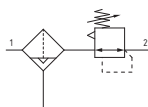
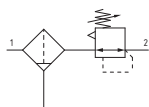


Filter regulators (E - EM - EW - EP - EZ)


- 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.



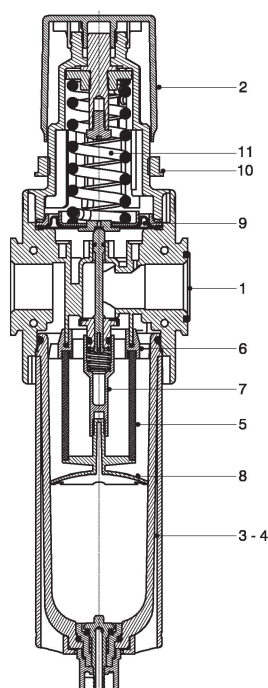
Technical characteristics					
Size		Size 1	Size 2	Size 3	Size 4
Body and connections type		Technopolymer body, integrated technopolymer connections (T version)			/
		Technopolymer body, metal connections (N version)			
		/	Aluminium body, integrated aluminium connections (P - L versions)		
Protection and bowl type		Technopolymer protection - PA bowl			
		Technopolymer protection - PC bowl			
		/	Metal protection - PA bowl		
			Metal protection - PC bowl		
			Metal bowl (blind metal bowl)		
IN / OUT connections	T version	G1/4"	G3/8"	G1/2"	not available
	N version	G1/8" - G1/4" - 1/4 NPT	G3/8" - G1/4" - 3/8 NPT	G3/8" - G1/2" - 1/2 NPT	
	P and L versions	not available	G3/8" - 1/4 NPT	G1/2" - 1/2 NPT	
Assembly configuration		Stand alone			
		Panel mounted			
		With fixing bracket			
Assembly positions		/			Panel mounted
Filter pore size		Vertical ±5°			
		5 µm			
		20 µm			
Bowl capacity		50 µm			
		18 cm³	34 cm³	68 cm³	90 cm³
Condensation drain		Semi-automatic			
		Automatic			
Pressure range		0-2 bar			
		0-4 bar			
		0-8 bar			
		0-12 bar (P2 max 10 Bar in case of digital pressure switch selection)			
Regulation		Manual push and lock with pressure			
		Manual lockable with accessories			
Pressure measurement		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)			
Max. fittings torque IN / OUT connections	G1" metal	/		/	35Nm
	G1/2" metal			30Nm	
	G1/4" metal	20Nm	/	/	
	G1/8" metal	15Nm			
	G3/8" metal	/	25Nm		
	G1/2" technopolymer	/	22Nm		
	G1/4" technopolymer	9Nm	/		
	G3/8" technopolymer	/	16Nm		
Max. fitting torque pressure gauge connection port		G1/8" metal: 15Nm			
		G1/8" technopolymer: 4Nm			

Operational characteristics								
Size	Size 1	Size 2	Size 3	Size 4	Size 1	Size 2	Size 3	Size 4
Condensation drain	Semi-automatic				Automatic			
Maximum working pressure	13 bar				10 bar			
	/	20 bar (only with body and metal bowl)			/	16 bar (only with body and metal bowl)		
Minimum working pressure	0,5 bar				0,5 bar			
Working temperature	-5 °C ... +50 °C				-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)						
Working temperature with digital pressure switch	0 °C ... +50 °C							

Size	Weights			
	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	/	480 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



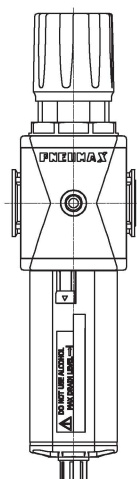
Filter regulator		
1	Body	Polyamide Die-cast aluminium
2	Adjusting knob	Polyamide
3	Technopolymer bowl	Polycarbonate Polyamide
4	Metal bowl	Die-cast aluminium
5	Bowl protection	Polyamide - Die-cast aluminium
6	Filtering element	Polyethylene
7	Baffle	Acetal resin
8	Spool support	Acetal resin
9	Filtering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

2

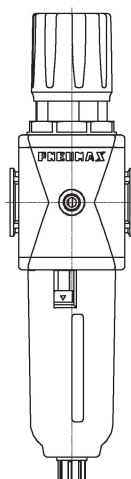
AIR TREATMENT

Design

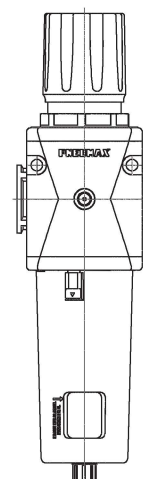
Size 1 - Size 2 - Size 3
Technopolymer protection



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



Size 4
All versions





Coding: **V17TEO1SRCO2O3O4O5**

2
AIR TREATMENT

V	VERSION
	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)
T	L = Aluminum body, low temperature (not available for size 1)
	SIZE AND CONNECTIONS
	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
O1	4B = Size 4 - G1" only for P - L versions
	4C = Size 4 - 1" NPT only for P - L versions
	PRESSURE MEASUREMENT OPTIONS
	= G1/8" - 1/8" NPT thread (Only for P - L versions with metal body and NPT thread)
	M = Integrated pressure gauge (not available on NPT, size 2 and size 3 aluminum body)
S	W = Integrated pressure gauge Right - Left (not available on NPT, size 2 and size 3 aluminum body)
	P = Digital pressure switch (not available on NPT, size 2 and size 3 aluminum body)
	Z = Digital pressure switch Right - Left (not available on NPT, size 2 and size 3 aluminum body)
	FILTER PORE SIZE
R	A = 5 µm
	B = 20 µm
	C = 50 µm
	PRESSURE RANGE
C	A = 0 - 2 bar
	B = 0 - 4 bar
	C = 0 - 8 bar
	D = 0 - 12 bar
O2	CONDENSATION DRAIN
	= Semi-automatic drain
O3	S = Automatic drain
	RELIEVING OPTIONS
O4	= With relieving
	L = Without relieving
	KNOB OPTIONS
O5	= Non-lockable version
	K = Lockable version
	U = Lockable version with universal key
O4	DIGITAL PRESSURE SWITCH OPTIONS
	A = Cable 150 mm + M8 PNP
	B = Cable 150 mm + M8 NPN
	C = Cable 2 m PNP
O5	D = Cable 2 m NPN
	BOWL OPTIONS
	= Technopolymer protection - PC bowl
	N = Technopolymer protection - PA bowl
	P = Metal protection - PC bowl (not available for size 1)
O5	R = Metal protection - PA bowl (not available for size 1)
	T = Metal bowl (not available for size 1)

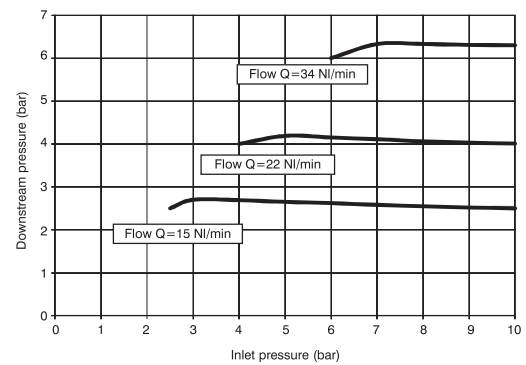
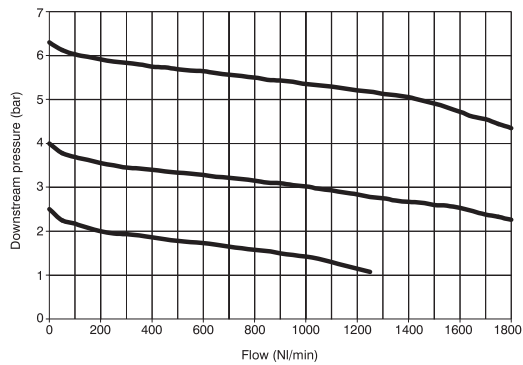
Example: T173BEMBDST: Size 3 filter regulator G1/2" 20 µm 0 - 12 bar, automatic drain and metal bowl

Characteristic curves

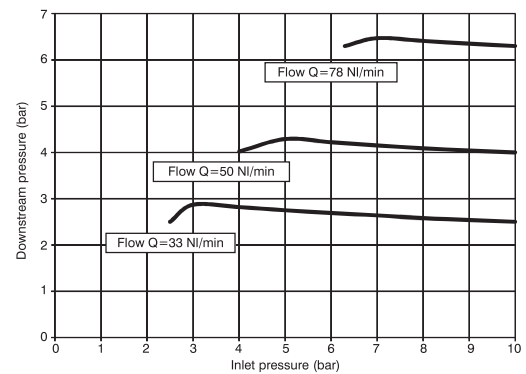
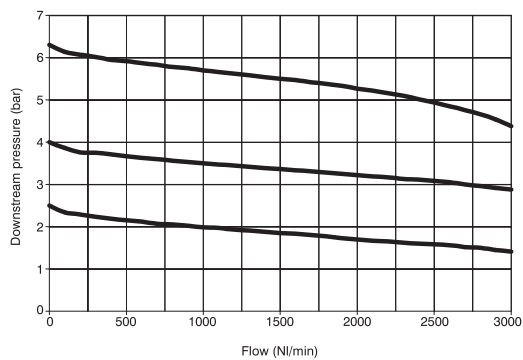
Flow rate curves

Adjustment characteristic

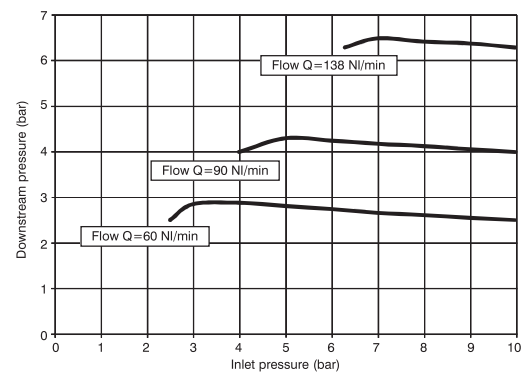
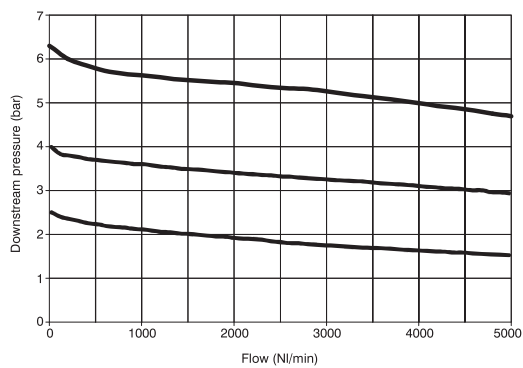
Size 1 - G1/4", 0-8 bar, P1=7 bar



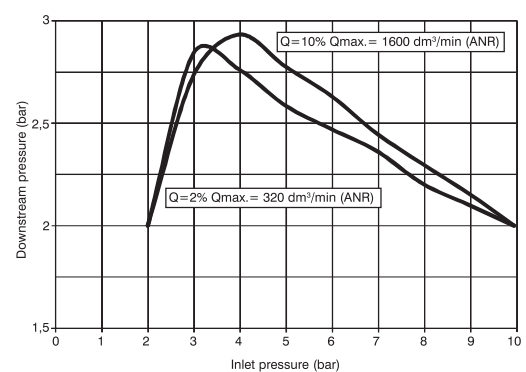
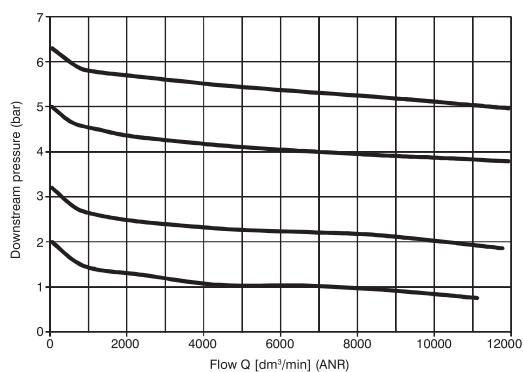
Size 2 - G3/8", 0-8 bar, P1=7 bar



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

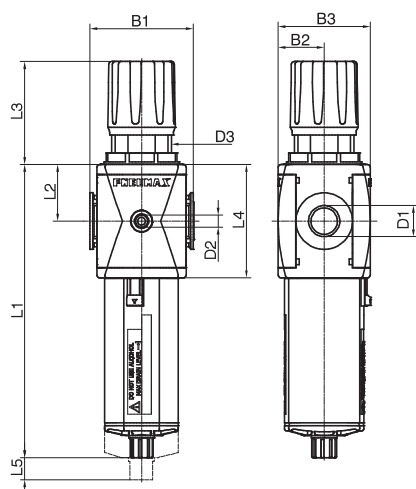


Size 4 - G1", 0-8 bar, P1=10 bar

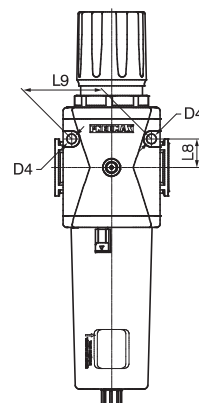


Dimensions

Pressure gauge connection port and
semi-automatic drain version



Fixing holes dimension detail
(only for size 4)

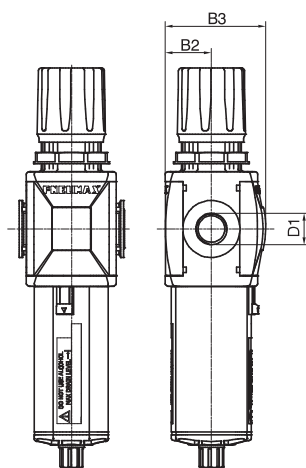


Model	B1	B2	B3	D1	D2	D3	D4	L1 - Bowl material		L2	L3	L4	L5	L8	L9
								Technopolymer	Metal						
#171...	48	21	42	G1/8" G1/4" 1/4" NPT	G1/8" 1/8" NPT*	M30x1,5	/	148	/	27,5	54	55	40	/	/
#172...	62	28,5	57	G1/4" G3/8" 1/4" NPT 3/8" NPT	G1/8" 1/8" NPT*	M42x1,5	/	169,1	171,5	34	71,8	68	50	/	/
#173...	73	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

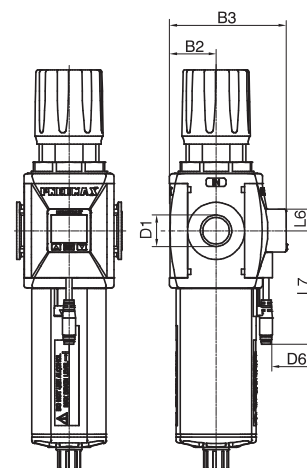
*(only for P - L versions and NPT connections)

Variable dimensions

Integrated pressure gauge version



Integrated digital pressure switch version

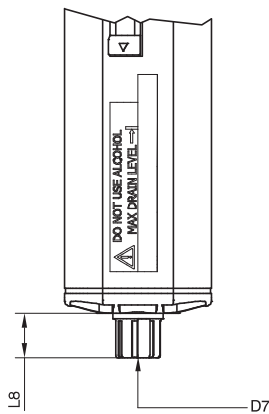


Model	B2	B3		D1	D6 - Type of digital pressure switch		L6	L7 - Type of digital pressure switch	
		With pressure gauge	With digital pressure switch		A - B	C - D		A - B	C - D
#171..	21	48,5	60	G1/8" G1/4" 1/4" NPT	M8 - 3 PIN	3 x 0,129 mm, Ø 4 mm	15	150	2000
#172..	28,5	62,5	73,5	G1/4" G3/8" 1/4" NPT 3/8"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

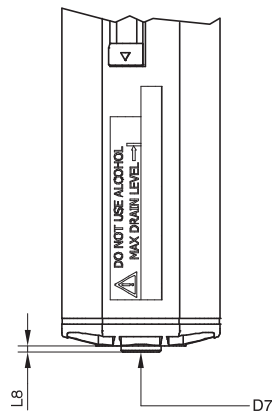


Variable dimensions

Semi-automatic drain version



Automatic drain version



Model	L8 - Bowl material		D7
	Technopolymer	Metal	
Semi-automatic drain	15,7	18	Plastic hose connector Ø6
Automatic drain	2	4,5	G1/8"

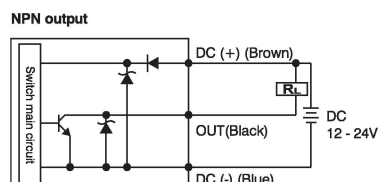
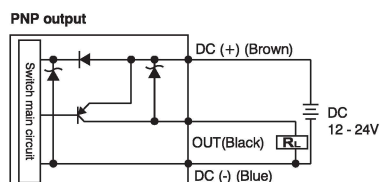
Digital pressure switch



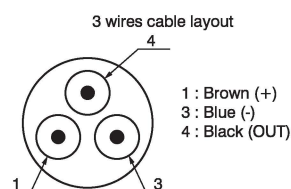
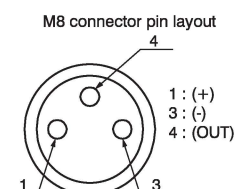
- ▶ 3 color digital LCD display, easy readout
- ▶ 4 units of measurement for pressure indication
- ▶ Optional PNP or NPN digital output
- ▶ N.O. and N.C. output contact selection directly on the digital pressure switch
- ▶ Available with M8-3PIN connector or 3 wire cable length 2 m

2

Output circuit wiring diagrams



Digital pressure switch layout



Cable ordering code

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

MCH2: cable 3 wires l=5m with M8 connector

MCH3: cable 3 wires l=10m with M8 connector

Connector



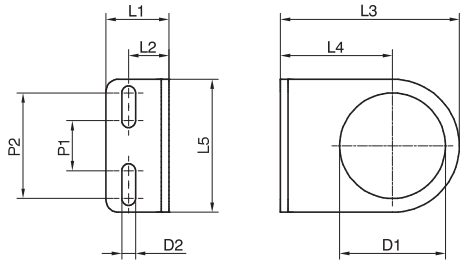
Technical characteristics	
Pressure range and display	0 ... 10 bar
Max. inlet pressure	15 bar
Fluid	40µm filtered and dehumidified air
Display unit of measurement	MPa - kgf/cm² - bar - psi
Supply voltage	12 ... 24 VDC
Current consumption	≤40mA (without load)
Digital output type	PNP - NPN
Type of contact output	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 options)
Display characteristics	Double 3 1/2 digit display Digital output status indication Three-pushbuttons touchpad
Indicator accuracy	±2% full scale value ± 1 digit
Protection degree	IP40
Working temperature	0°C ... 50°C
Cable section	3 x 0,129 mm², Ø4 mm, PVC



► Fixing bracket

Coding: **T**50

	SIZE
T	T171 = Size 1
	T172 = Size 2 - Size 3

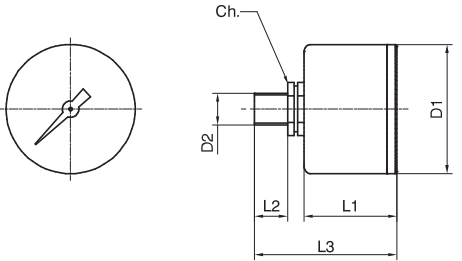


Model	D1	D2	L1	L2	L3	L4	L5	P1	P2
T17150	30	5.5	20	13	50	30	40	20	30
T17250	42	5.5	25	16	71	44.5	53	20	42

► Pressure gauge

Coding: 17070**V****S**

	VERSION
V	A = Dial Ø40
	B = Dial Ø50
	SCALE
S	A = 0 - 4 bar
	B = 0 - 6 bar
	C = 0 - 12 bar



Model	D1	D2	L1	L2	L3	Ch
17070A...	41	Gc - 1/8"	26	10	44	14
17070B...	49	Gc - 1/8"	27	10	45	14

2

AIR TREATMENT