

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) | l/min (ANR) | dm³/s (ANR) | regulator | with pressure gauge | without pressure |
| | | | | | | | Ø gauge | 0-12 bar (1) | |

Adjustment range: STANDARD

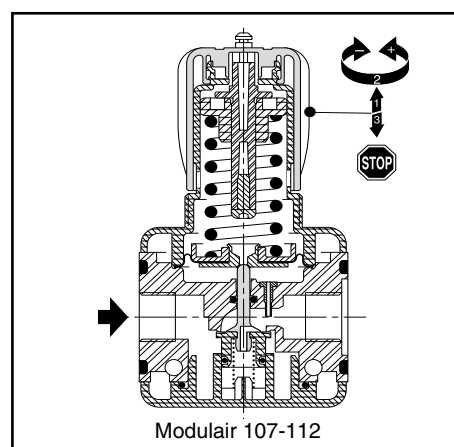
| | | | | | | | | | |
|----------|------------|----|--------|----|------|------|----|-----------------|-----------------|
| G1/8 | 105 | 12 | 0,5-8 | 8 | 550 | 9 | 40 | 34225007 | 34225005 |
| G1/4 | 105 | 12 | 0,5-8 | 8 | 650 | 11 | 40 | 34225008 | 34225006 |
| G1/8 | 107 | 16 | 0,5-10 | 8 | 700 | 11,7 | 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)

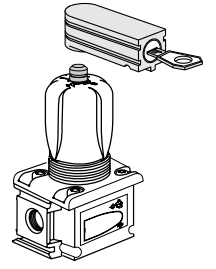


Modulair 107-112

ACCESSORIES see page 42

OPTIONS

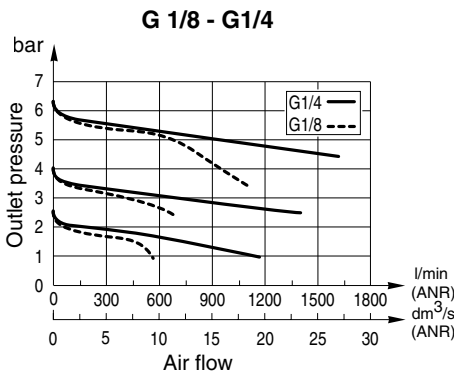
- Key locking device attached to adjustment knob supplied installed on regulator, code: **662561** for Modulair 107 range, code: **662554** for Modulair 112 range. Others options or accessories, see page 46
- Adjustment range: 0.5 to 12 bar for Modulair 107 and 112 ranges (provide 50 mm dia., 0 - 16 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)



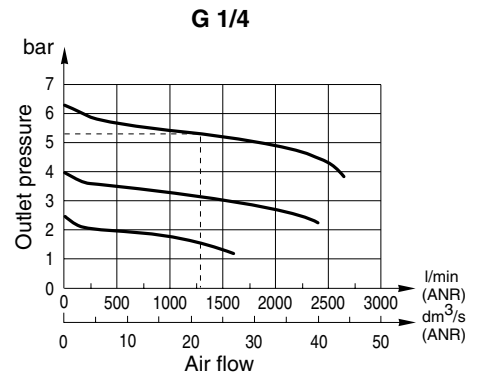
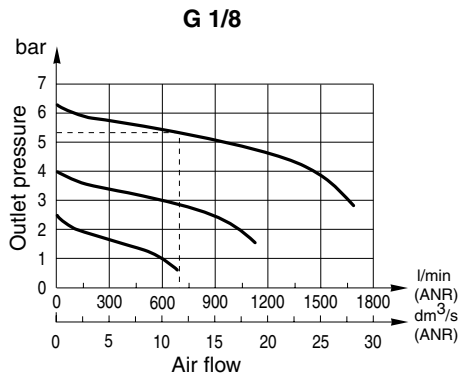
| zones | Ⓔ classification | gas group | ATEX option code | | |
|-------|------------------------|-------------|------------------|---------------|---------------|
| | | | Modulair 105 | Modulair 107 | Modulair 112 |
| 2-22 | II3GD c T 85°C (T6) | IIA-IIB-IIC | 612077 | 612073 | 612021 |
| 1-21 | II2GD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

PRESSURE LOSS VERSUS AIR FLOW CURVES

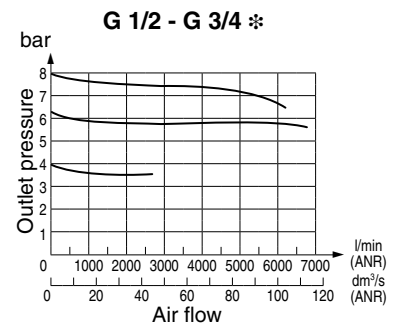
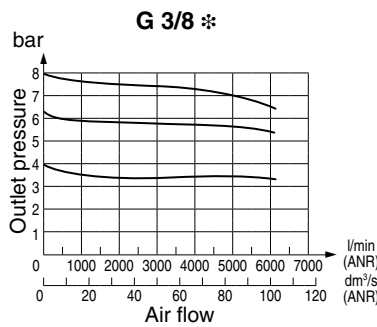
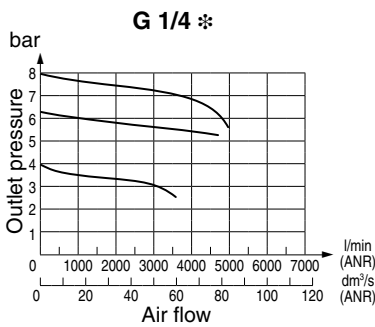
MODULAIR 105



MODULAIR 107



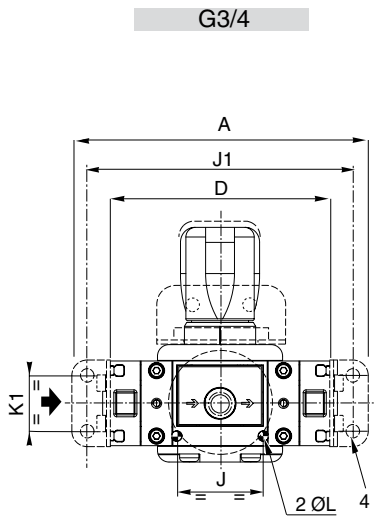
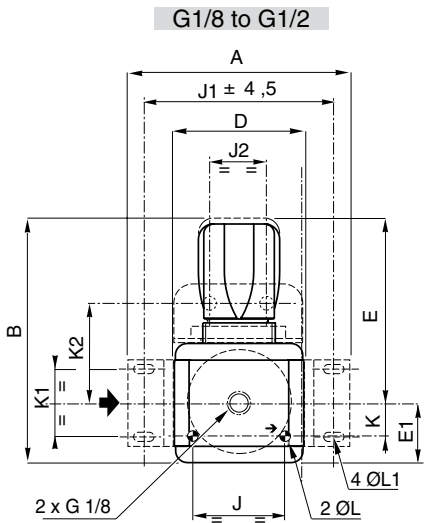
MODULAIR 112



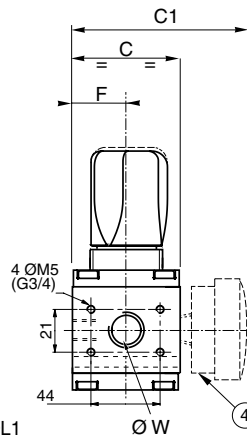
* according to ISO 6953 standards

DIMENSIONS AND WEIGHTS

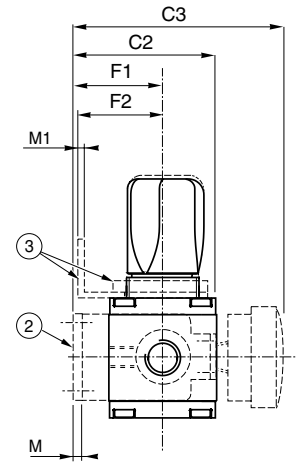
MODULAIR 107 - 112



Direct frontal mounting ① or lateral (G3/4)

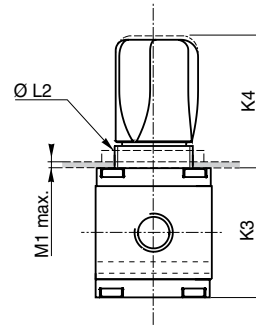


Mounting with bracket(s)



| range | Modulair 107 | Modulair 112 | Modulair 112 |
|-------------|----------------------|----------------------|----------------------|
| Ø W | G1/8 | G1/4 | G3/4 |
| | G1/4 | G3/8 | G1/2 |
| 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 ⁽¹⁾ | 0,550 ⁽¹⁾ | 0,880 ⁽¹⁾ |

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



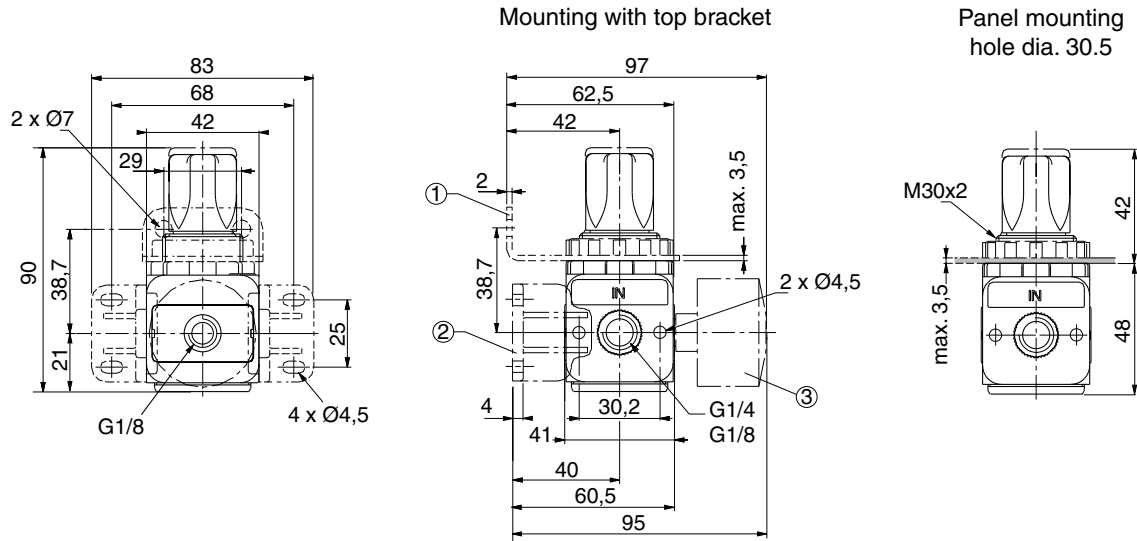
- ① Direct frontal mounting (G1/8 - G1/2) : 2 holes ØL and depth C
- ② Mounting with 2 side brackets (accessory)
- ③ Mounting by upper bracket and mounting ring (accessories)
- ④ Pressure gauge of 40 mm dia. (Modulair 107 range)
or 50 mm dia. (Modulair 112 range)

(1) Weight without pressure gauge

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