

SYNTESI[®] PROGRESSIVE START VALVE

The progressive start valve (VAP) is a pneumatic component that allows air enter the circuit gradually, thereby avoiding excessive pressure bursts. A sophisticated system of internal valves allows two separate stages of operation. During the first stage, a quantity of air that can be regulated via a pin flows from the VAP. The second stage starts when the downstream pressure reached 40 to 60% of the upstream pressure, during which full-port flow is achieved.

When the supply pressure is cut off, the VAP still remains open to allow the system to be relieved downstream.

In the final relief stage, part of the downstream pressure is relieved by the VAP itself.

The progressive start valve (VAP) is particularly useful on machinery where it is important to prevent actuators from moving rapidly and out of control, or where, for safety reasons, the air in-feed needs to be gentle and gradual.

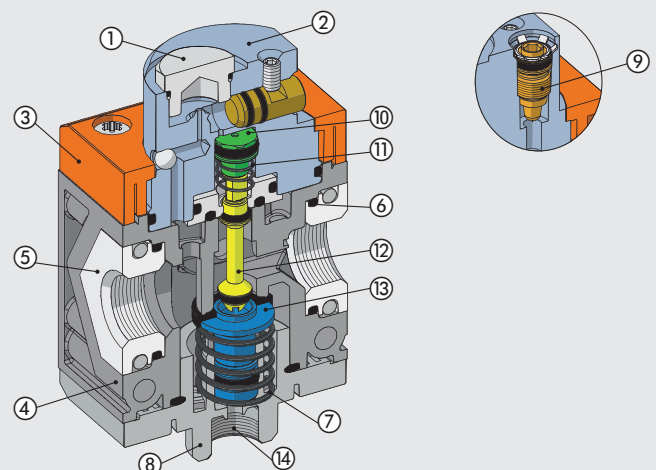
It, however, there is a major leak in the downstream system, it may never be possible to achieve the pressure required to open the valve completely.



TECHNICAL DATA		VAP SY1			VAP SY2			
Threaded port		1/8"	1/4"	3/8"	3/8"	1/2"	3/4"	1"
Threaded discharge port		1/8"			1/4"			
Inlet pressure	bar	3 - 15			3 - 13			
	MPa	0.3 - 1.5			0.3 - 1.3			
	psi	43 - 217			43 - 188			
Flow rate at 6.3 bar (0.63 MPa; 91 psi) ΔP 0.5 bar (0.05 MPa; 7 psi)	Nl/min	900	1000	1100	2800	3600	3600	
	scfm	32	39	39	99	127	127	
Flow rate at 6.3 bar (0.63 MPa; 91 psi) ΔP 1 bar (0.1 MPa; 14 psi)	Nl/min	1250	1500	1600	4400	4800	4800	
	scfm	44	53	57	156	170	170	
Drain flow rate at 6.3 bar (0.63 MPa; 91 psi)	Nl/min	500			2700			
	scfm	18			96			
Maximum flow rate start-up, at 6.3 bar (0.63 MPa; 91 psi) with regulation pin completely unscrewed	Nl/min	170			700			
	scfm	6			25			
Min/max temperature at 10 bar; 1 MPa; 145 psi	°C	From -10 to +50			From -10 to +50			
Weight	g	193	185	179	477	452	448	437
Fluid		Compressed air or other inert gases						
Mounting position		In any position						
Additional air take-off, for pressure gauges or fittings		1/8", front and rear			1/4", front and rear			
Additional air take-off flow rate at 6.3 bar (0.63 MPa; 91 psi) ΔP 1 bar (0.1 MPa; 14 psi)	Nl/min	500			1500			
	scfm	18			53			
Wall fixing screws		No. 2 M4 screws			No. 2 M5 screws			

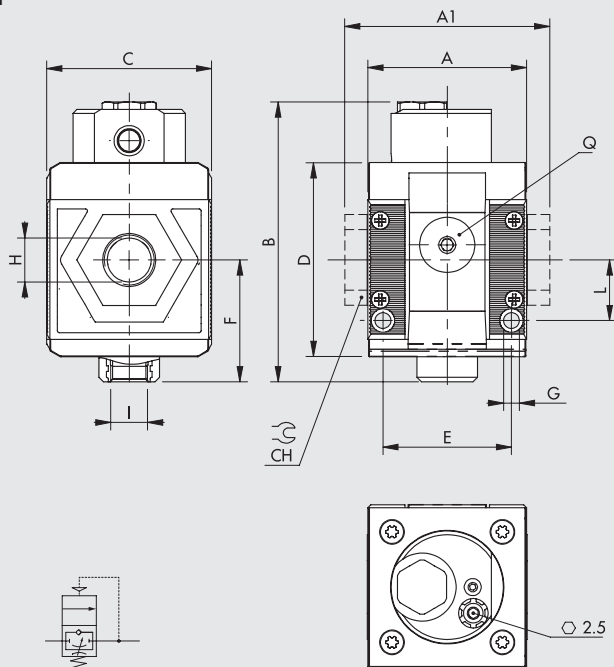
COMPONENTS

- ① OT58 nickel-plated brass cap
- ② Anodized aluminium upper block
- ③ Technopolymer flange
- ④ Technopolymer body
- ⑤ IN/OUT bushing made of OT58 nickel-plated brass or passivated aluminium for 3/4" - 1"
- ⑥ O-ring NBR gasket
- ⑦ Stainless steel valve spring
- ⑧ Technopolymer bottom plug
- ⑨ OT58 brass progressive start regulation pin
- ⑩ OT58 brass internal valve
- ⑪ Stainless steel spring stem recoveryng
- ⑫ OT58 brass stem
- ⑬ OT58 brass main valve with vulcanized gasket
- ⑭ OT58 brass threaded insert

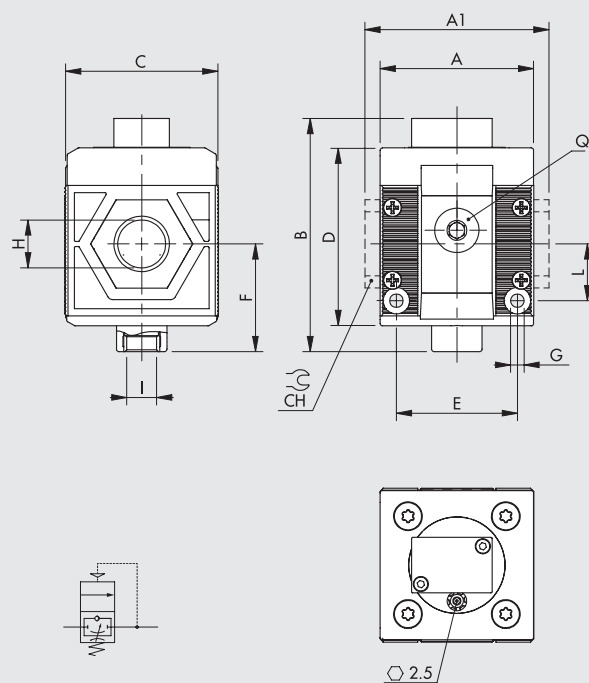


DIMENSIONS

SY1



SY2



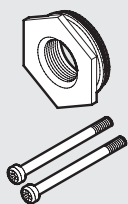
	VAP SY1			VAP SY2			
	1/8"	1/4"	3/8"	3/8"	1/2"	3/4"	1"
H (threaded port)	1/8"	1/4"	3/8"	3/8"	1/2"	3/4"	1"
A		42			60.5		
A1	-	-	44	-	-	95	95
B		74			92.5		
C		44			61		
CH		-		-	-	32	36
D		51.5			70.5		
E		33.5			47.5		
F		32.2			42.7		
G		Hole for M4 screws			Hole for M5 screws		
I (exhaust)		1/8"			1/4"		
L		16			22.5		
Q (additional air takes-off)		1/8"			1/4"		

ORDERING CODES

Code	Description
82950D9	VAP SY1 without bushings
82950D8	VAP SY2 without bushings

ACCESSORIES

THREADED PORT



Code	Description
9210001	Kit IN OUT 1/8 SY1
9210002	Kit IN OUT 1/4 SY1
9210003	Kit IN OUT 3/8 SY1
9210011	Kit IN OUT 3/8 SY2
9210012	Kit IN OUT 1/2 SY2
9210013	Kit IN OUT 3/4 SY2
9210014	Kit IN OUT 1 SY2

Max torque 0.4 Nm for SY1
Max torque 2.5 Nm for SY2

NOTES

Please contact our sales offices for further information and quotation.