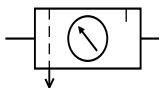
FILTER/REGULATOR + LUBRICATOR SYSTEMS

Modulair 105-107-112 ranges
G 1/8 to G 3/4



FEATURES

- *Modular, compact range for all types of pneumatic systems*
- *Quick installation and connection to systems: filter, regulator and lubricator functions in a "single unit"*
- *Light weight and robust design for direct installation on rigid piping*
- *Assembly of additional components without pipes or fittings: with "standard" kits*

SPECIFICATIONS

FLUID	: Compressed air or neutral gas				
RANGE		105	107	112	
RACCORDEMENT		G1/8 - G1/4	G1/8 - G1/4	G1/4...G1/2	G3/4
MAX. INLET PRESSURE (5) (bar)	at 23°C	12	16	16	16
	at 50°C	10	10	10	12
CONTROLLED PRESSURE	(bar)	0,5 - 8	0,5 - 10	0,5 - 10	0,5 -12
AMBIENT TEMPERATURE	(°C)	0°C to +50°C			
MAX. FLOW	(Qv at 6,3 bar)	See table below and charts			
REGULATOR		Self-relieving			
LUBRICATION		Selective oil fog			

INDIVIDUAL SPECIFICATIONS AND CONSTRUCTION

■ **MONOBLOC** MODULAIR 105 range
Filtering capacity 25 µm (5 µm on request)
Semi-automatic drain (operating pressure: min. 1.2 bar)
Regulating device with **rolling** diaphragm (very low hysteresis)
Lubricator oil refilling unpressurised; screw adjustment
Integrated by-pass module

■ MODULAIR 107 and 112 ranges
Filtering capacity 25 µm (5, 10 and 50 µm on request)
Semi-automatic drain (operating pressure: min. 1.2 bar) or automatic (operating pressure: 2 to max. 10 bar) or manual
Regulating device with **rolling** diaphragm (very low hysteresis)
Lubricator oil refilling unpressurised; refilling pressurised on request (Modulair 107 range)
Lubricator oil refilling unpressurised/pressurised (Modulair 112 range)

CONSTRUCTION AND OPERATING FEATURES: Filter/regulator: see page 17 - Lubricator: see page 23

CHOICE OF EQUIPMENT

Modulair range consists of two components (combined filter/regulator + lubricator, delivered assembled) except for Modulair 105 which consists of monobloc filter/regulator/lubricator

port size	MODULAIR range	bowl capacity	controlled pressure	flow (ANR) at upstream pressure	flow (ANR) at 6.3 bar pressure setpoint and ΔP of 1 bar / setpoint min. (1)		flow (ANR) at 6.3 bar pressure setpoint and ΔP of 1 bar / setpoint max.		code system FR+L Ø gauge	code system FR+L semi-automatic drain with 0-12 bar gauge (2) 25 µm	code system FR+L semi-automatic drain without gauge 25 µm	code system FR+L automatic drain with 0-12 bar gauge (2) 25 µm	code system FR+L automatic drain without gauge 25 µm
		(cm³)	(bar)	(bar)	(l/min)	(dm³/s)	(l/min)	(dm³/s)					
Polycarbonate bowls WITH protector													
G1/8	**105**	28	0,5-8	8	20	0,3	400	6,7	40	**34225183**	**34225181**	-	-
G1/4	**105**	28	0,5-8	8	20	0,3	550	9,2	40	**34225184**	**34225182**	-	-
G1/8	**107**	50	0,5-10	8	20	0,3	700	11,7	40	**34204131**	**34204127**	-	-
G1/4	**107**	50	0,5-10	8	20	0,3	1500	22	40	**34204132**	**34204128**	-	-
G1/4	**112**	114	0,5-10	10	20	0,3	3200	53	50	**34203290**	**34203302**	**34203396**	**34203393**
G3/8	**112**	114	0,5-10	10	20	0,3	5200	87	50	**34203291**	**34203303**	**34203397**	**34203394**
G1/2	**112**	114	0,5-10	10	20	0,3	5600	94	50	**34203292**	**34203304**	**34203398**	**34203395**
Metal bowls WITH visualization (others versions see page 26)													
G3/4 (3)	**112**	114	0,5-12	10	20	0,3	5600	94	50	**34203B67**	**34203B66**	**34203B59**	**34203B58**
G3/4 (4)	**112**	114	0,5-12	10	20	0,3	5600	94	50	**34203C08**	**34203C07**	**34203B99**	**34203B98**
Polycarbonate bowls WITHOUT protector													
G1/8	**105**	28	0,5-8	8	20	0,3	400	6,7	40	**34225103**	**34225101**	-	-
G1/4	**105**	28	0,5-8	8	20	0,3	550	9,2	40	**34225104**	**34225102**	-	-
G1/8	**107**	50	0,5-10	8	20	0,3	700	11,7	40	**34204137**	**34204133**	-	-
G1/4	**107**	50	0,5-10	8	20	0,3	1500	22	40	**34204138**	**34204134**	-	-
G1/4	**112**	114	0,5-10	10	20	0,3	3200	53	50	**34203314**	**34203326**	**34203402**	**34203399**
G3/8	**112**	114	0,5-10	10	20	0,3	5200	87	50	**34203315**	**34203327**	**34203403**	**34203400**
G1/2	**112**	114	0,5-10	10	20	0,3	5600	94	50	**34203316**	**34203328**	**34203404**	**34203401**

(1) Minimum for lubricator startup
(2) 0-10 bar pressure gauge in Modulair 105 range
0-10 bar pressure gauge in Modulair 107-112 range (except G3/4)
0-10 bar pressure gauge in Modulair 112 G3/4 range
(3) Non intented for the combination
(4) 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)
(5) P max= 10 bar for version with automatic drain

00261GB-2009/R01
Availability, design and specifications are subject to change without notice. All rights reserved.

INSTALLATION - MAINTENANCE

Systems must be installed with the bowls in vertical position (at the bottom)
Air flow direction indicated by arrow and "IN" - "OUT" marking on body (Modulair 105)
Recommended type of oil: non-detergent and without aggressive additives, viscosity VG32 (ISO 3448)
Use an alkaline solution (soapy water) and not a solvent for cleaning the polycarbonate bowls and sight glasses

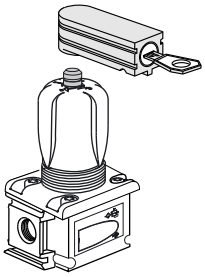
ISOLATION VALVE, SHUT-OFF VALVE AND SOFT-START UNIT (see following pages)

ACCESSORIES voir page 42

OPTIONS

FOR FILTER/REGULATOR

- Additional by-pass insert, 4/6 tube for Modulair 105 - code **685006**
- Metal bowl equipped with semi-automatic, automatic or manual drain for Modulair 112 range (see page 26)
- Polyamide bowl with protector, for use in solvent-charged environments (Modulair 107 and 112 ranges)
- Manual drain for Modulair 105, 107 and 112 ranges - code **662563** (Modulair 112 - fits on semi-automatic drain only)
- Filtering capacity:
  - 5 µm: Modulair 105 range - consult us
    Modulair 107, 112 ranges: use the codes corresponding to **separate** FR and L components (see corresponding pages) and procure one two-part assembly kit
  - 10 µm: code: **662 555** (Modulair 107 range) - code: **662535** (Modulair 112 range)
  - 50 µm: code: **662 556** (Modulair 107 range) - code: **662536** (Modulair 112 range)
- Key locking device attached to adjustment knob, supplied installed on regulator
  code: **662 561** for Modulair 107 range, **662554** for Modulair 112 range. Others options or accessories, see page 46



FOR LUBRICATOR

- Metal bowl for Modulair 112 (see page 26)
- Polyamide bowl with protector for use in solvent-charged environments (Modulair 107 and 112 ranges)
- Lubricator oil refilling while pressurised, code: **662562** (Modulair 107 range)

FOR FRL SYSTEM

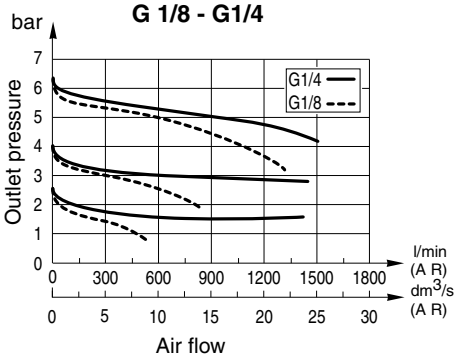
- Equipment for use in potentially **explosive atmospheres** caused by dusts or gases (ATEX Directive 94/9/EC)
- G3/4 version for Modulair 112, individual unit not for combination, polycarbonate bowl **with** bowl protector, controlled pressure range 0,5 – 10 bar, use code for G1/2 version + option code **662600**, example: 3420392 + 662600

zones	⟨Ex⟩ classification	gas group	**code** option ATEX			
			Modulair 105	Modulair 107		Modulair 112	
				with bowl protector	without bowl protector	with bowl protector	without bowl protector
2-22	II3GD **c** T 85°C (T6)	IIA-IIB-IIC	**612077**	**612075**		**612022**	
1-21	II2GD **c** IIB T85°C (T6)	IIB	**612076**	**612074**		**612024**	
1-21	II2GD **c** IIC T85°C (T6)	IIC	-	**612065**	-	**612063**	-

PRESSURE LOSS VERSUS AIR FLOW CURVES

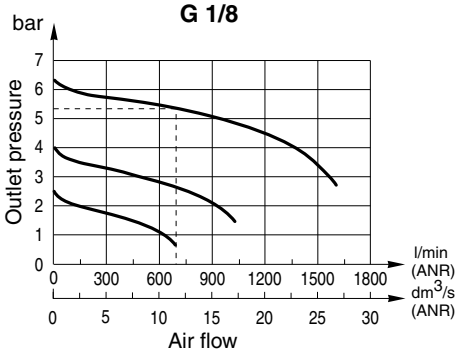
MODULAIR 105

G 1/8 - G1/4

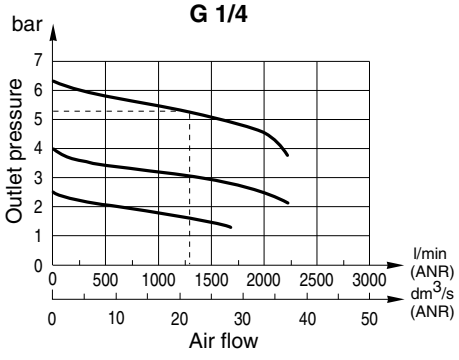


MODULAIR 107

G 1/8

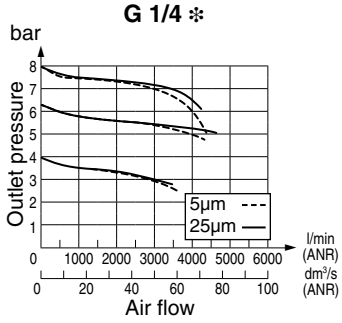


G 1/4

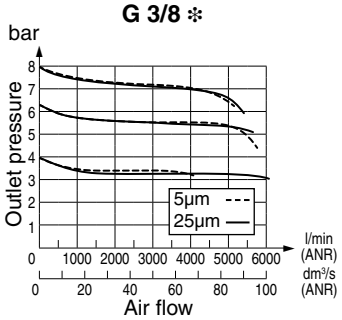


MODULAIR 112

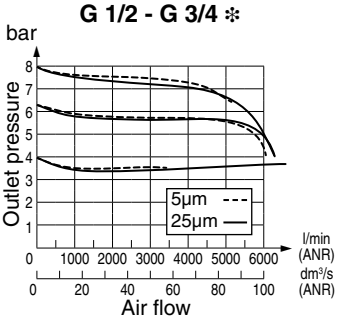
G 1/4 ❊



G 3/8 ❊



G 1/2 - G 3/4 ❊

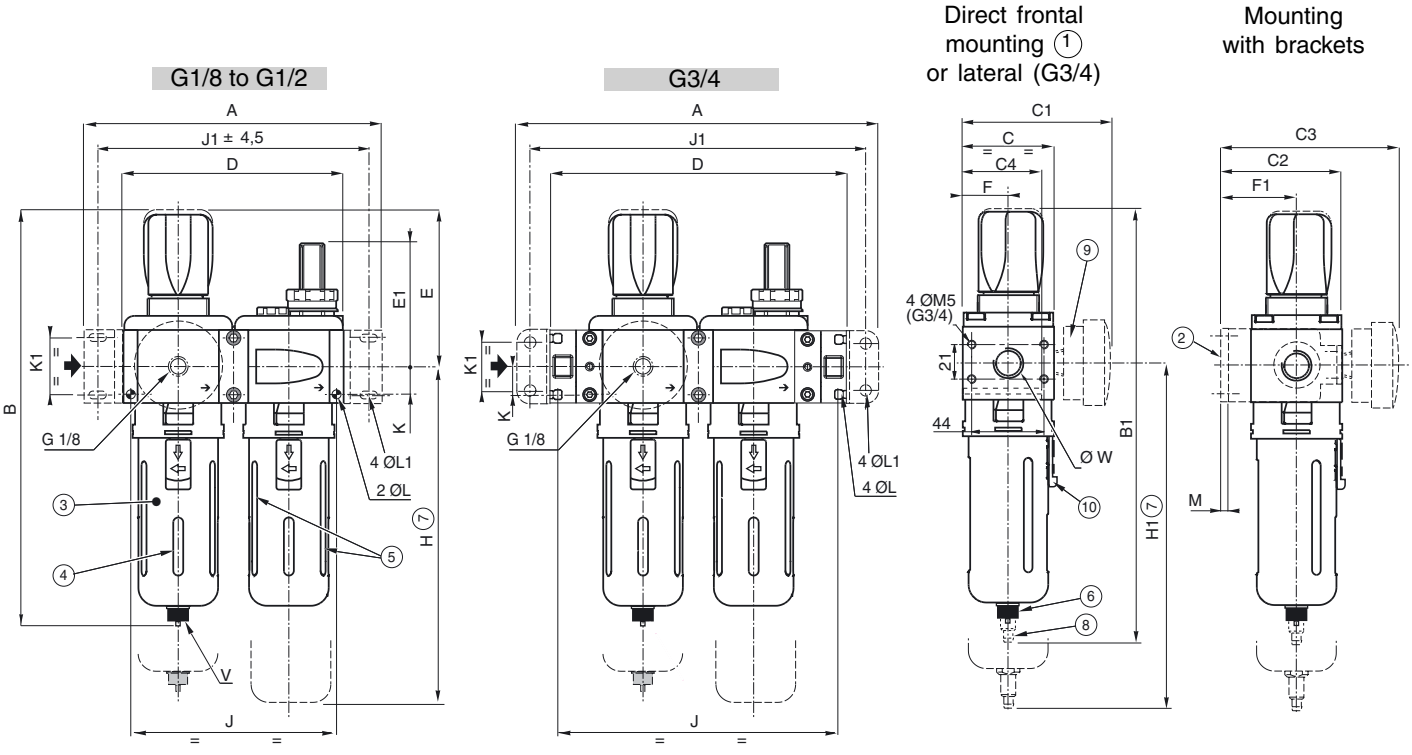


❊ according to ISO 6953 standards

00261GB-2010/R01
Availability, design and specifications are subject to change without notice. All rights reserved.

DIMENSIONS AND WEIGHTS

MODULAIR 107 - 112



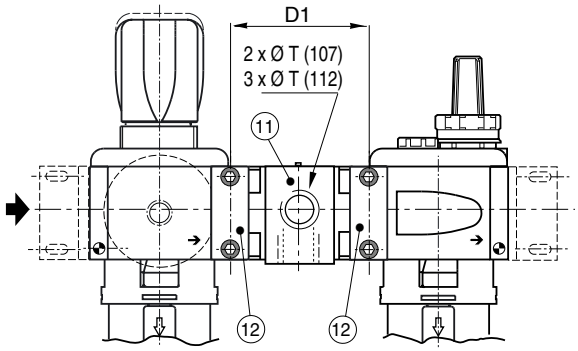
range	Modulair 107	Modulair 112	Modulair 112
Ø W	G1/8 G1/4	G1/4 G3/8 G1/2	G3/4
bowl (cl)	7	12	12
A	125	178	220
B	213	250,5	250,5
B1	-	262,5	262,5
C	42	55	55
C1	76	87	87
C2	61	73,5	69,5
C3	95	105	101,5
C4	38	47,5	55
D	84	132	180
D1	42	66	66
E	79	94,5	94,5
E1	65	71	71
F	21	27,5	27,5
F1	40	46	42
H	215	243	243
H1	-	232,5	232,5
J	74	123	171
J1	110,5	162	204
K	10	17	17
K1	28	33,5	29
ØL	4,1	5,5	4
ØL1	4,5	5,5	7
M	3	4	2
ØT	G1/8	G3/8	G3/8
V	G1/8	G1/8	G1/8
Masse (kg)	0,760 (1)	1,570 (1) 1,650 (2)	1,900 (1) 1,980 (2)

(1) Weight without pressure gauge
(2) Weight with automatic drain

(1) Direct frontal mounting (G1/8 - G1/2) : 2 holes ØL and depth C4
(2) Mounting with two side brackets (accessory)
(3) Metal bowl protector with transparent polycarbonate bowl
(4) Condensate level window (short slot)
(5) Oil min./max. level window (long slots)
(6) G 1/8 connectable semi-automatic drain
(7) Clearance necessary for bowl removal
(8) Automatic drain with fitting for connection of 6 mm ID hose (Modulair 112 range)
(9) 40 mm dia. pressure gauge (Modulair 107 range) or 50 mm dia. pressure gauge (Modulair 112 range)
(10) Protector unlocking button
(11) By-pass module available as accessory:

- Modulair 107 range: 2 air ports (dia. T) on front and rear, supplied with 1 plug
- Modulair 112 range: 3 air ports (dia. T) on front, bottom and rear, supplied with 2 pre-installed plugs

Adjustable pressure switch for top-side mounting
(for Modulair 107 range, procure the by-pass module designed for a pressure switch)
Add value D1 to dimensions A, D, J and J1 (see below)
NOTA - To install the by-pass module, procure an additional standard assembly kit (12)
see page 42: code **34304001** (Modulair 107)
code **34303001** (Modulair 112, G1/4-G1/2)



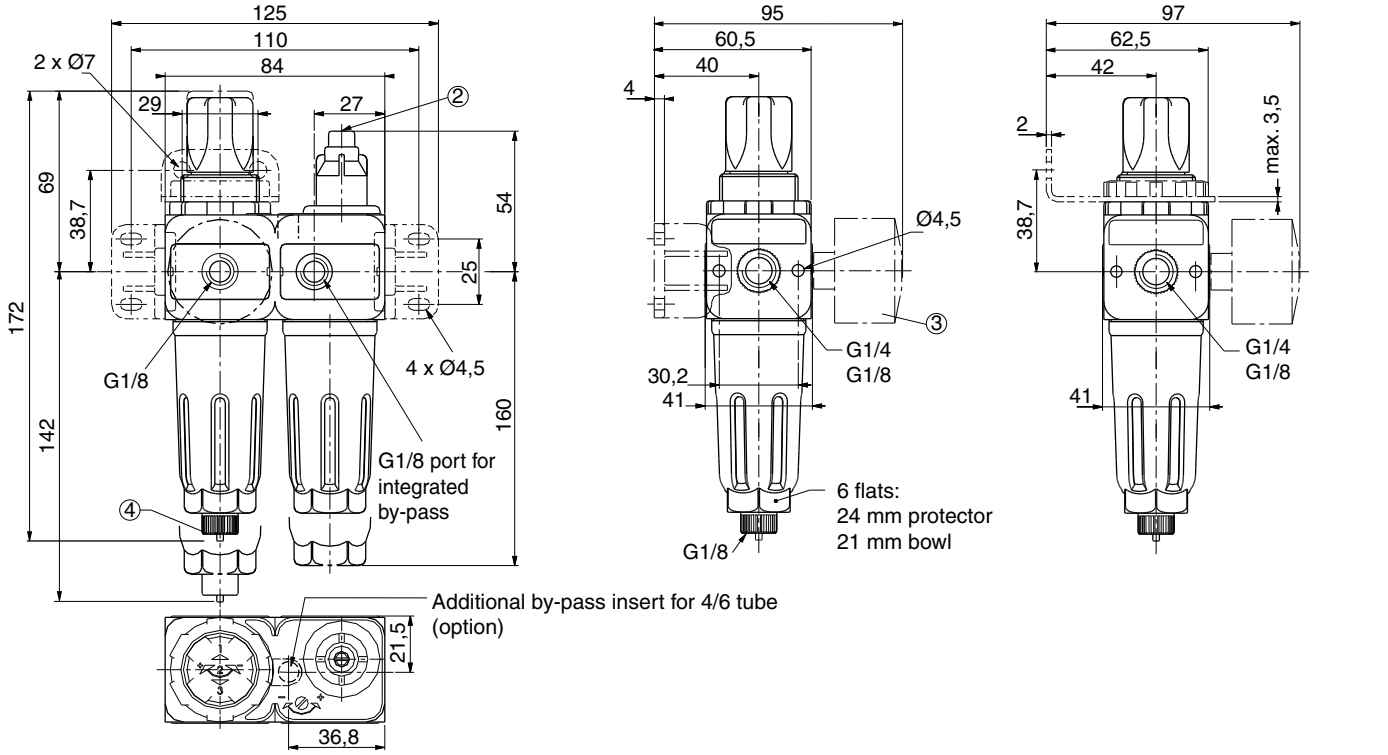
00261GB-2009/R01
Availability, design and specifications are subject to change without notice. All rights reserved.

DIMENSIONS AND WEIGHTS
Weight: 0.300 kg

MONOBLOC MODULAIR 105

Mounting with side brackets

Mounting with upper bracket ①



① Mounting by upper bracket (accessory) and mounting ring
② Oil flow adjustment screw
③ Dia 40 mm pressure gauge
④ Manual drain, connectable to G1/8 port

00261GB-2005/R01
Availability, design and specifications are subject to change without notice. All rights reserved.