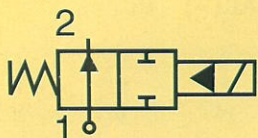


Solenoid Valves for Automation

2/2 way - Normally open - Diaphragm pilot operated

Fittings: G = 3/8" - 1"

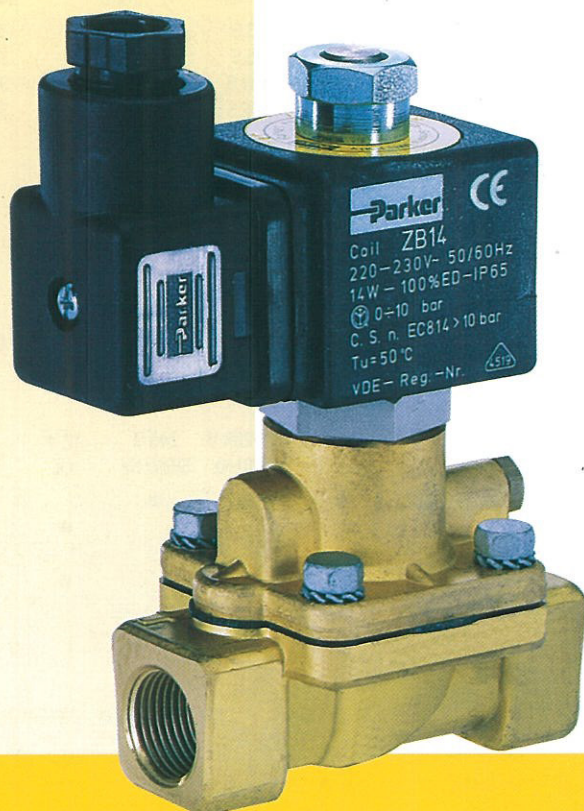
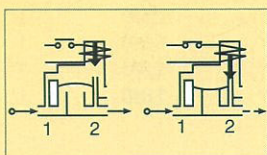
Series **169.1**



N.O.

Normally open

Coil energised - closed
Coil de-energised - open



General description:

PARKER series 169.1 solenoid valves are diaphragm pilot operated and therefore require a minimum differential pressure to operate.

They are used for **air** applications, including high operating frequencies. The diaphragm is made of plastic with a fabric reinforcement.

The valves of the series 169.1 are **normally open**.

Temperatures:

The working temperature for media is:

maximum	+90°C
minimum	-10°C

The maximum ambient temperature is:

• with class "F" coils	+50°C
• with class "H" coils	+80°C

Applications:

Series 169.1 solenoid valves are ideal for air applications where high flow rates with high operating frequencies are required. Some typical application examples are:

- Air compressors;
- Dust removal systems;
- Compressed air distribution systems;
- Pneumatic mail;
- Suction systems.

Coils:

For series 169.1 valves class "F" coils (**155°C**) are available encapsulated in thermoplastic containing 30% glass fiber (types: ZB, YB).

Class "H" coils (**180°C**) are also available encapsulated in thermoplastic containing 40% glass fiber (type: ZH).

All the coils are for continuous service, 100% E.D.

The rated voltage tolerance is:

±10% for AC. power supply and
+10% -5% for D.C.

The "Z" and "Y" coils can be used on a.c. with frequency of 50/60Hz (dualfrequency). The "Z" coils have Faston terminals for **DIN 43650A** connectors with protection to **IP65**.

The "Y" coil has terminals with 2 x 1,000 mm cables with protection to **IP67**.

Installation:

The valves can be mounted in any position without jeopardising their operation. It is however advisable to install them with the coil in a vertical position above the body.

Approvals:



- Coil certification:
ZB 14 24V/50-60Hz, 115V/50-60Hz
220-230V/50-60Hz
ZB 16 24V DC
YB 14 only for 220V/50-60Hz
YB 16 24V DC



- For the coil:
ZB 14 220-230V/50-60Hz

Series **169.1**

MATERIALS

- Valve body: OT58 UNI 5705 brass stamping
- Seals: NBR (Buna N)
- Enclosing tube: AISI 304 stainless steel
- Plunger: AISI 430 F stainless steel
- Spring: AISI 302 stainless steel
- Shading ring: Copper

ELECTRICAL FEATURES

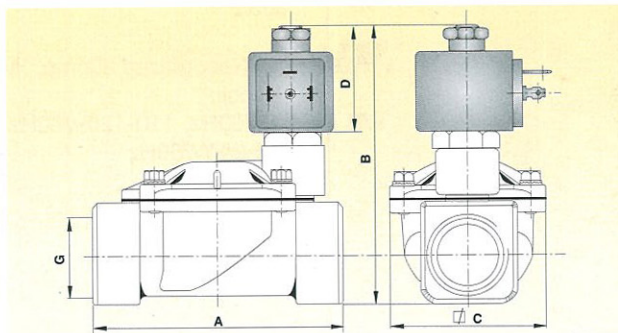
Coil type []		Power [W]		Insulat. class
A.C.(~)	D.C.(=)	A.C.(~)	D.C.(=)	
ZB 14	ZB 16	14	16	F
YB 14	YB 16	14	16	F
ZH 14	ZH 16	14	16	H

SPECIFICATION

Fittings Ø G	Valve type	Nominal orifice Ø	Flow coefficient Kv	Minimum pressure	Max differential pressure (M.O.P.D.)		Coil type	Weight	Notes
["]	[]	[mm]	[m³/h]	[bar]	in A.C.(~) [bar]	in D.C.(=) [bar]	[]	[Kg]	[]
3/8	169.1 I	13	2,0	0,5	16	16	Z - Y	0,560	1
1/2	169.1 A	13	2,5	0,5	16	16	Z - Y	0,590	1
3/4	169.1 C	20	7,0	0,5	16	16	Z - Y	1,250	1
1	169.1 D	25	8,0	0,5	16	16	Z - Y	1,110	1

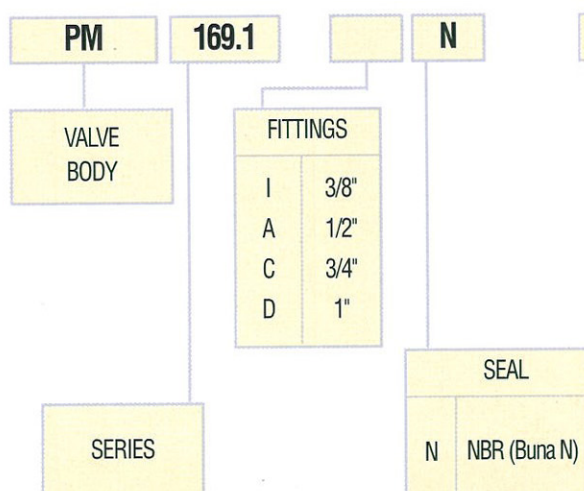
Note: 1) NP (nominal pressure): 25 bar.

DIMENSIONS



Fittings Ø G	A	B	C	D
["]	[mm]	[mm]	[mm]	[mm]
3/8	69,0	101,0	40,0	43
1/2	72,0	103,0	40,0	43
3/4	100,0	108,5	65,0	43
1	104,0	114,0	65,0	43

ORDER CODE



Coil type	[V]					[Hz] / d.c.
	24 V 50/60 Hz	115V 50/60 Hz	220-230 V 50/60 Hz	240 V 50/60 Hz	12 V d.c.	24 V d.c.
ZB 14	•	•	•	•		
ZB 16						•
YB 14	•	•	•			
YB 16						•
ZH 14	•		•			
ZH 16						•

Note: Valve supplied with body (PM) and coil separate. Connector to be ordered separately.