

## Technical data sheet

# Type HK2

## Membrane solenoid valves

### Applications and special features



- Membrane solenoid valve with direct action, assisted lift operated, normally closed, 2 ways.
- Absorbed power : 9 W CA/15 W CC.
- Viscosity : max 50cSt
- Ambient temperature : max. +40°C
- 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

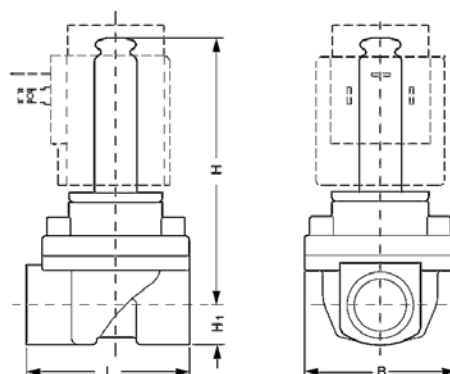
DN		220V/50Hz 9W	24V/50Hz 9W	24VDC 15W
"	mm			
3/8	10	149B 6789	149B 6793	149B 6797
1/2	12	149B 6790	149B 6794	149B 6798
3/4	18	149B 6791	149B 6795	149B 6799
1"	22	149B 6792	149B 6796	149B 6800

**Important :**  
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 2
- **θ :** Mini. -30 °C  
Maxi. 100 °C
- **Mediums :** water
- **Approvals :** **WRAS** (UK)

### Overall dimensions

Connection FF "	Passage	B	H	H1	L	Weight
		mm	mm	mm	mm	kg
3/8	10	52,5	91	12,5	58	0,76
1/2	12	52,5	91	12,5	58	0,76
3/4	18	58	92	18	90	0,96
1	22	58	96,3	22,3	90	1,26



## Technical data sheet    Type HK2 - Membrane solenoid valves

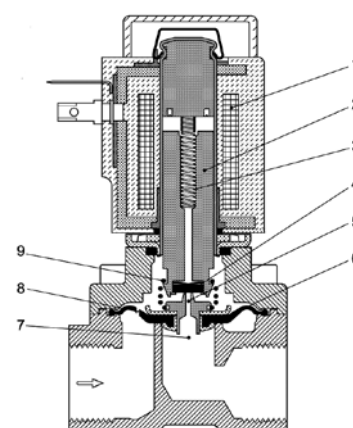
### Working principle

#### Coil voltage disconnected (closed) :

When the supply voltage to the coil (1) is disconnected, the valve plate (4) is pressed down against the pilot orifice (5) by the closing spring (3). The pressure across the diaphragm (6) is built up via the equalizing orifice (8). The diaphragm closes the main orifice (7) as soon as the pressure across the diaphragm is equivalent to the inlet pressure below, due to the larger diameter of the upper side and/or the tension of the closing spring (3). The valve will be closed as long as the voltage to the coil is disconnected.

#### Coil voltage connected (open)

When voltage is applied to the coil, the armature (2) and the valve plate (4) are lifted clear of the pilot orifice (5). If there is a differential pressure across the valve, the pressure above the diaphragm (6) drops as the pilot orifice is larger than the equalizing orifice. Therefore the diaphragm is lifted clear of the main orifice (7). If there is no differential pressure across the valve, the armature (2) draws the diaphragm (6) clear of the main orifice (7) using the assisted lift (9). The valve will be open for as long as there is voltage to the coil.



### Spare parts list and materials

• Valve body	: DZR brass CuZn36Pb2As
• Cover	: 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
• Diaphragm	: EPDM

### 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						
3/8	16	0	10	0,5	100	100	2,5	3,3		
1/2							4	3,3		
3/4	10						150	6	3,3	
1								7	3,3	

\* 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](mailto:commerfr@socla.com)