Water Solenoid Valves - Series 133

2/2 way - Normally Closed - Diaphragm Pilot Operated
G = 3/8" - 3" Fittings

General Description :

Parker series **133** solenoid valves are diaphragm pilot operated and require a minimum differential pressure to operate. Secondary refrigerant solenoid valve can be used with water and maximum 25% glycol.
Series **133** valves are **normally closed**. All sizes are available as normally open.

Temperatures :

The working temperature for media is:

maximum **+90°C**
minimum **-10°C**

with NBR seals (Buna N).

Coils :

Series 133 solenoid valves use coils in a watertight version for applications where the humidity conditions are particularly critical (type "YE09").
The "Y" coil has terminals with 2 x 1,000mm cables with protection to **IP67**.
The "Z" and "Y" coils can be used on a.c. with frequency 50/60 Hz (dual frequency)
The "Z" coils have faston terminals for **DIN 43650A** connector with protection to IP65.
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.

Materials

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

Electrical Features :

Coil Type [ ]		Power [w]		Insulation Class
A.C. (~)	D.C. (=)	A.C. (~)	D.C. (=)	
YE09	-	9	-	E
RT14	-	14	-	F
ZB12	-	-	12	F

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]	A.C.	[kg]	
3/8	133 I	13	3,00	0,1	20	20	YE-RT	0,55	1
1/2	133 A	13	3,00	0,1	20	20	YE-RT	0,58	1
3/4	133 C	20	8,40	0,1	20	20	YE-RT	1,02	1
1	133 D	25	9,60	0,1	20	20	YE-RT	1,08	1
1.1/4	133.2 E	35	25,20	0,1	10	10	YE-RT	3,15	2
1.1/2	133.2 F	40	30,00	0,1	10	10	YE-RT	2,90	2
2	133 G	50	37,20	0,1	10	10	YE-RT	4,30	2
2.1/2	133 L-CMV	65	66,00	0,2	10	10	YE-RT	13,80	2 - 3
3	133M-CMV	75	80,00	0,2	10	10	YE-RT	12,50	2 - 3

Note: 1) Safe working pressure : 25 bar (SWP)
2) Safe working pressure: 16 bar
3) Slow closure version and manual opener available.

Application

Series **133** valves are ideal for automatic control of media in a wide range of applications such as:

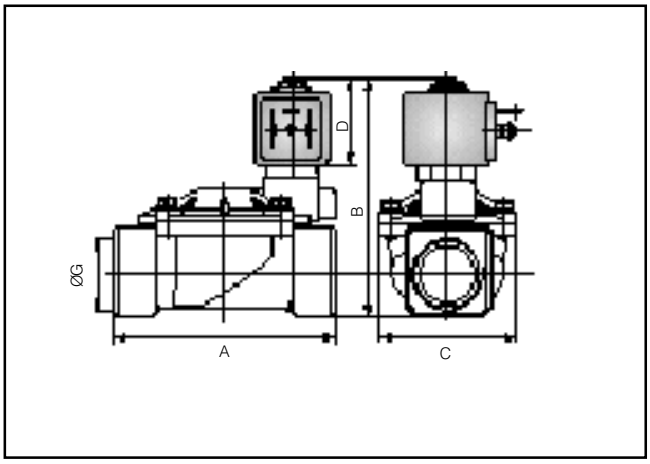
- thermohydraulic systems
- autoclaves
- cooling of machine tools
- industrial washing plants
- evaporator towers
- hospital equipment
- irrigation systems
- fire-fighting systems
- wood-working machines
- marble-working machines
- moulding machines
- hygiene-health equipment

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.
The valve body has one mounting hole with a diameter of 5.1 mm.

Dimensions



Fittings Ø G	A	B	C	D
["]	[mm]	[mm]	[mm]	[mm]
3/8"	69	92,5	40	38,5
1/2"	72	94,5	40	38,5
3/4"	100	100	65	38,5
1"	104	105,5	65	38,5
1.1/4"	145	127	102	38,5
1.1/2"	145	127	102	38,5
2	173	141	118	38,5
2.1/2	245	188	184	38,5
3	250	188	184	38,5

Order Code

PM	133		N			[V] [Hz]/d.c				
Valve Body	Series	Fittings	Seal			Coil Type	24 V 50/60Hz	115 V 50/60Hz	220-230V 50/60 Hz	12 V DC	24 V DC
		I 3/8" G	N NBR (Buna N)			YE 09	○		○		
		A 1/2" G									
		C 3/4" G									
		D 1" G									
		E 1.1/4" G									
		F 1.1/2"G									
		G 2" G									
		L 2.1/2" G									
		M 3"G									

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

Water Regulating Valve 65A

Features

- Compact size simplifies installation.
- Self-cleaning - sliding block wipes orifice clean every cycle.
- Easy to adjust - Simple screw type pressure adjustment. Adjusting stem is easily accessible.
- Diaphragm type nitrate seals keep water in main valve body. Water does not come in contact with either spring or bellows. Elastomer seals are nylon reinforced.
- Extra large bellows is built for extra long life.
- Choice of capillary lengths - 813mm and 1219mm are standard.
- Choice for capillary terminals - 1/4" flare nut, 1/4" refrigerant access valve or ODM solder.
- Non-corrosive materials used throughout….stainless steel orifice, Teflon® reinforced slide, forged brass body.
- No chatter, because operation is not affected by inlet pressure.
- Wide operating range - 4.6 bar to 21 bar. One valve for all common refrigerants.
- Manual flushing capability - all 3 valve sizes.

General Specifications

Operating Head Pressure Range: 4.6 bar to 21 bar.
(Model 65A) Bellows Stop is standard in all devices.

Maximum Water Pressure: 10.5 bar.

Head Pressure Connection: 813mm capillary with 1/4" flare nut is standard. Other lengths and terminals available.

N.P.T. Water Connection: 3/8" - 1/2" - 3/4"

Main Valve……..Sliding Rulon® Block
Main Valve Seat……..Stainless Steel
Internal Parts……..Brass and Stainless Steel
Springs……..Plated Spring Steel
Valve Body……..Forged Brass
Valve Bellows……..Heavy-duty phosphor bronze and brass
Water Seals……..Double Diaphragm Type

Ordering Information

Model No.	Device No.	Female NPT
65A	65-101	3/8"
65A	65-501	1/2"
65A	65-502	3/4"

Water Regulating Valve 265

Features

- **Does the work of two valves**
  The Model 265 handles both the heating and cooling cycles of water source heat pumps so that a separate valve for each cycle is unnecessary. As a result, cost is reduced, efficiency increased, and maintenance simplified.

- **Easy to adjust**
  The conveniently located outer stem adjusts for heating, and an inner screw adjusts for cooling to set valve opening points.

- **Self-Cleaning**
  The Model 265 works well even in dirty water. The sliding valve block wipes the orifice clean after every cycle. Therefore, dirt can't accumulate.

- **Fights Corrosion**
  Every part of the Model 265 that is touched by water is stainless steel or brass. The sliding block is Rulon®

- **Non-Corrosion**
  Operation is not affected by inlet pressure, so there are no disturbing chattering sounds.

- **Leak-Resistant**
  The valve diaphragm has double seals to prevent leakage.

General Specifications

Sensing Pressure Range: 0 to 21 bar

Maximum Water Pressure: 10.5 bar

Closed Plateau: 3.5 - 15.0 bar, Adjustable

Sensing Pressure Connection: 813mm Capillary; solder, flare or refrigerant access valve.

Valve Body……Forged Brass
Valve Gate……Sliding Rulon® Block
Valve Seat……Stainless Steel Orifice Plate
Diaphragm Seals……Nitrate
Other Internal Parts……Stainless Steel
Pressure Bellows……Heavy-duty Two-Ply Brass
Adjusting Springs……Plated Stainless Steel

Ordering Information

Use the chart below to chose the Parker Dual Acting Water Valve device number that fits your application.

Inlet and Outlet	Model No.	Device No.
1/2" NPT	265	265-002 *265-009
3/4" NPT	265	265-102 *265-109

* Models with mounting bracket
Shaded models available special order.