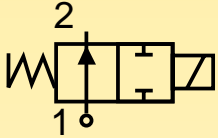


# Solenoid valves for heating

2/2 way - Normally Open - Direct Operated

Fittings: G = 1/8" - 1/4"

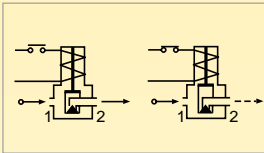
Series **120.4**



**N.O.**

**Normally open**

Coil energised - closed  
Coil de-energised - open



## General description:

PARKER series **120.4** solenoid valves are direct operated and do not require a minimum differential pressure to operate. They are used for general applications with media such as **fuel oils, diesel oil or naphtha up to 7°E**, provided they are compatible with the construction materials used. Series **120.4** valves are **normally open** with inlet and outlet in line.

## Temperatures:

The working temperature for media is:

maximum **+160°C**

minimum **-30°C**

The maximum ambient temperature is:

**+60°C**

## Application:

Series **120.4** solenoid valves are ideal for automatic control of fuel oils up to 7°E on pressurised burners.

## Coils:

For series **120.4** 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

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** 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 14** 115V/50-60Hz, 220-230V/50-60Hz

**ZH 14** 24V/50-60Hz

**YB 14** 220-230V/50-60Hz



• For coil:

**ZB 14** 220-230V/50-60Hz



• With coil:

**ZH 14** 220-230V/50-60Hz



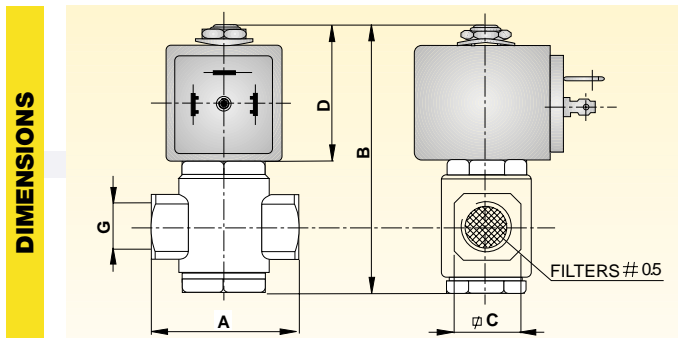
Series **120.4**

| MATERIALS     | • Valve body:     |                          | CW617N UNI EN 12165:98 brass stamping |
|---------------|-------------------|--------------------------|---------------------------------------|
|               | • Seals:          |                          | Ruby                                  |
|               | • 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 |                                       |

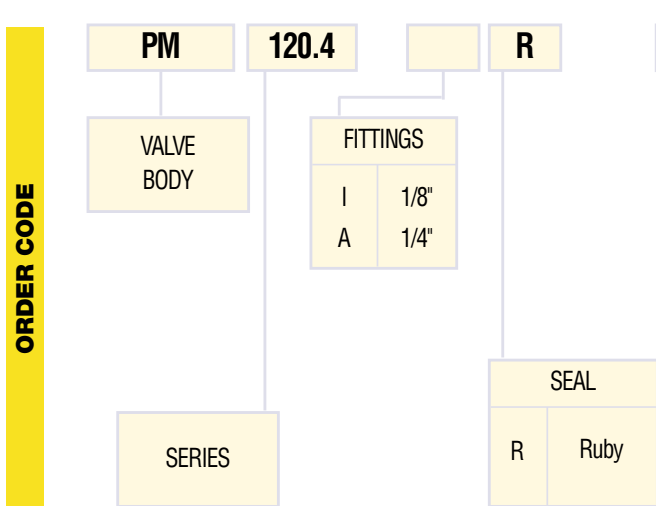
| ELECTRICAL FEATURES | Coil type [ ] |         | Power [ W ] |         | Insulat. class |
|---------------------|---------------|---------|-------------|---------|----------------|
|                     | A.C.(~)       | D.C.(=) | A.C.(~)     | D.C.(=) |                |
|                     | ZB 14         | -       | 14          | -       |                |
| YB 14               | -             | 14      | -           | F       |                |
| ZH 14               | -             | 14      | -           | 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]   | [ ]   |
|               | 1/8          | 120.4 I    | 3,0               | 0,24                | 0                | 30                                   | -                | Z-Y       | 0,350  | 1     |
| 1/4           | 120.4 A      | 3,0        | 0,24              | 0                   | 30               | -                                    | Z-Y              | 0,320     | 1      |       |

Note: 1) NP (nominal pressure): 64 bar.



| Fittings Ø G | A    | B    | C    | D    |
|--------------|------|------|------|------|
| [ " ]        | [mm] | [mm] | [mm] | [mm] |
| 1/8          | 40   | 75   | 18   | 37,5 |
| 1/4          | 40   | 75   | 18   | 37,5 |



| Coil type | [V]           |               |                    |                | [Hz]/cd.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 14     | ●             | ●             | ●                  |                |            |           |
| YB 14     | ●             | ●             | ●                  | ●              |            |           |
| ZH 14     | ●             | ●             | ●                  |                |            |           |

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