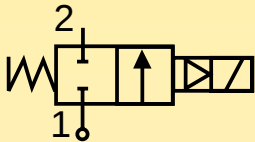


Solenoid Valves for Automation

2/2 way - Normally Closed - Diaphragm pilot operated

Fittings: G = 3/8" - 2"

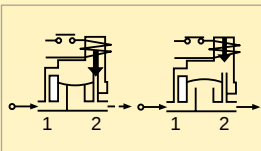
Series **133**



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	F
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

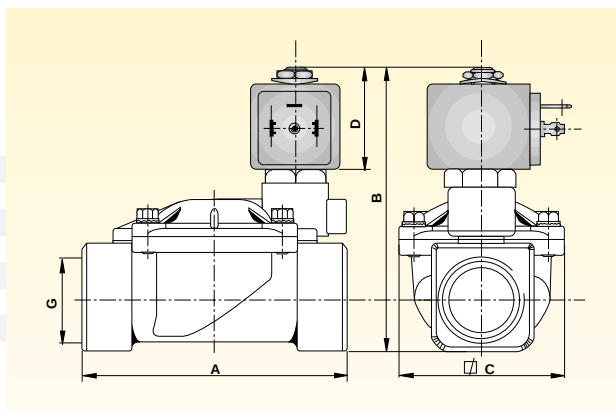
SPECIFICATION

Fittings Ø G	Valve type	Nominal orifice Ø	Flow coefficient Kv	Minimum pressure	Max differential pressure (M.O.P.D.)		Coil type	Weight	Notes
["]	[]	[mm]	[m³/h]	[bar]	in A.C.(~)	in D.C.(=)	[]	[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	133		
VALVE BODY			
	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		
SERIES		SEAL	
		N NBR (Buna N)	
		*V *Viton	

	[V]		[Hz] / d.c.	
Coil type	24 V 50/60 Hz	115V 50/60 Hz	220-230 V 50/60 Hz	240 V 50/60 Hz
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".