 42 | 11   | 22,5 | 36 | 70 | 5,3 | 35 | 11,5 | 30 |
| G 1/2 | 130 | 124 | 100 | 80 | -  | -  | 28   | 35   | -  | -  | 6,4 | 49 | 15   | 38 |

| GA    | I  | L   | L1  | L2  | M  | N  | O | P   | P2  | Q    | R    |      | T  |
|-------|----|-----|-----|-----|----|----|---|-----|-----|------|------|------|----|
|       |    |     |     |     |    |    |   |     |     |      | N.O. | N.C. |    |
| G 1/8 | 6  | 162 | 100 | 112 | 31 | 10 | 9 | 124 | 60  | 36   | 23   | 18   | 16 |
| G 1/4 | 8  | 188 | 100 | 130 | 40 | 10 | 9 | 152 | 83  | 46   | 30   | 25,5 | 20 |
| G 1/2 | 10 | 238 | -   | -   | 50 | -  | - | 180 | 145 | 63,3 | 40   | 30   | 25 |

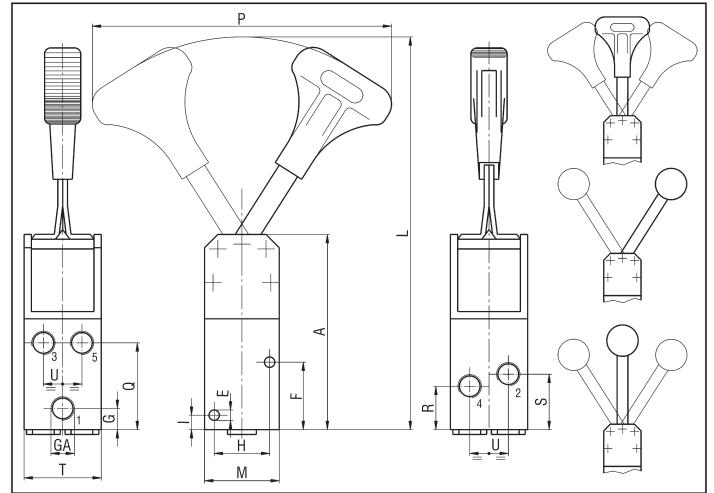
**3 PORT, 3 POSITIONS AND 5 PORT MANUALLY ACTUATED VALVES G 1/8 - G 1/4 - G 1/2**

| Symbol | Function                     | Controls           |                    | Flow rate at 6 bar $\Delta P = 1$ bar (Nl/min) | Weight (g) | Port size | TYPE    |
|--------|------------------------------|--------------------|--------------------|--|------------|-----------|---------|
|        |                              | Pilot              | Return             |  |            |           |         |
|        | 5/2 monostable               | Tapper             | Mechanical spring  | 650  | 180        | G 1/8     | CAT8    |
|        |                              |                    |                    | 1040   | 405        | G 1/4     | CAT4    |
|        |                              |                    |                    | 2050   | 790        | G 1/2     | CAT2    |
|        | 5/2 monostable               | Vertical knob      | Mechanical spring  | 650  | 315        | G 1/8     | CAM8    |
|        |                              |                    |                    | 1040   | 600        | G 1/4     | CAM4    |
|        |                              |                    |                    | 2050   | 1160       | G 1/2     | CAM2    |
|        | 5/2 bistable                 | Vertical knob      | Vertical knob      | 650  | 290        | G 1/8     | CAM8F   |
|        |                              |                    |                    | 1040   | 570        | G 1/4     | CAM4F   |
|        |                              |                    |                    | 2050   | 1065       | G 1/2     | CAM2F   |
|        | 5/2 monostable               | Lateral knob       | Mechanical spring  | 650  | 375        | G 1/8     | CAML8   |
|        |                              |                    |                    | 1040   | 650        | G 1/4     | CAML4   |
|        | 5/2 bistable                 | Lateral knob       | Lateral knob       | 650  | 365        | G 1/8     | CAML8F  |
|        |                              |                    |                    | 1040   | 635        | G 1/4     | CAML4F  |
|        | 5/2 monostable               | Hand-wheel         | Mechanical spring  | 650  | 395        | G 1/8     | CAVL8   |
|        |                              |                    |                    | 1040   | 665        | G 1/4     | CAVL4   |
|        | 5/2 bistable                 | Lateral hand-wheel | Lateral hand-wheel | 650  | 380        | G 1/8     | CAVL8F  |
|        |                              |                    |                    | 1040   | 650        | G 1/4     | CAVL4F  |
|        | 5/3 monostable open centre   | Vertical knob      | Mechanical spring  | 815  | 315        | G 1/8     | CCM8    |
|        |                              |                    |                    | 950  | 605        | G 1/4     | CCM4    |
|        |                              |                    |                    | 2250   | 1165       | G 1/2     | CCM2    |
|        | 5/3 stable open centre       | Vertical knob      | Vertical knob      | 815  | 290        | G 1/8     | CCM8F   |
|        |                              |                    |                    | 950  | 575        | G 1/4     | CCM4F   |
|        |                              |                    |                    | 2250   | 1095       | G 1/2     | CCM2F   |
|        | 5/3 monostable open centre   | Lateral knob       | Mechanical spring  | 815  | 385        | G 1/8     | CCML8   |
|        |                              |                    |                    | 950  | 675        | G 1/4     | CCML4   |
|        | 5/3 stable open centre       | Lateral knob       | Lateral knob       | 815  | 370        | G 1/8     | CCML8F  |
|        |                              |                    |                    | 950  | 650        | G 1/4     | CCML4F  |
|        | 5/3 monostable open centre   | Lateral hand-wheel | Mechanical spring  | 815  | 405        | G 1/8     | CCVL8   |
|        |                              |                    |                    | 950  | 690        | G 1/4     | CCVL4   |
|        | 5/3 stable open centre       | Lateral hand-wheel | Lateral hand-wheel | 815  | 385        | G 1/8     | CCVL8F  |
|        |                              |                    |                    | 950  | 660        | G 1/4     | CCVL4F  |
|        | 3/3 monostable closed centre | Vertical knob      | Mechanical spring  | 815  | 310        | G 1/8     | HCCM8   |
|        |                              |                    |                    | 950  | 600        | G 1/4     | HCCM4   |
|        | 5/3 stable closed centre     | Lateral knob       | Mechanical spring  | 815  | 310        | G 1/8     | HCCM8F  |
|        |                              |                    |                    | 950  | 600        | G 1/4     | HCCM4F  |
|        | 3/3 monostable closed centre | Lateral knob       | Mechanical spring  | 815  | 310        | G 1/8     | HCCML8  |
|        |                              |                    |                    | 950  | 600        | G 1/4     | HCCML4  |
|        | 5/3 stable closed centre     | Vertical knob      | Mechanical spring  | 815  | 310        | G 1/8     | HCCML8F |
|        |                              |                    |                    | 950  | 600        | G 1/4     | HCCML4F |
|        | 5/3 monostable closed centre | Vertical knob      | Mechanical spring  | 815  | 740        | G 1/8     | XH4CM8  |
|        |                              |                    |                    | 950  | 1605       | G 1/4     | XH4CM4  |
|        |                              |                    |                    | 2250   | 3185       | G 1/2     | XH4CM2  |
|        | 5/3 stable closed centre     | Vertical knob      | Vertical knob      | 815  | 680        | G 1/8     | XH4CM8F |
|        |                              |                    |                    | 1400   | 1555       | G 1/4     | XH4CM4F |
|        |                              |                    |                    | 2250   | 3080       | G 1/2     | XH4CM2F |

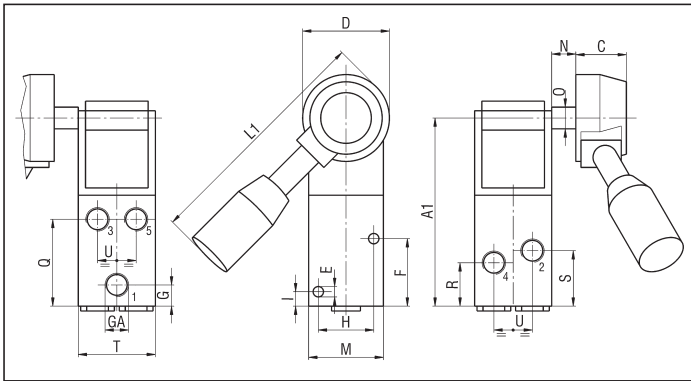
## 5/2 TAPPER



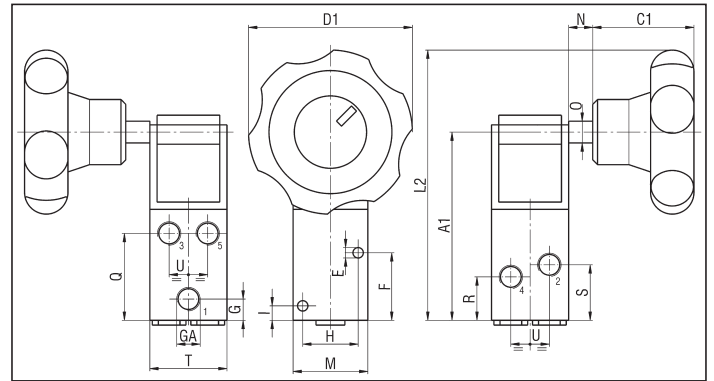
## 5/2 - 5/3 O.C. - 3/3 C.C. VERTICAL KNOB



## 5/2 - 5/3 O.C. - 3/3 C.C. LATERAL KNOB



## 5/2 LATERAL HAND-WHEEL



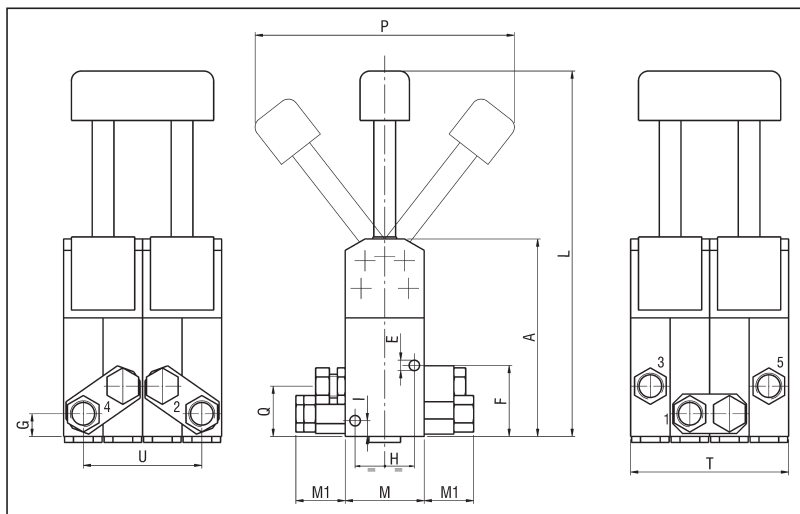
| GA    | A   | A1  | A2   | B  | C  | C1 | C2   |      | D  | D1 | E   | F  | G    | H  |
|-------|-----|-----|------|----|----|----|------|------|----|----|-----|----|------|----|
|       |     |     |      |    |    |    | min. | max. |    |    |     |    |      |    |
| G 1/8 | 80  | 77  | 75,5 | 46 | 20 | 42 | 8    | 15,5 | 36 | 70 | 4,3 | 28 | 8,8  | 23 |
| G 1/4 | 100 | 95  | 95   | 60 | 20 | 42 | 11   | 22,5 | 36 | 70 | 5,3 | 35 | 11,5 | 30 |
| G 1/2 | 130 | 124 | 83   | 80 | -  | -  | 28   | 35   | -  | -  | 6,4 | 49 | 15   | 38 |

| GA    | I  | L   | L1  | L2  | M  | N  | O | P   | P2  | Q    | R    |      | S  | T  |
|-------|----|-----|-----|-----|----|----|---|-----|-----|------|------|------|----|----|
|       |    |     |     |     |    |    |   |     |     |      | N.O. | N.C. |    |    |
| G 1/8 | 6  | 162 | 100 | 112 | 31 | 10 | 9 | 124 | 60  | 36   | 23   | 18   | 23 | 32 |
| G 1/4 | 8  | 188 | 100 | 130 | 40 | 10 | 9 | 152 | 83  | 46   | 30   | 25,5 | 30 | 40 |
| G 1/2 | 10 | 238 | -   | -   | 50 | -  | - | 180 | 145 | 63,3 | 40   | 30   | 40 | 50 |

| GA    | U  |
|-------|----|
| G 1/8 | 16 |
| G 1/4 | 20 |
| G 1/2 | 25 |

P.S.: THE VERSION WITH BLACK VERTICAL KNOB IS AVAILABLE ONLY IN THE SIZES G 1/8 AND G 1/4; TO ORDER THIS VERSION ADD THE SUFFIX "/E" TO THE TYPE.  
E.G.: CAM8/E; CCM8/E

5/3 C.C. VERTICAL KNOB



| GA    | A   | E   | F  | G    | H  | I  | L     | M  | M1 | P   | Q    | T   | U  |
|-------|-----|-----|----|------|----|----|-------|----|----|-----|------|-----|----|
| G 1/8 | 81  | 4,3 | 28 | 8,8  | 23 | 6  | 157,5 | 31 | -  | 111 | 18   | 64  | 48 |
| G 1/4 | 100 | 5,3 | 35 | 11,5 | 30 | 8  | 185   | 40 | 24 | 132 | 25,5 | 80  | 60 |
| G 1/2 | 130 | 6,4 | 49 | 15   | 38 | 10 | 235   | 50 | 29 | 162 | 30   | 100 | 75 |