

SYNTESI® SHUT-OFF VALVE

This device separates the compressed air circuit from the main air supply. It is a three-way valve that relieves the downstream system in the closed position. This makes it useful for maintenance operations or when the air supply to a machine or piece of equipment needs to be shut off.

Manual, pneumatic, electro-pneumatic and assisted electro-pneumatic control versions are available. The last version must be used if the inlet pressure is outside the electro-pneumatic valve operating range, so for particularly low or high pressures.

The version with manual control can be locked and you can enter up to two padlocks on size 1 and up to three on size 2 when the valve is in the closed position. As an alternative, a version with a single Ø7 hole is available for a single padlock. On the front and back there is a port (1/8" for size 1 and 1/4" size 2) that can be used with pressure gauges, pressure switches or as an additional air intake.

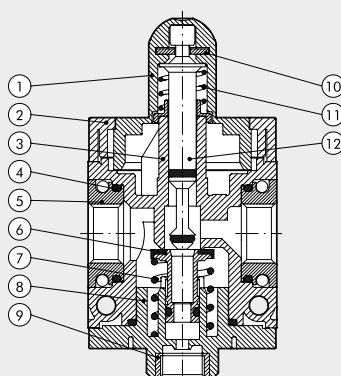


TECHNICAL DATA

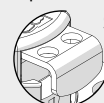
TECHNICAL DATA		V3V SY1			V3V SY2			
Threaded port		1/8"	1/4"	3/8"	3/8"	1/2"	3/4"	1"
Threaded discharge port		1/8"			1/4"			
Type of control		Manual - pneumatic - Elpn - Elpn pilot-assisted			Manual - Pneumatic - Cnomo elpn - Cnomo elpn pilot-assisted			
Max inlet pressure for pneumatic and solenoid pilot-assisted versions	bar	15			13			
	MPa	1.5			1.3			
	psi	217			188			
Inlet pressure for solenoid version	bar	3 - 10			3 - 10			
	MPa	0.3 - 1			0.3 - 1			
	psi	43 - 145			43 - 145			
Pilot pressure for pneumatic and solenoid pilot-assisted versions	bar	3 - 10			3 - 10			
	MPa	0.3 - 1			0.3 - 1			
	psi	43 - 145			43 - 145			
Flow rate at 6.3 bar (0.63 MPa; 91 psi) ΔP 0.5 bar (0.05 MPa; 7 psi)	Nl/min	800	1000	1100	2800	3000	3000	
	scfm	28	35	39	99	106	106	
Flow rate at 6.3 bar (0.63 MPa; 91 psi) ΔP 1 bar (0.1 MPa; 14 psi)	Nl/min	1100	1500	1600	3600	4000	4000	
	scfm	39	53	57	127	141.5	141.5	
Exhaust flow rate at 6.3 bar (0.63 MPa; 91 psi)	Nl/min	500			2000			
	scfm	18			71			
Min/max temperature at 10 bar; 1 MPa; 145 psi	°C	From -10 to +50			From -10 to +50			
Padlockable knob					Included			
Weight	g	197	192	183	476	449	445	433
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			
Bobbin capacity for electro-pneumatic version		12 VDC and 24 VDC = 2W; 24 VAC, 110 VAC and 220 VAC = 3.5 VA						
Manual control of electro-pneumatic versions		Bistable: horizontal = OFF, vertical = ON						

COMPONENTS

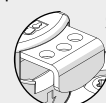
- ① Technopolymer knob
- ② Technopolymer hinge
- ③ Technopolymer body
- ④ NBR o-ring gasket
- ⑤ IN/OUT bushing made of OT58 nickel-plated brass or passivated aluminium for 3/4" - 1"
- ⑥ OT58 brass valve with NBR vulcanized gasket
- ⑦ Stainless steel valve spring
- ⑧ Technopolymer plug
- ⑨ OT58 brass threaded insert
- ⑩ Zinc-plated steel plate for knob locking (stainless steel for anti-corrosion version)
- ⑪ Stainless steel spring stem recovery
- ⑫ OT58 brass stem



V10 - Steel plate with Ø3.5 holes for locking with 2 padlocks (SY1) or 3 padlocks (SY2).

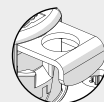


SY1



SY2

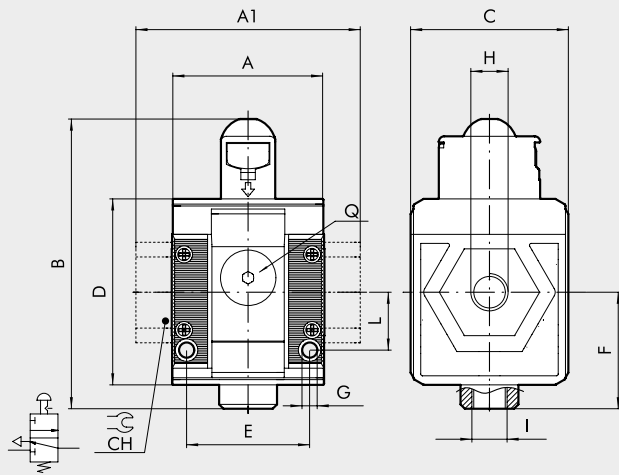
V11 - Steel plate with a single Ø7 hole for docking with a single padlock (compatible with most of the padlocks available from the trade with a Ø5mm arch).



DIMENSIONS

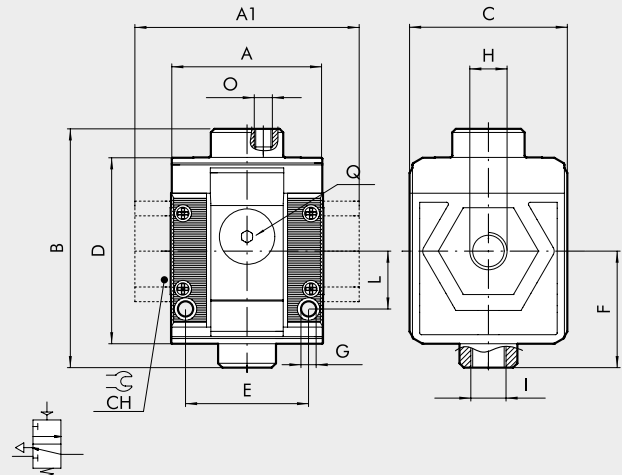
MANUAL

SY1-SY2



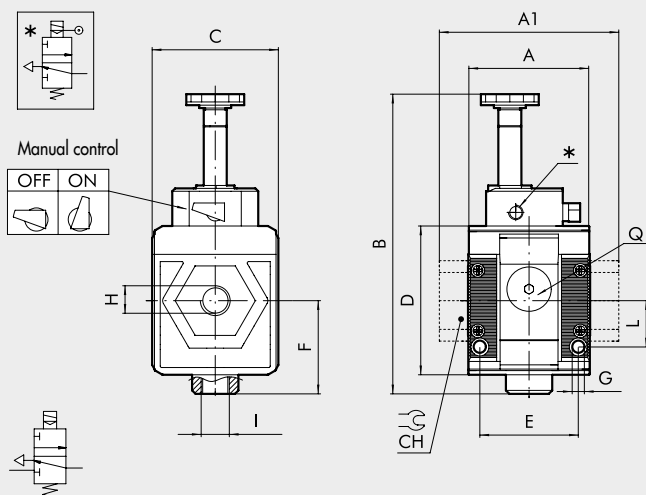
PNEUMATIC

SY1-SY2



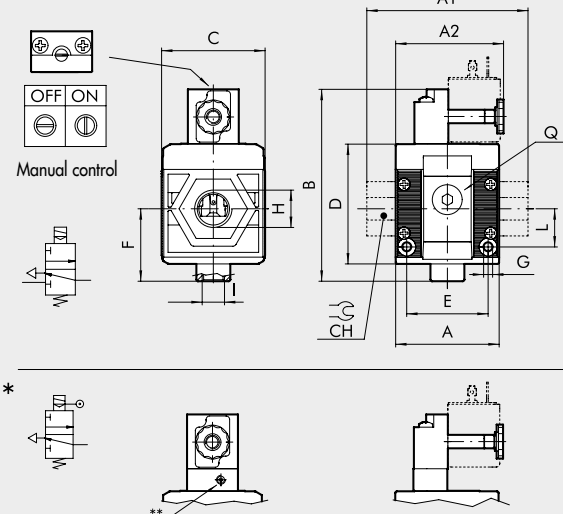
SOLENOID/SOLENOID PILOT-ASSISTED*

SY1



CNOMO SOLENOID / CNOMO SOLENOID PILOT-ASSISTED*

SY2



N.B.: Before assembling other Syntesi elements after the V3V, remember to mount the coil on the V3V itself.

	MANUAL				PNEUMATIC				SOLENOID/SOLENOID PILOT-ASSISTED				CNOMO SOLENOID/CNOMO SOLENOID PILOT-ASSISTED			
	SIZE 1		SIZE 2		SIZE 1		SIZE 2		SIZE 1		SIZE 2		SIZE 1		SIZE 2	
H (threaded port)	1/8"	1/4"	3/8"	3/8"	1/2"	3/4"	1"	1/8"	1/4"	3/8"	3/8"	1/2"	3/4"	1"	1/8"	1/4"
A	-	42	-	-	60.5	-	42	-	-	60.5	-	42	-	-	60.5	-
A1	-	-	44	-	-	95	95	-	-	44	-	-	95	95	-	-
A2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	65	-
B	80	-	-	109	-	-	66	94	104	-	-	113	-	-	-	-
C	44	-	-	61	-	-	44	61	44	-	-	126	-	-	61	-
CH	-	-	-	-	32	36	-	-	-	32	36	-	-	-	32	36
D	51.5	-	-	70.5	-	-	51.5	70.5	51.5	-	-	70.5	-	-	70.5	-
E	33.5	-	-	47.5	-	-	33.5	47.5	33.5	-	-	47.5	-	-	47.5	-
F	32.2	-	-	42.7	-	-	32.2	42.7	32.2	-	-	42.7	-	-	42.7	-
G	Hole for M4 screws		Hole for M5 screws		Hole for M4 screws		Hole for M5 screws		Hole for M4 screws		Hole for M5 screws		Hole for M4 screws		Hole for M5 screws	
I (exhaust)	1/8"	-	-	1/4"	-	-	1/8"	1/4"	1/8"	-	-	1/4"	1/8"	-	1/4"	-
L	16	-	-	22.5	-	-	16	22.5	16	-	-	22.5	16	-	22.5	-
O (pilot)	-	-	-	-	-	-	M5	1/8"	-	-	-	-	-	-	-	-
Q (no. 2 additional air takes-off)	1/8"	-	-	1/4"	-	-	1/8"	1/4"	1/8"	-	-	1/4"	1/8"	-	1/4"	-
** Pilot	-	-	-	-	-	-	-	-	M5	-	-	M5	-	-	M5	-

KEY TO CODES

56 SYNTESI	1 SIZE	1 THREADED INPUT CONNECTION	V ELEMENT	10 TYPE	1 THREADED OUTPUT CONNECTION
56 Syntesi 5X Syntesi anti-corrosion	1 Size 1 2 Size 2	0 Without bushing 1 1/8" port 2 1/4" port 3 3/8" port 0 Without bushing 3 3/8" port 4 1/2" port 5 3/4" port 6 1" port	V Shut-off valve	10 Manual with Ø3.5 hole for padlocks * 11 Manual with Ø7 hole for padlock ● 20 Pneumatic ● 30 Solenoid pilot-assisted ● 70 Solenoid	0 Without bushing 1 1/8" port 2 1/4" port 3 3/8" port 0 Without bushing 3 3/8" port 4 1/2" port 5 3/4" port 6 1" port

- * Compatible with most of the padlocks available from the trade with a Ø5mm arch.
● Not available in the anti-corrosion version.

PURCHASE ORDER CODES HAVING A MORE FREQUENT USE

N.B. Besides the below mentioned codes, you can order elements composed at your will according to the key to codes.

Code	Description	Code	Description	NOTE
Syntesi® SY1 SHUT-OFF VALVE		Syntesi® SY2 SHUT-OFF VALVE		Anti-corrosion version
5610V100	V3V SY1 manual without bushings	5620V100	V3V SY2 manual without bushings	5X-----
5611V101	V3V SY1 1/8 manual	5623V103	V3V SY2 3/8 manual	Example
5612V102	V3V SY1 1/4 manual	5624V104	V3V SY2 1/2 manual	5X11V101 V3V SY1 1/8 anti-corrosion
5613V103	V3V SY1 3/8 manual	5625V105	V3V SY2 3/4 manual	
		5626V106	V3V SY2 1 manual	
5610V200	V3V SY1 pneumatic without bushings			
5611V201	V3V SY1 1/8 pneumatic	5620V200	V3V SY2 pneumatic without bushings	
5612V202	V3V SY1 1/4 pneumatic	5623V203	V3V SY2 3/8 pneumatic	
5613V203	V3V SY1 3/8 pneumatic	5624V204	V3V SY2 1/2 pneumatic	
		5625V205	V3V SY2 3/4 pneumatic	
5610V300	V3V SY1 elpn pilot-assisted without bushings	5626V206	V3V SY2 1 pneumatic	
5611V301	V3V SY1 1/8 elpn pilot-assisted			
5612V302	V3V SY1 1/4 elpn pilot-assisted	5620V300	V3V SY2 elpn pilot-assisted Cnomo without bushings	
5613V303	V3V SY1 3/8 elpn pilot-assisted	5623V303	V3V SY2 3/8 elpn pilot-assisted Cnomo	
		5624V304	V3V SY2 1/2 elpn pilot-assisted Cnomo	
5610V700	V3V SY1 elpn without bushings	5625V305	V3V SY2 3/4 elpn pilot-assisted Cnomo	
5611V701	V3V SY1 1/8 elpn	5626V306	V3V SY2 1 elpn pilot-assisted Cnomo	
5612V702	V3V SY1 1/4 elpn			
5613V703	V3V SY1 3/8 elpn	5620V700	V3V SY2 elpn without bushings	
		5623V703	V3V SY2 3/8 elpn	
		5624V704	V3V SY2 1/2 elpn	
		5625V705	V3V SY2 3/4 elpn	
		5626V706	V3V SY2 1 elpn	

NOTES