Manifold unit

- Modular system
- Compact and linear design
- Maximum flexibility and reliability
- Up to 10 items assembly with unlimited configuration
- Flange coupling plug-n-play configuration
- Maintenance possible without completely disassembling the group
- Manifold integrated safety function elements
- Material and version wide selection
- Available in 4 sizes with connections from 1/8" to 1"
- Atex certification (II 2GD or II 3GD)

Operational characteristics					
Size		**Size 1**	**Size 2**	**Size 3**	**Size 4**
Maximum working pressure *		10 bar / 13 bar / 16 bar / 20 bar			
Minimum working pressure *		0,5 bar / 2,5 bar			
Working temperature *		-5 °C ... +50 °C / -30 °C ... +80 °C / -40 °C ... +80 °C			
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 mounted thru fixing elements			
Assembly positions		Vertical ±5° with no restriction in case of elements without bowl			
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. fittings torque G1/8" pressure gauge connection		G1/8" metal: 15 Nm G1/8" technopolymer: 4 Nm			

***** Module configuration shall be identified according to individual technical details of each items included in applicable manifold

Manifold assembly

The assembly operation of selected items (module) is carried out thru dedicated quick connection flanges.
Both aluminum and techno polymer materials selection available, with fixing holes in case of panel mounting configuration.
Due to its design, Pneumax connection flanges allow user-friendly maintenance activities with no need of entire manifold disassembling procedure.

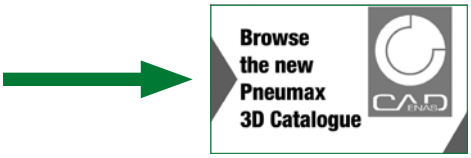
Thanks to a wide range of modules with different functions and characteristics, together with a wide choice of materials selection, make the Pneumax AIRPLUS air treatment units a robust, reliable and extremely flexible modular system, adaptable to different applications. AIRPLUS units properly assembled are modular with unlimited configurations and solutions and capable to satisfy and fulfill all their functions of compressed air treatment. Pneumax Airplus air treatment units can be integrated with safety elements that comply with EN-ISO 13849-1 and CE marking according to EU Machinery Directive, Annex V. Simple instruction provides an easy manifold configuration.

Configuration instructions

Manifold configuration as per following instructions.
As a result, a dedicated code will be provided, and the two main parameters will be identified, as follow:
- Features applicable to all items included in manifold (i.e. version, size, connection, flow direction);
- Assembly sequence of the single item + coupling flanges.

Note: Max 10 items for each manifold.

The group can be configured by consulting the Pneumax catalog here:
http://pneumax.partcommunity.com/3d-cad-models/
also reachable through a special link available on the home page of the Pneumax website



Order codes

Initial code that identifies the main characteristics of the group such as:
- version
- size and connections
- flow direction

These will be the same for all the modules included in manifold, in accordance with the characteristics of the individual items available.

Code that identifies the succession of individual modules and related coupling flanges included in manifold from module 1 to 10.

COMPLETE APPLICABLE ORDER CODE

G [ ] 17 [ ][ ] - [ ] - [ ] - [ ] [ ] [ ]

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

Flow direction
: From left to right
W : From right to left

Module 1
See list of modules

Mounting hardware 1
X : Technopolymer flange X
Y : Technopolymer flange Y
K : Aluminium flange X
T : Aluminium flange Y

Module 2
See list of modules

Mounting hardware 2
X : Technopolymer flange X
Y : Technopolymer flange Y
K : Aluminium flange X
T : Aluminium flange Y

Module 10
See list of modules

Elenco moduli

Di seguito l'elenco dei moduli disponibili per il montaggio del gruppo

FILTER	F	**A** : 5 µm **B** : 20 µm **C** : 50 µm	: Semi-automatic drain **S** : Automatic drain	: Technopolymer protection - PC bowl **N** : Technopolymer protection - PA bowl **P** : Metal protection - PC bowl **R** : Metal protection - PA bowl **T** : Metal bowl
COALESCING FILTER	DA	: Semi-automatic drain **S** : Automatic drain	: Technopolymer protection - PC bowl **N** : Technopolymer protection - PA bowl **P** : Metal protection - PC bowl **R** : Metal protection - PA bowl **T** : Metal bowl	
OIL REMOVAL FILTER	D	**AV** : Size 4 **BV** : Size 3 **CV** : Size 3 oversize cartridge	: Semi-automatic drain **S** : Automatic drain	: Technopolymer protection - PC bowl **N** : Technopolymer protection - PA bowl **P** : Metal protection - PC bowl **R** : Metal protection - PA bowl **T** : Metal bowl
CARBON FILTER	DD	: Technopolymer protection - PC bowl **N** : Technopolymer protection - PA bowl **P** : Metal protection - PC bowl **R** : Metal protection - PA bowl **T** : Metal bowl		

REGULATOR	R	: G1/8" connection **M** : Integrated pressure gauge **W** : Integrated pressure gauge Right - Left **P** : Digital pressure switch **Z** : Digital pressure switch Right - Left	**A** : 0-2 bar **B** : 0-4 bar **C** : 0-8 bar **D** : 0-12 bar	: With relieving **F** : Controlled refiel and improved relieving **L** : Without relieving **R** : Improved relieving	: Standard knob **K** : Lockable knob	**A** : Cable 150 mm M8 PNP **B** : Cable 150 mm M8 NPN **C** : Cable 2 m PNP **D** : Cable 2 m NPN

FILTER REGULATOR	E	: G1/8" connection **M** : Integrated pressure gauge **W** : Integrated pressure gauge Right - Left **P** : Digital pressure switch **Z** : Digital pressure switch Right - Left	**A** : 5 µm **B** : 20 µm **C** : 50 µm	**A** : 0-2 bar **B** : 0-4 bar **C** : 0-8 bar **D** : 0-12 bar	: Semi-automatic drain **S** : Automatic drain	: With relieving **L** : Without relieving	: Standard knob **K** : Lockable knob	**A** : Cable 150 mm M8 PNP **B** : Cable 150 mm M8 NPN **C** : Cable 2 m PNP **D** : Cable 2 m NPN	: Technopolymer protection - PC bowl **N** : Technopolymer protection - PA bowl **P** : Metal protection - PC bowl **R** : Metal protection - PA bowl **T** : Metal bowl

LUBRICATOR	L	: No electric level sensor device **A** : Electrical minimum level sensor NO (Normally open) **C** : Electrical minimum level sensor NC (Normally closed)	: Technopolymer protection - PC bowl **N** : Technopolymer protection - PA bowl **P** : Metal protection - PC bowl **R** : Metal protection - PA bowl

SHUT OFF VALVE	V	**L** : Manual **P** : Pneumatic **E** : Solenoid	**15 mm coil** **A4** : 12 VDC **A5** : 24 VDC **A6** : 24 VAC (50-60 Hz) **A7** : 110 VAC (50-60 Hz) **A8** : 230 VAC (50-60 Hz) **A9** : 24 VDC (1 Watt)	**22 mm coil** **B2** : Mechanical M2, without coil **B4** : 12 VDC **B5** : 24 VDC **B6** : 24 VAC (50-60 Hz) **B7** : 110 VAC (50-60 Hz) **B8** : 230 VAC (50-60 Hz) **B9** : 24 VDC (2 Watt)	**30 mm coil** **C5** : 24 VDC **C6** : 24 VAC (50-60 Hz) **C7** : 110 VAC (50-60 Hz) **C8** : 230 VAC (50-60 Hz) **C9** : 24 VDC (2 Watt)

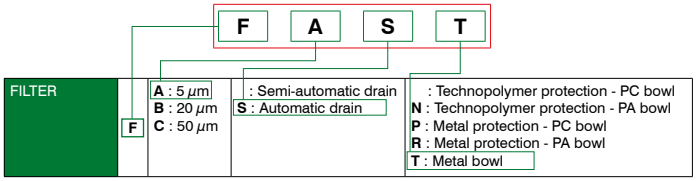
SAFETY VALVE	V	**S** : Single	: Without connection **M** : Integrated pressure gauge **W** : Integrated pressure gauge (Right - Left) **G** : G1/8" pressure gauge connection		
		2S : Double	: Without connection **M** : Integrated pressure gauge **G** : G1/8" pressure gauge connection	**X** = Flange X **Y** = Flange Y **K** = Aluminium flange Y **Z** = Aluminium flange X	: Standard (Right - Left) **W** : Integrated pressure gauge (Right - Left)

PROGRESSIVE START-UP VALVE	AP	: Size 1 - Size 2 - Size 3 **W** : Size 4 - flow direction Right - Left
AIR INTAKE	PA	

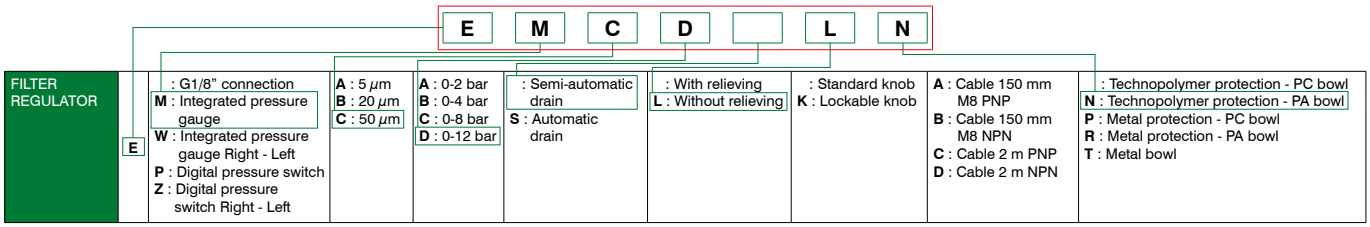
AIR INTAKE WITH PRESSURE GAUGE OR DIGITAL PRESSURE SWITCH INTEGRATED	P	**M** : Integrated pressure gauge **W** : Integrated pressure gauge (Right - Left) **P** : Integrated digital pressure switch **Z** : Integrated digital pressure switch (Right - Left)	**A** : Cable 150 mm M8 PNP **B** : Cable 150 mm M8 NPN **C** : Cable 2 m PNP **D** : Cable 2 m NPN

PRESSURE SWITCH	PP	: Size 1 - Size 2 - Size 3 **W** : TG4 - flow direction Right - Left

Examples of module identification: 5 µm filter, automatic drain, metal bowl is identified as: **F A S T**

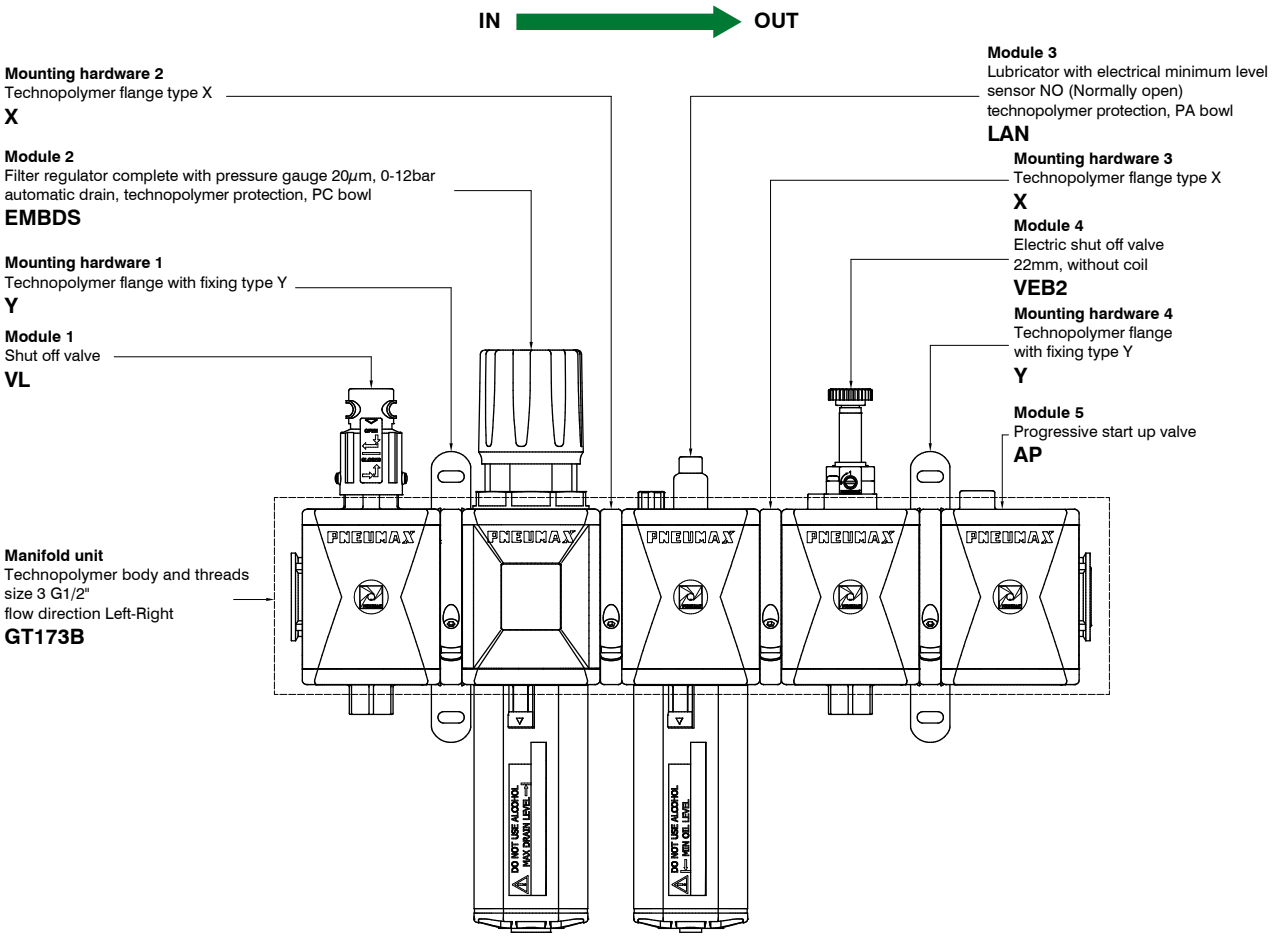


- Filter regulator with pressure gauge 50 µm, 0-12 bar semi-automatic drain, without relieving, technopolymer bowl protection, PA bowl, is identified as: **E M C D L N**



AIRPLUS assembled groups configuration

Configuration sample:
- Shut off valve
- Filter regulator, 20 μm, 0-12 bar, automatic drain
- Lubricator with electrical minimum level sensor NO (Normally open)
- Electric shut off valve, 22 mm, without coil
- Progressive start-up valve



Applicable order code:

Initial code that identifies the main characteristics of the group such as:
- version
- size and connections
- flow direction

These will be the same for all the modules included in manifold, in accordance with the characteristics of the individual items available

Code that identifies the succession of individual modules and related coupling flanges included in manifold from module 1 to 10

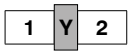
G	T	17	3B		-	VL	-	Y	-	EMBDS	-	X	-	LAN	-	X	-	VEB2	-	Y	-	AP

GT173 - VL - Y - EMBDS - X - LAN - X - VEB2 - Y - AP

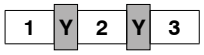
Flanges positioning schematic

Here below some indications related to flanges positioning according to the number of seats.
Pneumax recommend configuration in compliance with the following schematic:

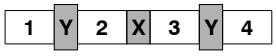
Group 2 seats



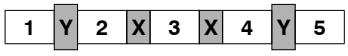
Group 3 seats



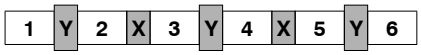
Group 4 seats



Group 5 seats

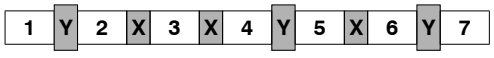


Group 6 seats

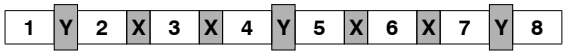


Y: Y type flange (Aluminium or technopolymer)
X: X type flange (Aluminium or technopolymer)
1 ... 10 : AIRPLUS modules

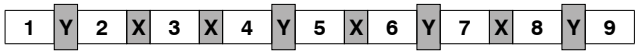
Group 7 seats



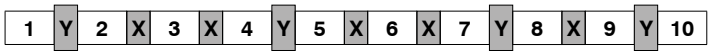
Group 8 seats



Group 9 seats



Group 10 seats



Quick coupling flanges

Pneumax Airplus quick coupling flanges series allow both module rapid fixing and panel mounted configuration. Due to its design, Pneumax connection flanges allow user-friendly maintenance activities with no need of entire manifold disassembling procedure.
Two types of flange are available: X type flange for assembling the modules together, and Y type flange suitable for panel mounted also. Both types are made of techno polymer or die-cast aluminum.