

Series 143

General description:

PARKER series 143 solenoid valves are diaphragm pilot operated and require a minimum differential pressure to operate.

They are used for general 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 143 valves are normally open.

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" and maximum working temperature + 140°C.

The maximum ambient temperature is;

• with class "F" coils +50°C

• with class "H" coils

+80°C

Coils:

For series 143 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 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 of 50/60Hz (dualfrequency).

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.

Materials:					
Valve body:	OT58 UNI 5705 brass stamping				
• Seals:	NBR (Buna N) - Viton				
• Enclosing tube:	AISI 304 stainless steel				
Plunger:	AISI 430 F stainless steel				
• Spring:	AISI 302 stainless steel				
Shading ring:	Copper				

Coil type		Pov [V	Insulat.	
A.C.(~)	D.C.(=)	A.C.(~)	D.C.(=)	
ZB 14	ZB 16	14	16	F
YB 14	YB 16	14	16	F
ZH 14	ZH 16	14	16	Н

Fittings Ø G Valve type ["]		orifice coefficie	Flow coefficient Kv	Minimum pressure	Max. differential pressure (M.O.P.D.)		Coil type	Weight	Notes
	Valve type								
			[m³/h]		in A.C.(~) bar	in D.C.(=) bar	[]	[Kg]	[]
3/8	1431	13	3.00	0.1	20	20	Z-Y	0.560	1
1/2	143 A	13	3.00	0.1	20	20	Z-Y	0.590	1
3/4	143 C	20	8.40	0.1	20	20	Z - Y	1.050	1
1	143 D	25	9.60	0.1	20	20	Z - Y	1.110	1
1 1/4	143.2 E	35	25.20	0.1	10	10	Z-Y	3.120	1
1 1/2	143.2 F	40	30.00	0.1	10	10	Z - Y	2.870	1
2	143 G	50	37.20	0.1	10	10	Z - Y	4.260	1

Note: 1) NP (nominal pressure): 25 bar (from 1 1/4" to 2" PN 16 bar).

Application:

Series 143 solenoid valves are ideal for the automatic control of media in a wide range of applications such as:

- Thermohydraulic systems;
- Air compressors:
- ·Washing plants;
- ·Hydrocleaners.

For air and inert gases they can be used for low operating frequencies.

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:



·Coil certification:

ZB 14 24V/50-60Hz, 115V/50-60Hz 220-230V/50-60Hz

ZB 16 12V DC, 24V DC

YB 14 220-230V/50-60Hz

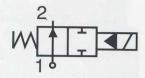
YB 16 24V DC



•For the coil:

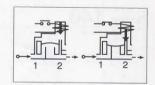
ZB 14 220-230V/50-60Hz

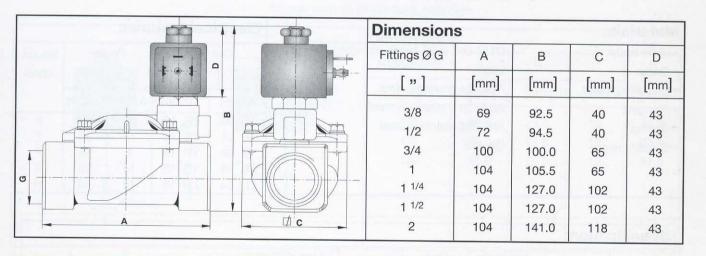
Series 143

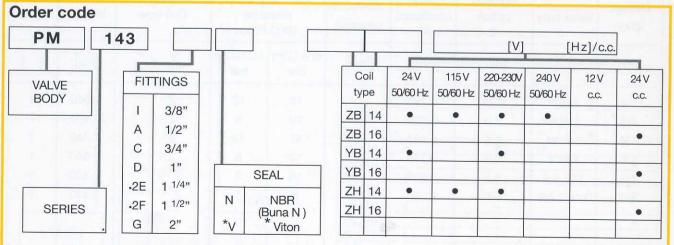


N.O. Normally open

Coil energised - closed Coil de-energised - open







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

* Optional Viton for fitting smaller than 1".