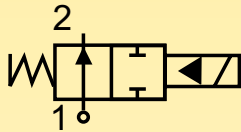


Solenoid Valves for Automation

2/2 way - Normally open - Diaphragm pilot operated

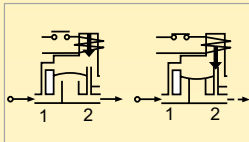
Fittings: G = 3/8" - 1"

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:



- For the coils:

ZB 14	115V/50-60Hz, 220-230V/50-60Hz
ZH 14	24V/50-60Hz
ZH 16	24V DC, 12V DC
YB 14	220-230V/50-60Hz



- For the coil:

ZB 14	220-230V/50-60Hz
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MATERIALS

- Valve body: CW617N UNI EN 12165:98 brass stamping
- Seals: NBR (Buna N)
- Enclosing tube: AISI 304 stainless steel
- Plunger: AISI 430F stainless steel
- Spring: AISI 302 stainless steel
- Shading ring: Copper

ELECTRICAL FEATURES

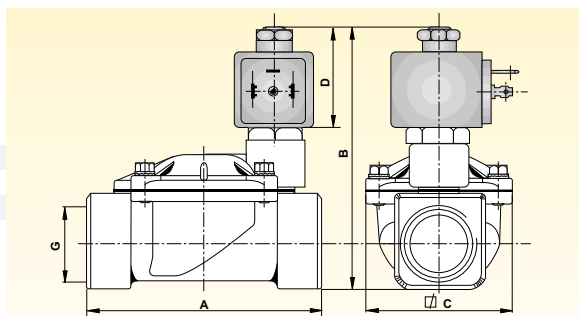
Coil type []		Power [W]		Insulat. class
A.C.(~)	D.C.(=)	A.C.(~)	D.C.(=)	
ZB 14	ZB 16	14	16	F
YB 14	YB 16	14	16	F
ZH 14	ZH 16	14	16	H

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

PM	169.1	N	[V] [Hz] / d.c.	
VALVE BODY	FITTINGS	SEAL	Coil type	
	I 3/8"		24 V 50/60 Hz	115V 50/60 Hz
	A 1/2"		220-230 V 50/60 Hz	240 V 50/60 Hz
	C 3/4"		12 V d.c.	24 V d.c.
	D 1"			
SERIES		N NBR (Buna N)	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.