

## PRESENTATION

- Wide selection of pressure regulation ranges: from between 0,2 and 0,5 bar to 3, 8 or 10 bar
- Ensures constant downstream pressure: rolling diaphragm, self-relieving feature
- Reliability and durability: low hysteresis, rolling diaphragm, no friction

## SPECIFICATIONS

|                           |                                  |             |             |             |
|---------------------------|----------------------------------|-------------|-------------|-------------|
| FLUID                     | : Compressed air or neutral gas  |             |             |             |
| RANGE                     | 105                              | 107         | 112         | 112         |
| PORTS                     | G1/8 - G1/4                      | G1/8 - G1/4 | G1/4...G1/2 | G3/4        |
| MAX. INLET PRESSURE (bar) | 12                               | 16          | 16          | 16          |
| CONTROLLED PRESSURE (bar) | 0,5 - 8                          | 0,5 - 10    | 0,5 - 10    | 0,5 - 12    |
|                           | see table below for other values |             |             |             |
| HYSTERESIS (bar)          | 0,35                             | 0,3         | 0,2         | 0,2         |
| AMBIENT TEMPERATURE (°C)  | 0°, +50°                         | -10°, +50°  | -10°, +50°  | -10°, +50°C |
| MAX. FLOW (Qv at 6,3 bar) | see table below and charts       |             |             |             |

## SELF-RELIEVING REGULATOR

## INDIVIDUAL SPECIFICATIONS AND CONSTRUCTION

- MODULAIR 105 range
  - Regulating device with **rolling** diaphragm (very low hysteresis)
  - Nitrile seal (NBR)
  - Glass-fibre reinforced polyamide body (PA)
  - Locking "pull-turn-push" pressure control knob
- MODULAIR 107 and 112 ranges
  - Regulating device with **rolling** diaphragm (very low hysteresis)
  - Nitrile seal (NBR)
  - Painted zamak body
  - Locking "pull-turn-push" pressure control knob

## INSTALLATION

Regulators can be installed in any position  
Panel mounting possible (mounting ring: see accessories)  
Fluid flow direction indicated by arrow and "IN" - "OUT" marking on body (Modulair 105).

## SELECTION DU MATERIEL

| port size | MODULAIR range | maximum inlet pressure (bar) | controlled pressure (bar) | flow (ANR) at 6.3 bar pressure setpoint and ΔP of 1 bar / setpoint |   | code        |                     |                                  |                        |
|-----------|----------------|------------------------------|---------------------------|--|---|-------------|---------------------|----------------------------------|------------------------|
|           |                |                              |                           | at upstream pressure (bar)   | at 6.3 bar pressure setpoint and ΔP of 1 bar / setpoint | regulator   | with pressure gauge | without pressure gauge           |                        |
|           |                |                              |                           |  | l/min (ANR)   | dm³/s (ANR) | Ø gauge             | with pressure gauge 0-12 bar (1) | without pressure gauge |

### Adjustment range: STANDARD

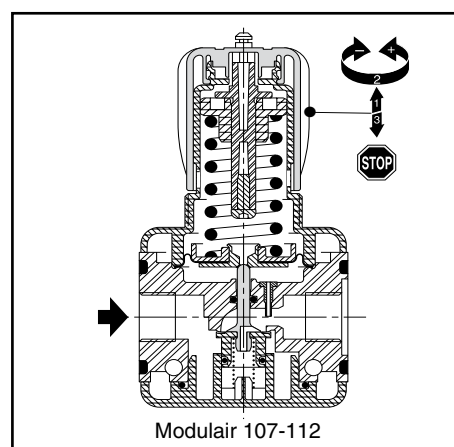
|          |     |    |        |    |      |      |    |          |          |
|----------|-----|----|--------|----|------|------|----|----------|----------|
| G1/8     | 105 | 12 | 0,5-8  | 8  | 550  | 9    | 40 | 34225007 | 34225005 |
| G1/4     | 105 | 12 | 0,5-8  | 8  | 650  | 11   | 40 | 34225008 | 34225006 |
| G1/8     | 107 | 16 | 0,5-10 | 8  | 700  | 11,7 | 40 | 34204037 | 34204033 |
| G1/4     | 107 | 16 | 0,5-10 | 8  | 1200 | 20   | 40 | 34204038 | 34204034 |
| G1/4     | 112 | 16 | 0,5-10 | 10 | 3900 | 65   | 50 | 34203058 | 34203052 |
| G3/8     | 112 | 16 | 0,5-10 | 10 | 5500 | 92   | 50 | 34203059 | 34203053 |
| G1/2     | 112 | 16 | 0,5-10 | 10 | 7000 | 117  | 50 | 34203060 | 34203054 |
| G3/4 (2) | 112 | 16 | 0,5-12 | 10 | 7000 | 117  | 50 | 34203B47 | 34203B46 |
| G3/4 (3) | 112 | 16 | 0,5-12 | 10 | 7000 | 117  | 50 | 34203B55 | 34203B54 |

### Adjustment range: LOW (0.2 - 3 bar)

|          |     |    |       |    |      |      | (0-4 bar pressure gauge) |          |          |
|----------|-----|----|-------|----|------|------|--------------------------|----------|----------|
| G1/8     | 105 | 12 | 0,2-3 | 8  | 550  | 9    | 40                       | 34225261 | 34225259 |
| G1/4     | 105 | 12 | 0,2-3 | 8  | 650  | 11   | 40                       | 34225262 | 34225260 |
| G1/8     | 107 | 16 | 0,2-3 | 8  | 700  | 11,7 | 40                       | 34204043 | 34204039 |
| G1/4     | 107 | 16 | 0,2-3 | 8  | 1200 | 20   | 40                       | 34204044 | 34204040 |
| G1/4     | 112 | 16 | 0,2-3 | 10 | 3900 | 65   | 50                       | 34203070 | 34203064 |
| G3/8     | 112 | 16 | 0,2-3 | 10 | 5500 | 92   | 50                       | 34203071 | 34203065 |
| G1/2     | 112 | 16 | 0,2-3 | 10 | 7000 | 117  | 50                       | 34203072 | 34203066 |
| G3/4 (3) | 112 | 16 | 0,2-3 | 10 | 7000 | 117  | 50                       | 34203B51 | 34203B50 |

- (1) 0-10 bar pressure gauge in Modulair 105 range, 0-16 bar pressure gauge in Modulair 112 G3/4 range - Other adjustment ranges on request
- (2) Non intended for the combination
- (3) Version intended for the combination of various functions (FRL - isolation valve etc ...), select the desired functions and obtain the necessary assembly kits and mounting brackets (see page 42)

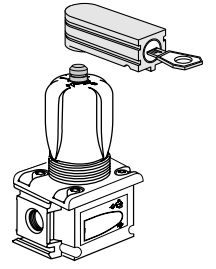
**Joinable regulator**  
common supply type Modulair 112 (see page 15)



ACCESSORIES see page 42

### OPTIONS

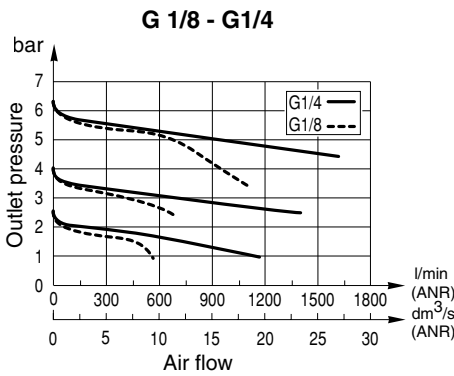
- Key locking device attached to adjustment knob supplied installed on regulator, code: **662561** for Modulair 107 range, code: **662554** for Modulair 112 range. Others options or accessories, see page 46
- Adjustment range: 0.5 to 12 bar for Modulair 107 and 112 ranges (provide 50 mm dia., 0 - 16 bar pressure gauge)
- G3/4 version for Modulair 112, individual unit not for combination, controlled pressure range 0,5 – 10 bar, use code for G1/2 version + option code **662600**, example: 34203003 + 662600
- Modulair 112: water service (non-self-relieving) code: **662543** (G1/4), **662542** (G3/8), **662541** (G1/2-3/4)
- Equipment for use in potentially **explosive atmospheres** caused by dusts or gases (ATEX Directive 94/9/EC)



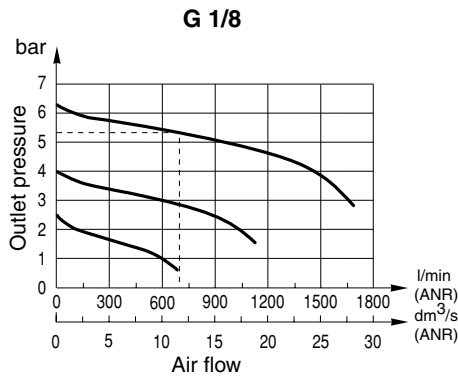
| zones | ⊕ classification       | gas group   | ATEX option code |               |               |
|-------|------------------------|-------------|------------------|---------------|---------------|
|       |                        |             | Modulair 105     | Modulair 107  | Modulair 112  |
| 2-22  | II3GD c T 85°C (T6)    | IIA-IIB-IIC | <b>612077</b>    | <b>612073</b> | <b>612021</b> |
| 1-21  | II2GD c IIC T85°C (T6) | IIC         | <b>612066</b>    | <b>612064</b> | <b>612062</b> |

### PRESSURE LOSS VERSUS AIR FLOW CURVES

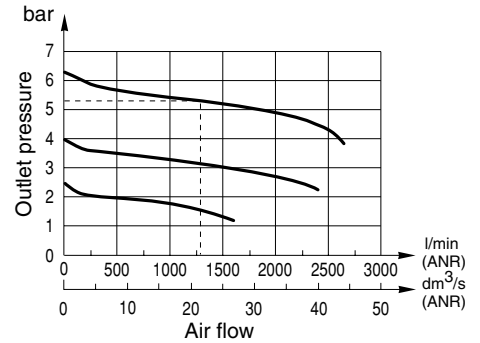
#### MODULAIR 105



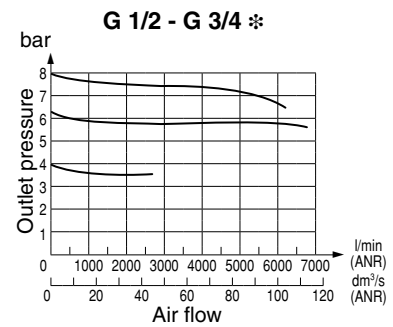
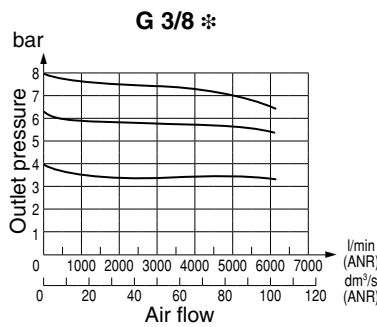
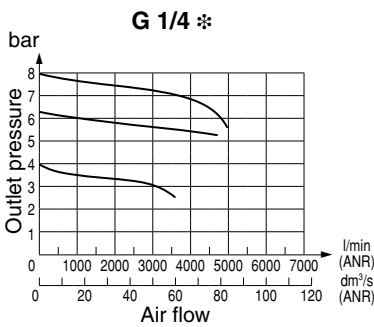
#### MODULAIR 107



#### G 1/4



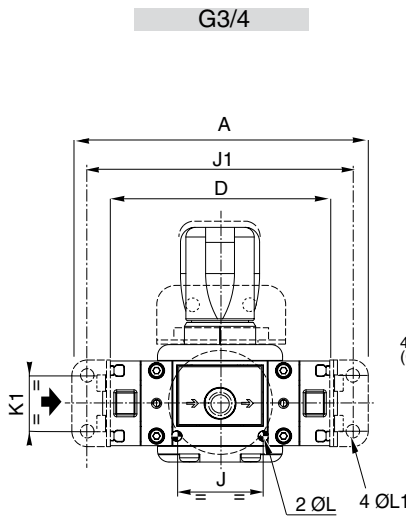
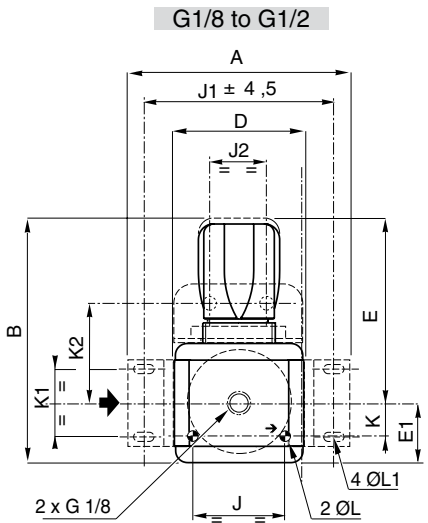
#### MODULAIR 112



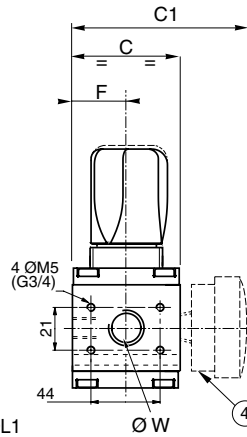
\* according to ISO 6953 standards

### DIMENSIONS AND WEIGHTS

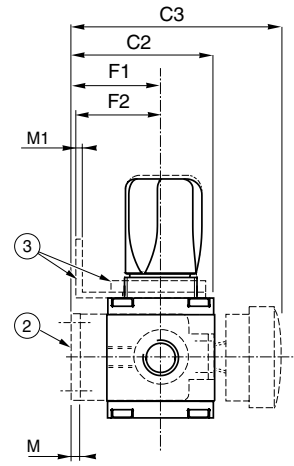
#### MODULAIR 107 - 112



Direct frontal mounting ① or lateral (G3/4)



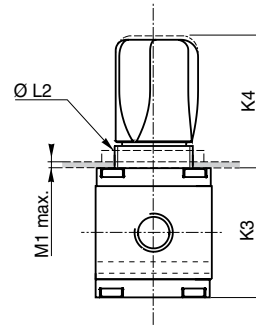
Mounting with bracket(s)



| range       | Modulair 107         | Modulair 112         | Modulair 112         |
|-------------|----------------------|----------------------|----------------------|
| Ø W         | G1/8                 | G1/4                 | G3/4                 |
| A           | 83                   | 112                  | 154                  |
| B           | 104                  | 125                  | 125                  |
| C           | 42                   | 55                   | 55                   |
| C1          | 76                   | 87                   | 87                   |
| C2          | 61                   | 73,5                 | 69,5                 |
| C3          | 95                   | 105                  | 101,5                |
| D           | 42                   | 66                   | 114                  |
| E           | 78,5                 | 94,5                 | 94,5                 |
| E1          | 25,5                 | 30,5                 | 30,5                 |
| F           | 21                   | 27,5                 | 27,5                 |
| F1          | 40                   | 46                   | 42                   |
| F2          | 42                   | 42                   | 42                   |
| J           | 32                   | 45                   | 45                   |
| J1          | 68,5                 | 96                   | 138                  |
| J2          | 29                   | 29                   | 29                   |
| K           | 10                   | 17                   | 17                   |
| K1          | 28                   | 33,5                 | 29                   |
| K2          | 37,5                 | 42,5                 | 42,5                 |
| K3          | 51                   | 61                   | 61                   |
| K4          | 53                   | 64                   | 64                   |
| ØL          | 4,1                  | 5,5                  | 5,5                  |
| ØL1         | 4,5                  | 5,5                  | 7                    |
| ØL2         | M30x2                | M37x2                | M37x2                |
| M           | 3                    | 4                    | 2                    |
| M1          | 2                    | 2                    | 2                    |
| Weight (kg) | 0,270 <sup>(1)</sup> | 0,550 <sup>(1)</sup> | 0,880 <sup>(1)</sup> |

(1) Weight without pressure gauge

Panel mounting hole diameter:  
30.5 for Modulair 107 range  
37.5 for Modulair 112 range



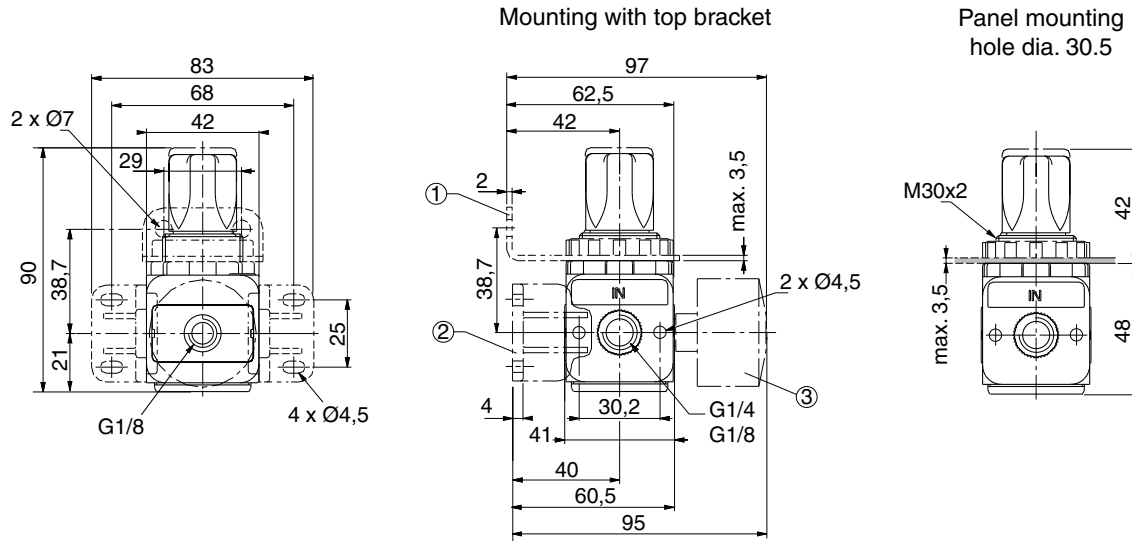
- ① Direct frontal mounting (G1/8 - G1/2) : 2 holes ØL and depth C
- ② Mounting with 2 side brackets (accessory)
- ③ Mounting by upper bracket and mounting ring (accessories)
- ④ Pressure gauge of 40 mm dia. (Modulair 107 range)  
or 50 mm dia. (Modulair 112 range)



## DIMENSIONS AND WEIGHTS

Weight : 0,135 kg

### MODULAIR 105



- ① Mounting with top bracket (accessory) and mounting ring
- ② Mounting with 2 side brackets (accessory)
- ③ 40 mm dia. pressure gauge