

## Fig. WZB2

### Membrane solenoid valves

#### Applications and special features



- Membrane solenoid valve, indirect action (pilot) normally open, 2 ways.
- Absorbed power : 9 W CA/15 W CC.
- Viscosity : max 50cSt
- Ambient temperature : max. +40°C
- Particularly suitable against waterhammer
- Integrated filter to protect the pilot system
- Adjustable closing system : on request
- Protection : IP 65 with connector.
- Solenoid valve delivered with standard coil 220/50 Hz ref 5290 or 24V/50Hz ref 5292 or 24VDC ref 5296, and with a connector.

#### Technical description

	DN		220V/50Hz 9W	24V/50Hz 9W	24VDC 15W
	"	mm			
EPDM	3/8	15	149B 6720	149B 6727	149B 6734
	1/2	15	149B 6721	149B 6728	149B 6735
	3/4	20	149B 6722	149B 6729	149B 6736
	1	25	149B 6723	149B 6730	149B 6737
	1 1/4	32	149B 6724	149B 6731	149B 6738
	1 1/2	40	149B 6725	149B 6732	149B 6739
	2	50	149B 6726	149B 6733	149B 6740
FKM	3/8	15	149B 6720V	149B 6727V	149B 6734V
	1/2	15	149B 6721V	149B 6728V	149B 6735V
	3/4	20	149B 6722V	149B 6729V	149B 6736V
	1	25	149B 6723V	149B 6730V	149B 6737V
	1 1/4	32	149B 6724V	149B 6731V	149B 6738V
	1 1/2	40	149B 6725V	149B 6732V	149B 6739V
	2	50	149B 6726V	149B 6733V	149B 6740V

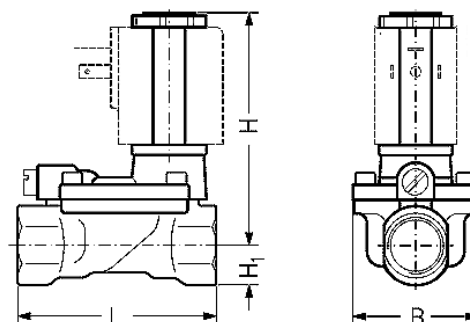
- **Connection** : Female/female, BSP thread
- **Permissible operating pressure PFA - water-** (for supply, distribution and disposal of water) : See table
- **θ :** EPDM Mini. : -30° C  
maxi : 100° C  
FKM Mini : 0° C  
maxi : 100° C
- **Mediums :** EPDM : water,  
FKM : oil, air, water (maxi 60° C)
- **Approvals :** EPDM version : **WRAS** - ACS

Every technical data concern the standard coils.  
All our solenoid valves can be delivered **ON DEMAND** with a different coil.

## Technical data sheet    Type WZB2 - Membrane solenoid valves

### Overall dimensions

Connection FF "	Passage	B	H	H1	L	Weight
		mm	mm	mm	mm	kg
3/8	15	52	94,0	15,0	80	0,96
1/2	15	52	94,0	15,0	80	0,96
3/4	20	58	98,0	18,0	90	1,16
1	25	70	108,0	22,0	109	1,56
1 1/4	32	82	115,0	27,0	120	2,16
1 1/2	40	95	124,0	32,0	130	3,36
2	50	113	130,0	37,0	162	4,46



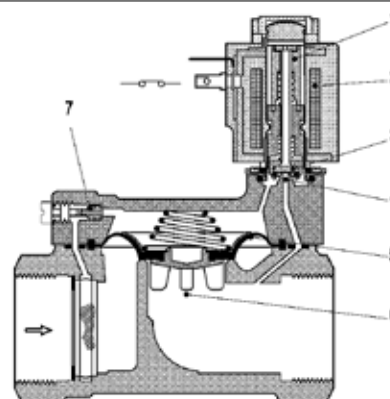
### Working principle

#### Coil voltage disconnected (open) :

When the voltage (2) is disconnected, the pilote orifice (4) is opened. As the pilote orifice is larger than the equalising orifice (7), the pressure across the diaphragm (5) drops and therefore it is lifted clear of the main orifice (6). The valve is now open for unimpeded flow and will be open for as long as the minimum differential pressure across the valve is maintained, and for as long as there is voltage to the coil.

#### Coil voltage connected ( closed ) :

When voltage is applied to the coil, the valve plate (3) is pressed down against the pilot orifice (4). The pressure across the diaphragm (5) is built up via the equalising orifice (7). The diaphragm closes the main orifice (6) as soon as the pressure across the diaphragm is equivalent to the inlet pressure. The valve will be closed for as long as the coil voltage is connected.



### Spare parts list and materials

- **Valve body** : Brass N° 2.0402
- **Armature** : Stainless steel N° 1.4105/AISI430FR
- **Armature tube** : Stainless steel N° 1.4306/AISI304L
- **Spring** : Stainless steel 1.4310/AISI301
- **Valve plate** : EPDM/FKM )
- **Diaphragm** : EPDM/FKM ) according to the type

### Working principle

DN "	Maxi. pressure bar	Differential pressure - bar 9W ca or 15W cc		Coil	Time to open m/s	Time to close m/s	Kv m3/h	Class
		Mini	Maxi					
			EPDM	FKM				
3/8	16	0,3	16	10	40	350	2,5	3,3
1/2		0,3			40	350	4	3,3
3/4		0,3			40	1000	8	3,3
1		0,3			300	1000	11	3,3
1"1/4		0,3			1000	2500	18	3,3 exceptGaz G1
1"1/2		0,3			1500	4000	24	3,3 exceptGaz G1
2		0,3			5000	10000	40	3,3 exceptGaz G1

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