

# GENERAL TECHNICAL DATA

## bit SERIES F FOR WATER



Filtering and/or water pressure regulation units, characterized by the use of materials certified to specific standards on products for use in contact with foodstuff or drinking water.

Declarations of conformity and release test reports are available on request for those who need them to certify our product incorporated in their own systems.

The white colour surface finish of the body was chosen to enhance the highly hygienic properties of the product.

If the pressure regulator works with incompressible fluids (water) and there is a valve leak, the downstream pressure could rise up to reach the inlet pressure and then it re-stabilizes with water consumption.

If necessary, consider the possibility of installing a safety valve that relieves any excess pressure.

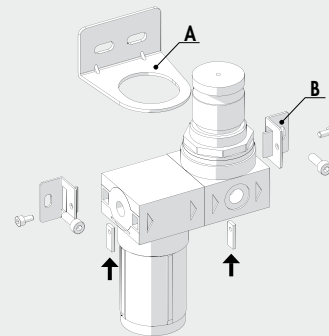


TECHNICAL DATA		BIT F 1/8"	BIT F 1/4"
Threaded port		1/8"	1/4"
Max. inlet pressure	MPa		1.3
	bar		13
	psi		188
Max temperature at 10 bar (1 MPa; 145 psi)	°C		50
	°F		122
Elements		Filter - Regulator - Filter regulator	
Mounting		Fixed to a wall, using fixing plate code 9170301 and M4 screws, or fixing bracket code 9200701 for the threaded regulator and filter-regulator bell.	
Fluid		Panel-mounted using the threaded bell of the regulator or filter-regulator (Ø hole 30-32 mm). Water, air and fluids compatible with the materials used	

### WALL MOUNTING

The wall fixing of a bit unit can be made through:

- Fixing bracket R/FR code 9200701 (A)
- Wall fixing plates code 9170301 (B)



### MATERIALS

#### COMPONENTS IN CONTACT WITH THE FLUID

Designation	Material	Certifications
Body	Hostaform® C13031	European Regulation (EU) 10/2011, KTW, W270, WRAS, ACS, NSF61
Threaded body inserts	CW510L low-lead brass	Approved for compliance with the UBA List, NSF/ANSI 372
Transparent bowl	TR90 Grilamid®	European Regulation (EU) 10/2011, KTW, W270, WRAS, ACS, NSF61
Rolling diaphragm	0477 NBR 70 telato	DM174/04, KTW, W270, WRAS, ACS, NSF61
Valve	AISI 303 stainless steel with vulcanized gasket 0477 NBR 70	Approved for compliance with the UBA List DM174/04, KTW, W270, WRAS, ACS, NSF61
Valve spring	AISI 302 stainless steel	Approved for compliance with the UBA List
Gaskets	0477 NBR 70	DM174/04, KTW, W270, WRAS, ACS, NSF61
Filter cartridge	GUR X192	European Regulation (EU) 10/2011,
Centrifuge	Hostaform® C13031	European Regulation (EU) 10/2011, KTW, W270, WRAS, ACS, NSF61
Baffle plug	Hostaform® C13031	European Regulation (EU) 10/2011, KTW, W270, WRAS, ACS, NSF61

#### COMPONENTS NOT IN CONTACT WITH THE FLUID

Designation	Material
Bell	Technopolymer
Fixing ring nut	Technopolymer
Nut	OT58 brass
Adjusting screw	OT58 brass
Adjusting spring	Steel

# bit SERIES F FILTER FOR WATER

Water filter characterized by the use of materials certified to specific standards on products for use in contact with foodstuff or drinking water. Declarations of conformity and release test reports are available on request for those who need them to certify our product incorporated in their own systems.

The white colour surface finish of the body was chosen to enhance the highly hygienic properties of the product.

The transparent bowl was designed to make it possible to check the state of the filter cartridge.

Unlike compressed air filters, the bowl has no drain holes.

The cartridge filtration degree is 20 µm.

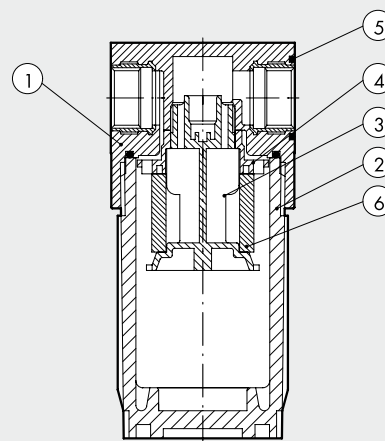


## TECHNICAL DATA

		FIL BIT F 1/8"	FIL BIT F 1/4"
Threaded port		1/8"	1/4"
Degree of filtration	µm	20 (white)	
Max. inlet pressure	MPa	1.3	
	bar	13	
	psi	188	
Flow rate at 6.3 bar (0.63 MPa ÷ 91 psi) ΔP 1 bar (0.1 MPa; 14 psi)	l/min	13	14.5
	cfm	0.46	0.51
Max temperature at 10 bar (1 MPa; 145 psi)	°C	50	
	°F	122	
Weight	g	40	
Internal volume	cm <sup>3</sup>	40	
Mounting position		In any position	
Fluid		Water, air and fluids compatible with the materials used	

## COMPONENTS

- ① Body with threaded inserts
- ② Transparent bowl
- ③ Baffle plug
- ④ Centrifuge
- ⑤ Gaskets
- ⑥ Filter cartridge

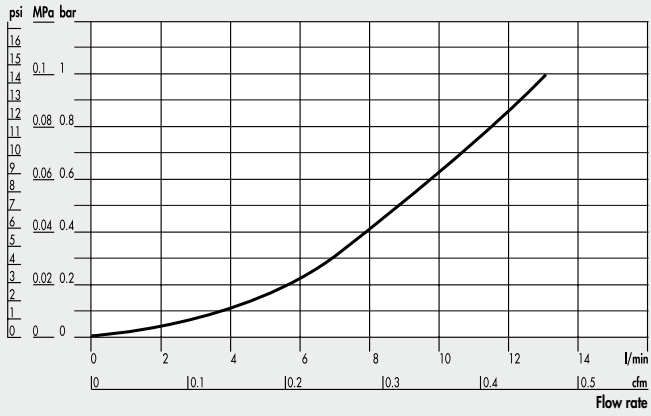


**N.B.:** For details on the materials used, please refer to the section "general technical data".

**FLOW CHARTS**

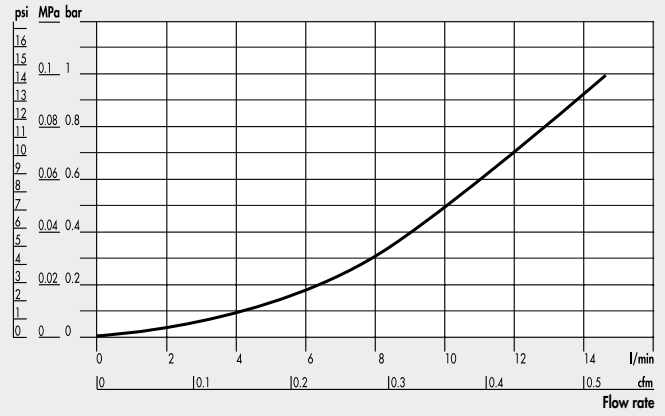
**FIL BIT F 1/8"**

$\Delta P = (P \text{ In-P Out})$

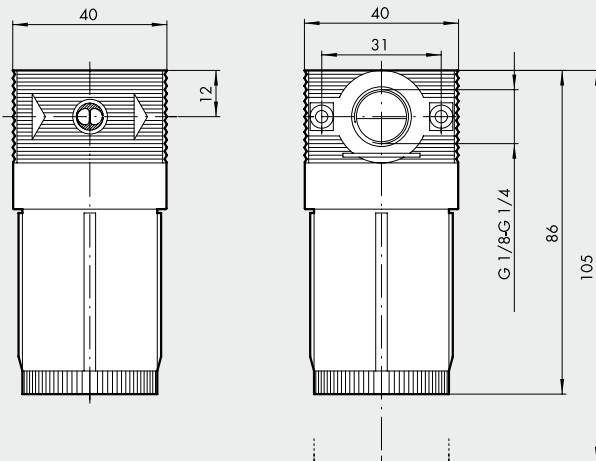


**FIL BIT F 1/4"**

$\Delta P = (P \text{ In-P Out})$



**DIMENSIONS**



**ORDERING CODES**

Code	Description
5101002F	FIL BIT F 1/8 20
5201002F	FIL BIT F 1/4 20

**NOTES**

# bit SERIES F REGULATOR FOR WATER

Water regulator characterized by the use of materials certified to specific standards on products for use in contact with foodstuff or drinking water. Declarations of conformity and release test reports are available on request for those who need them to certify our product incorporated in their own systems.

The white colour surface finish of the body was chosen to enhance the highly hygienic properties of the product.

Versions with brass threaded inlet and outlet ports and side sockets for pressure gauges and other uses with engineering plastic thread are available. There is also a version with inlet and outlet ports incorporated directly in the engineering plastic body, without requiring further threaded ports for pressure gauges.

If the pressure regulator works with incompressible fluids (water) and there is a valve leak, the downstream pressure could rise up to reach the inlet pressure and then it re-stabilizes with water consumption.

If necessary, consider the possibility of installing a safety valve that relieves any excess pressure.

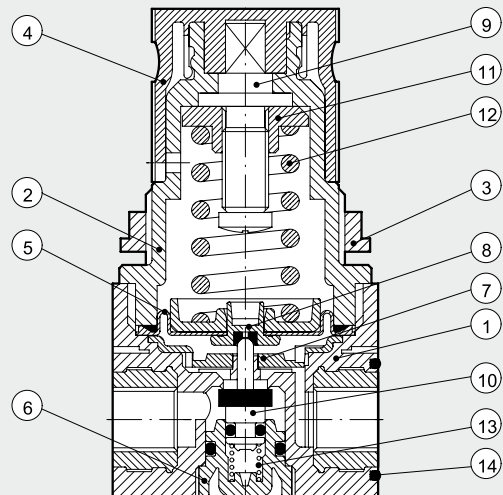


## TECHNICAL DATA

		REG BIT F 1/8"	REG BIT F 1/4"
Threaded port		1/8"	1/4"
Setting range	bar	0 to 2; 0 to 4; 0 to 8; 0 to 12	
Max. inlet pressure	MPa	1.3	
	bar	13	
	psi	188	
Flow rate at 6.3 bar (0.63 MPa ÷ 91 psi) ΔP 1 bar (0.1 MPa; 14 psi)	l/min	6.5	7
	scfm	0.23	0.25
Max temperature at 10 bar (1 MPa; 145 psi)	°C	50°	
	°F	122°	
Weight	g	80	
Versions		With 1/8" or 1/4" brass threaded ports and 1/8" pressure gauge port. With 1/4" engineering plastic threaded ports, without pressure gauge ports	
Mounting position		In any position	
Fluid		Water, air and fluids compatible with the materials used	
Notes		The pressure must always be set upwards. For increased sensitivity, use a pressure regulator with a rated pressure as close as possible to the required value.	

## COMPONENTS

- ① Body with incorporated threads or threaded inserts
- ② Bell
- ③ Fixing ring nut
- ④ Knob
- ⑤ Rolling diaphragm
- ⑥ Plug
- ⑦ Anti-vibration screen
- ⑧ Plate with gasket
- ⑨ Adjusting screws
- ⑩ Valve gasket
- ⑪ Nut
- ⑫ Adjusting spring
- ⑬ Valve spring
- ⑭ Gaskets



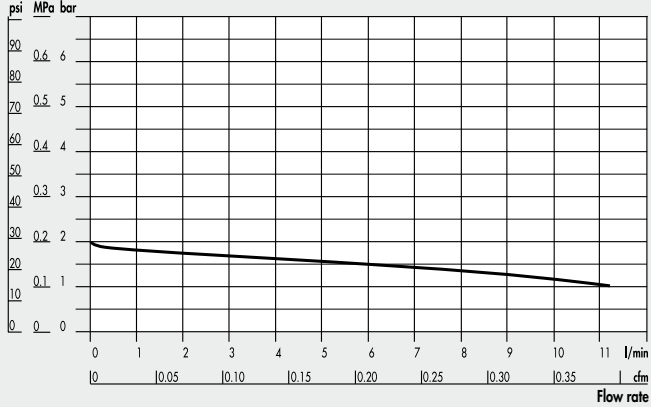
**N.B.:** For details on the materials used, please refer to the section "general technical data".

**FLOW CHARTS**

**REG BIT F 1/8" 0-2**

Pm = 0.9 MPa; 9 bar; 130 psi

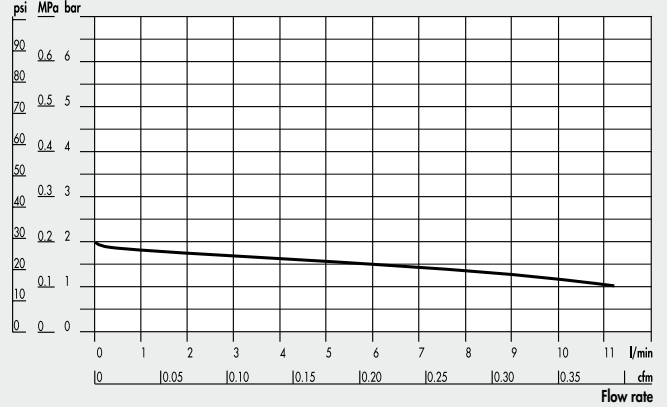
Regulated pressure



**REG BIT F 1/4" 0-2**

Pm = 0.9 MPa; 9 bar; 130 psi

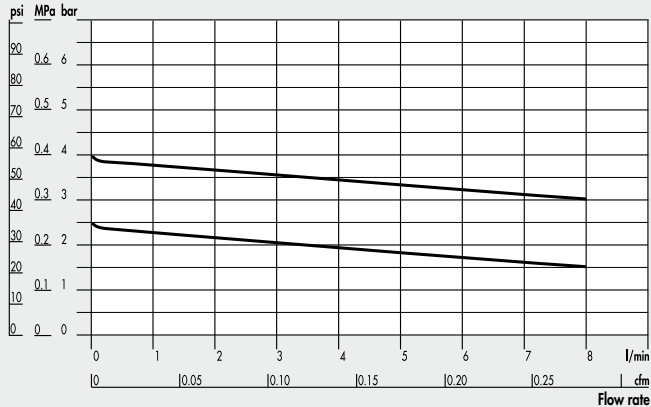
Regulated pressure



**REG BIT F 1/8" 0-4**

Pm = 0.9 MPa; 9 bar; 130 psi

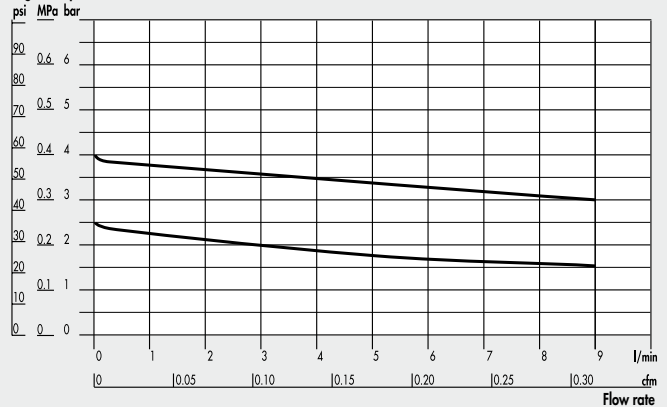
Regulated pressure



**REG BIT F 1/4" 0-4**

Pm = 0.9 MPa; 9 bar; 130 psi

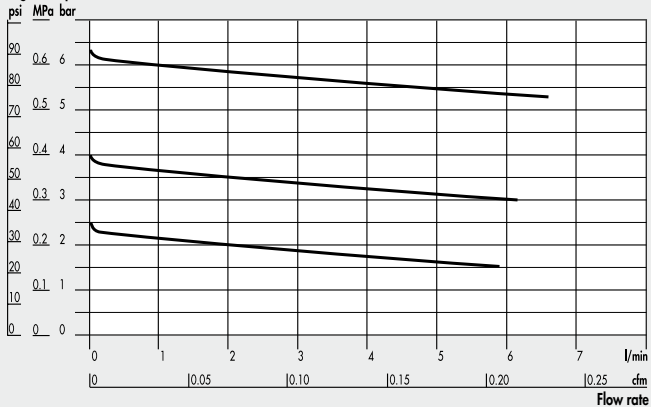
Regulated pressure



**REG BIT F 1/8" 0-8; 0-12**

Pm = 0.9 MPa; 9 bar; 130 psi

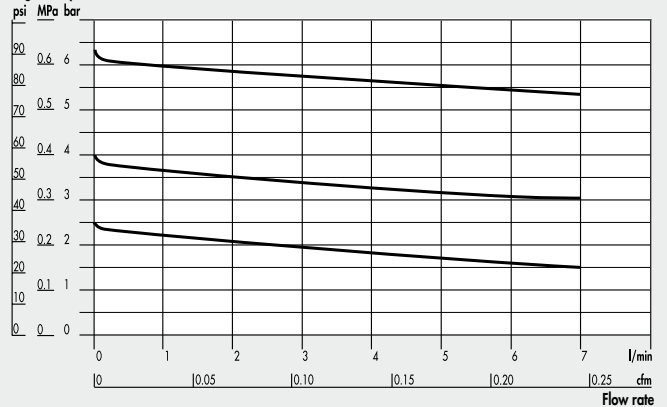
Regulated pressure



**REG BIT F 1/4" 0-8; 0-12**

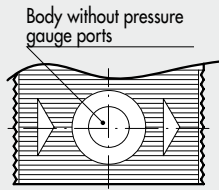
Pm = 0.9 MPa; 9 bar; 130 psi

Regulated pressure

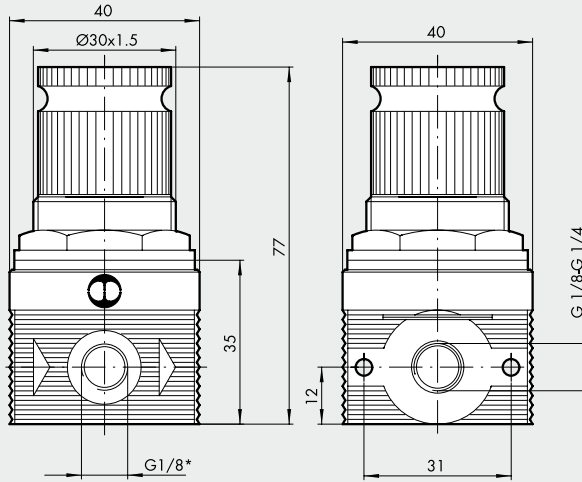


**DIMENSIONS**

DETAIL OF VERSION  
IN TECHNOPOLYMER



Body without pressure  
gauge ports



\* Pressure gauge port (not supplied in the technopolymer version)

**ORDERING CODES**

Code	Description
<b>REGULATOR WITH BRASS PORTS</b>	
5108001F	REG BIT F 1/8 02
5108002F	REG BIT F 1/8 04
5108003F	REG BIT F 1/8 08
5108004F	REG BIT F 1/8 012
5208001F	REG BIT F 1/4 02
5208002F	REG BIT F 1/4 04
5208003F	REG BIT F 1/4 08
5208004F	REG BIT F 1/4 012

<b>REGULATOR WITH TECHNOPOLYMER PORTS **</b>	
5228001F	REG BIT F 1/4 TP 02
5228002F	REG BIT F 1/4 TP 04
5228003F	REG BIT F 1/4 TP 08
5228004F	REG BIT F 1/4 TP 012

\*\* Without pressure gauge ports

**NOTES**

# bit SERIES F FILTER-REGULATOR FOR WATER



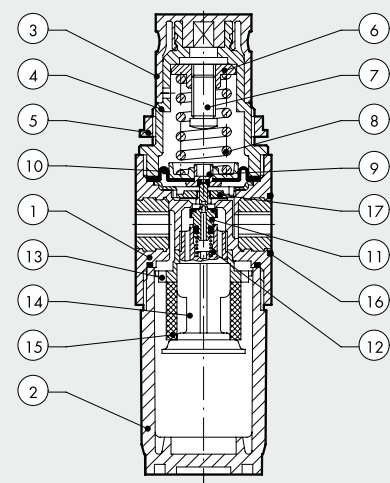
Filter-regulator characterized by the use of materials certified to specific standards on products for use in contact with foodstuff or drinking water. Declarations of conformity and release test reports are available on request for those who need them to certify our product incorporated in their own systems. The white colour surface finish of the body was chosen to enhance the highly hygienic properties of the product. The transparent bowl was designed to make it possible to check the state of the filter cartridge. The transparent bowl was designed to make it possible to check the state of the filter cartridge. Unlike compressed air filters, the bowl has no drain holes. The cartridge filtration degree is 20 µm. If the pressure regulator works with incompressible fluids (water) and there is a valve leak, the downstream pressure could rise up to reach the inlet pressure and then it re-stabilizes with water consumption. If necessary, consider the possibility of installing a safety valve that relieves any excess pressure.



TECHNICAL DATA	FR BIT F 1/8"		FR BIT F 1/4"	
	1/8"		1/4"	
Threaded port	1/8"		1/4"	
Setting range	0 to 2; 0 to 4; 0 to 8; 0 to 12			
Degree of filtration	20 (white)			
Max. inlet pressure	MPa			
	1.3			
	bar			
Flow rate at 6.3 bar (0.63 MPa ÷ 91 psi) ΔP 1 bar (0.1 MPa; 14 psi)	psi			
	13			
	188			
Max temperature at 10 bar (1 MPa; 145 psi)	l/min		6	
	cfm		0.21	
Weight	°C		50	
	°F		122	
Mounting position	g		110	
	In any position			
Fluid	Water, air and fluids compatible with the materials used			
Notes	The pressure must always be set upwards.			
	For increased sensitivity, use a pressure regulator with a rated pressure as close as possible to the required value.			

## COMPONENTS

- ① Body with threaded inserts
- ② Bowl
- ③ Knob
- ④ Bell
- ⑤ Fixing ring nut
- ⑥ Nut
- ⑦ Adjusting screws
- ⑧ Adjusting spring
- ⑨ Plate with gasket
- ⑩ Rolling diaphragm
- ⑪ Valve
- ⑫ Valve spring
- ⑬ Centrifuge
- ⑭ Baffle plug
- ⑮ Filter cartridge
- ⑯ Gaskets
- ⑰ Anti-vibration screen



**N.B.:** For details on the materials used, please refer to the section "general technical data".

UNITS  
bit SERIES F FILTER-REGULATOR FOR WATER

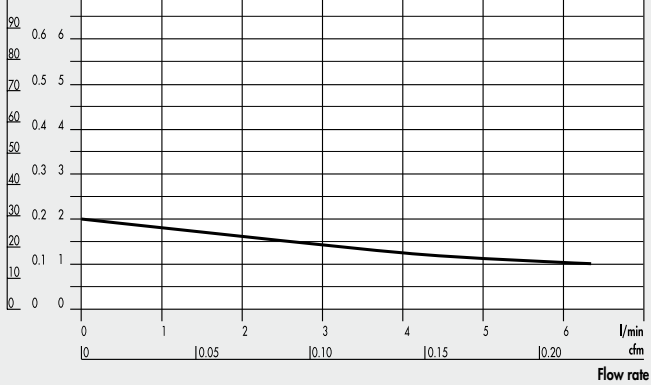
**FLOW CHARTS**

**FR BIT F 1/8" 0-2**

Pm = 0.9 MPa; 9 bar; 130 psi

Regulated pressure

psi MPa bar

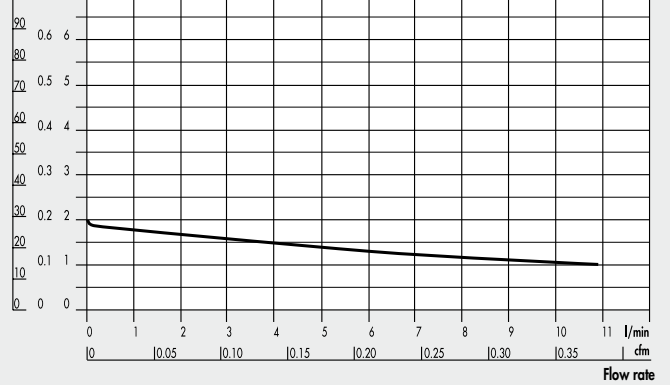


**FR BIT F 1/4" 0-2**

Pm = 0.9 MPa; 9 bar; 130 psi

Regulated pressure

psi MPa bar

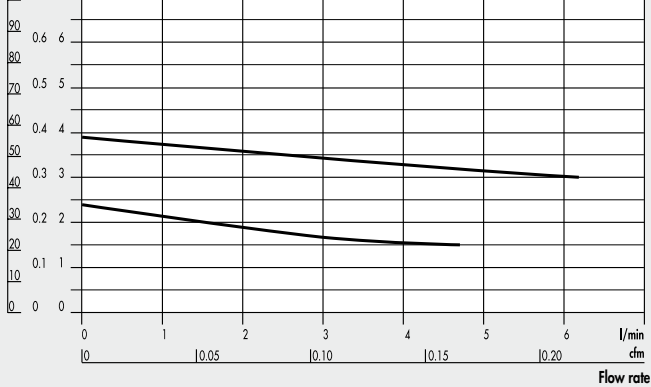


**FR BIT F 1/8" 0-4**

Pm = 0.9 MPa; 9 bar; 130 psi

Regulated pressure

psi MPa bar

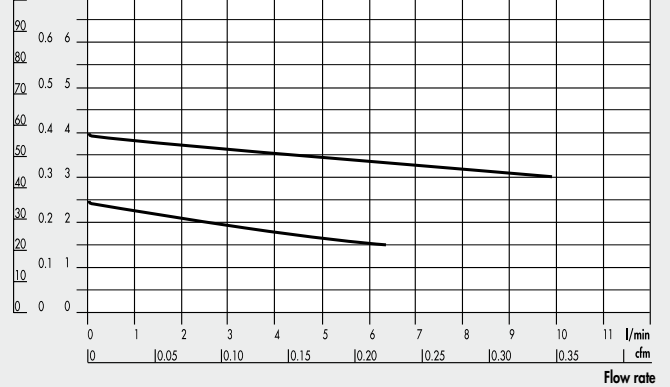


**FR BIT F 1/4" 0-4**

Pm = 0.9 MPa; 9 bar; 130 psi

Regulated pressure

psi MPa bar

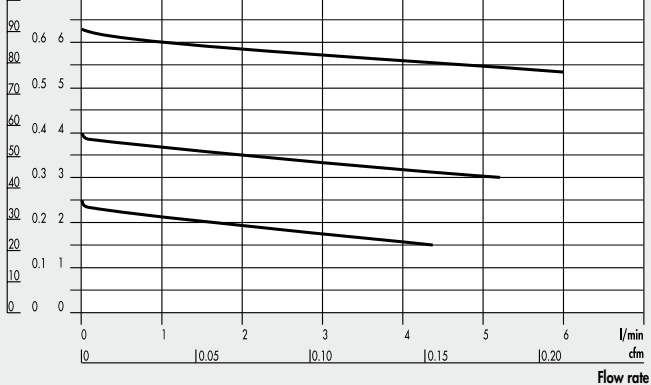


**FR BIT F 1/8" 0-8; 0-12**

Pm = 0.9 MPa; 9 bar; 130 psi

Regulated pressure

psi MPa bar

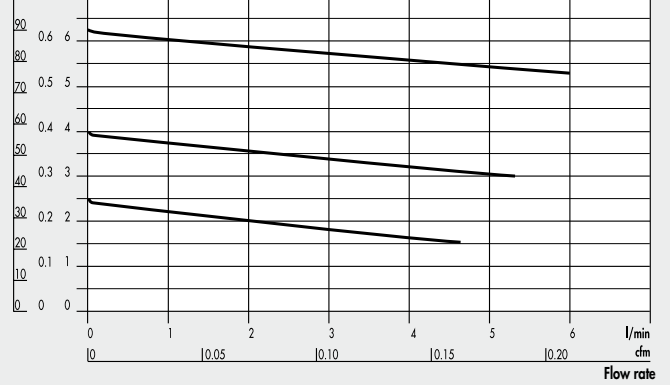


**FR BIT F 1/4" 0-8; 0-12**

Pm = 0.9 MPa; 9 bar; 130 psi

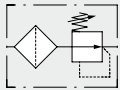
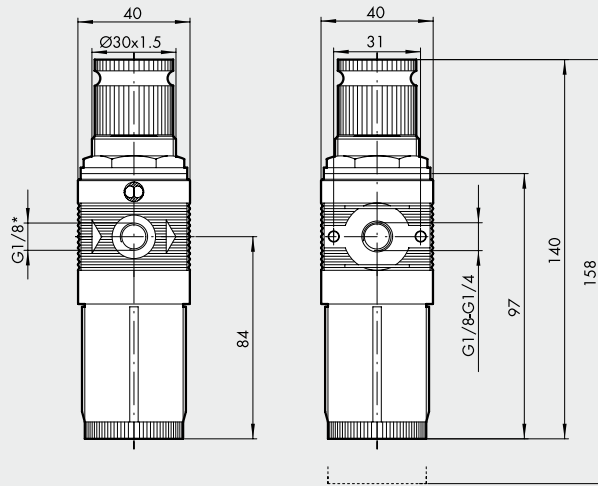
Regulated pressure

psi MPa bar





**DIMENSIONS**



\* Pressure gauge port

**ORDERING CODES**

Code	Description
5105102F	FR BIT F 1/8 20 02
5105105F	FR BIT F 1/8 20 04
5105108F	FR BIT F 1/8 20 08
5105111F	FR BIT F 1/8 20 012
5205102F	FR BIT F 1/4 20 02
5205105F	FR BIT F 1/4 20 04
5205108F	FR BIT F 1/4 20 08
5205111F	FR BIT F 1/4 20 012

**NOTES**