

# 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 Ø 7 mm hole is available for a single padlock. On the front and back there is a port (1/8" BSPP for size 1 and 1/4" BSPP size 2) that can be used with pressure gauges, pressure switches or as an additional air intake.



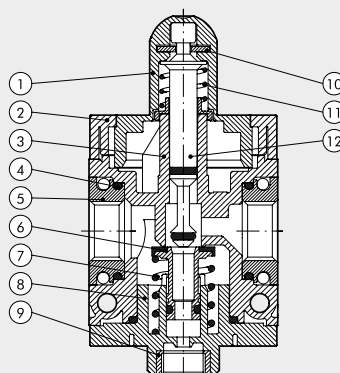
AIR PREP

Syntesi® SHUT-OFF VALVE

TECHNICAL DATA	V3V SY1			V3V SY2			
	1/8" NPT	1/4" NPT	3/8" NPT	3/8" NPT	1/2" NPT	3/4" NPT	1" NPT
Threaded port	1/8" NPT	1/4" NPT	3/8" NPT	3/8" NPT	1/2" NPT	3/4" NPT	1" NPT
Threaded discharge port	1/8" NPT			1/4" NPT			
Type of control	Manual - pneumatic - solenoid - solenoid pilot - assisted			Manual - Pneumatic - C-nomo elpn - C-nomo elpn pilot-assisted			
Max inlet pressure for pneumatic and solenoid pilot-assisted versions	bar MPa psi			bar MPa psi			
Inlet pressure for solenoid version	bar MPa psi			bar MPa psi			
Pilot pressure for pneumatic and solenoid pilot-assisted versions	bar MPa psi			bar MPa psi			
Flow rate at 6.3 bar (0.63 MPa; 91 psi) ΔP 0.5 bar (0.05 MPa; 7.25 psi)	Nl/min scfm	800 28	1000 35	1100 39	2800 99	3000 106	3000 106
Flow rate at 6.3 bar (0.63 MPa; 91 psi) ΔP 1 bar (0.1 MPa; 14.5 psi)	Nl/min scfm	1100 39	1500 53	1600 57	3600 127	4000 141.5	4000 141.5
Drain flow rate at 6.3 bar (0.63 MPa; 91 psi)	Nl/min scfm	500 18			2000 71		
Min/max temperature at 10 bar; 1 MPa; 145 psi	°C °F			From -10 to +50 From 14 to +122			From -10 to +50 From 14 to +122
Padlockable knob				Included			
Weight	pounds	0.44	0.43	0.41	1.04	0.94	0.98
Fluid	Compressed air or other inert gases						
Mounting position	In any position						
Additional air take-off, for pressure gauges or fittings	1/8" BSPP, front and rear			1/4" BSPP, 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 scfm	500 18			1500 53		
Wall fixing screws	N. 8-32 unc x 2			N. 10-24 unc x 2			
Bobbin capacity for electro-pneumatic version	W	12 VDC and 2VDC = 2W			24 VDC = 4W; 24 VAC, 110 VAC, 220 VAC = 4 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
- ⑥ OT58 brass valve with NBR vulcanized gasket
- ⑦ Stainless steel valve spring
- ⑧ Technopolymer plug
- ⑨ OT58 brass threaded insert
- ⑩ Plate for knob locking (stainless steel for anti-corrosion version)
- ⑪ Stainless steel spring stem recovery
- ⑫ OT58 brass stem



V10 - Steel plate with Ø 3.5 mm holes for locking with 2 padlocks (SY1) or 3 padlocks (SY2).



V11 - Steel plate with a single Ø 7 mm hole for docking with a single padlock.



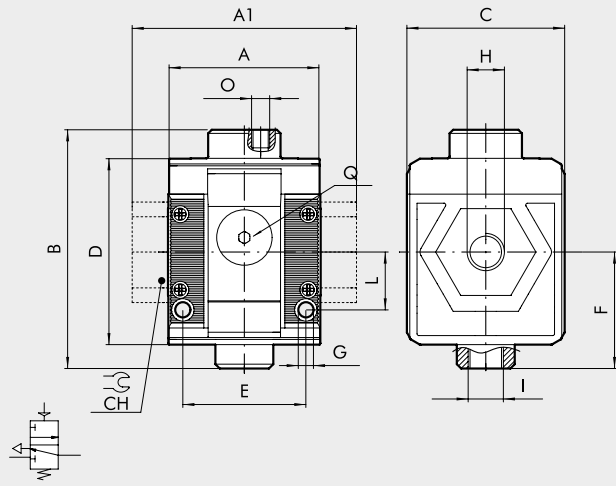
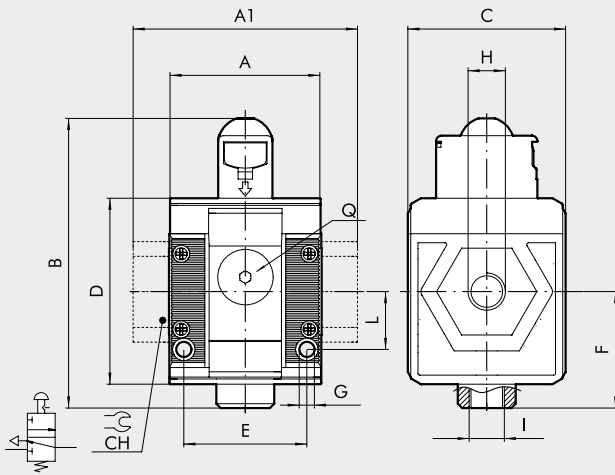
COMPONENTS

MANUAL

SY1-SY2

PNEUMATIC

SY1-SY2

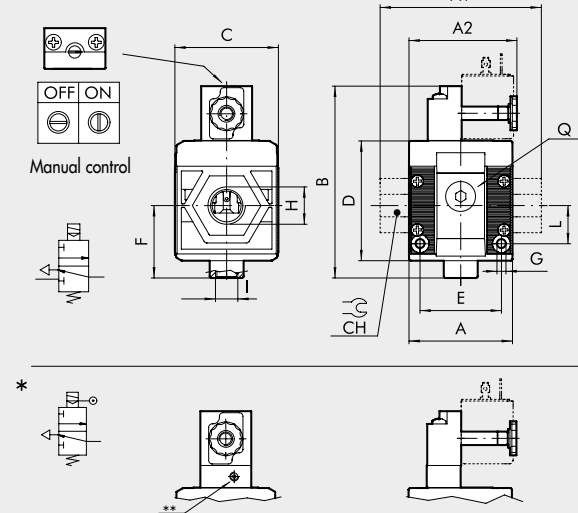
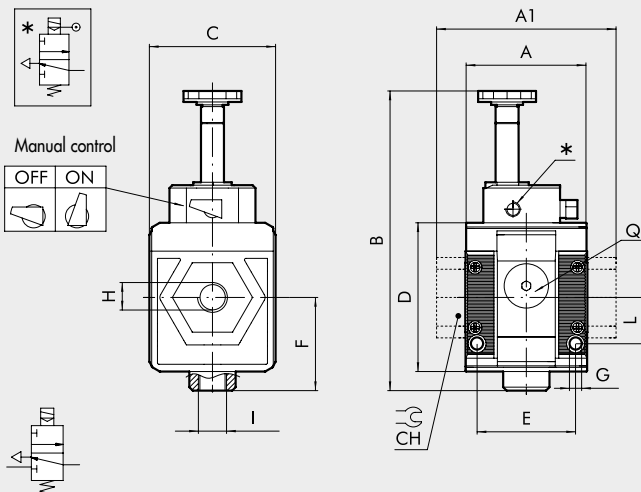


SOLENOID/SOLENOID PILOT-ASSISTED\*

SY1

CNOMO SOLENOID / CNOMO SOLENOID PILOT-ASSISTED\*

SY2



	MANUAL						PNEUMATIC						SOLENOID/SOLENOID PILOT-ASSISTED			CNOMO SOLENOID/CNOMO SOLENOID PILOT-ASSISTED					
	SIZE 1		SIZE 2				SIZE 1		SIZE 2				SIZE 1			SIZE 2					
H (threaded port) NPT	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"	3/8"	3/8"	1/2"	3/4"	1"
A	1.65		2.38				1.65		2.38				1.65			2.38					
A1	-	-	1.73	-	-	3.74	3.74	-	-	1.73	-	-	3.74	3.74	-	-	1.73	-	-	3.74	3.74
A2	-		-				-		-				-			2.56					
B	3.15		4.29				2.60		3.7				4.10			-					
Cnomo	-		-				-		-				-			4.45					
Cnomo pilot ass.	-		-				-		-				-			4.26					
C	1.73		2.4				1.73		2.4				1.73			2.4					
CH	-		-	-	1.26	1.41	-		-	-	1.26	1.41	-			-	-	1.26	1.41		
D	2.03		2.77				2.03		2.77				2.03			2.77					
E	1.32		1.87				1.32		1.87				1.32			1.87					
F	1.23		1.68				1.23		1.68				1.23			1.68					
G	0.165		0.21				0.165		0.21				0.165			0.21					
I (exhaust)	1/8" NPT		1/4" NPT				1/8" NPT		1/4" NPT				1/8" NPT			1/4" NPT					
L	0.63		-				0.63		-				0.63			0.89					
O (pilot)	-		-				M5**		1/8" NPT				-			-					
Q (no. 2 additional air takes-off)	1/8" BSPP		1/4" BSPP				1/8" BSPP		1/4" BSPP				1/8" BSPP			1/4" BSPP					
* Pilot	-		-				-		-				M5**			M5**					

\*\* AU 5/G M5 - 10/32 UNF adapter supplied

**KEY TO CODES**

5U SYNTESI	1 SIZE	1 THREADED INPUT CONNECTION	V ELEMENT	10 TYPE	1 THREADED OUTPUT CONNECTION
5U Syntesi NPT	1 Size 1	0 Without bushing 1 1/8" NPT port 2 1/4" NPT port 3 3/8" NPT port	V Shut-off valve	10 Manual with Ø 3.5 mm hole for padlocks 11 Manual with Ø 7 mm hole for padlock	0 Without bushing 1 1/8" NPT port 2 1/4" NPT port 3 3/8" NPT port
5Z Syntesi anti-corrosion NPT	2 Size 2	0 Without bushing 3 3/8" NPT port 4 1/2" NPT port 5 3/4" NPT port 6 1" NPT port		● 20 Pneumatic ● 30 Solenoid pilot-assisted ● 70 Solenoid	0 Without bushing 3 3/8" NPT port 4 1/2" NPT port 5 3/4" NPT port 6 1" NPT port

● 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
<b>Syntesi® SY1 SHUT-OFF VALVE</b>		<b>Syntesi® SY2 SHUT-OFF VALVE</b>		<b>NOTE</b> <b>Anti-corrosion version</b> <b>5Z_-----</b> <b>Example</b> <b>5Z11V101</b> V3V SY1 1/8 NPT anti-corrosion
5U10V100	V3V SY1 manual NPT without bushings	5U20V100	V3V SY2 manual NPT without bushings	
5U11V101	V3V SY1 1/8 manual NPT	5U23V103	V3V SY2 3/8 manual NPT	
5U12V102	V3V SY1 1/4 manual NPT	5U24V104	V3V SY2 1/2 manual NPT	
5U13V103	V3V SY1 3/8 manual NPT	5U25V105	V3V SY2 3/4 manual NPT	
		5U26V106	V3V SY2 1 manual NPT	
5U10V200	V3V SY1 pneumatic NPT without bushings			
5U11V201	V3V SY1 1/8 pneumatic NPT	5U20V200	V3V SY2 pneumatic NPT without bushings	
5U12V202	V3V SY1 1/4 pneumatic NPT	5U23V203	V3V SY2 3/8 pneumatic NPT	
5U13V203	V3V SY1 3/8 pneumatic NPT	5U24V204	V3V SY2 1/2 pneumatic NPT	
		5U25V205	V3V SY2 3/4 pneumatic NPT	
5U10V300	V3V SY1 solenoid pilot-assisted NPT without bushings	5U26V206	V3V SY2 1 pneumatic NPT	
5U11V301	V3V SY1 1/8 solenoid pilot-assisted NPT			
5U12V302	V3V SY1 1/4 solenoid pilot-assisted NPT	5U20V300	V3V SY2 solenoid pilot-assisted Cnomo NPT without bushings	
5U13V303	V3V SY1 3/8 solenoid pilot-assisted NPT	5U23V303	V3V SY2 3/8 solenoid pilot-assisted Cnomo NPT	
		5U24V304	V3V SY2 1/2 solenoid pilot-assisted Cnomo NPT	
5U10V700	V3V SY1 solenoid NPT without bushings	5U25V305	V3V SY2 3/4 solenoid pilot-assisted Cnomo NPT	
5U11V701	V3V SY1 1/8 solenoid NPT	5U26V306	V3V SY2 1 solenoid pilot-assisted Cnomo NPT	
5U12V702	V3V SY1 1/4 solenoid NPT			
5U13V703	V3V SY1 3/8 solenoid NPT	5U20V700	V3V SY2 solenoid NPT without bushings	
		5U23V703	V3V SY2 3/8 solenoid NPT	
		5U24V704	V3V SY2 1/2 solenoid NPT	
		5U25V705	V3V SY2 3/4 solenoid NPT	
		5U26V706	V3V SY2 1 solenoid NPT	

**NOTES**