### **MAIN CHARACTERISTICS**

The solenoid valve is a 2/2 direct acting valve dedicated to the shut off of clean and non-aggressive fluids. The operation way is normally closed and it can be used on  $\Delta P=0$  applications. The standard construction includes quality brass body and cover, internal parts in stainless steel and diaphragm is NBR. This solenoid valve is also available with several diaphragm materials and various coil voltages. Manufacturing quality is following ISO 9001. Connection is G threaded according to ISO 228/1.

### **LIMITS OF USE**

Electric protection		IP 65	
Max allowed fluid pressure : PS	0 - 10 bar		
Differential pressure :	See the table bellow		
Max allowed fluid temperature : TS	NBR	EPDM	FPM
·	+80°C +110°C +150°C		
Room temperature*:	-10°C / +80°C		

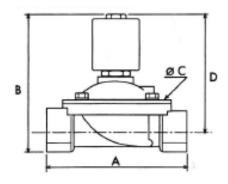
<sup>\*</sup> In direct current, over 40°C, the maximum differential pressure can be reduced.





# **DIMENSIONS (mm) AND WEIGHT (kg)**

DN	Α	В	С	D	Weight
G 3/8"	61	105	48	92	0,68
G 1/2"	61	105	48	92	0,66
G 3/4"	100	110	80	93	1,10
G 1"	100	116	80	96	1,20
G 1" 1/4	146	200	128	170	5,20
G 1" 1/2	146	200	128	170	5,00
G 2"	174	216	146	180	6,50



## **HYDRAULIC CHARACTERISTICS**

DN	Port (mm)	Kv (m³/h)	Max diff. Pressure (bar) C.A.	Max diff. Pressure (bar) C.C.	Coil	Operating time (s)
G 3/8"	12	2,20	5	5		
G 1/2"	12	2,20	5	5		20-60 ms
G 3/4"	20	5,50	4	2		20 00 1113
G 1"	25	7,50	4	2		
G 1" 1/4	36	17,5	4	2		
G 1" 1/4	39	19,0	4	2		50-80 ms
G 2"	51	32,4	4	2		

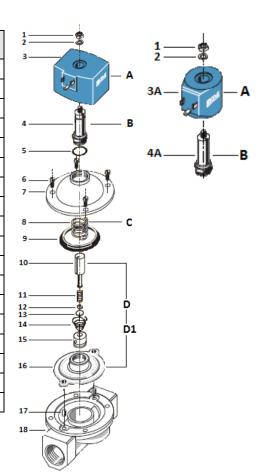
## **ELECTRIC CHARACTERISTICS**

Connecting by connector

Coil	Current	Available voltages (V)						Frequ	ency	Power cor	sumption
								Holding	Rush		
	AC Coil	12	24	48	110	230	380	50 Hz	60 Hz	18 VA	47 VA
	DC Coil	12	24		110			na		21 W	
	AC Coil		24	48	110	230	380	50 Hz	60 Hz	140 VA	430 VA
	DC Coil	12	24					na		43	W

## **CONSTRUCTION**

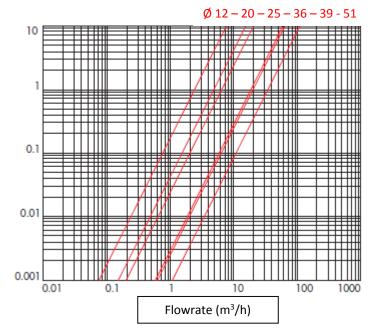
n°ItemMaterial1Lock nutZincated steel2WasherZincated steel3CoilPBT + 30% G.F4Tube guideStainless steel AISI 4305O-ringFPM6ScrewStainless steel7CoverBrass CW 617 N8SpringSteel9RingStainless steel10PlungerStainless steel11SpringSteel12SupportStainless steel13SealNBR14SpringSteel15BushStainless steel16DiaphragmNBR17BushStainless steel		•	
2 Washer Zincated steel 3 Coil PBT + 30% G.F 4 Tube guide Stainless steel AISI 430 5 O-ring FPM 6 Screw Stainless steel 7 Cover Brass CW 617 N 8 Spring Steel 9 Ring Stainless steel 10 Plunger Stainless steel 11 Spring Steel 12 Support Stainless steel 13 Seal NBR 14 Spring Steel 15 Bush Stainless steel 16 Diaphragm NBR	n°	Item	Material
3 Coil PBT + 30% G.F 4 Tube guide Stainless steel AISI 430 5 O-ring FPM 6 Screw Stainless steel 7 Cover Brass CW 617 N 8 Spring Steel 9 Ring Stainless steel 10 Plunger Stainless steel 11 Spring Steel 12 Support Stainless steel 13 Seal NBR 14 Spring Steel 15 Bush Stainless steel 16 Diaphragm NBR	1	Lock nut	Zincated steel
4 Tube guide Stainless steel AISI 430  5 O-ring FPM  6 Screw Stainless steel  7 Cover Brass CW 617 N  8 Spring Steel  9 Ring Stainless steel  10 Plunger Stainless steel  11 Spring Steel  12 Support Stainless steel  13 Seal NBR  14 Spring Steel  15 Bush Stainless steel  NBR	2	Washer	Zincated steel
5O-ringFPM6ScrewStainless steel7CoverBrass CW 617 N8SpringSteel9RingStainless steel10PlungerStainless steel11SpringSteel12SupportStainless steel13SealNBR14SpringSteel15BushStainless steel16DiaphragmNBR	3	Coil	PBT + 30% G.F
6 Screw Stainless steel 7 Cover Brass CW 617 N 8 Spring Steel 9 Ring Stainless steel 10 Plunger Stainless steel 11 Spring Steel 12 Support Stainless steel 13 Seal NBR 14 Spring Steel 15 Bush Stainless steel	4	Tube guide	Stainless steel AISI 430
7 Cover Brass CW 617 N  8 Spring Steel  9 Ring Stainless steel  10 Plunger Stainless steel  11 Spring Steel  12 Support Stainless steel  13 Seal NBR  14 Spring Steel  15 Bush Stainless steel  16 Diaphragm NBR	5	O-ring	FPM
8 Spring Steel 9 Ring Stainless steel 10 Plunger Stainless steel 11 Spring Steel 12 Support Stainless steel 13 Seal NBR 14 Spring Steel 15 Bush Stainless steel 16 Diaphragm NBR	6	Screw	Stainless steel
9 Ring Stainless steel 10 Plunger Stainless steel 11 Spring Steel 12 Support Stainless steel 13 Seal NBR 14 Spring Steel 15 Bush Stainless steel 16 Diaphragm NBR	7	Cover	Brass CW 617 N
10 Plunger Stainless steel 11 Spring Steel 12 Support Stainless steel 13 Seal NBR 14 Spring Steel 15 Bush Stainless steel 16 Diaphragm NBR	8	Spring	Steel
11 Spring Steel 12 Support Stainless steel 13 Seal NBR 14 Spring Steel 15 Bush Stainless steel 16 Diaphragm NBR	9	Ring	Stainless steel
12SupportStainless steel13SealNBR14SpringSteel15BushStainless steel16DiaphragmNBR	10	Plunger	Stainless steel
13SealNBR14SpringSteel15BushStainless steel16DiaphragmNBR	11	Spring	Steel
14 Spring Steel 15 Bush Stainless steel 16 Diaphragm NBR	12	Support	Stainless steel
15 Bush Stainless steel 16 Diaphragm NBR	13	Seal	NBR
16 Diaphragm NBR	14	Spring	Steel
	15	Bush	Stainless steel
17 Bush Stainless steel	16	Diaphragm	NBR
	17	Bush	Stainless steel
18 Body Brass CW 617 N	18	Body	Brass CW 617 N



# **REGULATIONS AND STANDARDS OF CONSTRUCTION**

Item	Standard	Item	Standard
	1/4" to 1" : Excluded	Brass materials	EN 1503-4
Pressure equipment directive 97/23	1" 1/4 to 2" : category I	BSP thread	ISO 228
Low voltage directive 72/23	category I	Drinking water	AC LY 361
Connector	DIN 43650		

## **PRESSURE LOSS DIAGRAM (BAR)**



### **USE ON DRINKING WATER**

The W version of the in diameter 3/4" et 1" can be used on the networks of drinking water. It has the French homologation ACS.

### **MOUNTING**

Installation in every position except horizontal pipe with coil towards the bottom.

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

For an use on liquids, the installation of a strainer for upstream protection is recommended.

Conform to the assembly instructions supplied with the solenoid valve.

#### **SPARE PARTS**

coil type (Number A)									
Voltage	230V 50Hz	24V 50Hz	48V 50Hz	110V 50Hz	12V cc	24V cc			
	980410	980411	980413	980414	980415	980416	980696		
Voltage	230V 60Hz	24V 60Hz	380V 50Hz	110V cc	12V 50 Hz				
Code	980420	980421	980419	980417	980412				
		coil t	ype (Number A	<b>A)</b>			Connector		
Voltage	230V 50Hz	24V 50Hz	48V 50Hz	110V 50Hz	12V cc	24V cc			
	980510 980511		980513	980514	980515	980516	980696		
	Moving parts (Number 10, 11, 12, 13, 14, 15, 16 et 17)								
DN	3/8"	1/2"	3/4"	1"	1" 1/4	1" 1/2	2"		
NBR	980	600	980601		980602		980603		
EPDM	980610		980611		980612		980613		
FPM	980620		980	621	1 980622		980623		
EPDM W			980	1660					