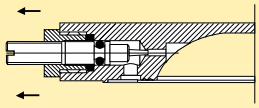
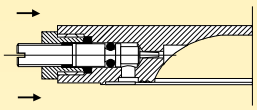
Series 133 CMV

Closure speed control
FULLY OPEN

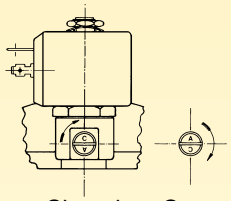


dwg. 1

Closure speed control
FULLY CLOSED



dwg. 2



Closed Fig. 1 Open Fig. 2

General description:

PARKER series **133CMV** 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 ≤ **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**

Manual control:

The manual control is used to open the valve without supplying voltage to the coil. The control consists of a slotted-head screw for a screwdriver with two possible positions:

CLOSED (valve closed) if letter **"C"** is turned upside (fig. 1).
OPEN (valve open) if the letter **"A"** is turned upside (fig. 2).

When from the "Closed" position the screw is turned to the "Open" position (no matter if in clockwise or counterclockwise direction) the valve is completely opened.

Coils:

For series **133CMV** valves class **"F"** coils **(155°C)**, encapsulated in thermoplastic containing 30% glass fiber (types: ZB), are available.
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 coils can be used on a.c. with frequency of 50/60HZ (dualfrequency).
The coils have Faston terminals for **DIN 43650A** connector with protection to **IP65.**

Closure speed control:

The closure times of the models 133CMV can be changed by means of the adjusting screw (dwgs. 1 and 2). The latter, by acting as a throttle on the inlet equalisation (pilot) hole of the valve, slows down the closure speed of the valve, thus reducing water hammer.
The regulation range is from:

SCREW FULLY OPEN
dwg. 1 max. closure speed
SCREW FULLY CLOSED
dwg. 2 valve always open, i.e. the pilot hole of the valve closes completely.

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

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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

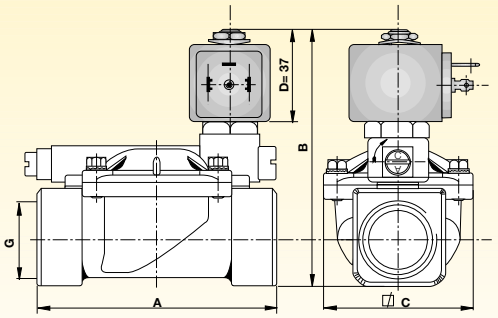
Coil type [ ]		Power [W]		Insulat. class
A.C.(~)	D.C.(=)	A.C.(~)	D.C.(=)	
ZB 09	ZB 12	9	12	F
YB 09	YB 12	9	12	F
ZH 09	ZH 12	9	12	H
ZH 14	ZH 16	14	16	H
YE 09	-	9	-	E

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.(~) [bar]	in D.C.(=) [bar]	[ ]	[Kg]	[ ]
3/4	133 C	20	8,40	0,1	10	10	Z - Y	1,020	1
1	133 D	25	9,60	0,1	10	10	Z - Y	1,080	1
1 1/4	133.2 E	35	25,20	0,1	5	5	Z - Y	3,150	1
1 1/2	133.2 F	40	30,00	0,1	5	5	Z - Y	2,900	1
2	133 G	50	37,20	0,1	5	5	Z - Y	4,300	2
2 1/2	133 L	65	66,00	0,2	10	10	Z -Y	13,600	2
3	133 M	75	80,00	0,2	10	10	Z - Y	11,900	2

Note: 1) NP (nominal pressure): 25 bar. 2) Valve supplied with mechanical part (M.P.) and coil separate.

DIMENSIONS



Fittings Ø G	A	B	C	D
["]	[mm]	[mm]	[mm]	[mm]
3/4	100,0	100,0	65,0	37,5
1	104,0	105,0	65,0	37,5
1 1/4	145,0	127,0	102,0	37,5
1 1/2	145,0	127,0	102,0	37,5
2	173,0	141,0	118,0	37,5
2 1/2	245,0	188,0	184,0	37,5
3	250,0	188,0	184,0	37,5

ORDER CODE

PM	133		N	CMV			[V]	[Hz] / d.c.

VALVE BODY

SERIES

FITTINGS

C	3/4"
D	1"
E	1 1/4"
F	1 1/2"
G	2"
L	2 1/2"
M	3"

SEAL

N	NBR (Buna N)

MANUAL CLOSURE SPEED CONTROL

Coil type	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					●	●
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.

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