

Technical data sheet

Type WBI2

Stainless steel solenoid valves

Applications and special features



- Membrane solenoid valve, indirect action except DN 1/8", 1/4" direct action, normally closed, 2 ways.
- Absorbed power : 9 W CA/15 W CC.
- Viscosity : max 50cSt
- Ambient temperature : max. +40°C
- Optional : manual actuation, except DN 1/4" and 1/8"
- 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

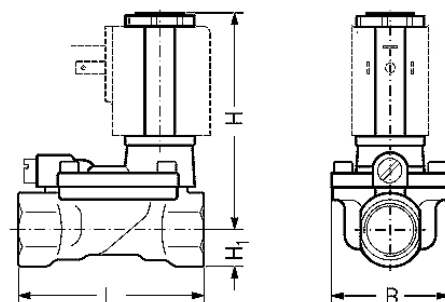
DN		220V/50Hz 9W	24V/50Hz 9W	24VDC 15W
"	mm			
1/8	3	149B 6741	149B 6749	149B 6757
1/4	4,5	149B 6742	149B 6750	149B 6758
3/8	15	149B 6743	149B 6751	149B 6759
1/2	15	149B 6744	149B 6752	149B 6760
3/4	20	149B 6745	149B 6753	149B 6761
1"	25	149B 6746	149B 6754	149B 6762
1"1/4	32	149B 6747	149B 6755	149B 6763
1"1/2	40	149B 6748	149B 6756	149B 6764

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

- **Connection** : Female/female, BSP thread
- **Permissible operating pressure PFA - water-** (for supply, distribution and disposal of water) : See table
- **θ** : Mini. : DN 1/8" and 1/4" : -10°C
: other DN : 0 °C
Maxi. : +100 °C (60°C for water)
- **Mediums** : Liquids and neutral or corrosive gas :
please consult our technical Department

Overall dimensions

Connection FF "	Passage	B mm	H mm	H1 mm	L mm	Weight kg
1/8	3	34	71	13	35	0,36
1/4	4,5	34	71	13	35	0,36
3/8	15	52	94	15	80	0,96
1/2	15	52	94	15	80	0,96
3/4	20	58	98	18	90	1,16
1	25	70	108	22	109	1,56
1"1/4	32	82	115	27	120	2,16
1"1/2	40	95	124	32	130	3,36



Technical data sheet Type WBI2 - Stainless steel solenoid valves

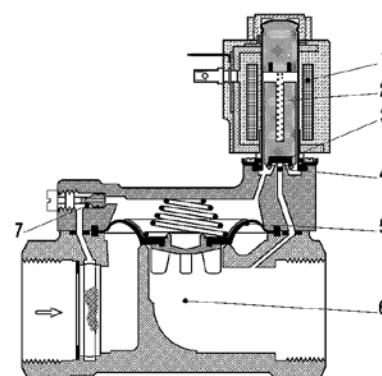
Working principle

Coil voltage disconnected (closed)

When the voltage is disconnected, the valve plate (3) is pressed down against the pilot orifice (4) by the armature spring (2). 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 voltage to the coil is disconnected.

Coil voltage connected (open):

When voltage is applied to the coil (1), the pilot orifice (4) is opened. As the pilot 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.



Spare parts list and materials

- **Valve body DN 1/8" - 1/4"** : Stainless steel 1.4404/AISI 316L
DN 3/8" - 1"1/2" : Stainless steel 1.4581/AISI 318
- **Armature** : Stainless steel 1.4105/AISI 430FR
- **Armature tube** : Stainless steel 1.4306/AISI 304L
- **Spring** : Stainless steel 1.4310/AISI 301
- **Valve plate** : FKM
- **Diaphragm** : FKM

Working principle

DN "	Maxi. pressure bar	Differential pressure - bar			Time to open m/s	Time to close m/s	Kv m3/h	Class
		Mini	Maxi					
			Coil 9W ca	Coil 15W cc				
1/8	35	0	15	9	20	20	0,30	3,3
1/4		0	8	3,5	20	20	0,55	3,3
3/8	10	0,3	10	10	40	350	2,5	3,3
1/2					40	350	4	3,3
3/4					40	1000	8	3,3
1					300	1000	11	3,3
1"1/4					1000	2500	18	3,3 exceptGaz G1
1"1/2					1500	4000	24	3,3 exceptGaz G1

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

Socla can accept no responsibility for possible errors in catalogue, brochures and other printed material. Socla reserve the right to alter its products without notice. This also applies to products already agreed. All trademarks in this material are the property of the respective companies. All right reserved.

Socla SAS

365 rue du lieutenant Putier
71530 VIREY LE GRAND
Postal address : BP 10273
71107 CHALON SUR SAONE Cedex

Tel : 33 3 85 97 42 52
Fax : 33 3 85 97 97 42
<http://www.socla.com>
e-mail: commerfr@socla.com