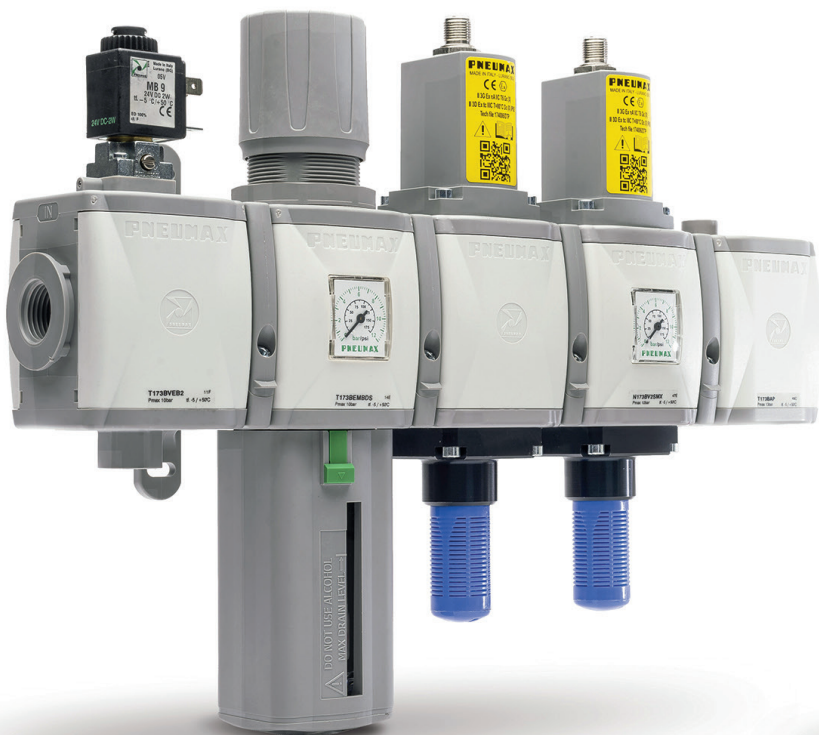




PNEUMAX



SERIES AIRPLUS AIR TREATMENT

SAFETY AND RELIABILITY



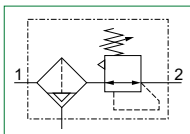
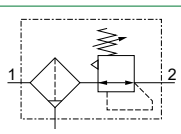
Product overview

PRODUCT	VERSION	SIZE				MAX. PRESSURE		MIN - MAX AMBIENT TEMPERATURE			ATEX
		Size 1	Size 2	Size 3	Size 4	Technopolymer body or bowl	Metal body and bowl	Technopolymer body or bowl	Metal body and bowl	Automatic drain	
FILTER (F)	T : Technopolymer body and thread	●	●	●		13 bar - 10 bar (automatic drain)	/ 20 bar - 16 bar (automatic drain)	-5 °C ... +50 °C	/ -30 °C ... +80 °C -40 °C ... +80 °C	-5 °C ... +50 °C	●
	N : Technopolymer body and metal inserts	●	●	●							
	P : Aluminum body		●	●	●						
	L : Aluminum body, low temperature		●	●	●						
COALESCING FILTER (D)	T : Technopolymer body and thread	●	●	●		13 bar - 10 bar (automatic drain)	/ 20 bar - 16 bar (automatic drain)	-5 °C ... +50 °C	/ -30 °C ... +80 °C -40 °C ... +80 °C	-5 °C ... +50 °C	●
	N : Technopolymer body and metal inserts	●	●	●							
	P : Aluminum body		●	●	●						
	L : Aluminum body, low temperature		●	●	●						
OIL REMOVAL FILTER (DBV) (DCV) (DAV)	T : Technopolymer body and thread			●		10 bar		-5 °C ... +50 °C	/ -30 °C ... +80 °C -40 °C ... +80 °C	-5 °C ... +50 °C	●
	N : Technopolymer body and metal inserts			●							
	P : Aluminum body			●	●						
	L : Aluminum body, low temperature										
CARBON FILTER (DD)	T : Technopolymer body and thread			●		13 bar	/ 20 bar	-5 °C ... +50 °C	/ -30 °C ... +80 °C -40 °C ... +80 °C	-5 °C ... +50 °C	●
	N : Technopolymer body and metal inserts			●							
	P : Aluminum body			●	●						
	L : Aluminum body, low temperature			●	●						
REGULATOR (R) (RM) (RW)	T : Technopolymer body and thread	●	●	●		13 bar	20 bar	-5 °C ... +50 °C	/ -30 °C ... +80 °C -40 °C ... +80 °C	/ -30 °C ... +80 °C -40 °C ... +80 °C	●
	N : Technopolymer body and metal inserts	●	●	●							
	P : Aluminum body		●	●	●						
	L : Aluminum body, low temperature		●	●	●						
PRESSURE REGULATORS FOR MANIFOLD (B - M)	T : Technopolymer body and thread	●				13 bar	/ 20 bar	-5 °C ... +50 °C	/ -30 °C ... +80 °C -40 °C ... +80 °C	/ -30 °C ... +80 °C -40 °C ... +80 °C	●
	N : Technopolymer body and metal inserts	●									
	P : Aluminum body										
	L : Aluminum body, low temperature										
PILOTTED PRESSURE REGULATORS (RP) (RMP) (RPP)	T : Technopolymer body and thread					/ 20 bar	/ 20 bar	/ 20 bar	/ 20 bar	/ 20 bar	●
	N : Technopolymer body and metal inserts										
	P : Aluminum body				●						
	L : Aluminum body, low temperature										
PILOTTED PRESSURE REGULATORS WITH DIGITAL PRESSURE SWITCH (RPP) (RPZ)	T : Technopolymer body and thread					/ 20 bar	/ 20 bar	/ 20 bar	/ 20 bar	/ 20 bar	●
	N : Technopolymer body and metal inserts										
	P : Aluminum body				●						
	L : Aluminum body, low temperature										
FILTER REGULATOR (E) (EM) (EW)	T : Technopolymer body and thread	●	●	●		13 bar - 10 bar (automatic drain)	20 bar - 16 bar (automatic drain)	-5 °C ... +50 °C	/ -30 °C ... +80 °C -40 °C ... +80 °C	-5 °C ... +50 °C	●
	N : Technopolymer body and metal inserts	●	●	●							
	P : Aluminum body		●	●	●						
	L : Aluminum body, low temperature		●	●	●						
REGULATOR WITH DIGITAL PRESSURE SWITCH (RP) (RZ)	T : Technopolymer body and thread	●	●	●		13 bar	20 bar	0 °C ... +50 °C	/ -30 °C ... +80 °C -40 °C ... +80 °C	/ -30 °C ... +80 °C -40 °C ... +80 °C	●
	N : Technopolymer body and metal inserts	●	●	●							
	P : Aluminum body		●	●	●						
	L : Aluminum body, low temperature		●	●	●						
FILTER REGULATOR WITH DIGITAL PRESSURE SWITCH (E) (EP) (EZ)	T : Technopolymer body and thread	●	●	●		13 bar - 10 bar (automatic drain)	20 bar - 16 bar (automatic drain)	0 °C ... +50 °C	/ -30 °C ... +80 °C -40 °C ... +80 °C	-5 °C ... +50 °C	●
	N : Technopolymer body and metal inserts	●	●	●							
	P : Aluminum body		●	●	●						
	L : Aluminum body, low temperature		●	●	●						
LUBRICATOR (L)	T : Technopolymer body and thread	●	●	●		13 bar		-5 °C ... +50 °C	/ -30 °C ... +80 °C -40 °C ... +80 °C	/ -30 °C ... +80 °C -40 °C ... +80 °C	●
	N : Technopolymer body and metal inserts	●	●	●							
	P : Aluminum body		●	●	●						
	L : Aluminum body, low temperature		●	●	●						

PRODUCT	VERSION	SIZE				MAX. PRESSURE		MIN - MAX AMBIENT TEMPERATURE			ATEX
		Size 1	Size 2	Size 3	Size 4	Technopolymer body or bowl	Metal body and bowl	Technopolymer body or bowl	Metal body and bowl	Automatic drain	
LUBRICATOR WITH ELECTRICAL MINIMUM LEVEL SENSOR (LA) (LC)	T : Technopolymer body and thread	●	●	●		13 bar		-5 °C ... +50 °C		/	
	N : Technopolymer body and metal inserts	●	●	●							
	P : Aluminum body		●	●	●						
	L : Aluminum body, low temperature					/		/			
SHUT OFF VALVE (VL)	T : Technopolymer body and thread	●	●	●		13 bar - 10 bar (for size 4)		-5 °C ... +50 °C	/	/	●
	N : Technopolymer body and metal inserts	●	●	●					-30 °C ... +80 °C		
	P : Aluminum body		●	●	●				-40 °C ... +80 °C		
	L : Aluminum body, low temperature		●	●	●						
PNEUMATIC SHUT OFF VALVE (VP)	T : Technopolymer body and thread	●	●	●		13 bar	20 bar	-5 °C ... +50 °C	/	/	●
	N : Technopolymer body and metal inserts	●	●	●					-30 °C ... +80 °C		
	P : Aluminum body		●	●	●				-40 °C ... +80 °C		
	L : Aluminum body, low temperature		●	●	●						
ELECTRIC SHUT OFF VALVE (VE)	T : Technopolymer body and thread	●	●	●		10 bar		-5 °C ... +50 °C		/	●
	N : Technopolymer body and metal inserts	●	●	●							
	P : Aluminum body		●	●	●						
	L : Aluminum body, low temperature					/		/			
PROGRESSIVE START-UP VALVE (AP)	T : Technopolymer body and thread	●	●	●		13 bar - 10 bar (for size 4)		-5 °C ... +50 °C		/	●
	N : Technopolymer body and metal inserts	●	●	●							
	P : Aluminum body		●	●	●						
	L : Aluminum body, low temperature		●	●	●						
AIR INTAKE (PA)	T : Technopolymer body and thread	●	●	●		13 bar	20 bar	-5 °C ... +50 °C	/	/	●
	N : Technopolymer body and metal inserts	●	●	●					-30 °C ... +80 °C		
	P : Aluminum body		●	●	●						
	L : Aluminum body, low temperature					/		/			
PRESSURE SWITCH (PP)	T : Technopolymer body and thread	●	●	●		13 bar	20 bar	-5 °C ... +50 °C		/	
	N : Technopolymer body and metal inserts	●	●	●							
	P : Aluminum body		●	●	●						
	L : Aluminum body, low temperature					/		/			
AIR INTAKE WITH INTEGRATED PRESSURE GAUGE (PM-PW)	T : Technopolymer body and thread	●	●	●		13 bar		-5 °C ... +50 °C	/	/	●
	N : Technopolymer body and metal inserts	●	●	●					-30 °C ... +80 °C		
	P : Aluminum body		●	●	●						
	L : Aluminum body, low temperature					/		/			
AIR INTAKE WITH INTEGRATED DIGITAL PRESSURE SWITCH (PP-PZ)	T : Technopolymer body and thread	●	●	●		13 bar		0 °C ... +50 °C		/	
	N : Technopolymer body and metal inserts	●	●	●							
	P : Aluminum body		●	●	●						
	L : Aluminum body, low temperature					/		/			

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 (5 µm, 20 µm and 50 µm)
- ▶ 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

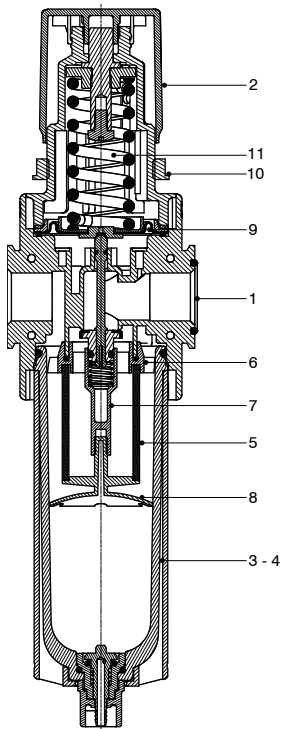
For installations where a more accurate and constant pressure is required, the unit should be installed as close as possible to the point of use. In order to ensure that any fluid discharged by the auto drain assembly is adequately drained away, it is recommended you use a 6 mm fitting and tube.

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 - PC bowl Technopolymer protection - PA bowl			
		/	Metal protection - PC bowl Metal protection - PA 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 version	non disponibile	G3/8" - 1/4" NPT	G1/2" - 1/2" NPT	G1" - 1" NPT
Assembly configuration		Stand alone Panel mounting With fixing bracket			Panel mounted
		/			
Assembly positions		Vertical ±5°			
Filter pore size		5 µm 20 µm 50 µm			
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)			
Bowl capacity		18 cm³	34 cm³	68 cm³	90 cm³
Condensation drain		Semi-automatic Automatic			
Regulation		Manul 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		G1/8" metal: 15 Nm G1/4" metal: 20 Nm G1/4" technopolymer: 9 Nm	G1/4" metal: 20 Nm G3/8" metal: 25 Nm G3/8" technopolymer: 16 Nm	G3/8" metal: 25 Nm G1/2" metal: 30 Nm G1/2" technopolymer: 22 Nm	G1" metal: 35 Nm
Max. fitting torque pressure gauge connection port		G1/8" technopolymer: 4 Nm G1/8" metal: 15 Nm			

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							

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

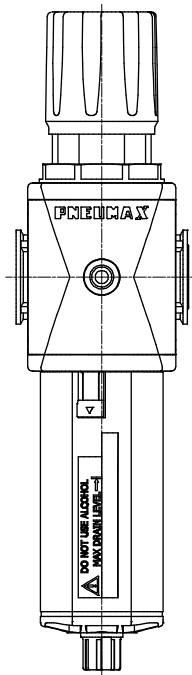
Materials
Exploded sectioned



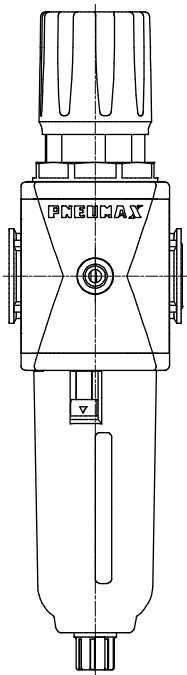
Filter regulator		
1	Body	Polyamide Die-cast aluminium
2	Adjusting knob	Polyamide
3	Technopolymer bowl	Polycarbonate Polyamide
4	Metal bowl Bowl protection	Die-cast aluminium Polyamide - Die-cast aluminium
5	Filtering element	Polyethylene
6	Baffle	Acetal resin
7	Spool support	Acetal resin
8	Filtering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

Design

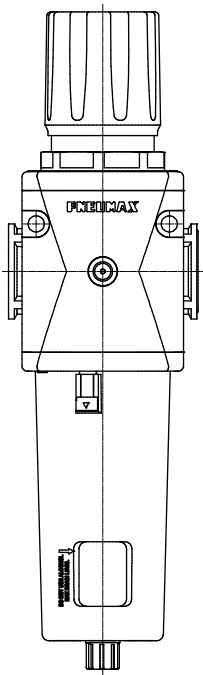
Size 1 - Size 2 - Size 3
Technopolymer protection



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



Size 4
All versions





Order codes

AIR TREATMENT

T 17 3B E M B D S [] [] [] T

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)
- 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
- 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
- M : Integrated pressure gauge
- W : Integrated pressure gauge Right - Left
- P : Digital pressure switch
- Z : Digital pressure switch Right - Left

Filter pore size

- A : 5 μ m
- B : 20 μ m
- C : 50 μ m

Pressure range

- A : 0 - 2 bar
- B : 0 - 4 bar
- C : 0 - 8 bar
- D : 0 - 12 bar

Condensation drain

- : Semi-automatic drain
- S : Automatic drain

Relieving options

- : With relieving
- L : Without relieving

Knob options

- : Non-lockable version
- K : Lockable version
- U : Lockable version with universal key

Digital pressure switch options

- A : Cable 150 mm + M8 PNP
- B : Cable 150 mm + M8 NPN
- C : Cable 2 m PNP
- D : Cable 2 m NPN

Bowl options

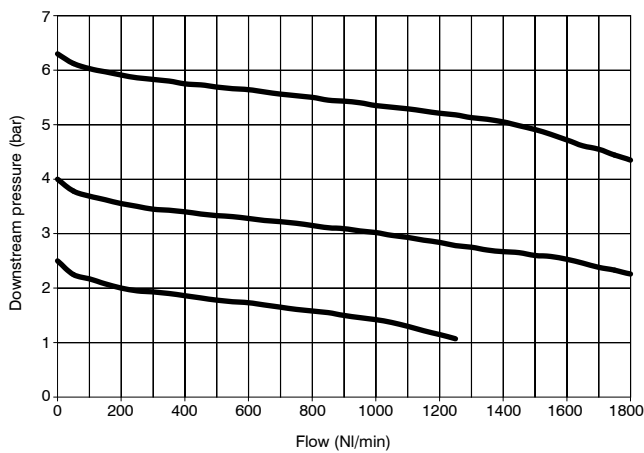
- : Technopolymer protection - PC bowl
- N : Technopolymer protection - PA bowl
- P : Metal protection - PC bowl (not available for size 1)
- R : Metal protection - PA bowl (not available for size 1)
- T : Metal bowl (not available for size 1)

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

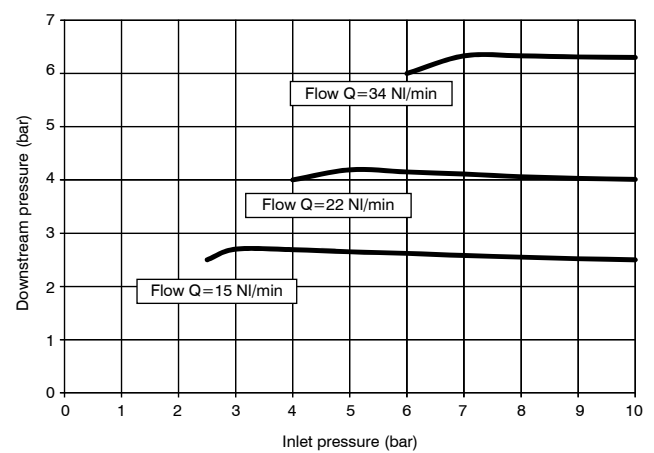
Characteristic curves

Flow rate curves

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

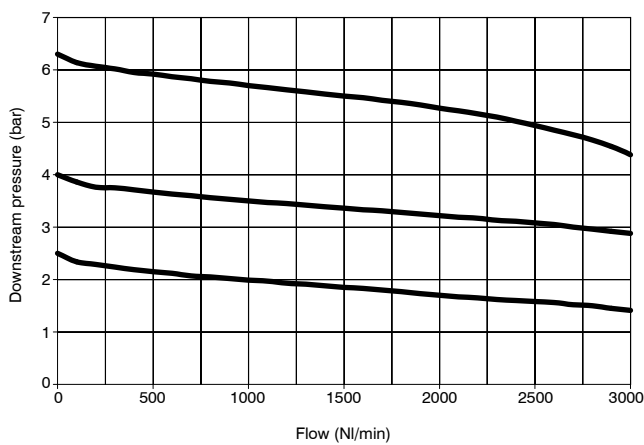


Adjustment characteristic

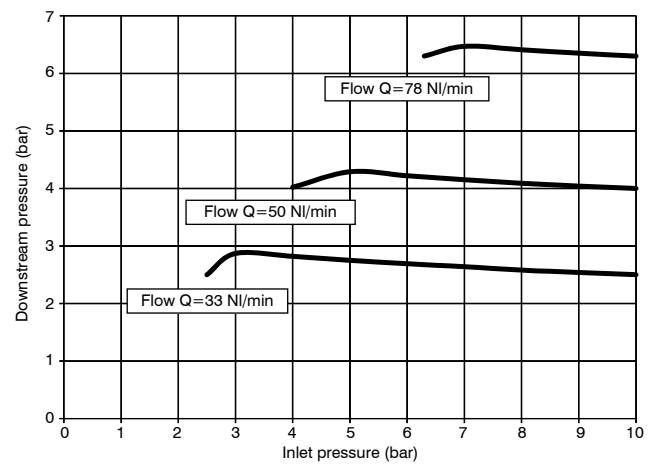


Flow rate curves

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

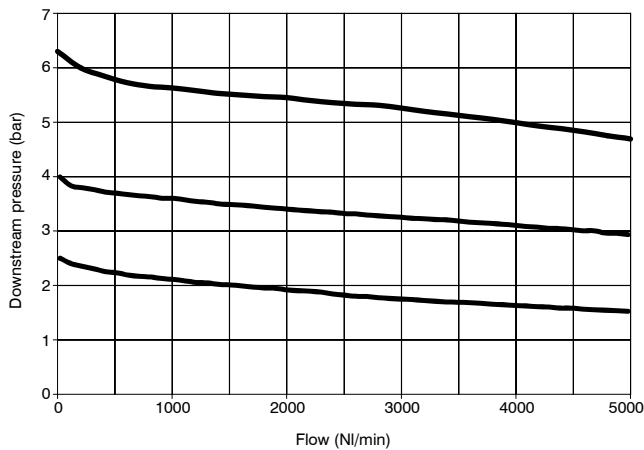


Adjustment characteristic

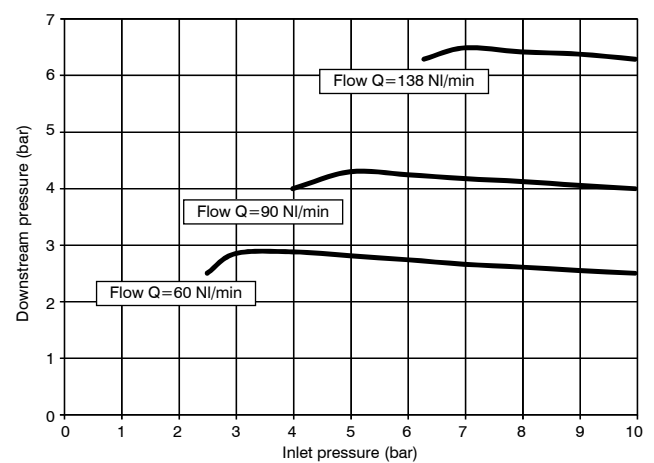


Flow rate curves

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

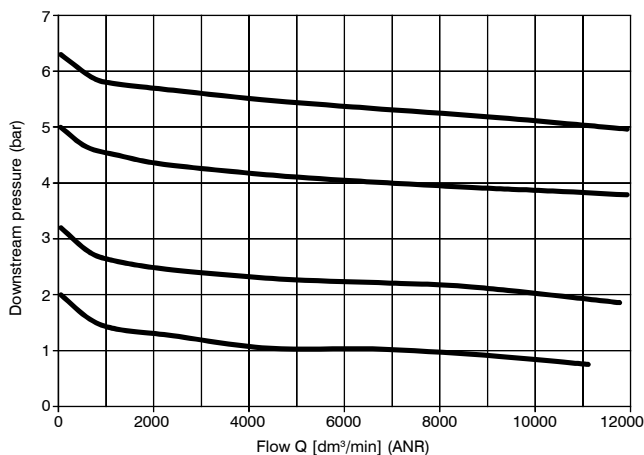


Adjustment characteristic

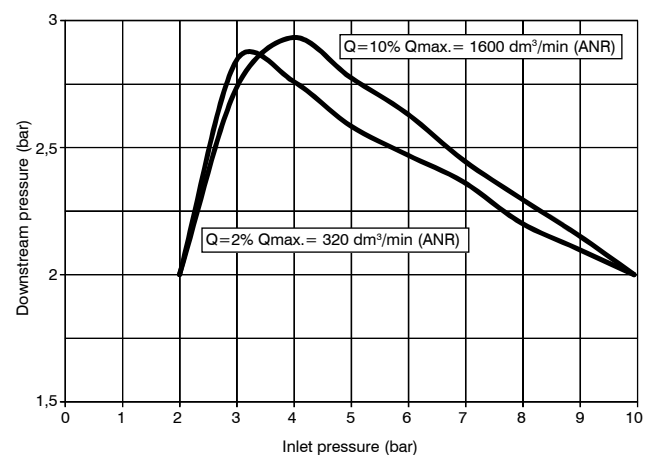


Flow rate curves

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

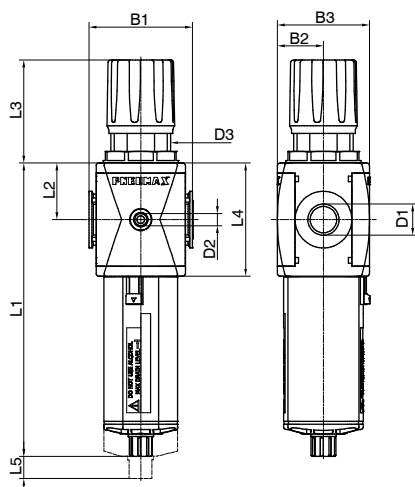


Adjustment characteristic

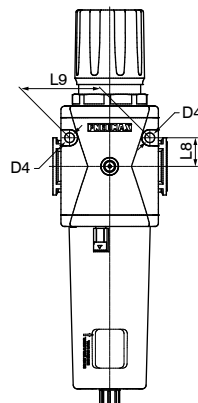


Dimensions

Pressure gauge connection port and semi-automatic drain version



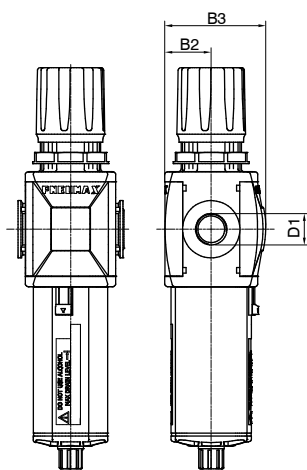
Fixing holes dimension detail (only for size 4)



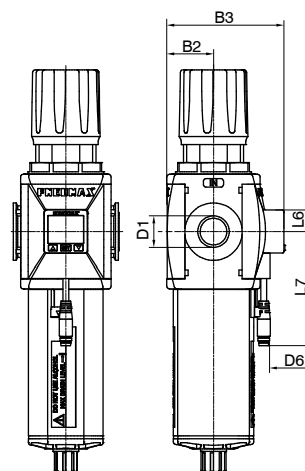
Model	B1	B2	B3	D1	D2	D3	D4	L1 - Bowl material		L2	L3	L4	L5	L8	L9
								Technopolymer	Metal						
#171..	48	21	42	G1/8" G1/4" 1/4" NPT	G1/8" 1/8" NPT	M30x1,5	/	148	/	27,5	54	55	40	/	/
#172..	62	28,5	57	G1/4" G3/8" 1/4" NPT 3/8" NPT	G1/8" 1/8" NPT	M42x1,5	/	169,1	171,5	34	71,8	68	50	/	/
#173..	73	32,5	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

Variable dimensions

Integrated pressure gauge version



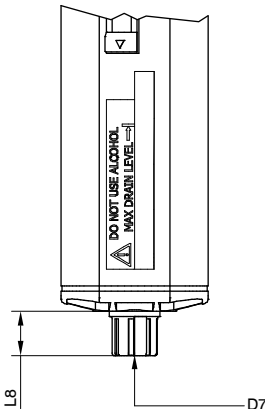
Integrated digital pressure switch version



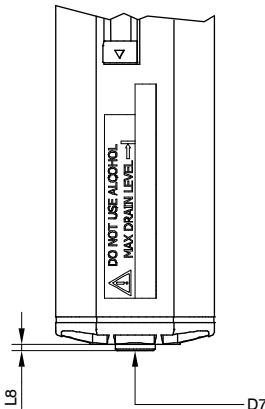
Model	B2	B3		D1	D6 - Type of digital pressure switch		L6	L7 - Type of digital pressure switch	
		With pressure gauge	With digital pressure switch		A - B	C - D		A - B	C - D
#171..	21	48,5	60	G1/8" G1/4" 1/4" NPT	M8 - 3 PIN	3 x 0,129 mm, Ø 4 mm	15	150	2000
#172..	28,5	62,5	73,5	G1/4" G3/8" 1/4" NPT 3/8"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



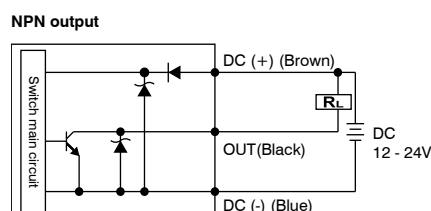
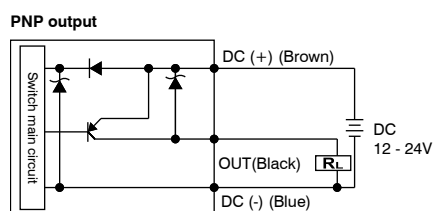
Model	L8 - Bowl material		D7
	Technopolymer	Metal	
Semi-automatic drain	15,7	18	Plastic hose connector Ø 6
Automatic drain	2	4,5	G1/8"

Digital pressure switch

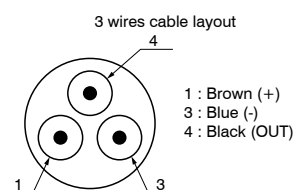
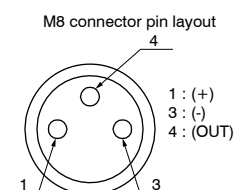


- ▶ 3 color digital LCD display, easy readout
- ▶ 4 units of measurement for pressure indication
- ▶ Optional PNP or NPN digital output
- ▶ N.O. and N.C. output contact selection directly on the digital pressure switch
- ▶ Available with M8-3PIN connector or 3 wire cable length 2 m
- ▶ Available only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

Output circuit wiring diagrams



Digital pressure switch lay out



Cable ordering code

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

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

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

Connector

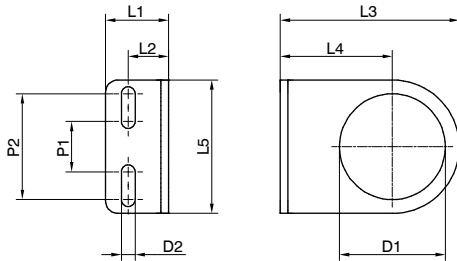


Technical characteristics	
Pressure range and display	0 ... 10 bar
Max. inlet pressure	15 bar
Fluid	40 µm filtered and dehumidified air
Display unit of measurement	MPa - kgf/cm² - bar - psi
Supply voltage	12 ... 24 VDC
Current consumption	≤40mA (without load)
Digital output type	PNP - NPN
Type of contact 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
IP Rating	IP40
Working temperature	0 °C ... 50 °C
Cable section	3 x 0,129 mm², Ø 4 mm, PVC

Fixing bracket

T172 50

Size
171 : Size 1
T172 : Size 2 - Size 3



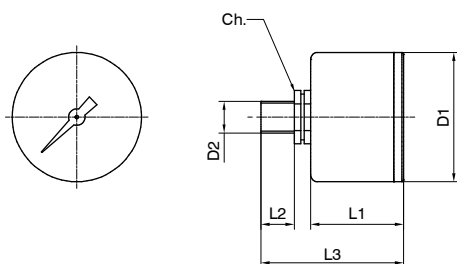
Model	L1	L2	L3	L4	L5	D1	D2	P1	P2
17150	20	13	50	30	40	30	5,5	20	30
T17250	25	16	71	44,5	53	42	5,5	20	42

Pressure gauge

17070 A C

Version
A : Dial Ø 40
B : Dial Ø 50

Scale
A : 0 - 4 bar
B : 0 - 6 bar
C : 0 - 12 bar



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

Regulators (R - RM - RW - RP - RZ)


- ▶ 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
- ▶ 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

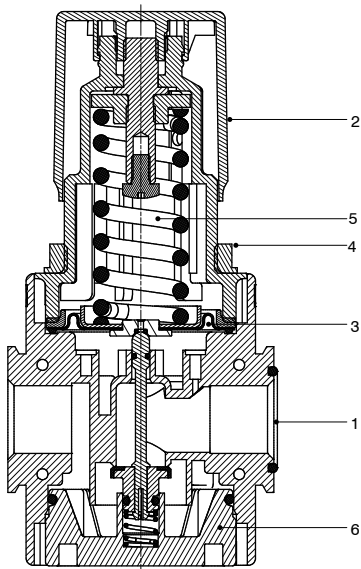
For installations where a more accurate and constant pressure is required, the unit should be installed as close as possible to the point of use.

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)		
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 version	not available	G3/8" - 1/4" NPT	G1/2" - 1/2" NPT	G1" - 1" NPT
Assembly configuration		Stand alone Panel mounting With fixing bracket			
		/			Panel mounted
Assembly positions		Indifferent			
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		Manul 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		G1/8" metal: 15 Nm G1/4" metal: 20 Nm G1/4" technopolymer: 9 Nm	G1/4" metal: 20 Nm G3/8" metal: 25 Nm G3/8" technopolymer: 16 Nm	G3/8" metal: 25 Nm G1/2" metal: 30 Nm G1/2" technopolymer: 22 Nm	G1" metal: 35 Nm
Max. fitting torque pressure gauge connection port		G1/8" technopolymer: 4 Nm G1/8" metal: 15 Nm			

Operational characteristics				
Size	Size 1	Size 2	Size 3	Size 4
Maximum working pressure	13 bar			
	/	20 bar (only for P - L versions)		
Minimum working pressure	0,5 bar			
Working temperature	-5 °C ... +50 °C			
	/	-30 °C ... +80 °C (only for P version) -40 °C ... +80 °C (only for L version)		
Working temperature with digital pressure switch	0 °C ... +50 °C			

Weights					
	Size	Size 1	Size 2	Size 3	Size 4
Technopolymer body version		150 g	310 g	390 g	/
Aluminium body version		/	400 g	560 g	1260 g

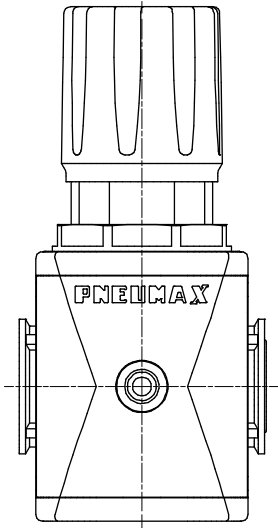
Materials
Exploded sectioned



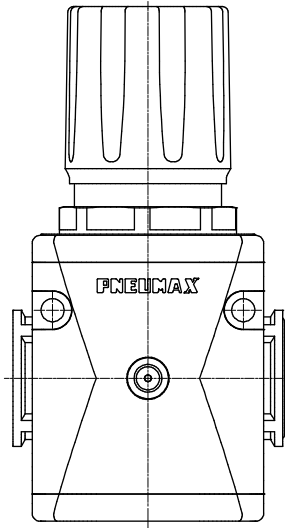
Regulator		
1	Body	Polyamide Die-cast aluminium
2	Adjusting knob	Polyamide
3	Diaphragm	NBR
4	Panel mounting locking ring	Polyamide
5	Adjusting spring	Steel
6	Rear end cap	Polyamide / Die-cast aluminium

Design

Size 1 - Size 2 - Size 3



Size 4
All versions





Order codes

AIR TREATMENT

T 17 3B R M D

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)
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
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
M : Integrated pressure gauge
W : Integrated pressure gauge Right - Left
P : Digital pressure switch
Z : Digital pressure switch Right - Left

Pressure range

A : 0 - 2 bar
B : 0 - 4 bar
C : 0 - 8 bar
D : 0 - 12 bar

Relieving options

: With relieving
F : Controlled refuel and improved relieving (not available for size 4)
L : Without relieving
R : Improved relieving

Knob options

: Non-lockable version
K : Lockable version
U : Lockable version with universal key

Digital pressure switch options

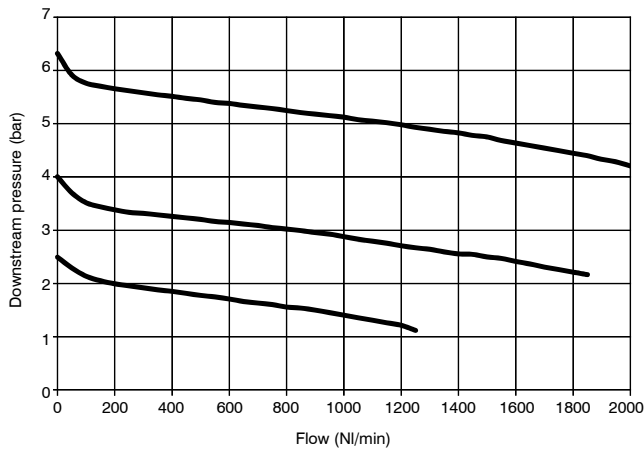
A : Cable 150 mm + M8 PNP
B : Cable 150 mm + M8 NPN
C : Cable 2 m PNP
D : Cable 2 m NPN

Example : T173BRMD : Size 3 regulator G1/2" 0 - 12 bar

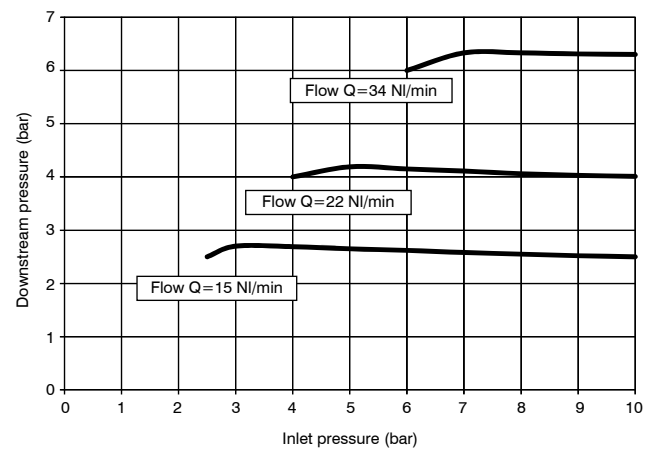
Characteristic curves

Flow rate curves

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

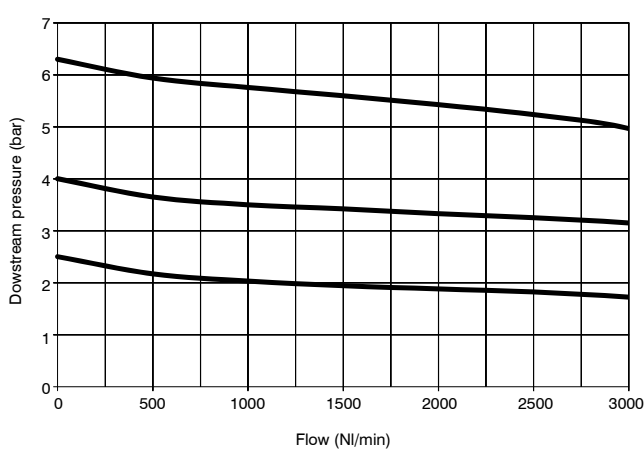


Adjustment characteristic

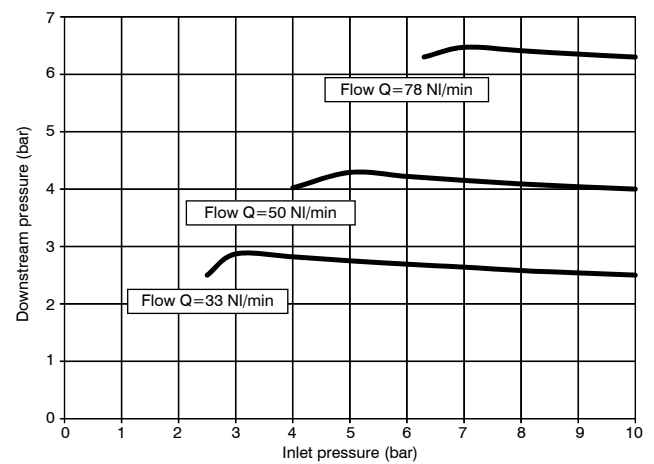


Flow rate curves

Size 2 - G1/4" 0-8 bar P1=7 bar

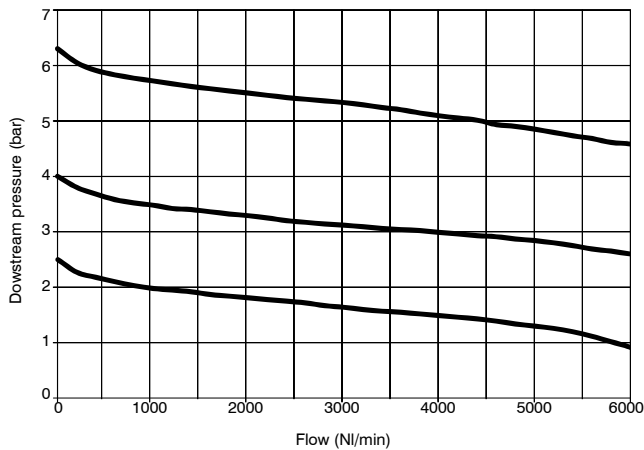


Adjustment characteristic

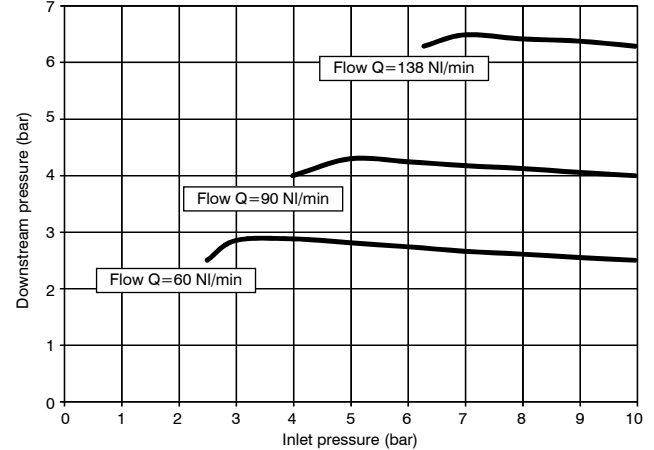


Flow rate curves

Size 3 - G1/4" 0-8 bar P1=7 bar

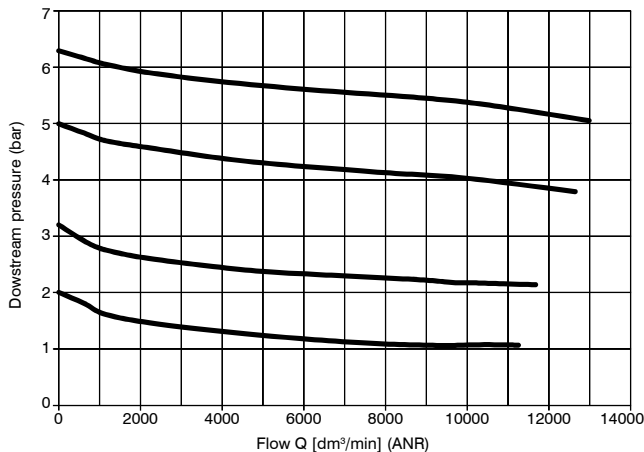


Adjustment characteristic

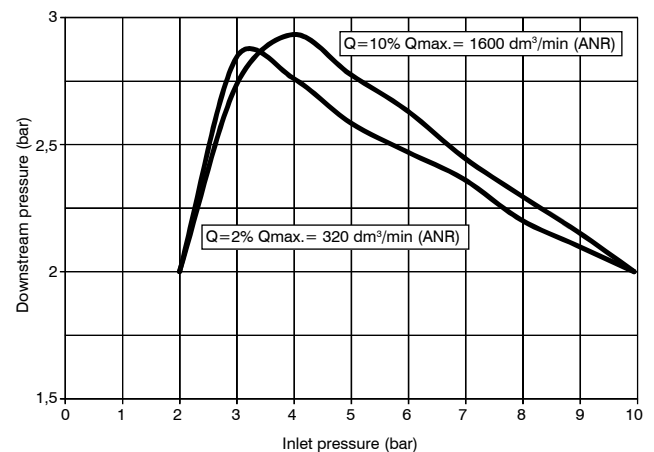


Flow rate curves

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

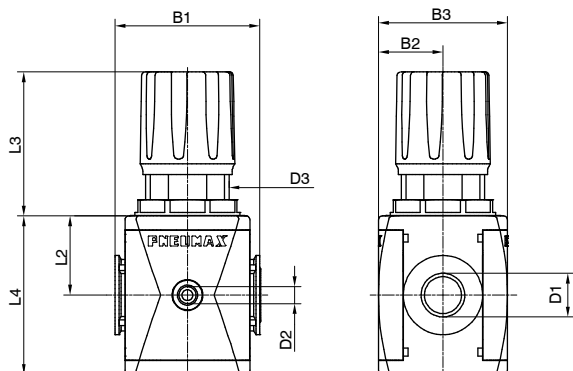


Adjustment characteristic

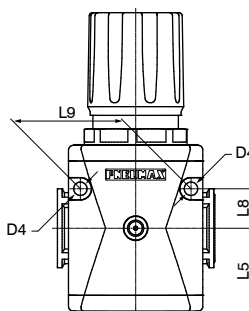


Dimensions

Pressure gauge connection port version



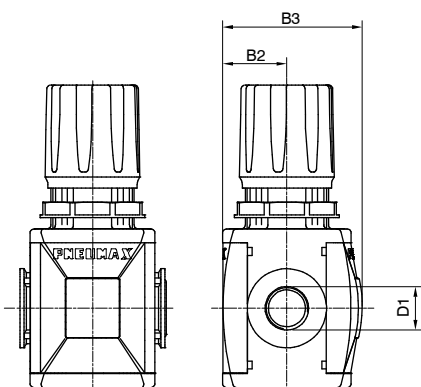
Fixing holes dimension detail
(only for size 4)



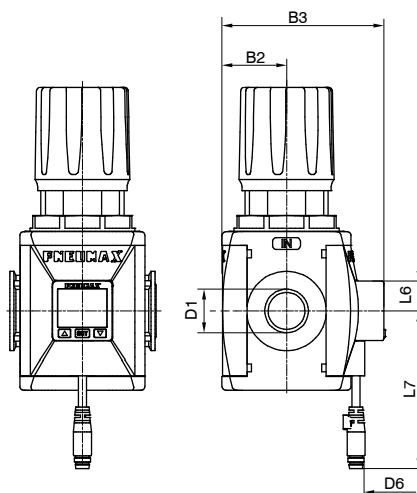
Model	B1	B2	B3	D1	D2	D3	D4	L2	L3	L4	L5	L8	L9
#171..	48	21	42	G1/8" G1/4" 1/4" NPT	G1/8" 1/8" NPT	M30x1,5	/	27,5	54	55	/	/	/
#172..	62	28,5	57	G1/4" G3/8" 1/4" NPT 3/8" NPT	G1/8" 1/8" NPT	M42x1,5	/	34	71,8	68	/	/	/
#173..	73	32,5	65	G3/8" G1/2" 1/2" NPT	G1/8" 1/8" NPT	M42x1,5	/	40	72,8	80	/	/	/
#174..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

Variable dimensions

Integrated pressure gauge version



Integrated digital pressure switch version



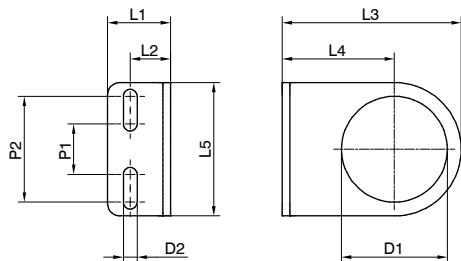
Model	B2	B3		D1	D6 - Type of digital pressure switch		L6	L7 - Type of digital pressure switch	
		With pressure gauge	With digital pressure switch		A - B	C - D		A - B	C - D
#171..	21	48,5	60	G1/8" G1/4" 1/4" NPT	M8 - 3 PIN	3 x 0,129 mm, Ø 4 mm	15	150	2000
#172..	28,5	62,5	73,5	G1/4" G3/8" 1/4" NPT 3/8"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

► Fixing bracket

T172 50

Size

171 : Size 1
T172 : Size 2 - Size 3



Model	L1	L2	L3	L4	L5	D1	D2	P1	P2
17150	20	13	50	30	40	30	5,5	20	30
T17250	25	16	71	44,5	53	42	5,5	20	42

► Pressure gauge

17070

A

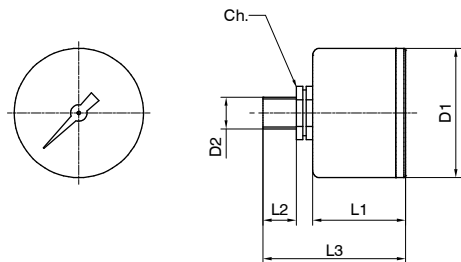
C

Version

A : Dial Ø 40
B : Dial Ø 50

Scale

A : 0 - 4 bar
B : 0 - 6 bar
C : 0 - 12 bar



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

Piloted pressure regulators (RP - RMP - RPP)



- ▶ Piston piloted pressure regulator
- ▶ Available with pressure gauge or digital pressure switch integrated
- ▶ Atex certification (II 2GD or II 3GD)
- ▶ Inlet pressures up to 20 bar



Note

Always regulate the rising pressure.

Technical characteristics

Size	Size 4
Body and connections type	Aluminium body, integrated aluminium connections
IN / OUT connections	G1" - 1" NPT
Assembly configuration	Stand alone Panel mounted
Assembly positions	Indifferent
Pressure range	0,5 ... 10 bar
Regulation	Pneumatic piloting
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: 35 Nm
Max. fitting torque pressure gauge connection port	G1/8"metal: 15 Nm

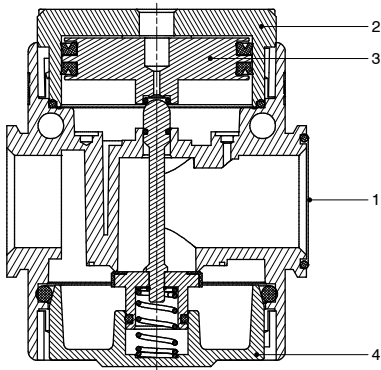
Operational characteristics

Size	Size 4
Maximum working pressure	20 bar
Minimum working pressure	0,5 bar
Pilot pressure range	0,5 ... 10 bar
Working temperature	-30 °C ... +80 °C
Working temperature with digital pressure switch	0 °C ... +50 °C



Weights	Size	Size 1	Size 2	Size 3	Size 4
Pneumatic pilot aluminum body version		/	/	/	1190 g

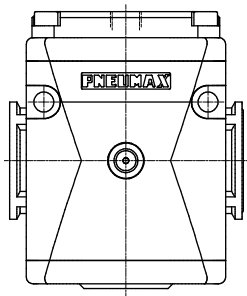
Materials
Exploded sectioned



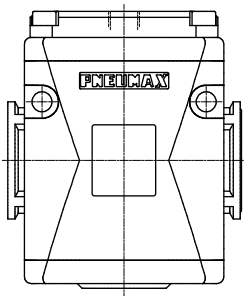
Piloted pressure regulator		
1	Body	Die-cast aluminium
2	Piloting operator	Aluminium
3	Piston	Aluminium
4	Rear end cap	Die-cast aluminium

Design

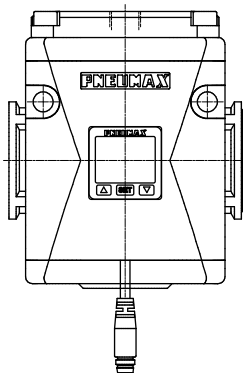
G1/8" pressure gauge
connection port version



Integrated pressure
gauge version



Integrated digital
pressure
switch version



Order codes

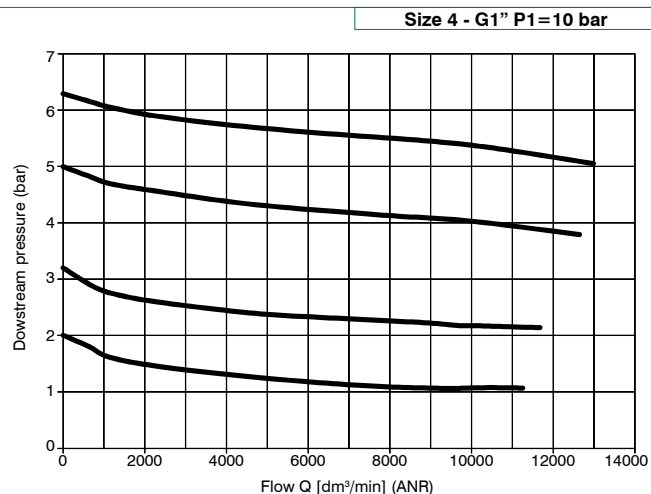
	P	17	4B	R	M		P
Version							
P : Aluminium body							
Size and connections							
4B : Size 4 - G1"							
4C : Size 4 - 1" NPT							
Pressure measurement options							
: G1/8" - 1/8" NPT thread							
M : Integrated pressure gauge							
W : Integrated pressure gauge Right - Left							
P : Digital pressure switch							
Z : Digital pressure switch Right - Left							
Digital pressure switch options							
A : Cable 150 mm + M8 PNP							
B : Cable 150 mm + M8 NPN							
C : Cable 2 m PNP							
D : Cable 2 m NPN							

Example : P174BRMP : Size 4 piloted pressure regulator G1", integrated pressure gauge

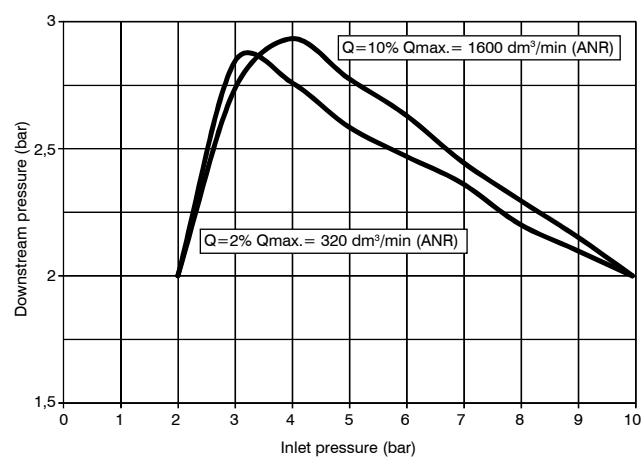
Characteristic curves

AIR TREATMENT

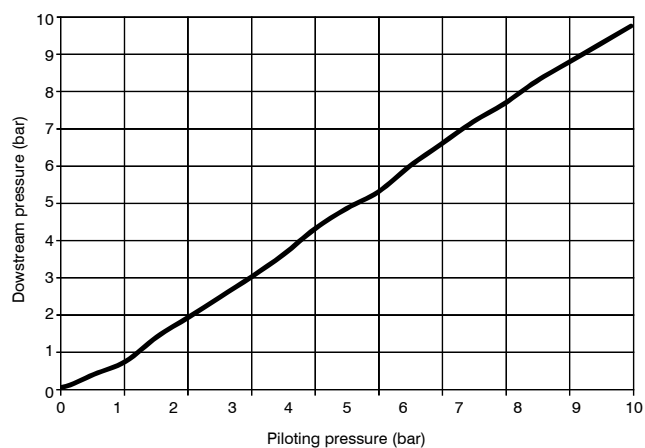
Flow rate curves



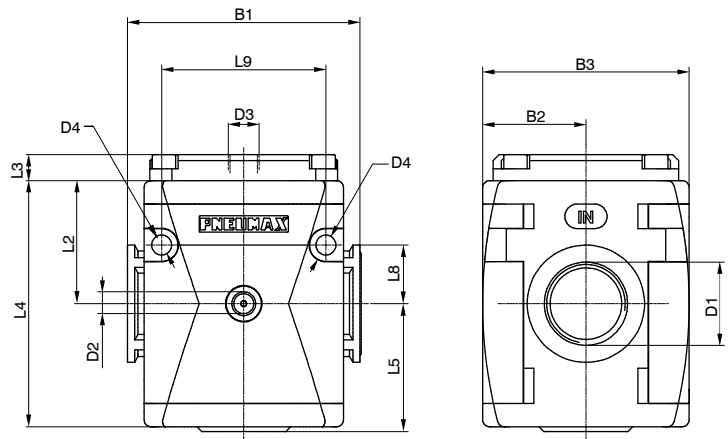
Adjustment characteristic



Flow rate curves



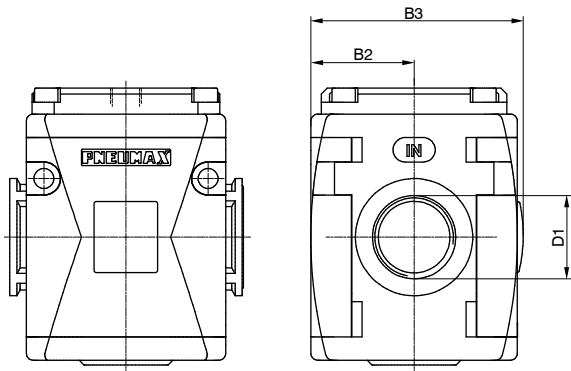
Dimensions



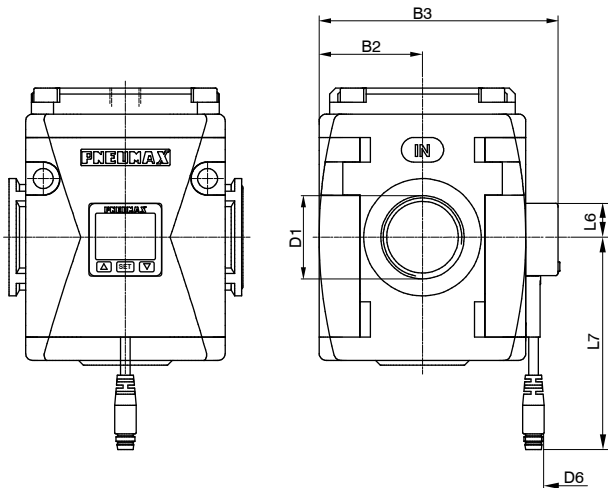
Model	B1	B2	B3	D1	D2	D3	D4	L2	L3	L4	L5	L8	L9
#174..	99	44	88	G1" 1" NPT	G1/8" 1/8" NPT	G1/4"	8,5	52,5	11	105	54,5	25	70

Variable dimensions

Integrated pressure gauge version



Integrated digital pressure switch version



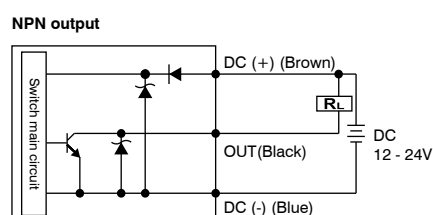
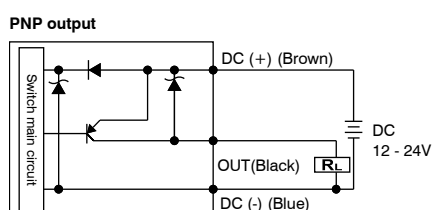
Model	B2	B3		D1	D6 - Type of digital pressure switch		L6	L7 - Type of digital pressure switch	
		With pressure gauge	With digital pressure switch		A - B	C - D		A - B	C - D
#174..	44	90,5	101,5	G1" 1" NPT	M8 - 3 PIN	3 x 0,129 mm, Ø 4 mm	15	150	2000

Digital pressure switch

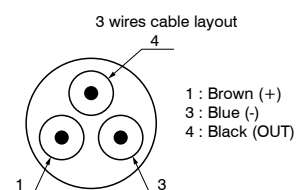
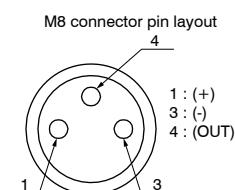


- ▶ 3 color digital LCD display, easy readout
- ▶ 4 units of measurement for pressure indication
- ▶ Optional PNP or NPN digital output
- ▶ N.O. and N.C. output contact selection directly on the digital pressure switch
- ▶ Available with M8-3PIN connector or 3 wire cable length 2 m
- ▶ Available only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

Output circuit wiring diagrams



Digital pressure switch lay out



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	40 µm filtered and dehumidified air
Display unit of measurement	MPa - kgf/cm² - bar - psi
Supply voltage	12 ... 24 VDC
Current consumption	≤40 mA (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
IP Rating	IP40
Working temperature	0 °C ... 50 °C
Cable section	3 x 0,129 mm², Ø 4 mm, PVC

Pressure regulators for manifold (B - M)



- ▶ Diaphragm pressure regulator with relieving
- ▶ Available with 2 front outputs connections G1/8" or with 1 front output and integrated pressure gauge on the opposite side
- ▶ Low hysteresis rolling diaphragm and balanced spool
- ▶ Available in four pressure ranges up to 12 bar
- ▶ Fitted with panel mounting locking ring
- ▶ Available with Integrated pressure gauge
- ▶ Air supply can be applied by both directions (Right or Left)
- ▶ Max. 6 off pressure regulators in manifold configuration
- ▶ Atex certification (II 3GD)



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.

Technical characteristics		
Size		Size 1
Body and connections type		Technopolymer body, integrated technopolymer connections (T version) Technopolymer body, metal connections (N version)
IN connections	T version	G1/4"
	N version	G1/8" - G1/4" - 1/4" NPT
OUT connections		G1/8"
Assembly configuration		Stand alone Panel mounting With fixing bracket
Assembly positions		Indifferent
Pressure range		0-2 bar 0-4 bar 0-8 bar 0-12 bar
Regulation		Manul push and lock with pressure Manual lockable with accessories
Pressure measurement		G1/8" pressure gauge connection port Integrated pressure gauge (optional)
Max. fittings torque IN / OUT connections		G1/8" metal: 15 Nm G1/4" metal: 20 Nm G1/4" technopolymer: 9 Nm
Max. fitting torque pressure gauge connection port		G1/8" technopolymer: 4 Nm G1/8" metal: 15 Nm

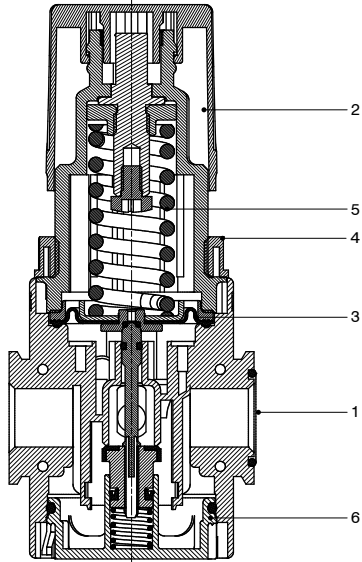
Operational characteristics	
Size	Size 1
Maximum working pressure	13 bar
Minimum working pressure	0,5 bar
Working temperature	-5 °C ... +50 °C

Weights

	Size	Size 1
Technopolymer body version		140 g

Materials

Exploded sectioned

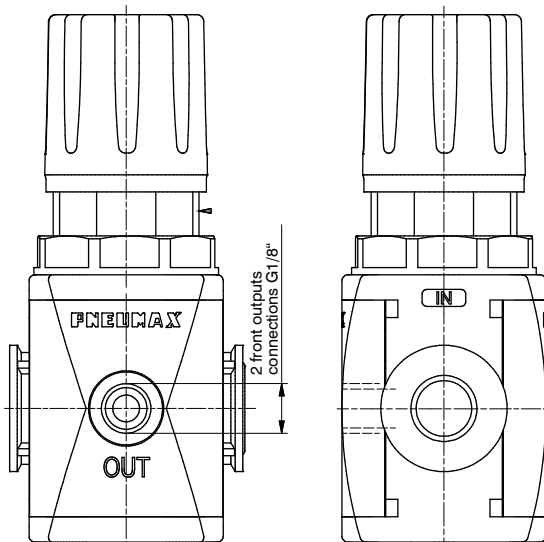


Pressure regulator for manifold

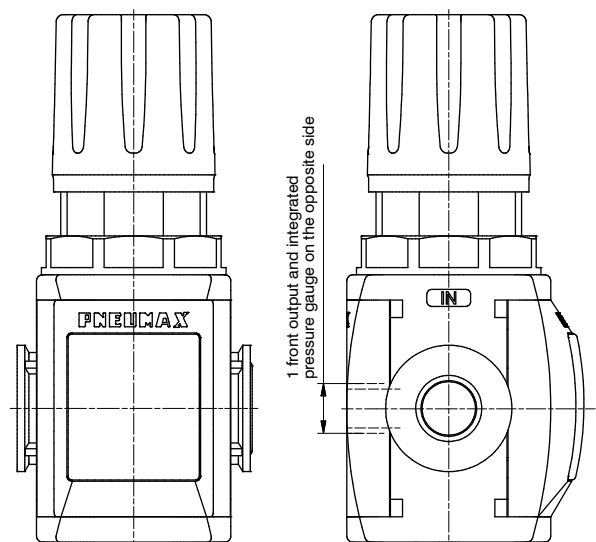
1	Body	Polyamide Die-cast aluminium
2	Adjusting knob	Polyamide
3	Diaphragm	NBR
4	Panel mounting locking ring	Polyamide
5	Adjusting spring	Steel
6	Rear end cap	Polyamide / Die-cast aluminium

Design

Pressure gauge connection port version



Integrated pressure gauge version

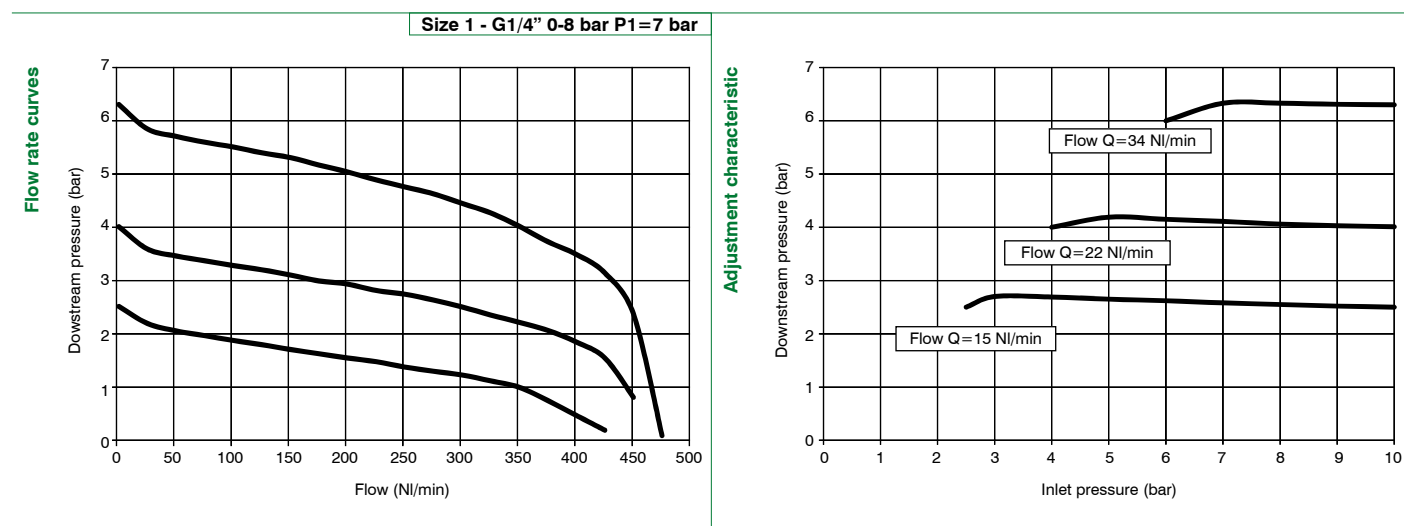


Order codes

	T	17	1B	B	D		
Version							
N : Technopolymer body and metal inserts							
T : Technopolymer body and thread							
Size and connections							
1A : Size 1 - G1/8"							
1B : Size 1 - G1/4"							
1C : Size 1 - 1/4" NPT only for N version							
Pressure measurement options							
B : G1/8" - 1/8" NPT thread							
M : Integrated pressure gauge							
Pressure range							
A : 0 - 2 bar							
B : 0 - 4 bar							
C : 0 - 8 bar							
D : 0 - 12 bar							
Relieving options							
: With relieving							
F : Controlled refuel and improved relieving							
L : Without relieving							
R : Improved relieving							
Knob options							
: Non-lockable version							
K : Lockable version							
U : Lockable version with universal key							

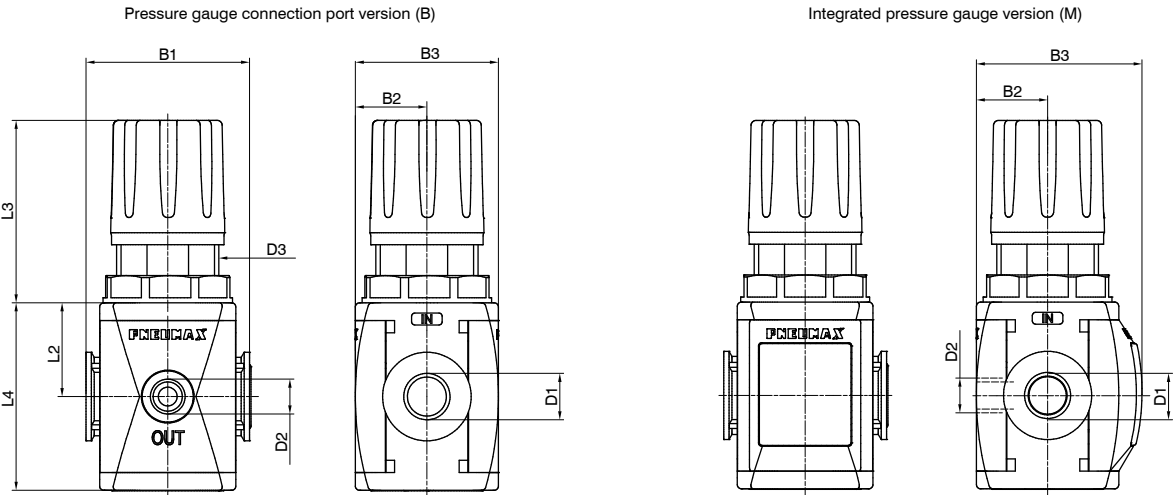
Example : T171BBD : Size 1 pressure regulator for manifold G1/4", 0 - 12 bar

Characteristic curves





Dimensions



Model	B1	B2	B3		D1	D2	D3	L2	L3	L4
			B version	M version						
#171..	48	24	42	48,5	G1/4" G1/8" 1/4" NPT	G1/8"	M30x1,5	27,5	54	55

Manifold pressure regulators



- ▶ Manifold pressure regulators
- ▶ Available in four pressure ranges up to 12 bar
- ▶ Inlet pressure common for the whole manifold of pressure regulator
- ▶ A maximum of 6 pressure regulators can be mounted
- ▶ Atex certification (II 3GD)
- ▶ Assembly with X or Y flanges

Technical characteristics		
Size		Size 1
Body and connections type		Technopolymer body, integrated technopolymer connections (T version) Technopolymer body, metal connections (N version)
IN connections	T version	G1/4"
	N version	G1/8" - G1/4" - 1/4" NPT
OUT connections		G1/8"
Assembly configuration		Stand alone Panel mounting With fixing bracket
Assembly positions		Indifferent
Pressure range		0-2 bar 0-4 bar 0-8 bar 0-12 bar
Regulation		Manul push and lock with pressure Manual lockable with accessories
Pressure measurement		G1/8" pressure gauge connection port Integrated pressure gauge (optional)
Max. fittings torque IN / OUT connections		G1/8" metal: 15 Nm G1/4" metal: 20 Nm G1/4" technopolymer: 9 Nm
Max. fitting torque pressure gauge connection port		G1/8" technopolymer: 4 Nm G1/8" metal: 15 Nm

Operational characteristics		
Size		Size 1
Maximum working pressure		13 bar
Minimum working pressure		0,5 bar
Working temperature		-5 °C ... +50 °C



Order codes

AIR TREATMENT

G T 17 1B M 6 C C C C C C

Version

N : Technopolymer body and metal inserts
T : Technopolymer body and thread

Size and connections

1A : Size 1 - G1/8"
1B : Size 1 - G1/4"
1C : Size 1 - 1/4" NPT only for N version

Pressure measurement options

B : G1/8" thread with flanges X
M : Integrated pressure gauge with flanges X
P : G1/8" thread with extended flanges Y
R : Integrated pressure gauge with extended flanges Y
W : G1/8" thread with flanges Y
Z : Integrated pressure gauge with flanges Y

Number of regulators

2 : n. 2 regulators
3 : n. 3 regulators
4 : n. 4 regulators
5 : n. 5 regulators
6 : n. 6 regulators

Pressure range

A : 0 - 2 bar
B : 0 - 4 bar
C : 0 - 8 bar
D : 0 - 12 bar

Pressure range

A : 0 - 2 bar
B : 0 - 4 bar
C : 0 - 8 bar
D : 0 - 12 bar

Pressure range

A : 0 - 2 bar
B : 0 - 4 bar
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Pressure range

A : 0 - 2 bar
B : 0 - 4 bar
C : 0 - 8 bar
D : 0 - 12 bar

Pressure range

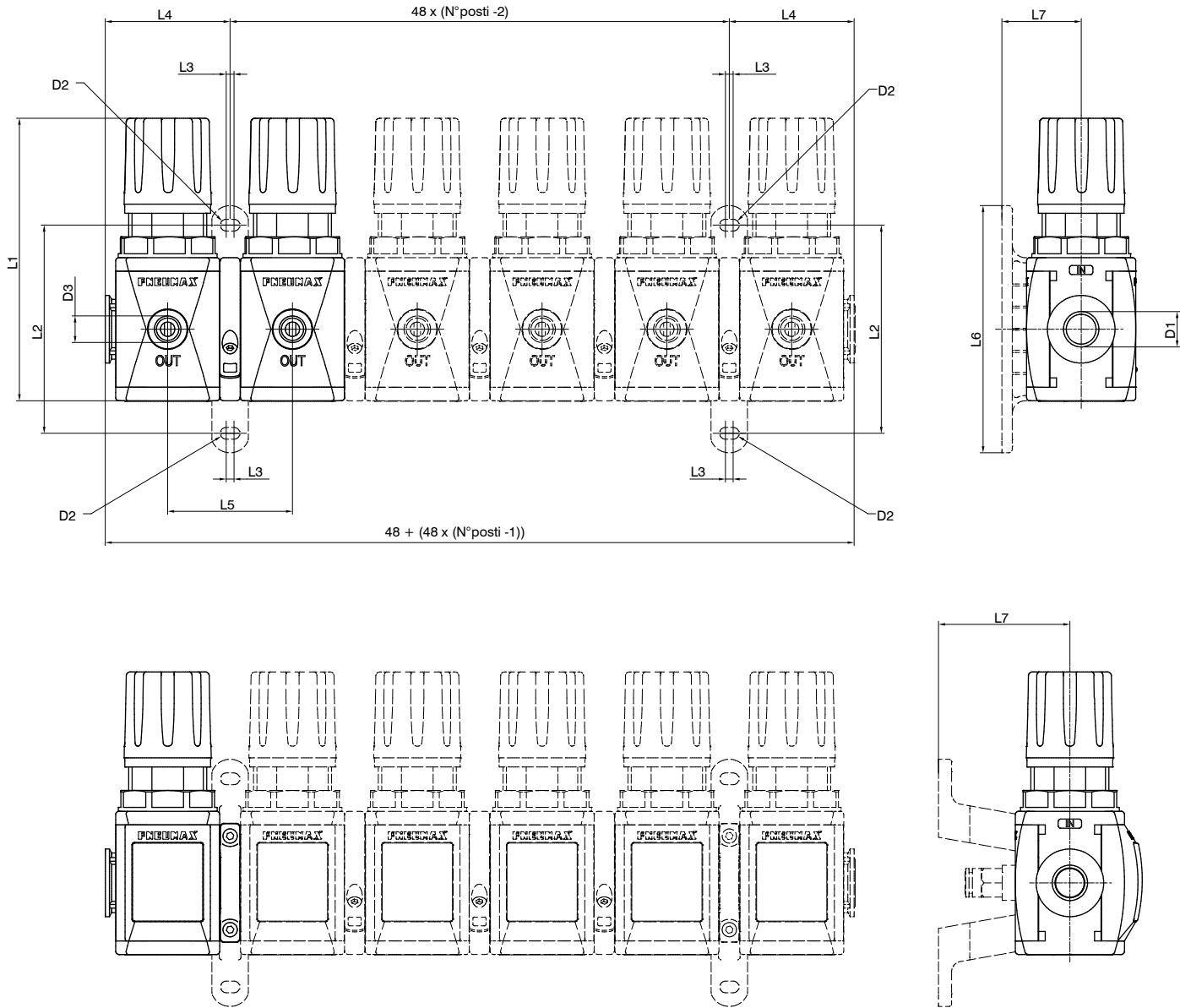
A : 0 - 2 bar
B : 0 - 4 bar
C : 0 - 8 bar
D : 0 - 12 bar

Pressure range

A : 0 - 2 bar
B : 0 - 4 bar
C : 0 - 8 bar
D : 0 - 12 bar

Example : T171BM6CCCCC : Size 1 manifold pressure regulators G1/4", 0 - 8 bar, integrated pressure gauge

Dimensions

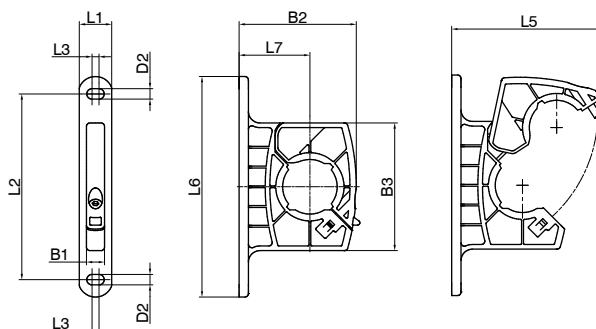


AIR TREATMENT

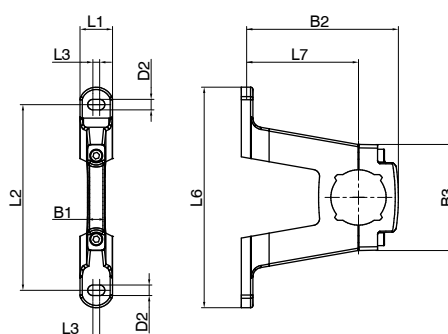
Model	D1	D2	D3	L1	L2	L3	L4	L5	L6	L7	
#171..with flanges X	G1/4" G1/8" 1/4" NPT	/	G1/8"	109	/	/	48	48	/	/	
#171..with flanges Y		Ø 4,5			80	3			48	105	30,5
#171..with extended flanges Y											50,5

► **Manifold mounting flanges**

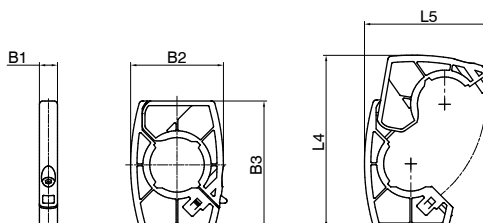
Flange Y



Extended flange Y



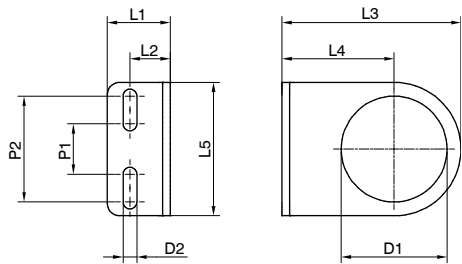
Flange X



Model	B1	B2	B3	D2	L1	L2	L3	L4	L5	L6	L7
T171Y	7,8	50,5	55	Ø 4,5	14	80	3	/	66	95	30,5
N171YP		67,7	45,7	Ø 4,5	14	80	3	/	66		50,5
T171X		40	55	/	/	/	/	74,5	55,5	/	/



► Fixing bracket

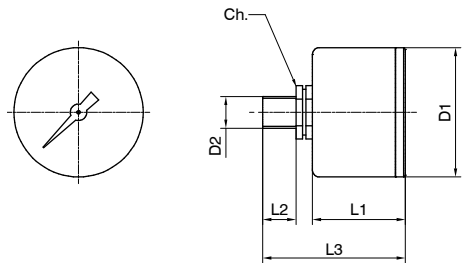


Model	L1	L2	L3	L4	L5	D1	D2	P1	P2
17150	20	13	50	30	40	30	5,5	20	30

► Pressure gauge

17070 A C

Version
A : Dial Ø 40
B : Dial Ø 50
Scale
A : 0 - 4 bar
B : 0 - 6 bar
C : 0 - 12 bar



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