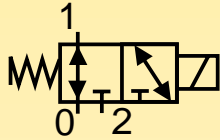


Solenoid Valves for Automation

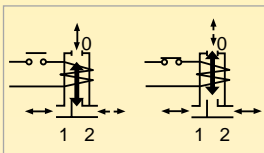
3/2 way - Universal - Direct operated

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

Series **139**



Universal Solenoid valve



General description:

PARKER series **139** solenoid valves are universal and may be used as normally closed, normally open and for bypass and mixer applications depending on the flow pattern chosen.

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.

Since they are direct-acting valves, they do not require a minimum differential pressure and function within the maximum differential pressure values (MOPD) indicated in the specification table.

The series **139** seal bubble tight.

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**

Application:

Series **139** solenoid valves are used in applications which require actuation and automatic discharge of moving systems. They enable the flow to be diverted towards a single outlet or to select one flow from two.

Some typical application examples:

- Pneumatic systems;
- Air compressors;
- Pilot valves;
- Batch systems;
- Paper and board manufacturing machines;
- Hydrocleaners;
- Hygiene-health systems;
- Instruments;
- Dryers;
- Automatic dispensers.



Coils:

For series **139** 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 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** 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. The valve body has a M4 x 8 mounting 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

- UL Recognized Comp. Mark for coils:
 - ZB 09** 24V/60Hz, 110-120V/60Hz, 208-240V/60Hz
 - YB 09** 24V/60Hz, 110-120V/60Hz, 208-240V/60Hz

Series **139**

for: water - air - light oils (2°E) - inert gases

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
	["]	[]	[mm]	[m³/h]	[bar]	in A.C.(~) [bar]	in D.C.(=) [bar]	[]	[Kg]	[]
	1/8	139 A	1,5 (1,5)*	0,07	0	10	10	Z - Y	0,360	1
1/8	139 B	2,0 (2,0)*	0,12	0	7	7	Z - Y	0,360	1	
1/4	139 F	2,0 (2,0)*	0,12	0	7	7	Z - Y	0,360	1	
1/4	139 G	2,5 (2,5)*	0,17	0	4	4	Z - Y	0,360	1	
1/4	139 L	3,5 (2,5)*	0,30	0	1	1	Z - Y	0,360	1	

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

DIMENSIONS	Fittings Ø G	A	B	C	D
	["]	[mm]	[mm]	[mm]	[mm]
	1/8	40,0	82,5	18	45,5
1/4	40,0	82,5	18	45,5	

ORDER CODE	PM	139	V	[V] [Hz] / d.c.						
	VALVE BODY	FITTINGS	SEAL	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.
				A 1/8"	V Viton	ZB 09	•	•	•	•
	B 1/8"		ZB 12					•	•	
	F 1/4"		YB 09	•	•	•				
	G 1/4"		YB 12					•	•	
	L 1/4"		ZH 14	•	•	•				
			ZH 16						•	

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

Technical information

Z coil

Coil manufactured from **class H** copper wire, moulded in thermoplastic:

- (polyester) with 30% glass fiber (**type ZB**);
- (polyphenylene) with 40% glass fiber (**type ZH**).

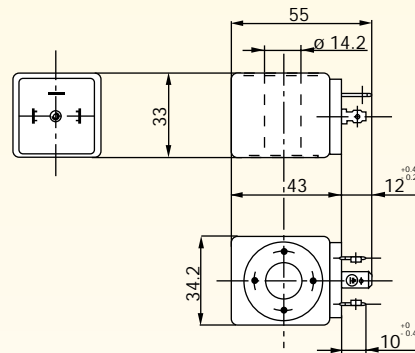
Features:

Protection	DIN 40050 = IP 65 with connector
Connector	DIN 43650 A - PG 9 or PG 11
Frequency	50/60 Hz

Types available:

* **IMQ, VDE, UL** approved for standard voltages

- Class F (155°C)
 - ZB09 = 16 VA - 9 W a.c. Service (25 VA - Inrush)
 - ZB12 = 12 W d.c.
 - ZB14 = 25 VA - 14 W a.c. Service (33 VA - Inrush)
 - ZB16 = 16 W d.c.
- Class H (180°C)
 - ZH14 = 25 VA - 14 W a.c. - Service (33 VA - Inrush)
 - ZH16 = 16 W d.c.



Y coil

Coil manufactured from **class H** copper wire, moulded in thermoplastic:

- (polyester) with 30% glass fiber;

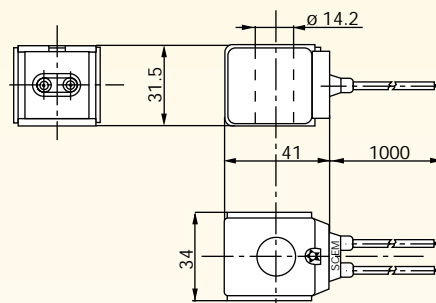
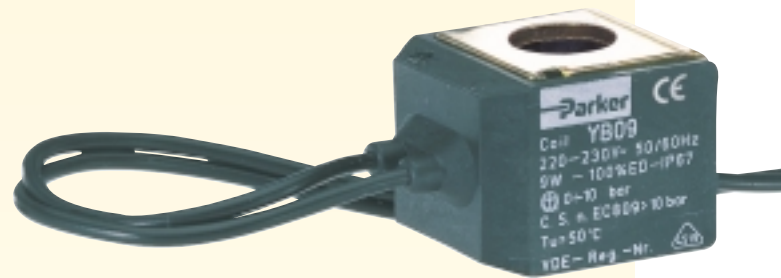
Features

Protection	DIN 40050 = IP 67
Electrical connection	two 1000 mm cables
Frequency	50/60 Hz

Types available:

* **IMQ, VDE, UL** approved for standard voltages

- Class F (155°C)
 - YB09 = 15 VA - 9 W a.c. Service (24 VA - Inrush)
 - YB12 = 12 W d.c.
 - YB14 = 24 VA - 14 W a.c. Service (32 VA - Inrush)
 - YB16 = 16 W d.c.
- Class E (120°C)
 - YEO9 = 15 VA - 9 W a.c.



Note: recommended for applications where humidity is particularly severe and where ice formation or defrosting may occur.