

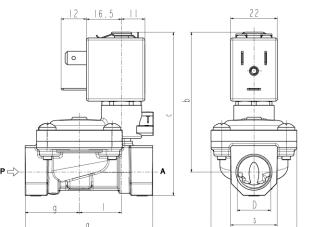
## **SOLENOID VALVE**

**2/2- NC** (Normally closed) Pilot operated

G 3/8 - G 1

## **HVSOLV**

**Issue 0724** 







D	а	b	С	f	g	- 1	S
G 3/8	60	66	77	40	25,5	20	22
G 1/2	66	68	82	40	29	20	27
G 3/4	79	72,5	89	50	35,5	24,5	33
G 1	105	85	106	71	46	28	42

#### **▶** GENERAL FEATURES

Diaphragm valve, pilot operated, having full orifice. Suitable to shut off liquid and gaseous fluids (verify the compatibility of fluid with material in contact).

#### ► TECHNICAL FEATURES

Maximum allowable pressure (PS) 20bar

 $\begin{array}{lll} \textit{Opening time} & \textit{from $\sim$300ms to $\sim$1500ms} \\ \textit{Closing time} & \textit{from $\sim$1000ms to $\sim$2000ms} \\ \textit{Fluid temperature} & -10^{\circ}\text{C +}90^{\circ}\text{C (NBR)} \\ & 0^{\circ}\text{C +}130^{\circ}\text{C (FPM)} \\ \end{array}$ 

0°C +130°C (FPM) -10°C +140°C (EPDM)

Max viscosity 5°E (~37 cStokes or mm²/s)

#### ► MATERIALS IN CONTACT WITH FLUID

Body Brass

Sealing NBR or FPM or EPDM
Internal components Brass and stainless steel

Seat Brass
Core tube Stainless steel
Shading coil Copper

## ► COIL

Approval Encapsulation material

Insulation class Ambient temperature Continuous duty Electric connection

Protection degree

Voltages DC AC

ZB10A	ZB12A ★	ZB14A ★							
1	UL and CSA	UL and CSA							
PA	PET	PET							
fiberglass	fiberglass	fiberglass							
reinforced	reinforced	reinforced							
F (155°C)	F (155°C)	H (180°C)							
-10°C +60°C	-10°C +60°C	-10°C +75°C							
ED 100%									
DIN 46340 - 3 poles plug connector									
IP 65	IP 67	IP 67							
(EN 60529) with	(EN 60529) with	(EN 60529) with							
plug connector	plug connector	plug connector							
12-24V (+10% -5%)									
24V/50-60Hz - 115V/50Hz - 230V/50-60Hz									
(+10% -15%)									

(Other voltages and frequencies on request).

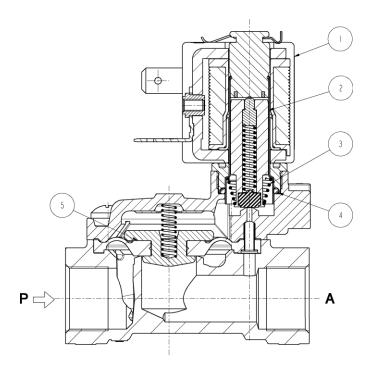
			Different	ial pressi	ure (bar)			Series and type			Power absorption						
Port size Size			Др тах			Kv (m³/h)		AC (VA)			DC	Sealings	Notes	Weight			
150 220	ISO 228 (mm)		Ga	Gases Liquids		, ,	Valve	Valve with Coil	Coil	Inrush Holdi		ding				(kg)	
			AC	DC	AC	DC			override		VA	VA	W	W			
3/8	40.5		16	16	16	16	2,5								(*) = B		0,32
1/2	13,5		(12)	(12)	(12)	(12)	3,8	3,8 L182(*)01		ZB10A ZB12A	12 6			(NBR)	1-3	0,38	
		0,35							82(*)01 L182(*)02			6	4	5,5	(*) = V (FPM) (*) = D		,
3/4	18		12	12 12	12	12	5										0,52
1	24		(10)	(10)	(10)	(10)	12								(EPDM)	2-3	1,08
																	,

#### **▶** NOTES

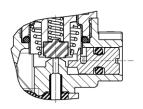
- Sealings: B(NBR)=Nitrile-butylene elastomer V(FPM)=Fluoro-carbon elastomer D(EPDM)=Ethylene-propylene elastomer (WRAS/KTW certified compound)
- Operation with gaseous media, at high pressure without any outlet restriction, can reduce the diaphragm life.
- On request coil in class H (ZB14A see § "COIL")
- The bracketed values of  $\Delta p$  max are related to valves with V(FPM) seals.
- 1 Low power consumption coil on request (3,5 VA in AC 3W in DC): Δp max = 12 bar
- 2 Low power consumption coil on request (3,5 VA in AC 3W in DC): Δp max = 8 bar
- 3 L182D01 L182D02: WRAS certified solenoid valves (certificate n. 1411048).

#### ► SPARE PARTS

# L182 B-V-D01



# L182 B-V-D02



Kit description			Kit P.N.	Consisting of:
Core kit	L182B-V L182D		G3138201 G3138202	Core kit pos.2 Core return spring pos. 3 O-Ring guide assembly pos. 4
Diaphragm assembly	L182B L182V L182D	3/8-1/2 3/8-1/2 3/8-1/2	2844302R 2844303R 2844306R	Diaphragm assembly pos.5
	L182B	3/4 1	2299701R 2380101R	
	L182V	3/4 1	2299702R 2380102R	
	L182D	3/4 1	2299708R 2380106R	
Coil			ZB10 ZB12 ZB14	Coil pos.1

#### ►INSTALLATION

- Solenoid valve can be mounted in any position; vertical with coil upwards preferred.

#### ► PIPE CONNECTIONS:

- Make sure that the arrow or the part numbering on the valve body correspond to the flow direction
- Make sure that no foreign bodies enter the solenoid valve during the assembly.
- At a very low ambient temperature, the medium can solidify and damage the solenoid valve.
- Make sure that the piping is perfectly clean. If possible, let the fluid circulate free for a few seconds without the solenoid
  valve.
- Due to their internal construction, these solenoid valves tend to retain solid particles, residues for machining, dirt and sediment conveyed by or suspended in the fluid.
- Therefore, we recommend that a close-mesh demountable filter should be installed upstream of the solenoid valve.
- Use good quality components for sealing the piping (tapes, glues, adhesives, bi-conical fittings, etc.). Never use hemp or similar products. Do not use adhesive or glue for solenoid valves with techno-polymer body, since they can corrode it.
- Use the right size wrench, applied to the hexagon or to the parallel planes of the body, when screwing the valves to the
  piping. Never use the valve as a lever arm, since this can deform the core tube, thus preventing the valve from working
  properly and causing it to burn out.
- Valves can work in any position. However, apart from special versions, we recommend vertical mounting with the coil
  upwards. While it is technically possible to mount the valve with the coil facing other directions, this can lead to an
  accumulation of foreign matters in core tube that negatively affect the regular solenoid valve working.
- In case of connection to flexible piping, in order to secure the solenoid valve, use its body through or blind holes.
- PINCH solenoid valves: join the soft tube to the provided slot before coil electrical connection. Do not use tubes with Shore hardness different from the recommended one.
- Always bear in mind the clamping force and any other data provided in the technical information.

#### ► ELECTRICAL CONNECTIONS:

- Verify the correspondence of voltage and frequency values printed on the coil with the main power supply ones.
- Solenoid valves must be connected to any suitable earthing system depending on the voltage and the local regulations. As
  for DC models, no polarity is pre-determined for electrical connections, excepting for latching models
- Do not connect the coil before its mounting on the solenoid valve.
- PINCH solenoid valves: do not connect the coil before the soft tube has joined the proper slot.
- Apart from special cases, all coils can rotate to adapt to different requirements. Afterwards lock the lock-nut of models having this possibility.
- All our solenoids are suitable for continuous duty with the exception of special models, where this is indicated on the coil.
   Obviously, under this condition the valve heats up and should not be touched with bare hands.
- The maximum temperature reached by the coil is a function of the temperature of the fluid, the ambient temperature and the
  conditions of use of the valve. Under certain conditions, the valve should be kept away from heating sources or closed
  environments that do not permit normal heat dissipation.