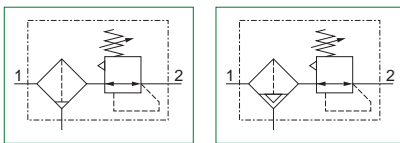


Filter regulators (E - EM - EW - EP - EZ)



- ▶ Filter - diaphragm pressure regulator with relieving
- ▶ Available in 4 sizes with flow rates up to 8000 NI/min and connections from 1/8" to 1"
- ▶ Low hysteresis rolling diaphragm and balanced spool
- ▶ Filtering element made of HDPE available in 3 different filtration grades (5µm, 20µm and 50µm)
- ▶ Bowl assembly via bayonet type quick coupling mechanism with safety button
- ▶ Semi-automatic or automatic drain
- ▶ Available in four pressure ranges up to 12 bar
- ▶ Fitted with panel mounting locking ring
- ▶ Available with pressure gauge or digital pressure switch integrated
- ▶ Atex certification (II 2GD or II 3GD)
- ▶ Inlet pressures up to 20 bar



**Note**

For installations where a more accurate and constant pressure is required, the unit should be installed as close as possible to the point of use. In order to ensure that any fluid discharged by the auto drain assembly is adequately drained away, it is recommended you use a 6mm fitting and tube.

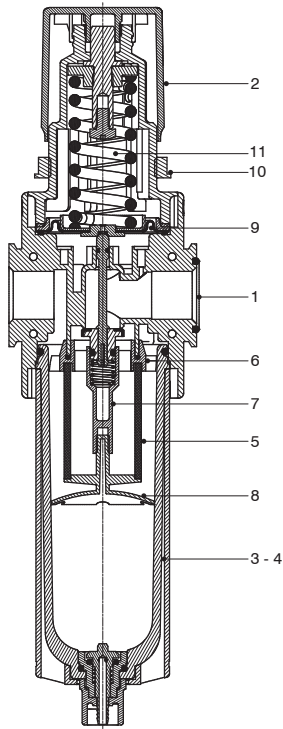
Technical characteristics		Size	Size 1	Size 2	Size 3	Size 4
<b>Body and connections type</b>			Technopolymer body, integrated technopolymer connections (T version) Technopolymer body, metal connections (N version)	Aluminium body, integrated aluminium connections (P - L versions)		/
<b>Protection and bowl type</b>			Technopolymer protection - PC bowl Technopolymer protection - PA bowl	Metal protection - PC bowl Metal protection - PA bowl Metal bowl (blind metal bowl)		
<b>IN / OUT connections</b>	<b>T version</b>		G1/4"	G3/8"	G1/2"	not available
	<b>N version</b>		G1/8" - G1/4" - 1/4" NPT	G3/8" - G1/4" - 3/8" NPT	G3/8" - G1/2" - 1/2" NPT	
	<b>P and L version</b>		not available	G3/8" - 1/4" NPT	G1/2" - 1/2" NPT	G1" - 1" NPT
<b>Assembly configuration</b>			Stand alone Panel mounting With fixing bracket /			Panel mounted
<b>Assembly positions</b>			Vertical ±5°			
<b>Filter pore size</b>			5 µm 20 µm 50 µm			
<b>Pressure range</b>			0-2 bar 0-4 bar 0-8 bar 0-12 bar (P2 max 10 Bar in case of digital pressure switch selection)			
<b>Bowl capacity</b>			18 cm <sup>3</sup>	34 cm <sup>3</sup>	68 cm <sup>3</sup>	90 cm <sup>3</sup>
<b>Condensation drain</b>			Semi-automatic Automatic			
<b>Regulation</b>			Manul push and lock with pressure Manual lockable with accessories			
<b>Pressure measurement</b>			G1/8" - 1/8" NPT pressure gauge connection port (only for versions with IN / OUT NPT connections) Integrated pressure gauge (optional) Digital pressure switch (optional)			
<b>Max. fittings torque IN / OUT connections</b>			G1/8" metal: 15Nm G1/4" metal: 20Nm G1/4" technopolymer: 9Nm	G1/4" metal: 20Nm G3/8" metal: 25Nm G3/8" technopolymer: 16Nm	G3/8" metal: 25Nm G1/2" metal: 30Nm G1/2" technopolymer: 22Nm	G1" metal: 35Nm
<b>Max. fitting torque pressure gauge connection port</b>			G1/8" technopolymer: 4Nm G1/8" metal: 15Nm			

Operational characteristics								
Size	Size 1	Size 2	Size 3	Size 4	Size 1	Size 2	Size 3	Size 4
Condensation drain	Semi-automatic				Automatic			
<b>Maximum working pressure</b>	13 bar	20 bar (only with body and metal bowl)			10 bar	16 bar (only with body and metal bowl)		
<b>Minimum working pressure</b>	0,5 bar				0,5 bar			
<b>Working temperature</b>	-5°C +50°C		-30°C +80°C (only for P version and metal bowl) -40°C +80°C (only for L version and metal bowl)		-5°C +50°C			
<b>Working temperature with digital pressure switch</b>	0°C +50°C							

Weights					
	Size	Size 1	Size 2	Size 3	Size 4
Fully technopolymer version		210 g	410 g	500 g	/
Technopolymer body version, aluminium bowl protection and technopolymer bowl		/	440 g	600 g	/
Technopolymer body version, aluminium bowl		/	460 g	660 g	/
Aluminium body version, technopolymer protection and bowl		/	480 g	710 g	1460 g
Aluminium body version, aluminium bowl protection and technopolymer bowl		/	510 g	730 g	1600 g
Aluminium body version and aluminium bowl		/	560 g	790 g	1620 g

**Materials**

Exploded sectioned

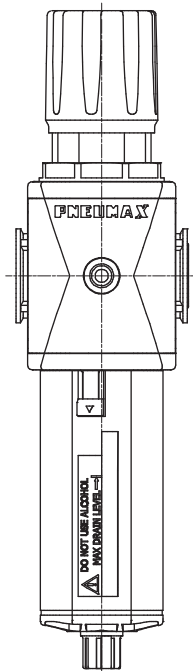


Filter regulator		
1	Body	Polyamide Die-cast aluminium
2	Adjusting knob	Polyamide
3	Technopolymer bowl	Polycarbonate Polyamide
4	Metal bowl Bowl protection	Die-cast aluminium Polyamide - Die-cast aluminium
5	Filtering element	Polyethylene
6	Baffle	Acetal resin
7	Spool support	Acetal resin
8	Filtering element support	Acetal resin
9	Diaphragm	NBR
10	Panel mounting locking ring	Polyamide
11	Adjusting spring	Steel

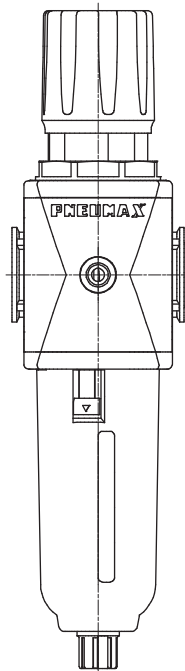
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AIR TREATMENT

**Design**

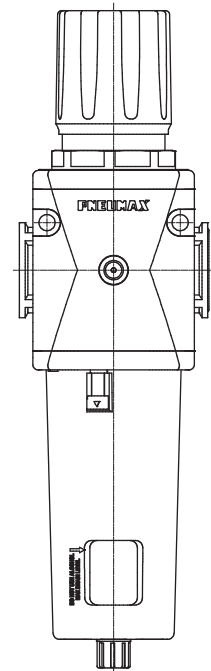
**Size 1 - Size 2 - Size 3**  
Technopolymer protection



**Size 1 - Size 2 - Size 3**  
Protection / Metal bowl



**Size 4**  
All versions





Order codes

	T	17	3B	E	M	B	D	S					T
<b>Version</b>													
N : Technopolymer body and metal inserts (not available for size 4)													
T : Technopolymer body and thread (not available for size 4)													
P : Aluminum body (not available for size 1)													
L : Aluminum body, low temperature (not available for size 1)													
<b>Size and connections</b>													
1A : Size 1 - G1/8" only for N version													
1B : Size 1 - G1/4" only for T - N versions													
1C : Size 1 - 1/4" NPT only for N version													
2A : Size 2 - G1/4" only for N version													
2B : Size 2 - G3/8" for all versions													
2C : Size 2 - 3/8" NPT only for N version - 1/4" NPT only for P - L versions													
3A : Size 3 - G3/8" only for N version													
3B : Size 3 - G1/2" for all versions													
3C : Size 3 - 1/2" NPT only for N - P - L versions													
4B : Size 4 - G1" only for P - L versions													
4C : Size 4 - 1" NPT only for P - L versions													
<b>Pressure measurement options</b>													
: G1/8" - 1/8" NPT thread													
M : Integrated pressure gauge													
W : Integrated pressure gauge Right - Left													
P : Digital pressure switch													
Z : Digital pressure switch Right - Left													
<b>Filter pore size</b>													
A : 5 µm													
B : 20 µm													
C : 50 µm													
<b>Pressure range</b>													
A : 0 - 2 bar													
B : 0 - 4 bar													
C : 0 - 8 bar													
D : 0 - 12 bar													
<b>Condensation drain</b>													
: Semi-automatic drain													
S : Automatic drain													
<b>Relieving options</b>													
: With relieving													
L : Without relieving													
<b>Knob options</b>													
: Non-lockable version													
K : Lockable version													
U : Lockable version with universal key													
<b>Digital pressure switch options</b>													
A : Cable 150 mm + M8 PNP													
B : Cable 150 mm + M8 NPN													
C : Cable 2 m PNP													
D : Cable 2 m NPN													
<b>Bowl options</b>													
: Technopolymer protection - PC bowl													
N : Technopolymer protection - PA bowl													
P : Metal protection - PC bowl (not available for size 1)													
R : Metal protection - PA bowl (not available for size 1)													
T : Metal bowl (not available for size 1)													

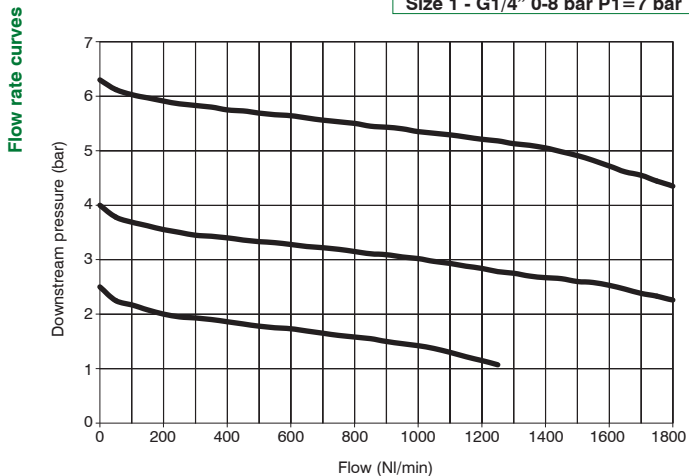
**Example : T173BEMBDST** : Size 3 filter regulator G1/2" 20 µm 0 - 12 bar, automatic drain and metal bowl



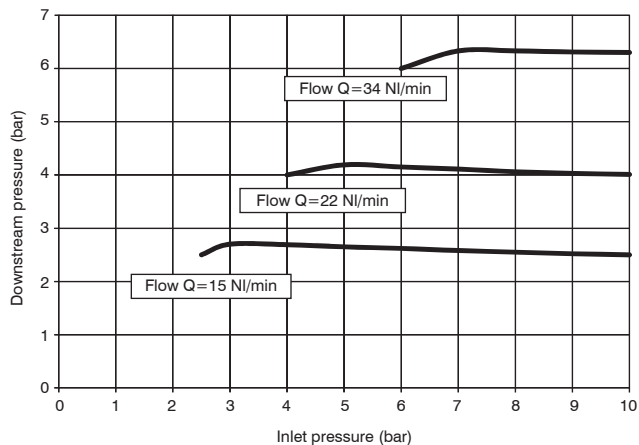
**Characteristic curves**

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AIR TREATMENT

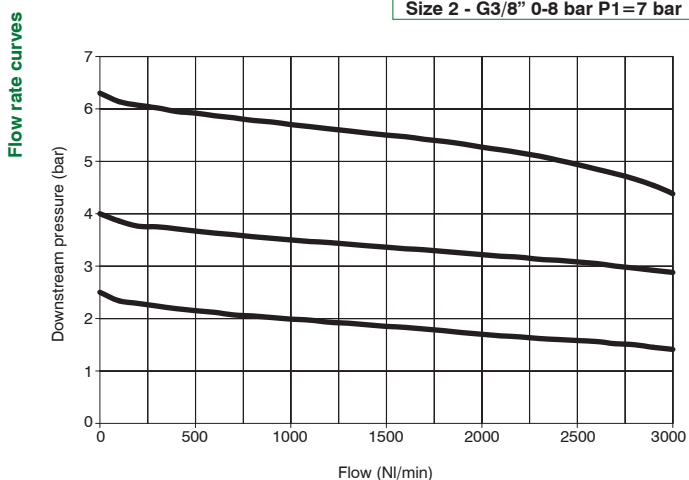
**Size 1 - G1/4" 0-8 bar P1=7 bar**



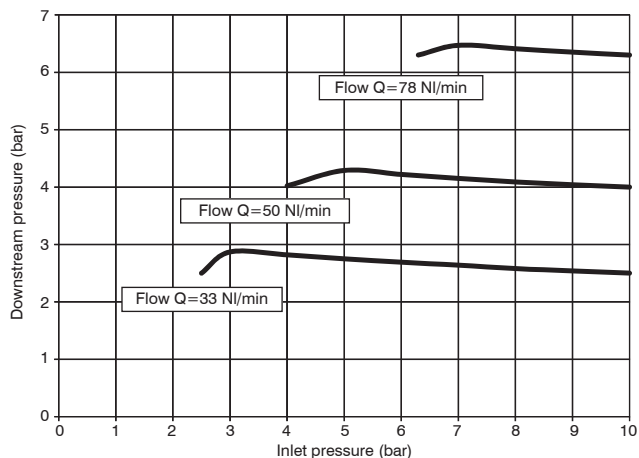
**Adjustment characteristic**



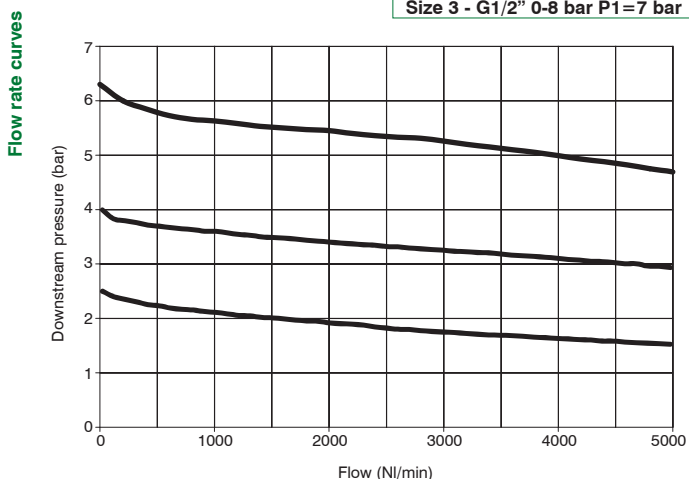
**Size 2 - G3/8" 0-8 bar P1=7 bar**



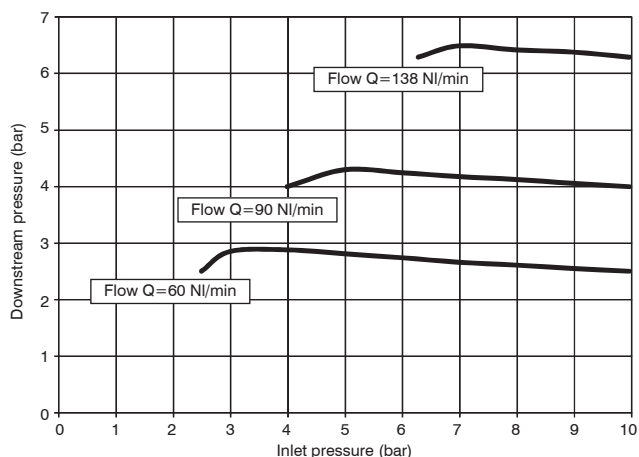
**Adjustment characteristic**



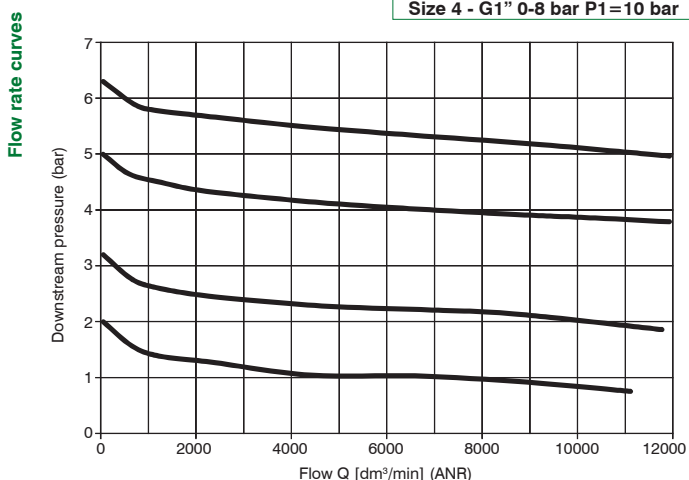
**Size 3 - G1/2" 0-8 bar P1=7 bar**



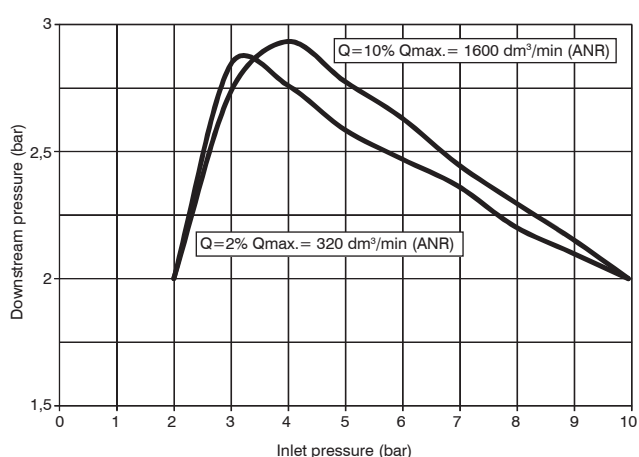
**Adjustment characteristic**



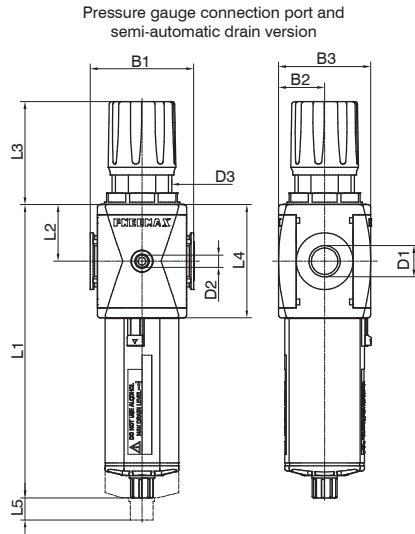
**Size 4 - G1" 0-8 bar P1=10 bar**



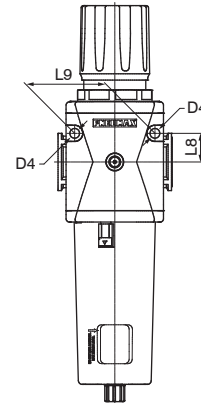
**Adjustment characteristic**



Dimensions



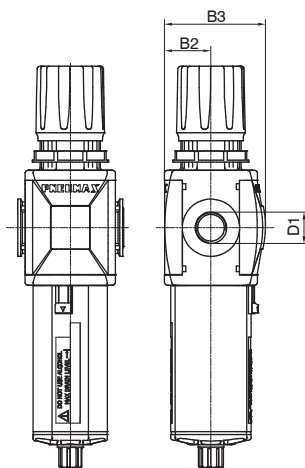
Fixing holes dimension detail (only for size 4)



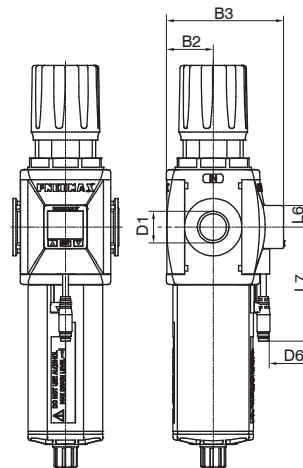
Model	B1	B2	B3	D1	D2	D3	D4	L1 - Bowl material		L2	L3	L4	L5	L8	L9
								Technopolymer	Metal						
#171..	48	21	42	G1/8" G1/4" 1/4" NPT	G1/8" 1/8" NPT	M30x1,5	/	148	/	27,5	54	55	40	/	/
#172..	62	28,5	57	G1/4" G3/8" 1/4" NPT 3/8" NPT	G1/8" 1/8" NPT	M42x1,5	/	169,1	171,5	34	71,8	68	50	/	/
#173..	73	32,5	65	G3/8" G1/2" 1/2" NPT	G1/8" 1/8" NPT	M42x1,5	/	207,2	209,5	40	72,8	80	65	/	/
#174..	99	44	88	G1" 1" NPT	G1/8" 1/8" NPT	M54x1,5	8,5	262	264,5	52,5	87,5	105	103	25	70

Variable dimensions

Integrated pressure gauge version



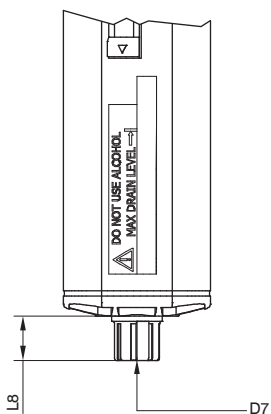
Integrated digital pressure switch version



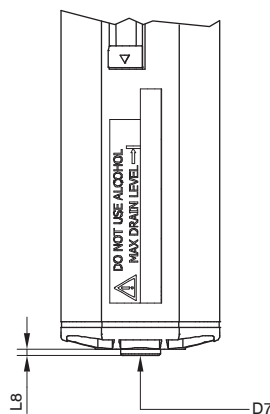
Model	B2	B3		D1	D6 - Type of digital pressure switch		L6	L7 - Type of digital pressure switch	
		With pressure gauge	With digital pressure switch		A - B	C - D		A - B	C - D
#171..	21	48,5	60	G1/8" G1/4" 1/4" NPT	M8 - 3 PIN	3 x 0,129 mm, Ø4 mm	15	150	2000
#172..	28,5	62,5	73,5	G1/4" G3/8" 1/4" NPT 3/8" NPT					
#173..	32,5	70,5	81,5	G3/8" G1/2" 1/2" NPT					
#174..	44	90,5	101,5	G1" 1" NPT					

Variable dimensions

Semi-automatic drain version



Automatic drain version



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AIR TREATMENT

Model	L8 - Bowl material		D7
	Technopolymer	Metal	
Semi-automatic drain	15,7	18	Plastic hose connector
Automatic drain	2	4,5	G1/8"