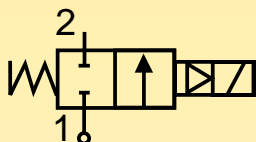


Solenoid Valves for Automation

2/2 way - Normally Closed - Diaphragm assisted lift

Fittings: G = 3/8" - 1"

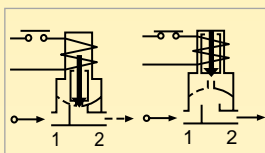
Series **123**



N.C.

Normally closed

Coil energised - open
Coil de-energised - closed



General description:

PARKER series 123 solenoid valves are diaphragm assisted lift and do not require a minimum differential pressure to operate. They are used for general applications with media such as: **water, air, light oils (2°E) and inert gases**, provided they are compatible with the construction materials used.

Series 123 valves are **normally closed**.

Temperatures:

The working temperature for media is:

maximum	+140°C
minimum	-10°C

The maximum ambient temperature is:

- with class "F" coils **+50°C**
- with class "H" coils **+80°C**

Application:

Series 123 solenoid valves are ideal for automatic control of media for a wide range of uses which require zero or very low differential pressures.

Some examples of applications are:

- thermohydraulic systems;
- industrial dishwashers;
- hydrocleaners;
- instruments;
- metal smelting plants;
- polyurethane systems;
- closed circuits;
- environmentally-friendly systems;
- suction pad manipulators.

In vacuum applications series 123 valves can be used in a range **from 10⁻³ to 10⁺³ torr**.

They may be used with gases with pressures over **2,000 mm of water column**.



Coils:

For series 123 valves class "F" coils (**155°C**) are available, encapsulated in thermoplastic containing 30% glass fiber (types: ZB, YB, JB).

For models I and A, 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", "Y", "J" coils can be used on a.c. with frequency 50/60 Hz (dualfrequency).

The "Z" and "J" 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 09 115V/50-60Hz, 220-230V/50-60Hz, 240V/50-60Hz

ZH 09 24V/50-60Hz

ZH 12 12V DC, 24V DC

YB 09 220-230V/50-60Hz

JB 14 220-230V/50-60Hz



• For the coils:

ZB 09 220-230V/50-60Hz, 240V/50-60Hz

YB 09 220-230V/50-60Hz



• UL Recognized Comp. coils mark

ZB 09 coil, voltages:
24V/60Hz, 110-120V/60Hz, 208-240V/60Hz

YB 09 24V/60Hz, 110-120V/60Hz, 208-240V/60Hz

Series **123**

MATERIALS

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

ELECTRICAL FEATURES

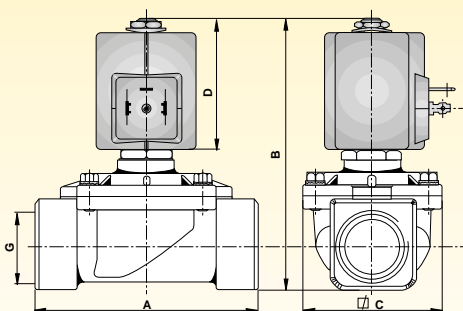
Coil type []		Power [W]		Insulat. class
A.C.(~)	D.C.(=)	A.C.(~)	D.C.(=)	
ZB 09	ZB 12	9	12	F
YB 09	YB 12	9	12	F
ZH 09	ZH 12	9	12	H
ZH 14	ZH 16	14	16	H
JB 14	JB 16	14	16	F

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	123 I	13	2,40	0	5	1	Z-Y	0,510	1
1/2	123 A	13	2,40	0	5	1	Z-Y	0,540	1
3/4	123 C	20	6,00	0	3	1	J	1,230	1
1	123 D	25	7,00	0	3	1	J	1,300	1

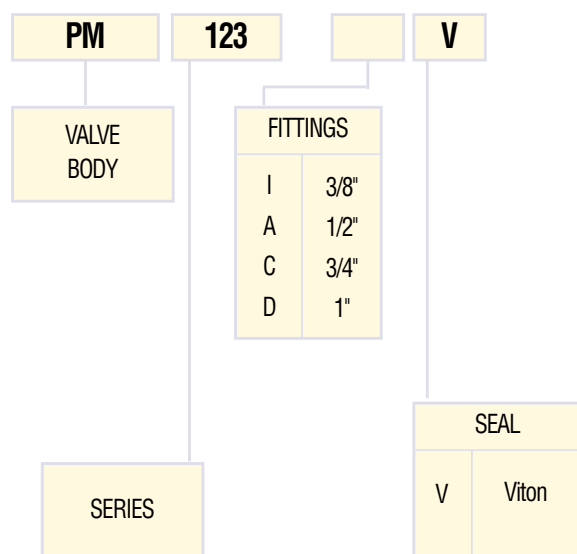
Note: 1) NP (Nominal pressure): 16 bar.

DIMENSIONS



Fittings Ø G	A	B	C	D
["]	[mm]	[mm]	[mm]	[mm]
3/8	69	83	40	37,5
1/2	72	85	40	37,5
3/4	100	120	65	59
1	104	125	65	59

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 09	●	●	●	●		
ZH 09	●					
ZB 12					●	●
ZH 12					●	●
YB 09	●	●	●			●
YB 12					●	●
ZH 14	●	●	●			
ZH 16					●	●
JB 14	●	●	●			
JB 16					●	●
Coil type	24 V / 60 Hz	110-120 V / 60 Hz	208-240 V / 60 Hz			
ZB 09 UL	●	●	●			
YB 09 UL	●	●	●			

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