# WZB2

Membrane solenoid valve indirect action normally opened

# **Technical Data Sheet**







## **Description**

Membrane solenoid valve, indirect action (pilot) normally opened, 2 way.

• Absorbed power : see table below. Other power : consult us

• Viscosity : max 25cSt

• Ambient temperature : max. +55°C

• Particularly suitable against waterhammer

• Adjustable closing system : on request

• Optional : manual actuation

• Protection : IP 65 with connector

 Solenoid valve delivered with standard coil 220/50 Hz or 24V/50Hz or 24VDC, and with a not assembled connector



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	Connection	Orifice	220V/50Hz 12W	24V/50Hz 9,5W	24VDC 14W	Weight Kg
	3/8	12	149B12406	149B12419	149B12432	0,42
	1/2	12	149B12407	149B12420	149B12433	0,39
>	3/4	18	149B12408	149B12421	149B12434	0,65
EPDM	1	25	149B12409	149B12422	149B12435	1,05
	1 1/4	30	149B12410	149B12423	149B12436	1,70
	1 1/2	37	149B12411	149B12424	149B12437	2,85
	2	50	149B12412	149B12425	149B12438	4,30
	1/2	12	149B12413	149B12426	149B12439	0,39
	3/4	18	149B12414	149B12427	149B12440	0,65
Σ	1	25	149B12415	149B12428	149B12441	1,05
五	1 1/4	30	149B12416	149B12429	149B12442	1,70
	1 1/2	37	149B12417	149B12430	149B12443	2,85
	2	50	149B12418	149B12431	149B12444	4,30

Every technical data concerns the standard coils.

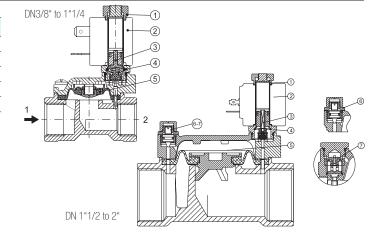
All our solenoid valves can be delivered ON DEMAND with a different coil.

Technical features							
Operating temperature	EPDM: -10 °C to 140 °C	FKM: -10 °C to 140 °C					
Mediums	EPDM: Water	FKM: oil, air, water					
Permissible operating pressure (PFA) in water	See table p.3						
Connection	Female/female, BSP thread						

#### Nomenclature and materials

Designation	Materials
Body and cover	Brass CW617N
Armature tube	AISI 303
Plunger and core	AISI 430FR
Springs	AISI 302
Seal material	EPDM/FKM according to the type

N°	Designation
1	Coil fixing nut
2	Coil
3	Plunger
4	Armature tube with core
5	Membrane assembly
6-7	Speed control valve

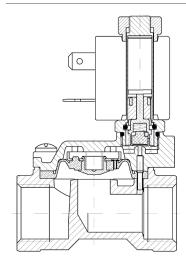




## **Approvals**

#### **ACS**

## **Functionning**



#### Valve open (coil de-energized):

When the coil is de-energized, the pilot orifice is open.

Since the pilot orifice is larger than the equalization orifice, the pressure exerted on the membrane drops and this allow the main orifice to be opened. The valve is then opened and remains open so as long as the minimum differential pressure it suffers is maintained and as long as the coil is de-energized.

#### Valve closed (coil energized):

When the coil is energized, the plunger with the seal is pushed against the pilot orifice. The fluid pressure is transmitted over the diaphragm through the equalization port. As soon as the pressures equalize, the diaphragm close the main orifice. The valve remains closed as long as the coil is energized.

For the correct functioning, a minimum pressure difference of 0.15 bar is needed.

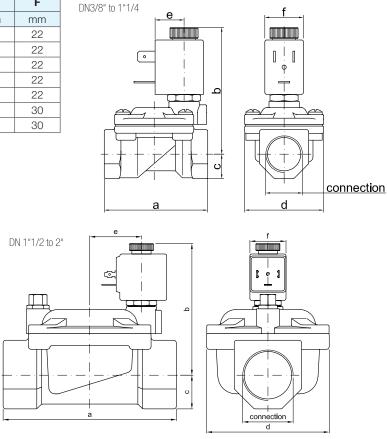
### **Operation**

DN	PS Maxi pressure	Differential pressure in Bar Coil 6,5W ca or 10W cc		Time to open	Time to close	Kv	
,,	bar	Mini	Maxi		m/s*	m/s*	m³/h
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			EPDM	FKM	III/S	111/S"	1117/11
3/8	25	0,15	15	15	30	50	2,2
1/2					30	50	2,5
3/4			13	13	50	70	5,5
1			10	10	50	70	10,2
1 1/4					150	200	15
1 1/2					250	350	21
2					400	700	36

<sup>\*</sup> The indicated times concern the medium water - The exact time depends of pressure conditions.

## **Sizing**

DN	Α	В	С	D	E	F
"	mm	mm	mm	mm	mm	mm
3/8	59	73	14	45	16	22
1/2	59	73	14	45	16	22
3/4	79	76	18	55	16	22
1	96	85	20	72	16	22
1 1/4	119	96	25	85	16	22
1 1/2	142	105	28	102	21	30
2	158	119	35	119	21	30



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