

# Solenoid Valves for Automation

3/2 way - Normally Closed - Direct operated

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



Series 141

## General description:

PARKER series 141 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 **water, air, light oils (2°E) and inert gases**, provided they are compatible with the construction materials used.

The series 141 valves seal bubble tight.

Series 141 valves are **normally closed**.

## Temperatures:

The working temperature for media is:

maximum **+140°C**  
minimum **-10°C**

The maximum ambient temperature is:

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

## Coils:

For series 141 valves class "F" coils (**155°C**) are available encapsulated in thermoplastic containing 30% glass fiber (types: ZB, YB).

Class "H" coils (**180°C**) are also available encapsulated in thermoplastic material 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 of 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**.

## Materials:

• Valve body:	OT58 UNI 5705 brass stamping
• Seals:	Viton
• Enclosing tube:	AISI 304 stainless steel
• Plunger:	AISI 430 F 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 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
					in A.C.(~) bar	in D.C.(=) bar			
[ " ]	[ ]	[mm]	[m³/h]	[bar]			[ ]	[Kg]	[ ]
1/8	141 A	1.5 (1.5)*	0.07	0	15	15	Z - Y	0.360	1
1/8	141 B	2.0 (2.5)*	0.12	0	10	10	Z - Y	0.360	1
1/4	141 F	2.0 (2.5)*	0.12	0	10	10	Z - Y	0.360	1
1/4	141 G	2.5 (2.5)*	0.17	0	7	7	Z - Y	0.360	1

Note: 1) NP (nominal pressure): 64 bar.  
2) \* Discharge diameter.

**Application:**

Series 141 solenoid valves are used in applications which require actuation and automatic discharge of moving systems in the following applications:

- Sterilisers;
- Espresso coffee machines;
- Air compressors;
- Diesel oil burners;
- Pilot valves;
- Polyurethane plants;
- Water treatment plants.

**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. The valve body has a M4 x 8 attachment hole.

**Approvals:**



•Coil certification:

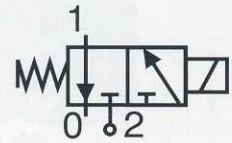
- ZB 09** 24V/50-60Hz, 115V/50-60Hz  
220-230V/50-60Hz, 240V/50-60Hz
- ZB 12** 12V DC, 24V DC
- YB 09** 220-230V/50-60Hz



•For the coils:

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

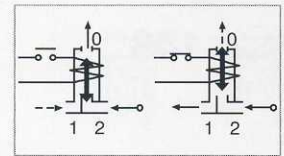
Series **141**



**N.C.**

**Normally closed**

- Coil energised - open
- Coil de-energised - closed



		Dimensions				
		Fittings Ø G	A	B	C	D
		[ " ]	[mm]	[mm]	[mm]	[mm]
		1/8	40	82.5	18	45.5
		1/4	40	82.5	18	45.5

**Order code**

<b>PM</b>	<b>141</b>		<b>V</b>				[V]	[Hz]/c.c.
VALVE BODY	FITTINGS		SEAL				Coil type	
	A 1/8"		V Viton				24V 50/60 Hz	24V c.c.
	B 1/8"						115V 50/60 Hz	
	F 1/4"						220-230V 50/60 Hz	
	G 1/4"						240V 50/60 Hz	
SERIES							12V c.c.	
							24V c.c.	
							ZB 09	
							ZB 12	
							YB 09	
							YB 12	
							ZH 14	
							ZH 16	

Note: Valve supplied with body (M.P.) and coil separate. Connector to be ordered separately.