

PILOT OPERATED STEAM SOLENOID VALVE CEME 2/2 ESV 90 NC

MAIN CHARACTERISTICS

The ESV 90 solenoid valve is a 2/2 piloted valve dedicated to the shut off of low-pressure steam networks. Normally closed operating. The valve is with brass body and stainless steel internal parts and the piston PTFE in graphite. The minimum differential pressure of is 1 bar.

AVAILABLE MODELS

ESV90 : G 1/2" to G 2"

Voltages: See on page 3.

BSP Screwed end connections.

LIMITS OF USE

Electric protection	IP 65	
Max allowed fluid pressure : PS	Coil (AC)	Coil (DC)
	0 - 10 bar	0 - 5 bar
Max allowed fluid temperature : TS	0°C - 180°C	
Room temperature* :	-10°C / +80°C	

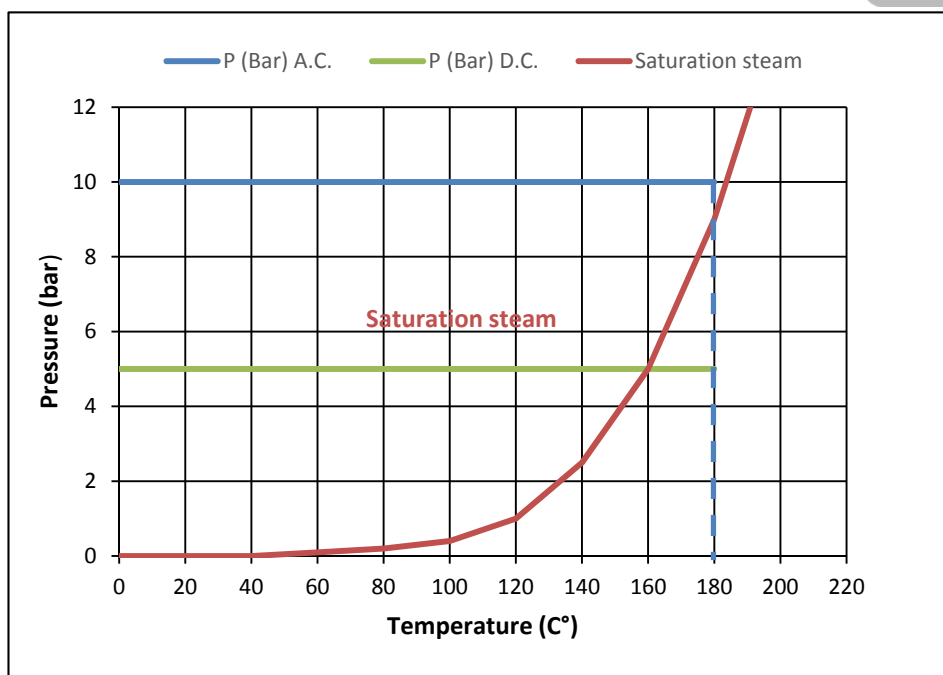
* In direct current, over 40°C, the maximum differential Pressure can be reduced.



Type : G 1/2"



Type : G 3/4" à G 2"



Modifications reserved



SECTORIEL S.A.
45 rue du Ruisseau
38290 SAINT QUENTIN-FALLAVIER – FRANCE
Tél : +33 4 74 94 90 70 – Fax : +33 4 74 94 13 95
www.sectoriel.fr / Email : sectoriel@sectoriel.fr

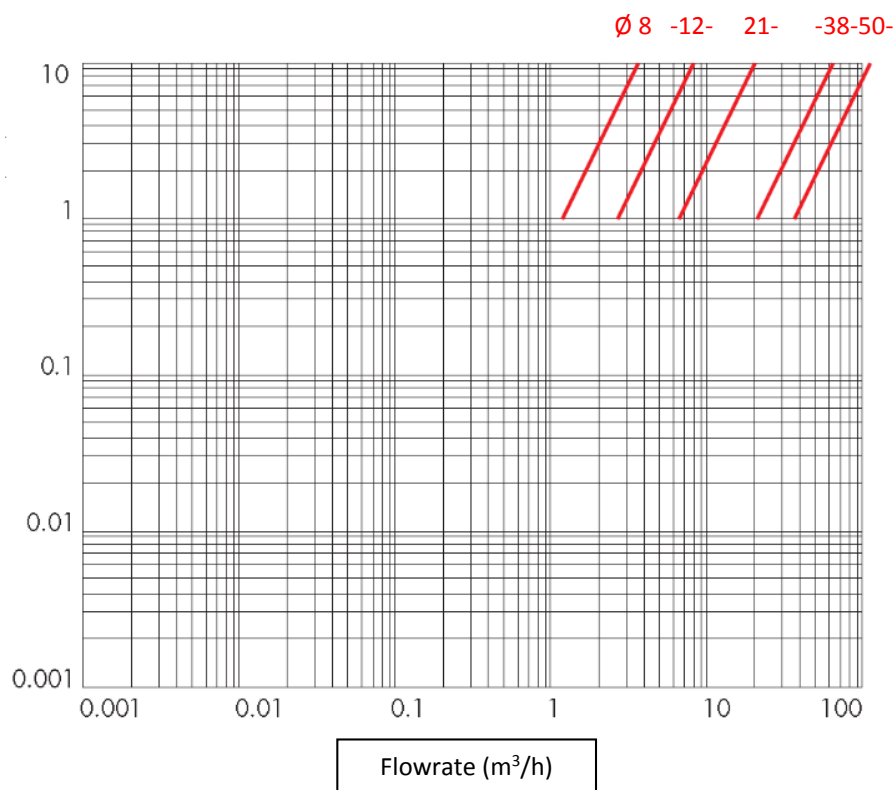
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REGULATIONS AND STANDARDS OF CONSTRUCTION

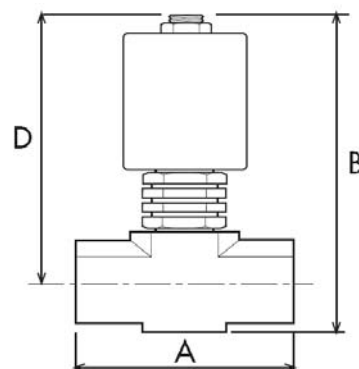
Item	Standard	Item	Standard
Pressure Equipment Directive 97/23	1/2" to 2" : A3 § 3 excluded	Brass materials	EN 1503-4
Low voltage directive CE 73/23	catégory I	BSP thread	ISO 228
Connector	DIN 43650		

PRESSURE LOSS DIAGRAM (BAR)



DIMENSIONS (mm) AND WEIGHT (kg)

DN	A	B	C	D	Weight (Kg)
G 1/2"	56	99	60	81	0,5
G 3/4"	100	134	80	116	1,6
G 1"	100	139	80	119	1,6
G 1" 1/4	146	184	128	154	4,9
G 1" 1/2	146	184	128	154	4,8
G 2"	174	219	146	184	7,3



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HYDRAULIC CHARACTERISTICS

DN	Port (mm)	Kv (m ³ /h)	Min diff. Pressure (bar)	Max Diff. AC. Pressure (bar)	Max Diff. DC. Pressure (bar)	Coil	Operating time (s)
G 1/2"	8	1,08	1	10	5	B12	20-60 ms
G 3/4"	21	6,3	1	10	5		
G 1"	21	6,3	1	10	5		
G 1" 1/4	38	20,4	1	10	5		50-80 ms
G 1" 1/2	38	20,4	1	10	5		
G 2"	50	34,8	1	10	5		

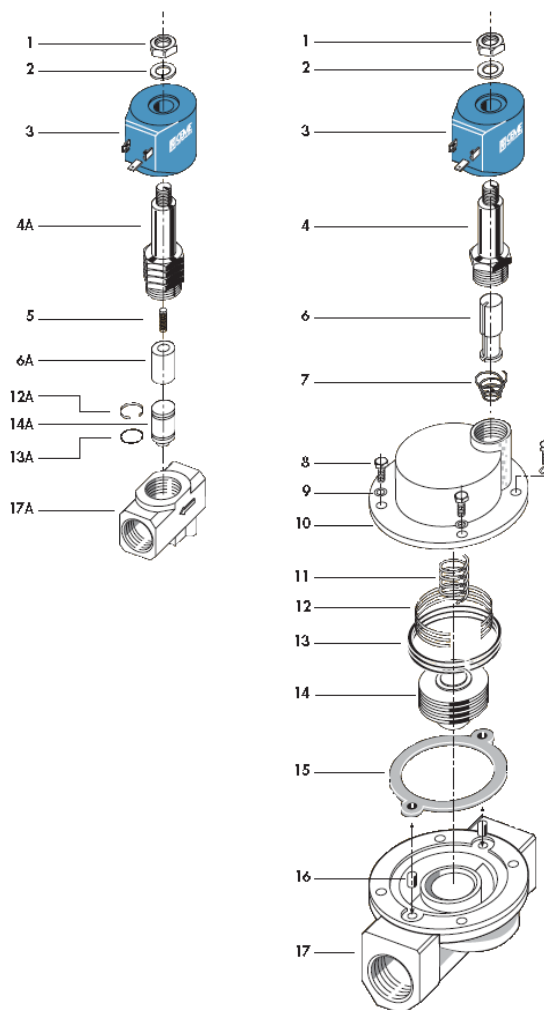
ELECTRIC CHARACTERISTICS

Coil classified F. Duty 100%. Connecting by connector T30.

Coil	Current	Available voltages (V)						Frequency		Power consumption	
		12	24	48	110	230	400	50 Hz	60 Hz	Holding	Rush
B 12	AC Coil	12	24	48	110	230	400	50 Hz	60 Hz	20 VA	38 VA
	DC Coil	12	24	48	110					14 W	

CONSTRUCTION

N°	Item	Material
1	Lock nut	Zincated steel
2	Washer	Zincated steel
3	Coil	PBT + 30% G.F
4 (A)	Tube guide	Stainless steel AISI 430
5	Spring	Stainless steel AISI 430
6 (A)	Plunger	Stainless steel AISI 430
7	Spring	Stainless steel AISI 430
8	Screw	Stainless steel
9	Spring washer	Steel
10	Cover	Brass EN CW 617 N
11	Spring	Steel
12 (A)	Spring	Steel
13 (A)	Gasket	PTFE
14 (A)	Piston	Stainless steel + PTFE Graphite
15	Gasket	PTFE
16	Bush	Brass
17 (A)	Body	Brass EN CW 617 N



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MOUNTING

Installation in every position although the position with coil upside down is not recommended (Risk of fouling of the experimental opening).

For the diameter 1" 1/4 à 2", It is recommended to install the solenoid valve with coil in vertical position.

Respect the sense of flow indicated by the arrow marked on the body.

Conform to the assembly instructions supplied with the solenoid valve.


SPARE PARTS

B12 coil type (Item 3)							Connector
Voltage	230V 50Hz	24V 50Hz	48V 50Hz	110V 50Hz	12V cc	24V cc	T30
Code	980410	980411	980413	980414	980415	980416	980696
Voltage				110V cc	12V 50 Hz	380V 50Hz	T30
Code				980417	980412	980419	980696
	Gasket (Item 14 (A))		Gasket (Item 13 (A))				
DN	1/2"		3/4"	1"	1" 1/4	1" 1/2	2"
PTFE	980698		980699		980710		980697

CEME TRANSLATIONS REFERENCES

∅ Diameter	1/2"	3/4"	1"	1" 1/4	1" 1/2	2"
CEME	9014	9015	9016	9017	9018	9019
SECTORIEL	See WEB catalog					

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