

Solenoid Valves for Automation

2/2 way - Normally Closed - Diaphragm pilot operated

Fittings: G = 3/8" - 1"



Series **168.1**

General description:

PARKER series 168.1 solenoid valves are diaphragm pilot operated and therefore require a minimum differential pressure to operate.

They are used for air applications, even with high operating frequencies. The diaphragm is made of plastic with a fabric reinforcement. Series 168.1 valves are normally closed.

On request and for large orders, all the models can be supplied with manual control (MC).

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

Coils:

For series 168.1 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 A.C. power supply and
- +10% -5% for D.C.

The "Z" and "Y" coils can be used on a.c. with frequency of 50/60Hz (dual frequency).

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.

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
C.A.(~)	D.C.(=)	C.A.(~)	D.C.(=)	
ZB 09	ZB 12	9	12	F
YB 09	YB 12	9	12	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
					in C.A.(~) bar	in D.C.(=) bar			
["]	[]	[mm]	[m³/h]	[bar]			[]	[Kg]	[]
3/8	168.1 I	13	2.0	0.5	16	16	Z - Y	0.550	1 - 2
1/2	168.1 A	13	2.5	0.5	16	16	Z - Y	0.580	1 - 2
3/4	168.1 C	20	7.0	0.5	16	16	Z - Y	1.020	1 - 2
1	168.1 D	25	8.0	0.5	16	16	Z - Y	1.080	1 - 2

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

