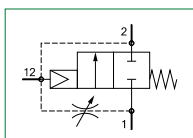


## Progressive start-up valve (AP - APW)



- ▶ Progressive start-up valve
- ▶ Available in 4 sizes with flow rates up to 15000 NI/min and connections from 1/8" to 1"
- ▶ Suitable for downstream system gradual pressurization
- ▶ Downstream circuit filling time regulated via a built in flow regulator
- ▶ Full pressure is allowed once the down stream circuit pressure reaches 50% of the inlet pressure
- ▶ Atex certification (II 2GD or II 3GD)



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 version)		
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 version	non disponibile	G3/8"	G1/2"	G1"
Assembly configuration		Stand alone			
		/			Panel mounted
Assembly positions		Indifferent			
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

Operational characteristics				
Size	Size 1	Size 2	Size 3	Size 4
Maximum working pressure	13 bar			10 bar
Minimum working pressure	2,5 bar			
Working temperature	-5 °C ... +50 °C			
Nominal flow rate at 6 bar with Δp=1 (from 1 to 2)	1400 NI/min	2200 NI/min	3600 NI/min	15000 NI/min
Fully open flow control device maximum flow rate	75 NI/min	200 NI/min	200 NI/min	1000 NI/min

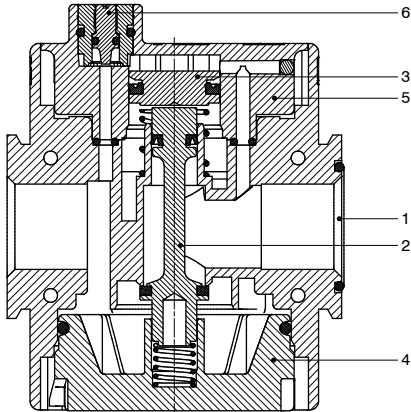


Weights

	Size	Size 1	Size 2	Size 3	Size 4
Technopolymer body version		80 g	150 g	240 g	/
Aluminium body version		/	235 g	370 g	1100 g

Materials

Exploded sectioned

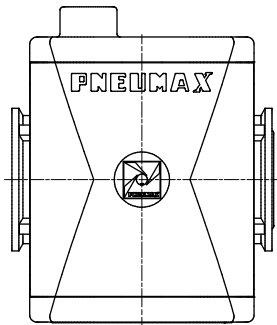


Progressive start-up valve

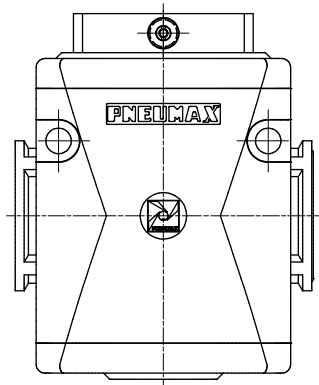
1	Body	Polyamide Die-cast aluminium
2	Drive pin	Aluminium
3	Piston	Aluminium
4	Rear end cap	Polyamide / Die-cast aluminium
5	Central support	Polyamide / Aluminium
6	Modulating needle	Brass

Design

Size 1 - Size 2 - Size 3



Size 4

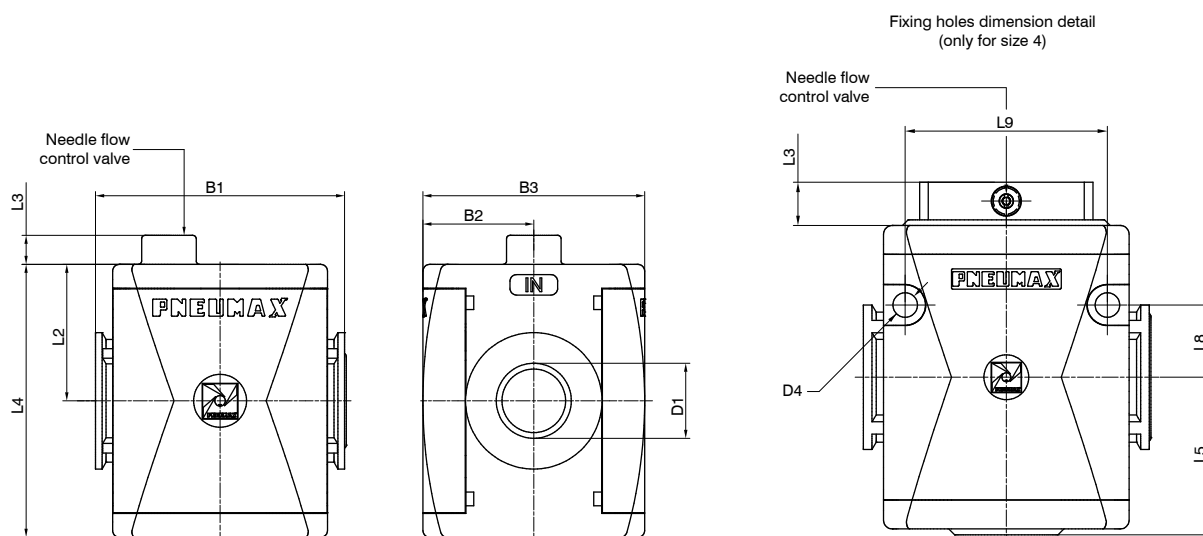


## Order codes

<b>Version</b>	<b>T</b>	<b>17</b>	<b>3B</b>	<b>AP</b>	
<b>N</b> : Technopolymer body and metal inserts (not available for size 4)					
<b>T</b> : Technopolymer body and thread (not available for size 4)					
<b>P</b> : Aluminum body (not available for size 1)					
<b>Size and connections</b>					
<b>1A</b> : Size 1 - G1/8" only for N version					
<b>1B</b> : Size 1 - G1/4" only for T - N versions					
<b>1C</b> : Size 1 - 1/4" NPT only for N version					
<b>2A</b> : Size 2 - G1/4" only for N version					
<b>2B</b> : Size 2 - G3/8" for all versions					
<b>2C</b> : Size 2 - 3/8" NPT only for N version					
<b>3A</b> : Size 3 - G3/8" only for N version					
<b>3B</b> : Size 3 - G1/2" for all versions					
<b>3C</b> : Size 3 - 1/2" NPT only for N version					
<b>4B</b> : Size 4 - G1" only for P version					
<b>Flow direction (only for size 4)</b>					
: From left to right					
<b>W</b> : From right to left					

**Example : T173BAP** : Size 3 progressive start-up valve G1/2"

## Dimensions

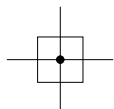


Model	B1	B2	B3	D1	D4	L2	L3	L4	L5	L8	L9
#171..	48	21	42	G1/8" G1/4"	/	27,5	12	55	/	/	/
#172..	62	28,5	57	G1/4" G3/8"	/	34	9,2	68	/	/	/
#173..	73	32,5	65	G3/8" G1/2"	/	40	8,7	80	/	/	/
#174..	99	44	88	G1"	8,5	52,5	13	105	54,5	25	70

**Air intake (PA)**



- ▶ Pneumatic by-pass
- ▶ Available with 2 threaded connections
- ▶ Atex certification (II 2GD or II 3GD)



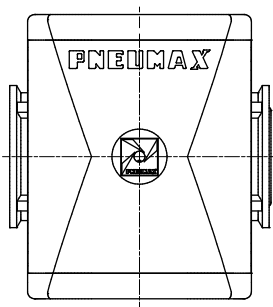
Technical characteristics					
Size		Size 1	Size 2	Size 3	Size 4
Body and connections type		Technopolymer body, integrated technopolymer connections (T version) Technopolymer body, metal connections (N version)			/
		/	Aluminium body, integrated aluminium connections (P version)		
IN / OUT / INTAKE connections	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 version	not available	G3/8"	G1/2"	G1"
Assembly configuration		Stand alone			
Assembly positions		/			Panel mounted
Max. fitting torque IN / OUT / INTAKE 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

Operational characteristics					
Size		Size 1	Size 2	Size 3	Size 4
Maximum working pressure		13 bar			20 bar
Working temperature		-5 °C ... +50 °C			-30 °C ... +80 °C (only for P version)

Weights					
	Size	Size 1	Size 2	Size 3	Size 4
Technopolymer body version		52 g	95,5 g	151 g	/
Aluminium body version		/	248 g	370 g	720 g

**Design**

**Size 1 - Size 2 - Size 3**



**Size 4**

