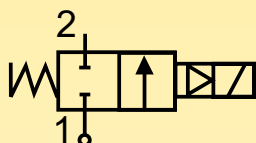


Solenoid Valves for Automation

2/2 way - Normally Closed - Diaphragm pilot operated

Fittings: G = 3/8" - 2"

Series **133**

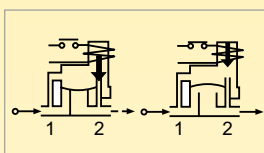


N.C.

Normally closed

Coil energised - open

Coil de-energised - closed



General description:

PARKER series **133** solenoid valves are diaphragm pilot operated and require a minimum differential pressure to operate. They are used for applications with high flow rates and media such as **water, light oils (2°E) and others**, provided they are compatible with the construction materials used.

Series **133** valves are **normally closed**.

Temperatures:

The working temperature for media is:

maximum	+90°C
minimum	-10°C

with NBR seals (Buna N).

On request seals in Viton are available, for fittings \leq G 1" for maximum working temperature **+140°C**.

The maximum ambient temperature is:

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

Application:

Series **133** solenoid valves are ideal for the automatic control of media in a wide range of applications such as:

- thermohydraulic systems;
- autoclaves;
- cooling of machine tools;
- industrial washing plants;
- evaporation towers;
- hospital equipment;
- irrigation systems;
- fire-fighting systems;
- wood-working machines;
- marble-working machines;
- molding machines;
- hygiene-health equipment.



Coils:

For series **133** valves class "F" coils (**155°C**), encapsulated in thermoplastic containing 30% glass fiber (types: ZB, YB), are available.

Class "H" Coils are also available (**180°C**), 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 50/60 Hz (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**.

Series **133** solenoid valves are also available in a watertight version for applications where the conditions of humidity are particularly critical (type: YE 09).

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** 12VDC, 24VDC
- YB 09** 220-230V/50-60Hz



- The coils:
- ZB 09** 220-230V/50-60Hz, 240V/50-60Hz
- YB 09** 220-230V/50-60Hz



- UL Recognized Comp. coils mark:
- ZB 09** 24V/60Hz, 110-120V/60Hz, 208-240V/60Hz
- YB 09** 24V/60Hz, 110-120V/60Hz, 208-240V/60Hz

Series **133**

MATERIALS

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

ELECTRICAL FEATURES

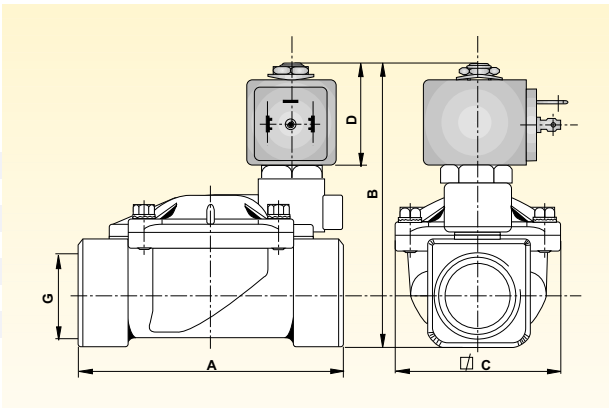
Coil type []		Power [W]		Insulat. class
A.C.(~)	D.C.(=)	A.C.(~)	D.C.(=)	
ZB 09	ZB 12	9	12	
YB 09	YB 12	9	12	F
ZH 09	ZH 12	9	12	H
ZH 14	ZH 16	14	16	H
YE 09	-	9	-	E

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 A.C.(~) [bar]	in D.C.(=) [bar]			
["]	[]	[mm]	[m³/h]	[bar]			[]	[Kg]	[]
3/8	133 I	13	3,00	0,1	20	20	Z-Y	0,550	1
1/2	133 A	13	3,00	0,1	20	20	Z-Y	0,580	1
3/4	133 C	20	8,40	0,1	20	20	Z-Y	1,020	1
1	133 D	25	9,60	0,1	20	20	Z-Y	1,080	1
1 1/4	133.2 E	35	25,20	0,1	10	10	Z-Y	3,150	1-2
1 1/2	133.2 F	40	30,00	0,1	10	10	Z-Y	2,900	1-2
2	133 G	50	37,20	0,1	10	10	Z-Y	4,300	1-2

Note: 1) NP (nominal pressure): 25 bar (from 1 1/4 to 3" PN 16 bar). 2) Slow closure version.

DIMENSIONS



Fittings Ø G - NPT	A	B	C	D
["]	[mm]	[mm]	[mm]	[mm]
3/8 G	69,0	92,5	40,0	37,5
1/2 G	72,0	94,5	40,0	37,5
3/4 G	100,0	100,0	65,0	37,5
1 G	104,0	105,5	65,0	37,5
1 1/4 G	145,0	127,0	102,0	37,5
1 1/2 G	145,0	127,0	102,0	37,5
2 G	173,0	141,0	118,0	37,5

ORDER CODE

PM

VALVE BODY

133

FITTINGS

I	3/8" G
A	1/2" G
C	3/4" G
D	1" G
E	1 1/4" G
F	1 1/2" G
G	2" G

SEAL

N	NBR (Buna N)
*V	*Viton

Coil type	24 V / 60 Hz		115V / 60 Hz		220-230 V / 60 Hz		240 V / 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										●		●
YE 09	●				●							

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. * Optional Viton for fittings up to 1".