Series Airplus
Size 1

General

The operational safety and durability of a pneumatic circuit depends on the quality of the compressed air. The compressed air and the moisture increase the rate of wear of the surfaces and seals, reducing the efficiency and the life of the pneumatic components. Furthermore the pressure fluctuation due to a discontinuous demand of air, adversely effect the correct operation of the circuit. To eliminate these disadvantages it is essential to install the service unit: filter, presure regulator and lubricator.

Construction and working characteristics

The new FRL units AIRPLUS series represents the evolution of the well known and consolidated 1700 series.

The main features are increased performances, reliability, easy and fast assembly and the introduction of the latest technical features.

With the exception of the air intake module and the pressure switch module all elements are available in two configurations: with technopolimer connections (IN and OUT), (T series), or with metal threaded inserts, (N series).

Bowls made of transparent polycarbonate (PC) are fitted with a bowl protection guard which is assembled on the body via a quick coupling mechanism provided with a safety button. The filter, available with three filtration grades (5μ m, 20μ m and 50μ m) is fitted as standard with a drain mechanism which can be operated manually or semi-automatically. The regulator is based on the rolling diaphragm technology with low hysteresis and the system is balanced. The unit can be fitted with integrated flush mounting pressure gauge (0 to 12 bar range).

4 pressure ranges are available going from 0 to 12 bar and the regulating knob can be blocked in position simply by pressing it down. A dedicated version is available for battery mounting, up to a maximum of 6 units. The lubricator is based on the Venturi principle and the oil quantity is regulated via the adjusting screw positioned don the transparent polycarbonate (PC) regulating dome which also ensure clear visibility of the oil flow and regulation. The oil suction pipe is fitted as standard with a sintered filter which ensures that any contaminant that should be present in the oil will reach the down stream circuit. Shoot off valve is available in two versions, one manually operated and one solenoid operated. In both cases the unit is fitted with a threaded connection for depressurising the downstream circuit. On the manually operated version, in the lock position, it is possible to fit up to three locks in order to prevent the accidental pressurization of the pneumatic circuit avoiding accidents or damages.

The solenoid operated version is available with a 15mm or with a 22mm solenoid valve. The soft start valve ensure a progressive pressurization of the down stream circuit avoiding sudden pressure surges which could be dangerous for the devices fitted on the down stream circuit. The filling time can be easily adjusted via a built in flow regulator. The full flow rate is allowed only once the down stream pressure has reached 50% of the value of the inlet pressure. The pressure switch module which can be set between 2 and 10 bar and the air intake module complete the range. The elements are joint together via dedicated quick coupling technopolimer flanges which allows for the units to be panel mounted moreover ensure the possibility to replace any component without disassembling the FRL group from its position.

90° mounting brackets and standard gauges are also available.

Instruction for installation and operation

The FRL unit must be installed as close as possible to the application.

The air flow direction must follow the directions indicated on the single units in correspondence of the threaded connections. (IN and OUT)

Units provided with bowl must be mounted vertically with the bawl facing down. Single units or groups can be panel mounted via the Y type flanges, regulators and filter-regulators can be mounted via the 90° zinc plated steel bracket. In order to mount the 90° bracket it is necessary to remove the regulating knob and then the locking ring before positioning the bracket. All units must be operated according to the specified pressure and temperature ranges; fittings must be mounted without exciding the maximum torque allowed. Ensure that the units cover plates are in position before pressure is applied. The cover plates are needed to lock in position the top part of the unit. The condense level in filer and filter-regulators bowls must never exceed the maximum level indicated on the bowls. With manual or semi automatic drain the condense can be discharged via a 6/4mm tube directly connected to the drain tap. On the pressure regulator the pressure value must always set wile pressure is rising and ideally the unit pressure range should be chosen based on the pressure value to be regulated. Lubricators must be filled with class FD22 and HG32 oils. Ensure, both on the inlet and on the outlet, that the flow rate is above the minimum flow rate required to operate the unit. Below this value the units does not operate.

The oil quantity can be regulated via the regulating screw on the transparent polycarbonate dome through which it is also clearly visible the oil flow. A drop every 300-600 litres should be allowed. The oil refill can take place only with the bowl not under pressure. This size does not have the dedicated oil re-fill plug.

The manual shot off valve needs, to be operated, a push and turn action (clockwise) in order to close it and discharge the down stream circuit it is necessary to turn anti clock wise the knob. The soft start valve is used to slowly and progressively pressurize the down stream circuit, the time needed to do so can be set by means of the built in flow regulator. The soft start valve on its own does not allow for the down stream circuit to be discharged, in order to do so it is necessary to combine it with a shot off valve (to be mounted upstream).

Maintenance



For any maintenance which requires the removal of the top plugs/ supports from the body it is necessary to preventively remove the sides cover plates. If the top plugs\supports are removed with the sides plates still in their position the unit could be permanently damaged.

Bowls, plugs and supports are assembled with a bayonet type mechanism. In order to remove them rotate anti clockwise until the mechanical stop is reached and than remove from the body (for the bowls firstly press down the green safety button).

Bowls and transparent parts can be cleaned with water and neutral soap. Do not use solvents or alcohol.

Filtering elements (from filters and filter regulators) made of HDPE can be regenerated by washing and blowing them. In order to remove them it is necessary to remove the bowl unscrew the filter element and replace it with a new one or clean it.

The oil refill process can take place only if the bowl in not pressurized. The oil refill plug is not available on this size.

Should the pressure regulator not perform properly or should present a constant leackage from the relieving replaced the diaphragm by unloading completely the regulating spring before removing the regulation support.

Any other maintenance operation, in consideration of the complexity of the assembly, and the need of a through test according to the Pneumax spa specification, should be carried out by the manufacturer.

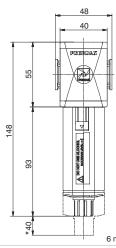
Fittings maximum recommended torque applicable

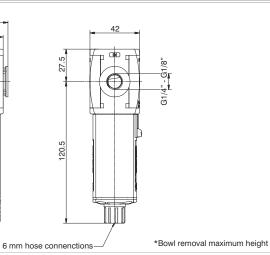
THREAD	Technopolymer version (T)	Metal version (N)
G1/8"	4 Nm	15 Nm
G1/4"	9 Nm	20 Nm
G3/8"	16 Nm	25 Nm
G1/2"	22 Nm	30 Nm



Filter (F)

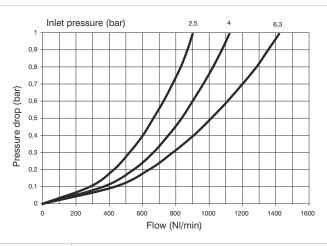






Example: T171BFB : size 1, Filter with Technopolymer threads, G1/4" connections, 20 μ m filter pore size

Flow rate curves



Operational characteristics

- Double filtering action: air flow centrifugation and filter element
- Filtering element made of HDPE (high density polyethylene) available in three different filtration grades (5 μ m, 20 μ m and $50\mu\text{m}$) can be regenerated by washing it or replaced.
- Transparent bowl made off polycarbonate with bowl protection guard.
- Bowl assembly via bayonet type quick coupling mechanism with safety button.
- Semi-automatic drain mounted as standard; automatic drain upon request

Note

In order to ensure adequate flow on the auto drain version it is recommended to use minimum a 6mm fitting.

Technical characteristics

Connections	G 1/8" - G 1/4"	
Max. inlet pressure	13 bar	
Minimum working pressure	0,5 bar	
with automatic drain	0,5 bai	
Maximum working pressure	10 bar	V
with automatic drain	10 bar	
Working temperature	-5°C +50°C	0
Weight with Technopolymer threads	gr. 120	
Weight with threaded inserts	gr. 130	
Filter pore size	5 μm - 20 μm - 50 μm	8
Bowl capacity	18 cm ³	•
Assembly positions	Vertical	-
Max. fitting torque	C1/4II - O Noo	•
(with Technopolymer threads)	G1/4" = 9 Nm	
Max. fitting torque	G1/8" = 15 Nm	2
(with threaded inserts)	G1/4" = 20 Nm	9

Orc	ering	code

Ø171**@F©@**

VERSION				
V	N = Metal inserts			
	T = Technopolymer thread			
CONNECTIONS				
0	A = G1/8"(only for "N" version)			
G	B = G1/4"			
	C = 1/4 NPT(only for "N" version)			
	FILTER PORE SIZE			
8	$A = 5 \mu m$			
0	$B = 20 \mu m$			
	$C = 50 \mu m$			
	OPTIONS			
0	= Standard *			
	S = Automatic drain			

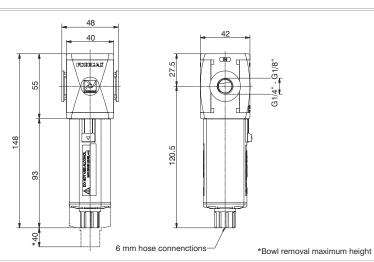
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BOWL OPTIONS = Standard * N = Nylon bowl

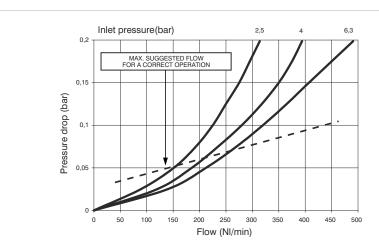
Coalescing filter (D)

Flow rate curves





Example: T171BDA: Coalescing size 1, Filter with Technopolymer threads, G1/4" connections, filter efficency 99,97%



Operational characteristics Coelesing filter element with filtration grade of $0.01\mu m$ Transparent bowl made off polycarbonate with bowl protection guard. Bowl assembly via bayonet type quick coupling mechanism with safety button. Semi-automatic drain mounted as standard; automatic drain upon request In order to ensure a better grade of filtration it is recommended to use a 5 μ m filter before the coalescing filter. In order to ensure adequate flow on the auto drain version it is recommended to use minimum a 6mm fitting.

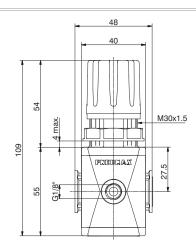
Technical characteristics					
Connections	G 1/8" - G 1/4" Ordering c		Ordering code		
Max. inlet pressure	13 bar	3			
Minimum working pressure	0,5 bar		Ø 171 @ D @Ø		
with automatic drain	0,0 54.		VERSION		
Maximum working pressure		V	N = Metal inserts		
with automatic drain	10 bar		T = Technopolymer thread		
			CONNECTIONS		
Working temperature	-5°C +50°C	0	A = G1/8"(only for "N" version)		
Weight with Technopolymer threads	gr. 125		B = G1/4"		
Weight with threaded inserts	gr. 135		C = 1/4 NPT(only for "N" version)		
	gr. 135		FILTER EFFICIENCY		
Filter efficiency	99,97%	•	A = 99,97%		
with 0,01 μm particle	33,37 70		OPTIONS		
Bowl capacity	18cm³	•	= Standard *		
			S = Automatic drain		
Assembly positions	Vertical		BOWL OPTIONS		
Max. fitting torque	G1/4" = 9 Nm		= Standard *		
(with Technopolymer threads)			N = Nylon bowl		
Max. fitting torque	G1/8" = 15 Nm				
(with threaded inserts)	G1/4" = 20 Nm				

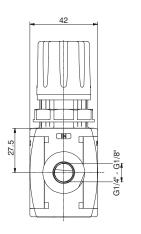
^{*} no additional letter required

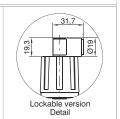


Regulator (R)

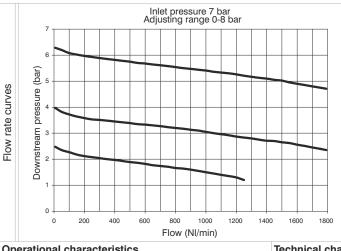


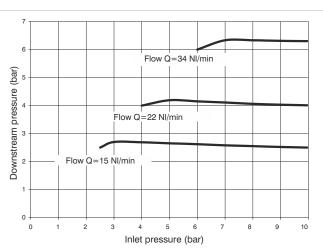






Example: T171BRC: size 1, Regulator with Technopolymer threads, G1/4" connections, 0 to 8 bar adjusting range





Operational characteristics	Technical characteristics			
Diaphragm pressure regulator with relieving.	Connections	G 1/8" - G 1/4"		Ordering code
Low hysteresis rolling diaphragm.	Max. inlet pressure	13 bar		
Balanced system.	Working temperature	-5°C +50°C		Ø 171 @ R @①◎
Available in four pressure ranges up to 12 bar.	Pressure gauge connections	G 1/8"		VERSION
Operating knob can be locked in position by pressing it	Weight with Technopolymer threads	gr. 130	V	N = Metal inserts
down once the desired P2 (regulated pressure)	Weight with threaded inserts	gr. 140	_	T = Technopolymer thread CONNECTIONS
pressure value is achieved.	Pressure range	0-2 bar / 0-4 bar	0	A = G1/8"(only for "N" version)
Fitted with panel mounting locking ring.	. researe range	0-8 bar / 0-12 bar		B = G1/4"
Note	Assembly positions	Indifferent		C = 1/4 NPT(only for "N" version) ADJUSTING RANGE
The pressure must be always regulating while increasing. For	Max. fitting torque	G1/8" = 4 Nm		A = 0.2 bar
a more precise regulation and higher sensibility, the use of a	(with Technopolymer threads)	G1/4" = 9 Nm		B = 0-4 bar
regulator with a pressure range as close as possible to the				C = 0-8 bar D = 0-12 bar
regulated pressure is recommended.	Max. fitting torque (with threaded inserts)	G1/8" = 15 Nm G1/4" = 20 Nm	•	TYPE = Standard * F = Controlled refiel + improved relieving L = no relieving R = Improved relieving OPTIONS = Standard * K = Lockable version

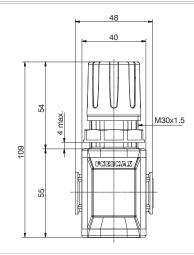
Adjustment characteristics

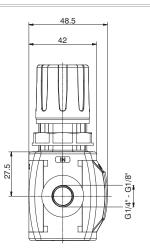
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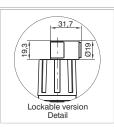




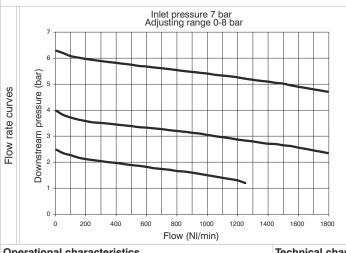


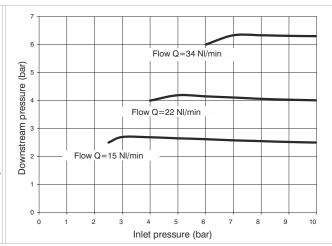






Example: T171BRMC: size 1, Regulator including gauge with Technopolymer threads, G1/4" connections, 0 to 8 bar adjusting range





Operational characteristics

- Diaphragm pressure regulator with relieving.
- Low hysteresis rolling diaphragm.
- Balanced system.
- Available in four pressure ranges up to 12 bar.
- Operating knob can be locked in position by pressing it down once the desired P2 (regulated pressure) pressure value is achieved.
- Fitted with panel mounting locking ring.
- Integrated manometer 0-12 bar as standard (for 0-8 and 0-12 bar range) and 0-4 bar (for 0-2 and 0-4 range)

Note

The pressure must be always regulating while increasing. For a more precise regulation and higher sensibility, the use of a regulator with a pressure range as close as possible to the regulated pressure is recommended.

Technical characteristics

Adjustment characteristics

	Connections	G 1/8" - G 1/4"		Ordering code
	Max. inlet pressure	13 bar		
	Working temperature	-5°C +50°C		Ø 171 @ R D@①①
	Weight with Technopolymer threads	gr. 140		VERSION
	Weight with threaded inserts	gr. 150	V	N = Metal inserts
		0-2 bar / 0-4 bar		T = Technopolymer thread
	Pressure range			CONNECTIONS
		0-8 bar / 0-12 bar	•	A = G1/8"(only for "N" version)
	Assembly positions	Indifferent		B = G1/4"
	Max. fitting torque			C = 1/4 NPT(only for "N" version)
		G1/4" = 9 Nm		FLOW DIRECTION
)	(with Technopolymer threads)		D	M = from left to right
				W = from right to left
				ADJUSTING RANGE
				A = 0-2 bar
			G	B = 0-4 bar
				C = 0-8 bar
				D = 0-12 bar
	Max. fitting torque	G1/8" = 15 Nm		TYPE
				= Standard *
	(with threaded inserts)	G1/4" = 20 Nm	•	F = Controlled refiel +
			•	improved relieving
				L = no relieving
				R = Improved relieving
			•	OPTIONS
				= Standard *

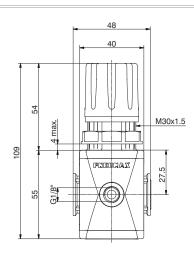
K = Lockable version * no additional letter required

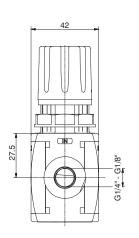
Flow rate curves

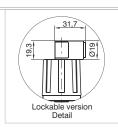
Series Airplus Size 1

Modular pressure regulator (B)









Example: T171BBC : size 1, Regulator with Technopolymer threads, G1/4" connections, 0 to 8 bar adjusting range

Inlet pressure 7 bar Adjusting range 0-8 bar Downstream pressure (bar) 0 200 400 600 800 1000 1200 1400 1600 Flow (NI/min)

Operational characteristics
- Diaphragm pressure regulator with relieving.
- Low hysteresis rolling diaphragm.
- Balanced system.
- Available in four pressure ranges up to 12 bar.
- Operating knob can be locked in position by pressing it
down once the desired P2 (regulated pressure)
pressure value is achieved.
- G1/8" output front connection.
- Air supply can be applied by both directions.
Note
The pressure must be always regulating while increasing. For
a more precise regulation and higher sensibility, the use of a
regulator with a pressure range as close as possible to the
regulated pressure is recommended.

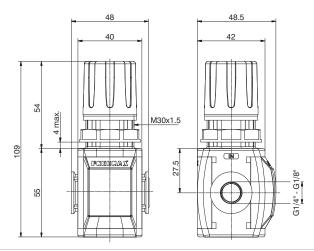
Technical characteristics		
Connections	G 1/8" - G 1/4"	
Max. inlet pressure	13 bar	
Working temperature	-5°C +50°C	
Pressure gauge connections	G 1/8"	
Weight with Technopolymer threads	gr. 130	•
Weight with threaded inserts	gr. 140	
Pressure range	0-2 bar / 0-4 bar	
Tressure range	0-8 bar / 0-12 bar	•
Assembly positions	Indifferent	
Max. fitting torque	G1/8" = 4 Nm	
(with Technopolymer threads)	G1/4" = 9 Nm	0
		Г
Max. fitting torque	G1/8" = 15 Nm	•
(with threaded inserts)	G1/4" = 20 Nm	

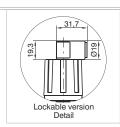
VERSION
N = Metal inserts
T = Technopolymer thread
CONNECTIONS
A = G1/8"(only for "N" version)
B = G1/4"
C = 1/4 NPT(only for "N" version)
ADJUSTING RANGE
A = 0-2 bar
B = 0-4 bar
C = 0-8 bar
D = 0-12 bar
TYPE
= Standard *
F = Controlled refiel +
improved relieving
L = no relieving
R = Improved relieving
OPTIONS
= Standard *
K = Lockable version

Ordering code **Ø**171**@**B**@©®**

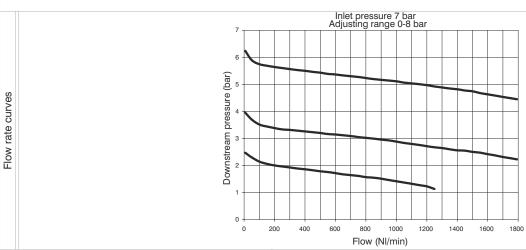
^{*} no additional letter required







Example: T171BMC: size 1, Regulator including gauge with Technopolymer threads, G1/4" connections, 0 to 8 bar adjusting range



- Diaphragm pressure regulator with relieving.
- Low hysteresis rolling diaphragm.
- Balanced system.
- Available in four pressure ranges up to 12 bar.
- Operating knob can be locked in position by pressing it down once the desired P2 (regulated pressure) pressure value is achieved.
- G 1/8" output connection positioned on the opposite side of the built in gauge.
- Air supply can be applied by both directions.
- Integrated manometer 0-12 bar as standard
- (for 0-8 and 0-12 bar range) and 0-4 bar (for 0-2 and 0-4 range)

Note

The pressure must be always regulating while increasing. For a more precise regulation and higher sensibility, the use of a regulator with a pressure range as close as possible to the regulated pressure is recommended.

Technical characteristics

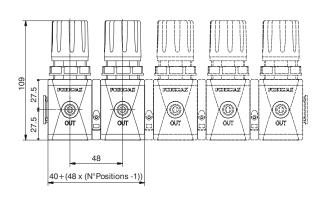
Connections	G 1/8" - G 1/4"	Ordering code
Max. inlet pressure	13 bar	3 1 1 1
Working temperature	-5°C +50°C	Ø 171 @ M @①◎
Weight with Technopolymer threads	gr. 140	VERSION
Weight with threaded inserts	gr. 150	N = Metal inserts
Pressure range	0-2 bar / 0-4 bar 0-8 bar / 0-12 bar	T = Technopolymer thread CONNECTIONS A = G1/8"(only for "N" version)
Assembly positions	Indifferent	B = G1/4"
Max. fitting torque (with Technopolymer threads)	G1/8" = 4 Nm G1/4" = 9 Nm	C = 1/4 NPT(only for "N" version) ADJUSTING RANGE A = 0-2 bar
		B = 0-4 bar C = 0-8 bar D = 0-12 bar
Max. fitting torque (with threaded inserts)	G1/8" = 15 Nm G1/4" = 20 Nm	TYPE = Standard * F = Controlled refiel + improved relieving L = no relieving R = Improved relieving OPTIONS = Standard *

K = Lockable version * no additional letter required



Manifold pressure regulators

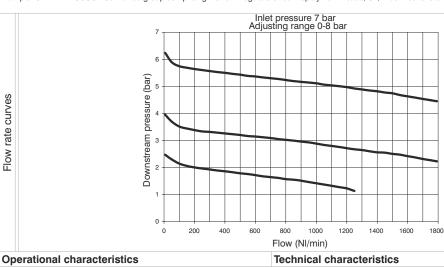




C 1/0" C 1/4"

G1/4" = 9 Nm

Example: GT171BB4CCCC: Combined group comprising 4 size 1 Regulators Technopolymer threads, G1/4" connections and 0 to 8 bar adjusting range



- Inlet pressure common for the whole manifold of regulator.
- A maximum of 6 regulators can be mounted
- Air supply can be applied by both directions.

The pressure must be always regulating while increasing. For a more precise regulation and higher sensibility, the use of a regulator with a pressure range as close as possible to the regulated pressure is recommended.

Connections	G 1/8 - G 1/4		
Max. inlet pressure	13 bar		
Working temperature	-5°C +50°C		
Pressure range	0-2 bar / 0-4 bar		
Tressure range	0-8 bar / 0-12 bar		
Assembly positions	indifferent		
Max. fitting torque	G1/8" = 4 Nm		

(with Technopolymer threads)

Max. fitting torque G1/8" = 15 Nm(with threaded inserts) G1/4" = 20 Nm

Ordering code

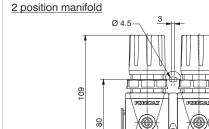
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	VERSION
V	N = Metal inserts
	T = Technopolymer thread

- CONNECTIONS A = G1/8"(only for "N" version) B = G1/4"
- C = 1/4 NPT(only for "N" version)
 - TYPE
 - B = Standard with flanges X M = Manometer included with flanges X
 - W = Standard with flanges Y Z = Manometer included with flanges Y
 - NUMBER REGULATORS 2 = 2 regulators
- 3 = 3 regulators 4 = 4 regulators 5 = 5 regulators
- 6 = 6 regulators ADJUSTING RANGE 1
- A = 0-2 bar**G** B = 0-4 bar
- C = 0.8 barD = 0-12 barADJUSTING RANGE 2
- A = 0-2 bar**B** = 0-4 bar
- C = 0-8 bar D = 0-12 bar
- ADJUSTING RANGE 3 A = 0-2 bar **G** B = 0-4 bar
- C = 0-8 bar D = 0-12 bar ADJUSTING RANGE 4
- A = 0-2 bar
- **G** B = 0-4 barC = 0-8 bar D = 0-12 bar
- ADJUSTING RANGE 5 A = 0-2 bar**G** B = 0-4 bar
- C = 0-8 bar D = 0-12 bar ADJUSTING RANGE 6
- A = 0-2 bar**G** B = 0-4 barC = 0.8 bar
- D = 0-12 bar

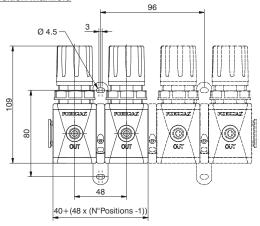


Dimensions with Y type flanges

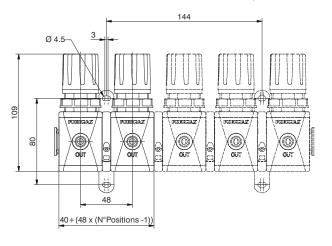


3 position manifold 48 O 4.5 O TOTAL SANT POSITIONS -1))

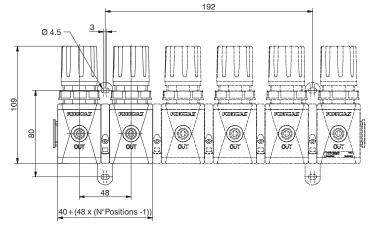
4 position manifold



5 position manifold

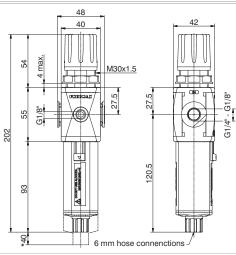


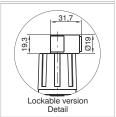
6 position manifold



Filter-Regulator (E)

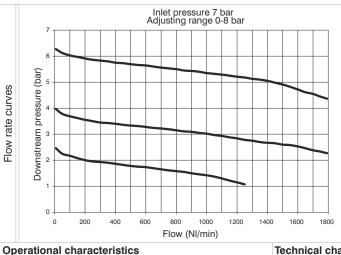


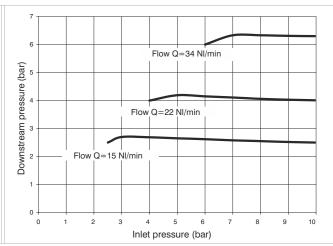




*Bowl removal maximum height

Example : T171BEBC : size 1, Filter-regulator with Technopolymer threads, G1/4" connections, 20 μ m filtering pore size, 0 to 8 bar adjusting range





Operational characteristics

- Filter diaphragm pressure regulator with relieving.
- Low hysteresis rolling diaphragm.
- Balanced system.
- Double filtering action: air flow centrifugation and filter element.
- Filtering element made of HDPE (high density polyethylene) available in three different filtration grades (5 μ m, 20 μ m and $50\mu\text{m}$) can be regenerated by washing it or replaced.
- Transparent bowl made of polycarbonate with bowl protection guard.
- Bowl assembly via bayonet type quick coupling mechanism with safety button.
- Semi-automatic drain mounted as standard; automatic drain upon request
- Available in four pressure ranges up to 12 bar.
- Operating knob can be locked in position by pressing it down once the desired P2 (regulated pressure) pressure value is achieved
- Fitted with panel mounting locking ring.

Note

The pressure must be always regulating while increasing. For a more precise regulation and higher sensibility, the use of a regulator with a pressure range as close as possible to the regulated pressure is recommended. In order to ensure adequate flow on the auto drain version it is recommended to use minimum a 6mm fitting.

Adjustment characteristics

Connections	G 1/8" - G 1/4"	
Max. inlet pressure	13 bar	
Minimum working pressure	0,5 bar	
with automatic drain	0,5 bai	
Maximum working pressure	10 bar	V
with automatic drain	10 bar	
Working temperature	-5°C +50°C	
Pressure gauge connections	G 1/8"	•
Weight with Technopolymer threads	gr. 190	-
Weight with threaded inserts	gr. 200	6
Pressure range	0-2 bar / 0-4 bar	6
Fressure range	0-8 bar / 0-12 bar	
Filter pore size	5 μm - 20 μm - 50 μm	
Bowl capacity	18 cm ³	(
Assembly positions	Vertical	
Max. fitting torque	G1/8" = 4 Nm	T
(with Technopolymer threads)	G1/4" = 9 Nm	Q
		-
		•
Max. fitting torque	G1/8" = 15 Nm	2
(with threaded inserts)	G1/4" = 20 Nm	

Ordering code

0171**0**E**00000**

		VERSION
1	V	N = Metal inserts
l		T = Technopolymer thread
		CONNECTIONS
	0	A = G1/8"(only for "N" version)
	G	B = G1/4"
		C = 1/4 NPT(only for "N" version)
		FILTER PORE SIZE
	8	$A = 5 \mu m$
	0	$B = 20 \mu m$
		$C = 50 \mu m$
		ADJUSTING RANGE
		A = 0-2 bar
	Œ	B = 0-4 bar
		C = 0-8 bar
		D = 0-12 bar
		TYPE

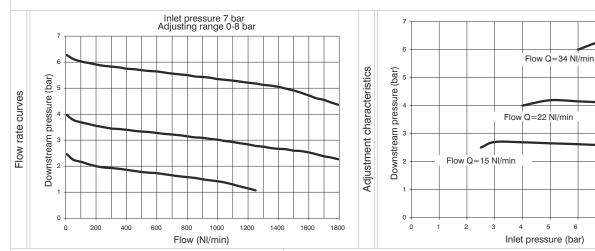
- = Standard * S = Automatic drain OPTIONS = Standard *
- K = Lockable version **BOWL OPTIONS** = Standard * N = Nylon bowl
 - * no additional letter required

*Bowl removal maximum height

Filter-regulator including gauge (EM)(EW) 48 48.5 40 42 54 202 20.5 93

6 mm hose connenctions-

Example: T171BEMBC: size 1, Filter-Regulator including gauge with Technopolymer threads, G1/4" connections, with 20 μ m filtering pore size, 0 to 8 bar adjusting range



Operational characteristics

- Filter diaphragm pressure regulator with relieving.
- Low hysteresis rolling diaphragm.
- Balanced system.
- Double filtering action: air flow centrifugation and filter element.
- Filtering element made of HDPE (high density polyethylene) available in three different filtration grades (5 μ m, 20 μ m and $50\mu\text{m}$) can be regenerated by washing it or replaced.
- Transparent bowl made off polycarbonate with bowl protection guard.
- Bowl assembly via bayonet type quick coupling mechanism with safety button.
- Semi-automatic drain mounted as standard; automatic drain upon request
- Available in four pressure ranges up to 12 bar.
- Operating knob can be locked in position by pressing it down once the desired P2 (regulated pressure) pressure value is achieved
- Fitted with panel mounting locking ring.
- Integrated manometer 0-12 bar as standard

(for 0-8 and 0-12 bar range) and 0-4 bar (for 0-2 and 0-4 range)

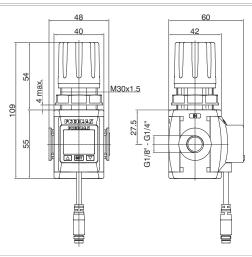
The pressure must be always regulating while increasing. For a more precise regulation and higher sensibility, the use of a regulator with a pressure range as close as possible to the regulated pressure is recommended. In order to ensure adequate flow on the auto drain version it is recommended to use minimum a 6mm fitting.

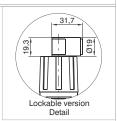
Technical characteristics

	Connections	G 1/8" - G 1/4"		Ordering code	
	Max. inlet pressure	13 bar	Ordoning dodd		
	Minimum working pressure	0,5 bar		Ø 171 © E D©©00	
	with automatic drain	,		VERSION	
	Maximum working pressure		V	N = Metal inserts	
	with automatic drain	10 bar		T = Technopolymer thread	
			-	CONNECTIONS	
	Working temperature	-5°C +50°C	•	A = G1/8"(only for "N" version)	
	Weight with Technopolymer threads	gr. 200		B = G1/4"	
	Weight with threaded inserts	gr. 210	-	C = 1/4 NPT(only for "N" version)	
		0-2 bar / 0-4 bar	•	FLOW DIRECTION	
	Pressure range		•	M = from left to right W = from right to left	
		0-8 bar / 0-12 bar	-	FILTER PORE SIZE	
	Filter pore size	5 μm - 20 μm - 50 μm		$A = 5 \mu m$	
	Bowl capacity	18 cm ³	8	B = 20 μm	
	Assembly positions	Vertical		$C = 50 \mu m$	
	7.1	70.000	-	ADJUSTING RANGE	
	Max. fitting torque	G1/4" = 9 Nm		A = 0-2 bar	
	(with Technopolymer threads)		e	B = 0-4 bar	
				C = 0-8 bar	
				D = 0-12 bar	
				TYPE	
			0	= Standard *	
)			_	S = Automatic drain	
				OPTIONS	
_	Max. fitting torque	G1/8" = 15 Nm	0	= Standard *	
	(with threaded inserts)	G1/4" = 20 Nm		K = Lockable version	
			2	BOWL OPTIONS = Standard *	
			4	= Standard * N = Nylon bowl	
				* no additional letter required	

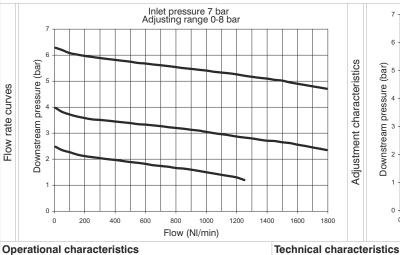
Regulator with pressure switch (RP)(RZ)

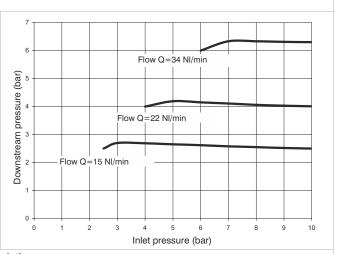






Example: T171BRPCA: size 1, Regulator with Technopolymer threads, G1/4" connections, 0 to 8 bar adjusting range, with pressure switch with M8 connector PNP





- Diaphragm pressure regulator with relieving.
- Low hysteresis rolling diaphragm.
- Balanced system.
- Available in four pressure ranges up to 12 bar.
- Operating knob can be locked in position by pressing it down once the desired P2 (regulated pressure) pressure value is achieved.
- Fitted with panel mounting locking ring.
- Pressure switch as standard

The pressure must be always regulating while increasing. For a more precise regulation and higher sensibility, the use of a regulator with a pressure range as close as possible to the regulated pressure is recommended.

Connections	G 1/8" - G 1/4"
Max. inlet pressure	13 bar
Working temperature	0°C +50°C
Weight with Technopolymer threads	gr. 140

(with Technopolymer threads)

Adjustment characteristics

Max. fitting torque (with threaded inserts)

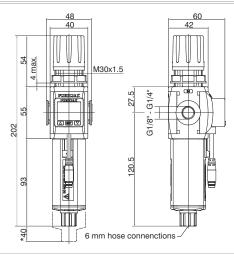
Ma W W Weight with threaded inserts gr. 150 0-2 bar / 0-4 bar Pressure range 0-8 bar / 0-12 bar Assembly positions Indifferent Max. fitting torque G1/4" = 9 Nm

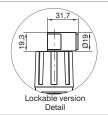
> G1/8" = 15 NmG1/4" = 20 Nm

V171@RD@D@D

	VERSION
V	N = Metal inserts
	T = Technopolymer thread
©	CONNECTIONS
	A = G1/8"(only for "N" version)
	B = G1/4"
	C = 1/4 NPT(only for "N" yearsign)

- FLOW DIRECTION P = from left to right Z = from right to left ADJUSTING RANGE
- A = 0-2 bar**6** B = 0-4 barC = 0-8 bar D = 0-12 bai
- TYPE = Standard * F = Controlled refiel +
- improved relieving L = no relieving R = Improved relieving **OPTIONS** = Standard 3
- K = Lockable version PRESSURE SWITCH OPTION A = Cable 150 mm+M8 PNP B = Cable 150 mm+M8 NPN C = Cable 2 mt. PNP
 - D = Cable 2 mt. NPN



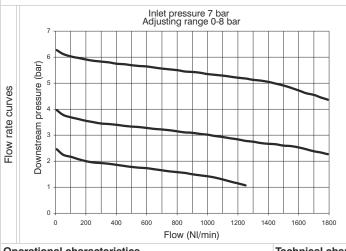


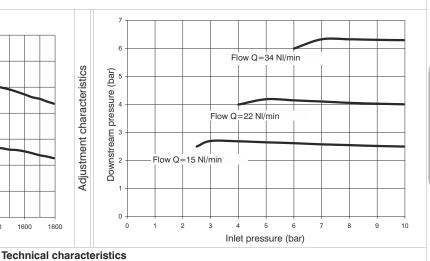
Size 1

Series Airplus

* Bowl removal maximum height

Example: T171BEPBCA: size 1, Filter-regulator with Technopolymer threads, G1/4" connections, 20 μ m filtering pore size, 0 to 8 bar adjusting range, with pressure switch with M8 connector PNP





Operational characteristics

- Filter diaphragm pressure regulator with relieving.
- Low hysteresis rolling diaphragm.
- Balanced system.
- Double filtering action: air flow centrifugation and filter element.
- Filtering element made of HDPE (high density polyethylene) available in three different filtration grades (5µm, 20µm and $50\mu\text{m}$) can be regenerated by washing it or replaced.
- Transparent bowl made off polycarbonate with bowl protection guard.
- Bowl assembly via bayonet type quick coupling mechanism with safety button.
- Semi-automatic drain mounted as standard; automatic drain upon request
- Available in four pressure ranges up to 12 bar.
- Operating knob can be locked in position by pressing it down once the desired P2 (regulated pressure) pressure value is achieved
- Fitted with panel mounting locking ring.
- Pressure switch as standard

The pressure must be always regulating while increasing. For a more precise regulation and higher sensibility, the use of a regulator with a pressure range as close as possible to the regulated pressure is recommended. In order to ensure adequate flow on the auto drain version it is recommended to use minimum a 6mm fitting.

Connections	G 1/8" - G 1/4"		Ordering code	
Max. inlet pressure	13 bar	Grading code		
Minimum working pressure	0.51	V.	V 171 0 E D000002	
with automatic drain	0,5 bar		VERSION	
			N = Metal inserts	
Maximum working pressure	10 bar	• <u> </u>	T = Technopolymer thread	
with automatic drain		_	CONNECTIONS	
Working temperature	0°C +50°C		A = G1/8"(only for "N" version)	
Weight with Technopolymer threads	gr. 200	-	B = G1/4"	
Weight with threaded inserts	gr. 210		C = 1/4 NPT(only for "N" version)	
Weight with threaded maerta			FLOW DIRECTION	
Pressure range	0-2 bar / 0-4 bar		P = from left to right	
l little in gr	0-8 bar / 0-12 bar		Z = from right to left	
Filter pore size	5 μm - 20 μm - 50 μm		FILTER PORE SIZE	
Bowl capacity	18 cm ³		$A = 5 \mu m$ $B = 20 \mu m$	
			$C = 50 \mu\text{m}$	
Assembly positions	Vertical		ADJUSTING RANGE	
Max. fitting torque	G1/4" = 9 Nm	I -	A = 0-2 bar	
(with Technopolymer threads)	G1/4 = 9 WIII		B = 0-4 bar	
		- (C = 0-8 bar	
		1	D = 0-12 bar	
		-	TYPE	
		•	= Standard *	
			S = Automatic drain	
-			OPTIONS	
Many California and a second	04/01/45 N	•	= Standard *	
Max. fitting torque	G1/8" = 15 Nm		K = Lockable version	
(with threaded inserts)	G1/4" = 20 Nm		PRESSURE SWITCH OPTION	
			A = Cable 150 mm+M8 PNP	
			B = Cable 150 mm+M8 NPN	
		- I	C = Cable 2 mt. PNP	
		-	D = Cable 2 mt. NPN BOWL OPTIONS	
		2	= Standard *	
			N = Nylon bowl	
			* no additional	





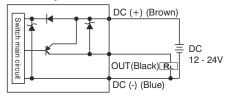


CHARACTERISTICS

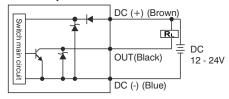
- 3 color digital LCD display, easy readout
- 4 units of measurement for pressure indication
- PNP and NPN output
- N.O. and N.C. output contact
- Not available individually, but only with a Regulator or a Filter-regulator

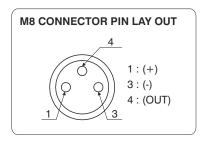
OUTPUT CIRCUIT WIRING DIAGRAMS

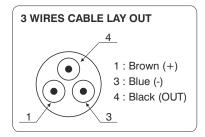
PNP output



NPN output







Cable ordering code

MCH1 cable 3 wires I=2,5m with M8 connector

MCH2 cable 3 wires I=5m with M8 connector

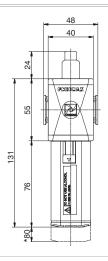
MCH3 cable 3 wires I=10m with M8 connector

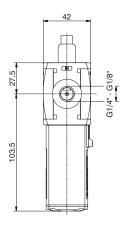
Connector



TECHNICAL CHARACTERISTICS			
Adjusting range	0 - 10 bar / 0 - 1MPa		
Max. inlet pressure	15 bar / 1,5 MPa		
Fluid	Filtered and dehumidified air		
Display unit of measurement	MPa - kgf/cm² - bar - psi		
Supply voltage	12 - 24 VDC		
Current consumption	≤40mA (without load)		
Digital output type	NPN - PNP		
Type of contact	Normally Open - Normally Closed		
Max. load current	125 mA		
Digital output activation mode	single threshold with fixed hysteresis - window with fixed hysteresis - window without hysteresis		
Digital output activation time	0.05s - 0.25s - 0.5s - 1s - 2s - 3s (selections for chattering-proof function)		
Display characteristics	Double 3 1/2 digit display Digital output status indication Three-pushbuttons touchpad		
Indicator accuracy	≤±2% F.S. ± 1 digit		
Protection grade	IP 40		
Temperature	0 - 50 °C		
Cable section	3 x 0,129mm², Ø4 mm, PVC		







*Bowl removal maximum height

Series Airplus

Size 1

Example: T171BL: size 1, Lubricator with Technopolymer threads, G1/4" connections

Inlet pressure (bar) 6,3 0,9 0.8 0,7 Flow rate curves Pressure drop (bar) 0,6 0,5 0,4 0,3 0,2 0.1 200 400 800 1200 1400 1600 Flow (NI/min)

Operationa	ii Characteristics	

Technical characteristics

Min. operational flow at 6,3 bar

- Oil mist lubrication with variable orifice size in function
- Oil quantity regulation mechanism and oil quantity visualization dome made of polycarbonate.
- Transparent bowl made off polycarbonate with bowl protection guard.
- Bowl assembly via bayonet type quick coupling mechanism with safety button.

Note

Install as close as possible to the point o fuse Do not use alcohol, deterging oils or solvents.

Connections	G 1/8" - G 1/4"	
Max. inlet pressure	13 bar	
Working temperature	-5°C +50°C	
Weight with Technopolymer threads	gr. 110	
Weight with threaded inserts	gr. 120	V
Indicative oil drop rate	1 drop every	
indicative on drop rate	300/600 NI	0
Oil type	FD22 - HG32	
Bowl capacity	36 cm ³	
Assembly positions	Vertical	•
Max. fitting torque	O4/4II O NI	
(with Technopolymer threads)	G1/4" = 9 Nm	
Max. fitting torque	G1/8" = 15 Nm	
(with threaded inserts)	G1/4" = 20 Nm	

40 NI/min.

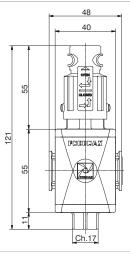
Ordering code **Ø**171**@**L**Ø** VERSION

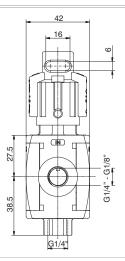
- N = Metal inserts T = Technopolymer thread CONNECTIONS
- $$\begin{split} A &= G1/8\text{" (only for "N" version)} \\ B &= G1/4\text{"} \\ C &= 1/4 \text{ NPT(only for "N" version)} \end{split}$$
 BOWL OPTIONS
 - = Standard * N = Nylon bowl
 - * no additional letter required



Shut-off valve (VL)







550 NI/min.

Example: T171BVL: size 1, Shut-off valve with Technopolymer threads, G1/4" connections

Operational characteristics

- Manual operated 3 ways poppet valve.
- Double handle action for valve opening: pushing and rotating (clockwise).
- The valve can be closed and the down stream circuit depressurized by rotating anticlockwise the knob.
- Knob lockable with three padlocks.

Technical characteristics

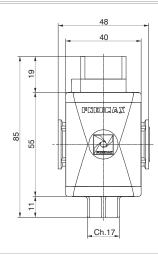
at 6 bar with $\Delta p = 1$

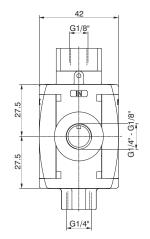
Connections	G 1/8" - G 1/4"
Max. inlet pressure	13 bar
Discharge connection	G1/4"
Working temperature	-5°C +50°C
Weight with Technopolymer threads	gr. 100
Weight with threaded inserts	gr. 110
Assembly positions	Indifferent
Handle opening and closing angle	90°
Max. fitting torque	G1/4" = 9 Nm
(with Technopolymer threads)	G1/4 - 9 MIII
Max. fitting torque	G1/8" = 15 Nm
(with threaded inserts)	G1/4" = 20 Nm
Nominal flow rate	1400 NI/min.
at 6 bar with ∆p=1	1400 M/IIIII.
Exhaust nominal flow rate	550 NI/min

Ordering code			
Ø 171 @ VL			
	VERSION		
V	N = Metal inserts		
	T = Technopolymer thread		
	CONNECTIONS		
0	A = G1/8"(only for "N" version)		
U	B = G1/4"		
	C = 1/4 NPT(only for "N" version)		

Pneumatic shut-off valve (VP)







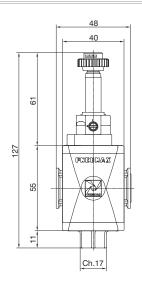
Example: T171BVP: size 1, Pneumatic shut-off valve with Technopolymer threads, G1/4" connections

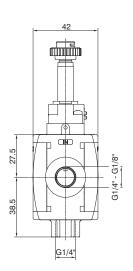
Operational characteristics Technical characteristics G 1/8" - G 1/4" - Pneumatic operated 3 ways poppet valve. Connections Ordering code When the pneumatic signal is removed the Discharge connection G1/4" **Ø**171**@**VP valves exhaust the pneumatic circuit Pilot port size G1/8" -5°C +50°C Working temperature VERSION N = Metal inserts Weight with technopolymer threads gr. 94 T = Technopolymer thread Weight with threaded inserts gr. 99 CONNECTIONS A = G1/8"(only for "N" version) Assembly positions Indifferent B = G1/4" Min. pressure working 3 bar C = 1/4 NPT(only for "N" version) Max. pressure working 10 bar Max. fitting torque G1/4" = 9 Nm(with Technopolymer threads) Max. fitting torque G1/8" = 15 Nm(with threaded inserts) G1/4" = 20 NmNominal flow rate 1400 NI/min. at 6 bar with ∆p=1 Exhaust nominal flow rate 550 NI/min. at 6 bar with $\Delta p = 1$



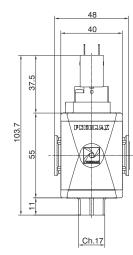
Electric shut-off valve (VE)

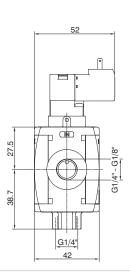












Example: T171BVEB2: size 1, Electric shut-off valve, with M2 pilot without coil, Technopolymer threads, G1/4" connections

Operational characteristics

- Solenoid operated 3 ways poppet valve.
- The model fitted with 15 mm pilots uses pilots series N33_0A and N33_0E (1 Watt)

Technical characteristics		
Supply and operating connections	G 1/8" - G 1/4"	
Discharge connections	G 1/4"	
Working temperature	-5°C +50°C	
Weight with Technopolymer threads	130 g	
Weight with threaded inserts	140 g	V
Assembly positions	Indifferent	
Min. Pressure working	3 bar	_
Max. Pressure working	10 bar	•
Max. fitting torque	G1/4" = 9 Nm	
(with Technopolymer threads)	G1/4 = 9 NIII	
Max. fitting torque	G1/8" = 15 Nm	
(with threaded inserts)	G1/4" = 20 Nm	
Nominal flow rate	4400 NII/	
at 6 bar with Δp=1	1400 NI/min.	
		A
		•

Exhaust nominal flow rate

at 6 bar with $\Delta p = 1$

	ľ
A	В
•	В
	В
	В
	В
	В

550 NI/min.

_	14 — Wicker Hilberto
	T = Technopolymer thread
	CONNECTIONS
0	A = G1/8"(only for "N" version)
G	B = G1/4"
	C = 1/4 NPT(only for "N" version)
	15 mm COIL VOLTAGE
	A4 = 12 V DC
	A5 = 24 V DC
	A6 = 24 V AC (50-60 Hz)
	A7 = 110 V AC (50-60 Hz)
	A8 = 230 V AC (50-60 Hz)
	A9 = 24 V DC (1 Watt)
	22 mm COIL VOLTAGE
	B2 = Without coil
	M2 mechanic
_	B4 = 12 V DC

Ordering code

Ø171**@**VE**Ø**

VERSION

N = Metal inserts

B2 = Without coil
M2 mechanic
B4 = 12 V DC
B5 = 24 V DC
B6 = 24 V AC (50-60 Hz)
B7 = 110 V AC (50-60 Hz)
B8 = 230 V AC (50-60 Hz)
B9 = 24 V DC (2 Watt)
30 mm COIL VOLTAGE
C5 = 24 V DC
C6 = 24 V AC (50-60 Hz)

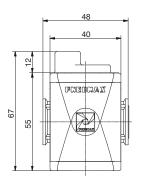
- C7 = 110 V AC (50-60 Hz) C8 = 230 V AC (50-60 Hz)
- C9 = 24 V DC (2 Watt)

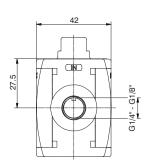




Progressive start-up valve (AP)





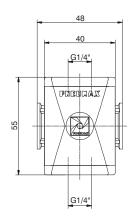


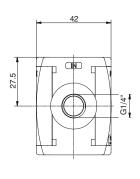
Example: T171BAP: size 1, Progressive start-up valve with Technopolymer threads, G1/4" connections

Operational characteristics	Technical characteristics		
- Down stream circuit filling time regulated via a built	Connections	G 1/8" - G 1/4"	Ordering code
in flow regulator.	Max. inlet pressure	13 bar	
- Full pressure is allowed once the down stream circuit	Working temperature	-5°C +50°C	Ø 171 ⊚ AP
pressure reaches 50% of the inlet pressure.	Weight with Technopolymer threads	gr. 70	VERSION
	Weight with threaded inserts	gr. 80	N = Metal inserts
	Max. fitting torque	0.//	T = Technopolymer thread CONNECTIONS
	(with Technopolymer threads)	G1/4" = 9 Nm	A C1/0
	Max. fitting torque	G1/8" = 15 Nm	B = G1/4"
	(with threaded inserts)	G1/4" = 20 Nm	C = 1/4 NPT(only for "N" version)
	Assembly positions	Indifferent	
	Min. pressure working	2,5 bar	
	Nominal flow rate	4 400 NII/r i	
	at 6 bar with Δp=1	1400 NI/min. 75 NI/min.	
	Fully open built in flow		
	regulator flow rate		

Air intake (PA)







Example: T171BPA: size 1, Air intake with Technopolymer threads, G1/4" connections

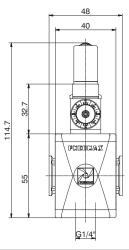
Operational characteristics	Technical characteristics		
Available with two G1/4" threaded connections.	Connections	G 1/4"	Ordering code
	Max. inlet pressure	13 bar	
Attenction For this product are available only	Working temperature	-5°C +50°C	T171BPA
Technopolymer connections	Weight	gr. 52	
	Assembly positions	Indifferent	
	Max. fitting torque	G1/4" = 9 Nm	
	(with Technopolymer threads)	G1/4 = 9 NIII	

Ordering code

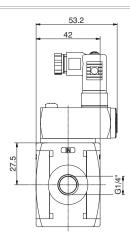
T171BPP

Pressure switch (PP)





Technical characteristics



Example: T171BPP: Size 1, Pressure switch with Technopolymer threads, G1/4" connections

Operational characteristics

- Built in adjustable pressure switch (2 to 10 bar) with electrical connection.
- G1/4" threaded connection on the bottom face.
- The electrical connection is made by mean of a 15 mm connector DIN 43650 type C. The microswitch conta could be normally closed or open (change overswite

Attenction

For this product are available only Technopolymer connections

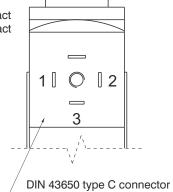
Connections	G 1/4"
Max. inlet pressure	13 bar
Working temperature	-5°C +50°C
Weight	gr. 138
Microswitch capacity	1A
Grade of protection	IP 65
(with connector assembled)	11 03
Adjusting range	2 -10 bar
Assembly positions	Indifferent
Max. fitting torque	C1/4II - O Nimo
(with Technopolymer threads)	G1/4" = 9 Nm

	Weight	gi. 100
tact	Microswitch capacity	1A
itch).	Grade of protection	IP 65
	(with connector assembled)	11 00
	Adjusting range	2 -10 bar
	Assembly positions	Indifferent
	Max. fitting torque	G1/4" = 9 Nm
	(with Technopolymer threads)	G1/4 = 9 MIII
	Microswitch maximum tension	250 VAC

1 = neutral

2 = N.C. contact

3 = N.O. contact



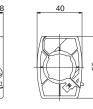
Flange X

Ordering code

T171X









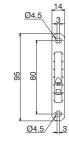
Weight 12 gr.
Example : T171X : Size 1 coupling flange
-Enables the quick connection of two functions

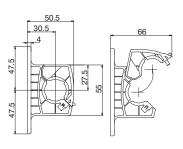
Flange Y

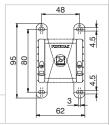
Ordering code

T171Y









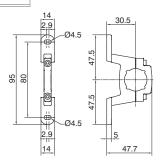
Weight 18 gr.
Example: T171Y: Size 1 coupling flange with mounting holes
- Used to couple together two elements and to panel mount them.
- Used to panel mount one single element.

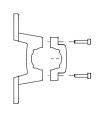
Aluminium flange Y

Ordering code

N171Y







Single unit panel mounting dimensions

80

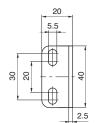
Weight 27 gr. Example: N171Y: Size 1 coupling aluminium flange with mounting holes

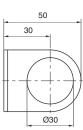
Single unit panel Used to couple together two elements and to panel mount them. Used to panel mount one single element. mounting dimensions Fixing bracket

Ordering code

17150







Weight 32 gr.
- Allows for regulators and filter regulators to be panel mounted.

Pressure gauge

Ordering code

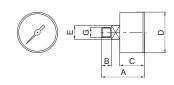
17070**Ø**.**⑤**

	VERSION
V	A = Dial Ø40
	B = Dial Ø50
	SCALE







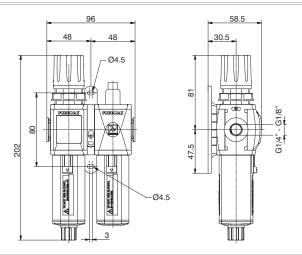


	DIMENSIONS								
CODE A B					D	Е	G	Weight gr.	
I	17070A	44	10	26	41	14	1/8"	60	
	17070B	45	10	27	49	14	1/8"	80	

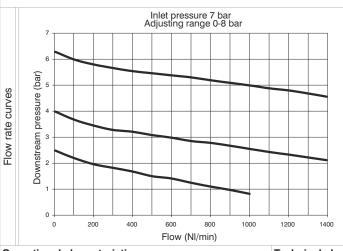


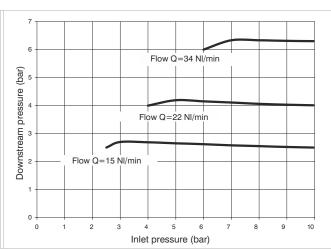
Service unit assembled (EM+L) (E+L) (EW+L)





Example: GT171BHG: size 1, combined group comprising Filter-regulator and Lubricator, Technopolymer threads, G1/4" connections, 0 to 8 bar adjusting range and 20 μ m filter pore size





Operational characteristics

Combined group comprising Filter-regulator with built in manometer and Lubricator assembled with a (Y) type coupling kit for panel mounting.

Integrated manometer 0-12 bar as standard

(for 0-8 and 0-12 bar range) and 0-4 bar (for 0-2 and 0-4 range)

The pressure must be always regulating while increasing. For a more precise regulation and higher sensibility, the use of a regulator with a pressure range as close as possible to the regulated pressure is recommended.

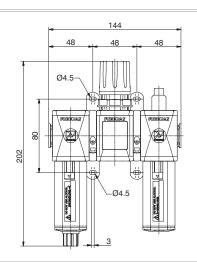
Technical characteristics

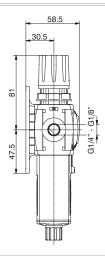
Adjustment characteristics

Connections	G 1/8" - G 1/4"		Ordering code		
Max. inlet pressure	13 bar				
Working temperature	-5°C +50°C		G Ø 171 @D \$@ DØ		
Weight with Technopolymer threads	gr. 328		VERSION		
Weight with threaded inserts	gr. 348	V	N = Metal inserts		
	0-2 bar / 0-4 bar		T = Technopolymer thread		
Pressure range			CONNECTIONS		
	0-8 bar / 0-12 bar	•	A = G1/8"(only for "N" version)		
Filter pore size	5 μm - 20 μm - 50 μm		B = G1/4"		
Bowl capacity	18 cm ³	<u> </u>	C = 1/4 NPT(only for "N" version)		
2011 dapadity			TYPE		
Indicative oil drop rate	1 drop every	U	H = Built in gauge		
·	300/600 NI		J = G1/8" gauge connection		
Oil type	FD22 - HG32		FILTER PORE SIZE		
Bowl capacity	36 cm ³		ADJUSTING RANGE C = 5 μm / 0-8 bar		
Assembly positions	Vertical	8	$D = 5 \mu m / 0-12 bar$		
	70.000	9	$G = 20 \mu m / 0-8 bar$		
Max. fitting torque	G1/4" = 9 Nm		$H = 20 \mu m / 0 - 12 bar$		
(with Technopolymer threads)			$N = 50 \mu m / 0-8 bar$		
Max. fitting torque	G1/8" = 15 Nm		$P = 50 \mu m / 0-12 bar$		
(with threaded inserts)	G1/4" = 20 Nm	_	OPTIONS		
(With threaded moerts)	G1/4 - 2014III	•			
			S = Automatic drain		
			FLOW DIRECTION		
		0	= Standard *		
Min. operational flow at 6,3 bar	40 NI/min.		(from left to right)		
			W = from right to left		
			BOWL OPTIONS		
		2	= Standard *		
			N = Nylon bowl		

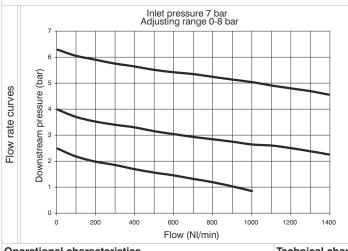
^{*} no additional letter required

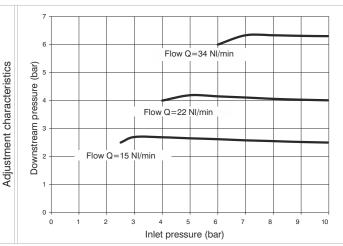






Example: GT171BKG: size 1 combined group comprising Filter, Regulator and Lubricator Technopolymer threads, G1/4" connections, 0 to 8 bar adjusting range and 20 µm filter pore size





Operational characteristics

Combined group comprising Filter, Regulator with built in manometer and Lubricator assembled with two (Y) type coupling kits for panel mounting.

Integrated manometer 0-12 bar as standard

(for 0-8 and 0-12 bar range) and 0-4 bar (for 0-2 and 0-4 range)

The pressure must be always regulating while increasing. For a more precise regulation and higher sensibility, the use of a regulator with a pressure range as close as possible to the regulated pressure is recommended.

Technical characteristics

Connections	G 1/8" - G 1/4"		Orderin
Max. inlet pressure	13 bar		
Working temperature	-5°C +50°C		G Ø 171 @
Weight with Technopolymer threads	gr. 406		VERSION
Weight with threaded inserts	gr. 436	V	11 1110101 111
3	0-2 bar / 0-4 bar	_	T = Technop
Pressure range			CONNECTIO
	0-8 bar / 0-12 bar	0	A = G1/8" (or
Filter pore size	5 μm - 20 μm - 50 μm		B = G1/4"
Bowl capacity	18 cm ³	_	C = 1/4 NPT
	1 drop every	0	
Indicative oil drop rate	300/600 NI	_	T = G1/8" ga
	,	-	FILTER POR
Oil type	FD22 - HG32	8	ADJUSTING
Bowl capacity	36 cm ³		$C = 5 \mu m / C$
Assembly positions	Vertical		$D = 5 \mu m / C$
Max. fitting torque			$G = 20 \mu m /$
9 1	G1/4" = 9 Nm		$H = 20 \mu m /$
(with Technopolymer threads)			$N = 50 \mu m /$
Max. fitting torque	G1/8" = 15 Nm		$P = 50 \mu m /$
(with threaded inserts)	G1/4" = 20 Nm		OPTIONS
,		•	
		-	S = Automat
			= Standar
		0	(from lef
Min. operational flow at 6,3 bar	40 NI/min.		W = from rio
			BOWL OPTION
		2	= Standar
		9	

ng code

00000

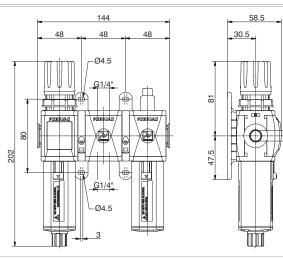
- nserts polymer thread IONS
- T(only for "N" version)
- gauge
- auge connection RE SIZE G RANGE 0-8 bar
- 0-12 bar / 0-8 bar / 0-12 bar / 0-8 bar
- / 0-12 bar rd *
- atic drain CTION ard
- eft to right) ight to left TIONS ırd *
 - N = Nylon bowl * no additional letter required



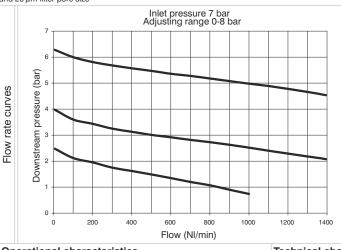


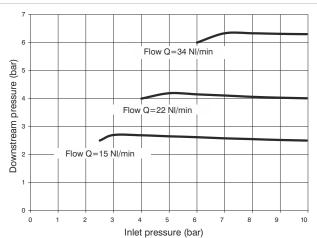
Service unit assembled (EM+PA+L) (E+PA+L) (EW+PA+L)





Example: GT171BNG: size 1 combined group comprising Filter-regulator, Air intake and Lubricator Technopolymer threads, G1/4" connections, 0 to 8 bar adjusting range and 20 μ m filter pore size





Operational characteristics

Combined group comprising Filter-regulator with built in manometer, Air intake and Lubricator assembled with two (Y) type coupling kits for panel mounting. Integrated manometer 0-12 bar as standard (for 0-8 and 0-12 bar range) and 0-4 bar (for 0-2 and 0-4 range)

The pressure must be always regulating while increasing. For a more precise regulation and higher sensibility, the use of a regulator with a pressure range as close as possible to the regulated pressure is recommended.

Technical characteristics

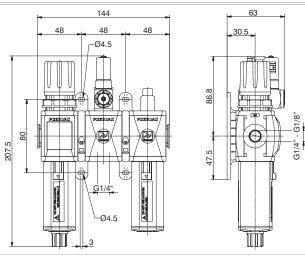
Adjustment characteristics

Connections	G 1/8" - G 1/4"	Ordering code		
Max. inlet pressure	13 bar			
Working temperature	-5°C +50°C		G Ø 171 @@© @ @	
Weight with Technopolymer threads	gr. 398		VERSION	
Weight with threaded inserts	gr. 418	V	N = Metal inserts	
	0-2 bar / 0-4 bar		T = Technopolymer thread	
Pressure range			CONNECTIONS	
	0-8 bar / 0-12 bar	0	A = G1/8" (only for "N" version)	
Filter pore size	5 μm - 20 μm - 50 μm	_	B = G1/4"	
Bowl capacity	18 cm ³	_	C = 1/4 NPT(only for "N" version)	
	1 drop every		TYPE	
Indicative oil drop rate	' '	0	N = Built in gauge P = G1/8" gauge connection	
	300/600 NI		FILTER PORE SIZE	
Oil type	FD22 - HG32		ADJUSTING RANGE	
Bowl capacity	36 cm ³		$C = 5 \mu m / 0.8 bar$	
Assembly positions	Vertical	8	$D = 5 \mu m / 0-12 bar$	
Max. fitting torque		9	$G = 20 \mu m / 0-8 bar$	
	G1/4" = 9 Nm		$H = 20 \mu m / 0-12 bar$	
(with Technopolymer threads)	· ·		$N = 50 \mu \text{m} / 0-8 \text{bar}$	
Max. fitting torque	G1/8" = 15 Nm		$P = 50 \mu m / 0-12 bar$	
(with threaded inserts)	G1/4" = 20 Nm		OPTIONS	
(Will allocated moorte)	G.1,1 2011	•		
		_	S = Automatic drain	
			FLOW DIRECTION	
		0	= Standard	
Min. operational flow at 6,3 bar	40 NI/min.		(from left to right)	
		2	W = from right to left	
			BOWL OPTIONS	
			= Standard *	
			N = Nylon bowl	

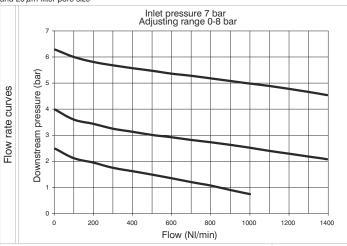
^{*} no additional letter required

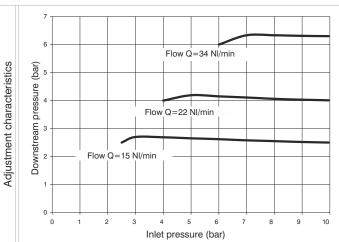
Series Airplus

Size 1



Example : GT171BRG : size 1 combined group comprising Filter-Regulator, Pressure switch and Lubricator Technopolymer threads, G1/4" connections 0 to 8 bar adjusting range and $20 \, \mu \text{m}$ filter pore size





Operational characteristics

Combined group comprising Filter-regulator with built in manometer, Pressure switch and Lubricator assembled with two (Y) type coupling kits for panel mountings. Integrated manometer 0-12 bar as standard (for 0-8 and 0-12 bar range) and 0-4 bar (for 0-2 and 0-4 range)

The pressure must be always regulating while increasing. For a more precise regulation and higher sensibility, the use of a regulator with a pressure range as close as possible to the regulated pressure is recommended.

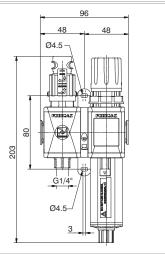
Technical characteristics

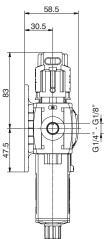
Connections	G 1/8" - G 1/4"	Ordering code
Max. inlet pressure	13 bar	Ordering dead
Working temperature	-5°C +50°C	G Ø 171 00 0 0 0
Weight with Technopolymer threads	gr. 484	VERSION
Weight with threaded inserts	gr. 504	N = Metal inserts
3	0-2 bar / 0-4 bar	T = Technopolymer thread
Pressure range		CONNECTIONS
	0-8 bar / 0-12 bar	A = G1/8" (only for "N" version)
Filter pore size	5 μm - 20 μm - 50 μm	B = G1/4"
Bowl capacity	18 cm ³	C = 1/4 NPT(only for "N" version)
		TYPE
Indicative oil drop rate	1 drop every	R = Built in gauge
	300/600 NI	C = G1/8" gauge connection
Oil type	FD22 - HG32	FILTER PORE SIZE
Bowl capacity	36 cm ³	ADJUSTING RANGE $C = 5 \mu m / 0.8 \text{ bar}$
Assembly positions	Vertical	D F / 0.10 hav
71	Vortical	$G = 20 \mu\text{m} / 0.8 \text{bar}$
Max. fitting torque	G1/4" = 9 Nm	$H = 20 \mu \text{m} / 0 - 12 \text{bar}$
(with Technopolymer threads)	G.1, 1 G.1	$N = 50 \mu \text{m} / 0.8 \text{bar}$
Max. fitting torque	G1/8" = 15 Nm	$P = 50 \mu \text{m} / 0-12 \text{bar}$
(with threaded inserts)	G1/4" = 20 Nm	OPTIONS
(with threaded insens)	G1/4 = 20 MII	Standard *
		S = Automatic drain
		FLOW DIRECTION
		= Standard
Min. operational flow at 6,3 bar	40 NI/min.	(from left to right)
•		W = from right to left
		BOWL OPTIONS
		= Standard *
		N = Nylon bowl



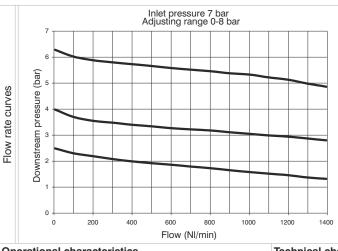
Service unit assembled (VL+EM) (VL+E) (VL+EW)

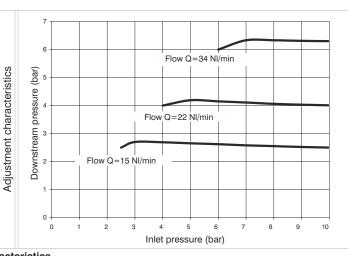






Example: GT171BVGG: size 1 combined group comprising Shut-off valve, Filter-regulator Technopolymer threads, G1/4" connections 0 to 8 bar adjusting range and 20 μ m filter pore size





Operational characteristics

Combined group comprising manual shut-off valve, Filter - regulator with built in manometer, assembled with one (Y) type coupling kit for panel mountings.

Integrated manometer 0-12 bar as standard

(for 0-8 and 0-12 bar range) and 0-4 bar (for 0-2 and 0-4 range)

Note

The pressure must be always regulating while increasing. For a more precise regulation and higher sensibility, the use of a regulator with a pressure range as close as possible to the regulated pressure is recommended.

ecillicai	Characteristics	

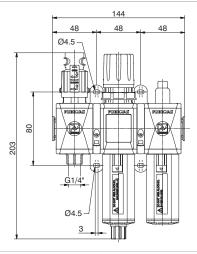
Connections	G 1/8" - G 1/4"		Ordering code		
Max. inlet pressure	13 bar				
Working temperature	-5°C +50°C		G Ø 171 @@© @ @		
Weight with Technopolymer threads	gr. 318		VERSION		
Weight with threaded inserts	gr. 338	V	N = Metal inserts		
Troignt that an educa moone	<u> </u>		T = Technopolymer thread		
Pressure range	0-2 bar / 0-4 bar		CONNECTIONS		
_	0-8 bar / 0-12 bar	•	A = G1/8" (only for "N" version)		
Filter pore size	5 μm - 20 μm - 50 μm		B = G1/4"		
Bowl capacity	18 cm ³		C = 1/4 NPT(only for "N" version)		
DOWI Capacity		-	TYPE		
Indicative oil drop rate	1 drop every	0	VG = Built in gauge		
Indicative on drop rate	300/600 NI		VU = G1/8" gauge connection		
Oil type	FD22 - HG32		FILTER PORE SIZE		
**		-	ADJUSTING RANGE		
Bowl capacity	36 cm ³		$C = 5 \mu m / 0-8 bar$		
Assembly positions	Vertical	8	$D = 5 \mu m / 0-12 bar$		
Max. fitting torque			$G = 20 \mu \text{m} / 0-8 \text{bar}$		
J 1	G1/4" = 9 Nm		$H = 20 \mu\text{m} / 0-12 \text{bar}$		
(with Technopolymer threads)		_	$N = 50 \mu m / 0-8 bar$		
Max. fitting torque	G1/8" = 15 Nm		$P = 50 \mu m / 0-12 bar$		
(with threaded inserts)	G1/4" = 20 Nm		OPTIONS		
(**************************************	0.1, 1 = 0.1111	•	= Standard *		
			S = Automatic drain		
			FLOW DIRECTION		
		0	= Standard		
Min. operational flow at 6,3 bar	40 NI/min.		(from left to right)		
			W = from right to left		
		_	BOWL OPTIONS		
		2	= Standard *		
			N = Nylon bowl		

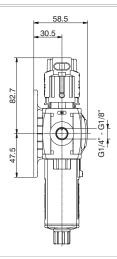
Series Airplus

Size 1

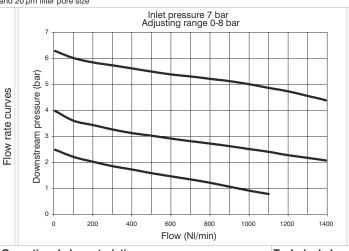
Service unit assembled (VL+EM+L) (VL+E+L) (VL+EW+L)

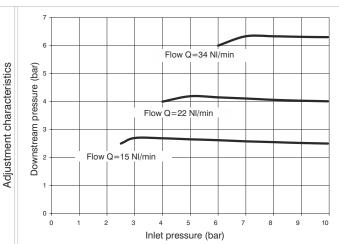






Example : GT171BVHG : size 1 combined group comprising Shut-off valve, Filter-regulator and Lubricator Technopolymer threads, G1/4" connections 0 to 8 bar adjusting range and 20 μ m filter pore size





Operational characteristics

Combined group comprising manual shut-off valve, Filter - regulator with built in manometer and Lubricator assembled with two(Y) type coupling kits for panel mountings. Integrated manometer 0-12 bar as standard

(for 0-8 and 0-12 bar range) and 0-4 bar (for 0-2 and 0-4 range)

Note

The pressure must be always regulating while increasing. For a more precise regulation and higher sensibility, the use of a regulator with a pressure range as close as possible to the regulated pressure is recommended.

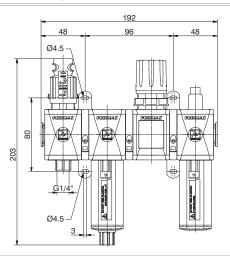
Technical characteristics

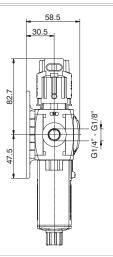
Ī	Connections	G 1/8" - G 1/4"		Ordering code
	Max. inlet pressure	13 bar		
	Working temperature	-5°C +50°C		G Ø 171 @@© @ @
	Weight with Technopolymer threads	ds gr. 446		VERSION
ŀ	Weight with threaded inserts	gr. 476	V	N = Metal inserts
+	g	0-2 bar / 0-4 bar		T = Technopolymer thread
-	Pressure range	, , , , , , , , , , , , , , , , , , , ,		CONNECTIONS
		0-8 bar / 0-12 bar	0	A = G1/8" (only for "N" version)
	Filter pore size	5 μm - 20 μm - 50 μm		B = G1/4"
ľ	Bowl capacity	18 cm ³		C = 1/4 NPT(only for "N" version)
ŀ		1 drap overv		TYPE
	Indicative oil drop rate	1 drop every	U	VH = Built in gauge
		300/600 NI	_	VJ = G1/8" gauge connection FILTER PORE SIZE
	Oil type	FD22 - HG32		ADJUSTING RANGE
ľ	Bowl capacity	36 cm ³		$C = 5 \mu \text{m} / 0.8 \text{ bar}$
ŀ	Assembly positions	Vertical	8	$D = 5 \mu m / 0-12 bar$
ŀ	Max. fitting torque		•	$G = 20 \mu m / 0-8 bar$
	0 1	G1/4" = 9 Nm		$H = 20 \mu m / 0-12 bar$
	(with Technopolymer threads)			$N = 50 \mu m / 0-8 bar$
	Max. fitting torque	G1/8" = 15 Nm		P = 50 μm / 0-12 bar
	(with threaded inserts)	G1/4" = 20 Nm		OPTIONS
ŀ	(•	= Standard *
				S = Automatic drain
				FLOW DIRECTION
			0	= Standard (from left to right)
	lin. operational flow at 6,3 bar	40 NI/min.		W = from right to left
			9	BOWL OPTIONS
				= Standard *
			9	N = Nylon bowl
				· · · · · · · · · · · · · · · · · · ·



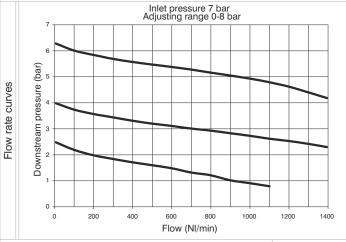
Service unit assembled (VL+F+RM+L) (VL+F+R+L) (VL+F+RW+L)

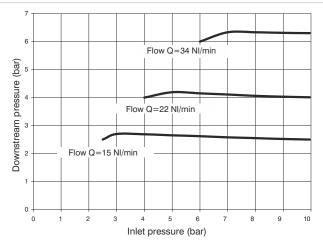






Example: GT171BVKG: size 1 combined group comprising Shut-off valve, Filter, Regulator and Lubricator Technopolymer threads, G1/4" connections 0 to 8 bar adjusting range and 20 μm filter pore size





Operational characteristics

Combined group comprising manual shut - off valve, Filter, Regulator with built in manometer and Lubricator, assembled with two (Y) type coupling kits for panel mounting and one (X) type coupling kit.

Integrated manometer 0-12 bar as standard

(for 0-8 and 0-12 bar range) and 0-4 bar (for 0-2 and 0-4 range)

Note

The pressure must be always regulating while increasing. For a more precise regulation and higher sensibility, the use of a regulator with a pressure range as close as possible to the regulated pressure is recommended.

Technical characteristics

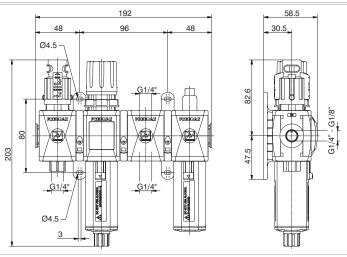
Adjustment characteristics

Connections	G 1/8" - G 1/4"	Ordering code
Max. inlet pressure	13 bar	
Working temperature	-5°C +50°C	G Ø 171 00 80 0 2
Weight with Technopolymer threads	gr. 518	VERSION
Weight with threaded inserts	gr. 558	N = Metal inserts
	0-2 bar / 0-4 bar	T = Technopolymer thread
Pressure range	0-8 bar / 0-12 bar	CONNECTIONS A = G1/8" (only for "N" version)
Filter pore size	5 μm - 20 μm - 50 μm	B = G1/4"
<u>'</u>		C = 1/4 NPT(only for "N" version)
Bowl capacity	18 cm ³	TYPE
Indicative oil drop rate	1 drop every	VK = Built in gauge
indicative on drop rate	300/600 NI	VT = G1/8" gauge connection
Oil type	FD22 - HG32	FILTER PORE SIZE
Bowl capacity	36 cm ³	ADJUSTING RANGE
' '		$C = 5 \mu m / 0.8 \text{ bar}$
Assembly positions	Vertical	S $D = 5 \mu m / 0.12 bar$ $G = 20 \mu m / 0.8 bar$
Max. fitting torque	04/48 0 14	$H = 20 \mu m / 0.12 bar$
(with Technopolymer threads)	G1/4" = 9 Nm	$N = 50 \mu\text{m} / 0.8 \text{bar}$
Max. fitting torque	G1/8" = 15 Nm	$P = 50 \mu \text{m} / 0.12 \text{bar}$
	7.7	OPTIONS
(with threaded inserts)	G1/4" = 20 Nm	Standard *
		S = Automatic drain
		FLOW DIRECTION
		= Standard
Min. operational flow at 6,3 bar	40 NI/min.	(from left to right)
		W = from right to left
		BOWL OPTIONS
		= Standard *
		N = Nylon bowl

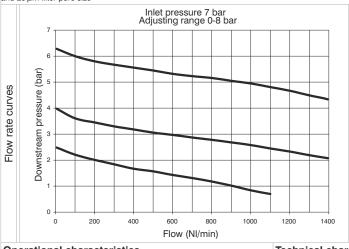


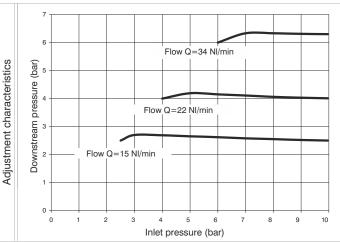
Service unit assembled (VL+EM+PA+L) (VL+E+PA+L) (VL+EW+PA+L)





Example: GT171BVNG: size 1 combined group comprising Shut-off valve, Filter-regulator, Air intake and Lubricator Technopolymer threads, G1/4" connections 0 to 8 bar adjusting range and 20 μ m filter pore size





Operational characteristics

Combined group comprising manual shut-off valve, Filter - regulator with built in manometer, Air intake and Lubricator, assembled with two (Y) type coupling kits for panel mounting and one (X) type coupling kit.

Integrated manometer 0-12 bar as standard

(for 0-8 and 0-12 bar range) and 0-4 bar (for 0-2 and 0-4 range)

Note

The pressure must be always regulating while increasing. For a more precise regulation and higher sensibility, the use of a regulator with a pressure range as close as possible to the regulated pressure is recommended.

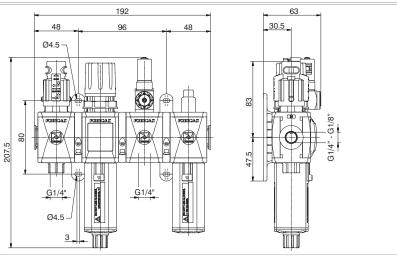
Technical characteristics

Connections	G 1/8" - G 1/4"		Ordering code		
Max. inlet pressure	13 bar		Ordering code		
Working temperature	-5°C +50°C	G Ø 171 00 00 0			
Weight with Technopolymer threads	gr. 510		VERSION		
Weight with threaded inserts	gr. 540	V	N = Metal inserts		
Trongine man a modado a moonto	0-2 bar / 0-4 bar		T = Technopolymer thread		
Pressure range			CONNECTIONS		
	0-8 bar / 0-12 bar	0	A = G1/8" (only for "N" version)		
Filter pore size	5 μm - 20 μm - 50 μm	•	B = G1/4"		
Bowl capacity	18 cm ³		C = 1/4 NPT(only for "N" version)		
вомі сарасіту		-	TYPE		
Indicative oil drop rate	1 drop every	0	VN = Built in gauge		
maioanvo on arop rato	300/600 NI		VP = G1/8" gauge connection		
Oil type	FD22 - HG32		FILTER PORE SIZE		
71			ADJUSTING RANGE		
Bowl capacity	36 cm³		$C = 5 \mu \text{m} / 0-8 \text{bar}$		
Assembly positions	Vertical	8	$D = 5 \mu m / 0-12 bar$		
Max. fitting torque			$G = 20 \mu \text{m} / 0-8 \text{bar}$		
5 1	G1/4" = 9 Nm		$H = 20 \mu \text{m} / 0-12 \text{bar}$		
(with Technopolymer threads)			$N = 50 \mu m / 0-8 bar$		
Max. fitting torque	G1/8" = 15 Nm		$P = 50 \mu m / 0-12 bar$		
(with threaded inserts)	G1/4" = 20 Nm		OPTIONS		
(**************************************	511, 1 25 11111	•	= Standard *		
			S = Automatic drain		
			FLOW DIRECTION		
		0	= Standard		
Min. operational flow at 6,3 bar	40 NI/min.		(from left to right)		
. ,	- '		W = from right to left		
			BOWL OPTIONS		
		2	= Standard *		
			N = Nylon bowl		



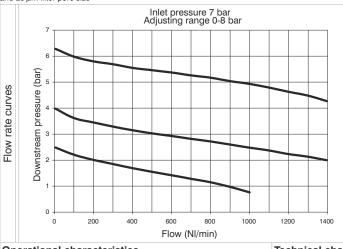
Service unit assembled (VL+EM+PP+L) (VL+E+PP+L) (VL+EW+PP+L)

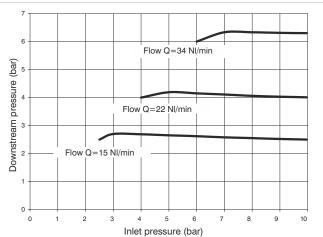




Example: GT171BVRG: size 1 combined group comprising Shut-off valve, Filter-regulator, Pressure switch and Lubricator Technopolymer threads, G1/4" connections adjusting range 0 to 8 bar and 20 μ m filter pore size

Adjustment characteristics





Operational characteristics

Combined group comprising manual shut-off valve, Filter regulator with built in manometer, Pressure switch and Lubricator, assembled with two (Y) type coupling kits for panel mounting and one (X) type coupling kit. Integrated manometer 0-12 bar as standard

(for 0-8 and 0-12 bar range) and 0-4 bar (for 0-2 and 0-4 range)

Note

The pressure must be always regulating while increasing. For a more precise regulation and higher sensibility, the use of a regulator with a pressure range as close as possible to the regulated pressure is recommended.

Technical characteristics

Connections	G 1/8" - G 1/4"	
Max. inlet pressure	13 bar -5°C +50°C s gr. 596 gr. 626 0-2 bar / 0-4 bar 0-8 bar / 0-12 bar 5 μm - 20 μm - 50 μm 18 cm³ 1 drop every 300/600 NI FD22 - HG32 36 cm³ Vertical G1/4" = 9 Nm G1/8" = 15 Nm G1/4" = 20 Nm 13 bar 1 drop every 30/600 NI FD22 - HG32 36 cm³ Vertical	
Working temperature	-5°C +50°C	
Weight with Technopolymer threads	gr. 596	
Weight with threaded inserts	gr. 626	V
Pressure range	0-2 bar / 0-4 bar	
rressure range	0-8 bar / 0-12 bar	A
Filter pore size	13 bar -5°C +50°C lymer threads gr. 596 nserts gr. 626 0-2 bar / 0-4 bar 0-8 bar / 0-12 bar 5 μm - 20 μm - 50 μm 18 cm³ 1 drop every 300/600 NI FD22 - HG32 36 cm³ Vertical G1/4" = 9 Nm G1/4" = 20 Nm	
Bowl capacity	18 cm ³	
Indicative oil drop rate	1 drop every	0
indicative oil drop rate	300/600 NI	
Oil type	FD22 - HG32	
Bowl capacity	36 cm³	
Assembly positions	Vertical	8
Max. fitting torque	G1/4" = 9 Nm	
(with Technopolymer threads)		
Max. fitting torque	G1/8" = 15 Nm	
(with threaded inserts)	G1/4" = 20 Nm	
Min anational flavort 0.0 has	40 NII/	•
Min. operational flow at 6,3 bar	40 NI/min.	

Ordering code

G**Ø**171**GG**S**002**

VERSION N = Metal inserts

		I = lechnopolymer thread
		CONNECTIONS
	•	A = G1/8" (only for "N" version)
		B = G1/4"
		C = 1/4 NPT(only for "N" version)
		TYPE
	•	VR = Built in gauge
		VC = G1/8" gauge connection
		FILTER PORE SIZE
		ADJUSTING RANGE
		$C = 5 \mu m / 0-8 bar$
	8	$D = 5 \mu m / 0-12 bar$
	9	$G = 20 \mu m / 0-8 bar$
		$H = 20 \mu m / 0-12 bar$
		$N = 50 \mu \text{m} / 0-8 \text{bar}$
		$P = 50 \mu m / 0-12 bar$
	•	OPTIONS
		= Standard *
		S = Automatic drain
	•	FLOW DIRECTION
		= Standard
	•	(from left to right)
		W = from right to left

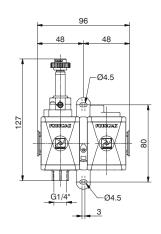
N = Nylon bowl * no additional letter required

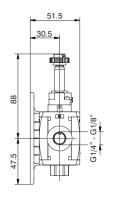
BOWL OPTIONS = Standard *



Service unit assembled (VE+AP)







Example: GT171BSB2: size 1 combined group comprising Electric shut-off valve, Progressive start-up valve without coil with M2 pilot Technopolymer threads, G1/4" connections

Operational characteristics	Technical characteristics			
Combined group comprising Electric shut-off valve and	Connections	G 1/8" - G 1/4"	Ordering code	
Progressive start-up valve assembled with a (Y) type	Max. inlet pressure	10 bar	GØ171@SØ	
coupling kit for panel mounting.	Min. inlet pressure	3 bar		
	Working temperature	-5°C +50°C	VERSION	
	Weight with Technopolymer threads	gr. 218	■ Metal inserts	
	Weight with threaded inserts	gr. 238	T = Technopolymer thre	
	Assembly positions	Indifferent	CONNECTIONS A = G1/8" (only for "N" version)	
	Max. fitting torque	in amorone	B = G1/4"	
	,	G1/4" = 9 Nm	C = 1/4 NPT(only for "N" vers	
	(with Technopolymer threads)		15 mm COIL VOLTAGE	
	Max. fitting torque	G1/8" = 15 Nm	A4 = 12 V DC	
	(with threaded inserts)	G1/4" = 20 Nm	A5 = 24 V DC	
		1200 NI/min.	A6 = 24 V AC (50-60 H	
			A7 = 110 V AC (50-60 I	
			A8 = 230 V AC (50-60 I	
			A9 = 24 V DC (1 Watt)	
			22 mm COIL VOLTAGE	
			B2 = Without coil	
	Flow at 6 bar with $\Delta p=1$		M2 mechanic B4 = 12 V DC	
			B5 = 24 V DC	
			B6 = 24 V AC (50-60 H	
			B7 = 110 V AC (50-60 I	
			B8 = 230 V AC (50-60 I	
			B9 = 24 V DC (2 Watt)	
				30 mm COIL VOLTAGE
				C5 = 24 V DC
			C6 = 24 V AC (50-60 H	
			C7 = 110 V AC (50-60 I	
			C8 = 230 V AC (50-60 l	
			C9 = 24 V DC (2 Watt)	