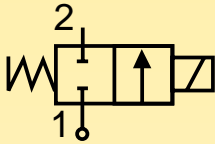


# Solenoid valves for steam and high temperatures

2/2 way - Normally Closed - Direct Operated

Fittings: G = 1/4"

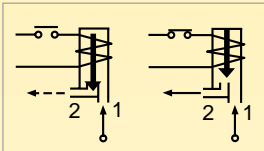
Series **158**



**N.C.**

**Normally closed**

Coil energised - open  
Coil de-energised - closed



## General description:

PARKER series 158 solenoid valves are direct operated and do not require a minimum differential pressure to operate.

They are used for **steam and superheated water** where the flow rate has to be altered by means of a manual regulator.

Series 158 valves are **normally closed**.

## Temperatures:

The working temperature for media is: **+140°C** for the version with a seal of ethylene propylene (EPDM) and **+180°C** for the version with a seal of Teflon (PTFE).

The minimum temperature for media is - **10°C** for the two versions.

The maximum ambient temperature is:

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

## Application:

Series 158 solenoid valves are ideal for the control and regulation of steam in equipment such as:

- Ironing machines;
- Steam-cleaning machines;
- Steam sprayers.

## Coils:

For series 158 valves class "F" coils (**155°C**) are available encapsulated in thermoplastic containing 30% glass fiber (types: ZB, YB) and class "H" coils (**180°C**) are 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 a frequency of 50/60 Hz (dual-frequency)

The "Z" coils have Faston terminals for **DIN 43650A** connector 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



- 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** 24V/60Hz, 110-120V/60Hz, 208-240V/60Hz

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



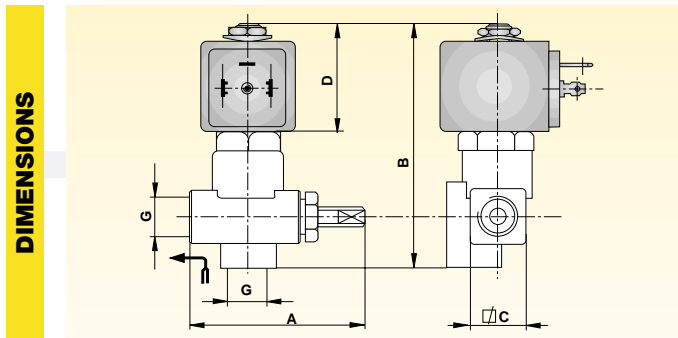
Series **158**

MATERIALS	• Valve body:	CW617N UNI EN 12165:98 brass stamping
	• Seals:	EPDM - PTFE (Teflon)
	• Enclosing tube:	AISI 304 stainless steel
	• Plunger:	AISI 430F stainless steel
	• Spring:	AISI 302 stainless steel
	• Shading ring:	Copper
• Fitted sit:	AISI 304 stainless steel	

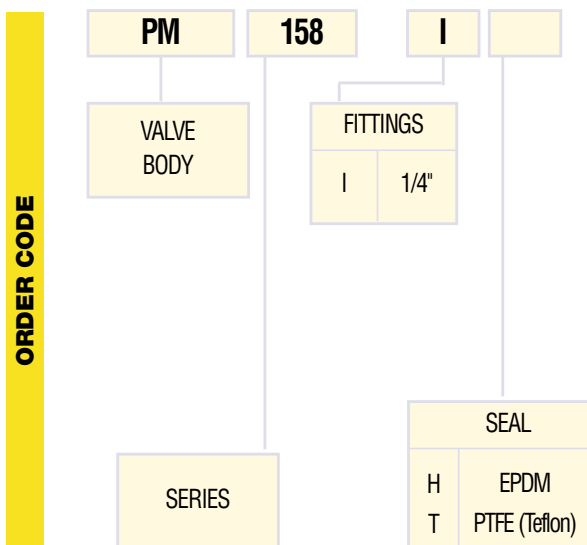
ELECTRICAL FEATURES	Coil type [ ]		Power [ W ]		Insulat. class
	A.C.(~)	D.C.(=)	A.C.(~)	D.C.(=)	
	ZB 09	ZB 12	9	12	
YB 09	YB 12	9	12	F	
ZH 09	ZH 12	9	12	H	
ZH 14	ZH 16	14	16	H	

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]	[ ]
	1/4	158 IH	3,0	0,2	0	10	4	ZB - YB	0,320	1 - 2
1/4	158 IT	3,0	0,2	0	10	10	ZH	0,400	1	

Note: 1) NP (nominal pressure): 25 bar. 2) Maximum pressure for steam: 4 bar (140 °C).



Fittings Ø G	A	B	C	D
[ " ]	[mm]	[mm]	[mm]	[mm]
1/4	57	82	18	37,5



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					•	•

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. Connectors to be ordered separately.