

GENERAL FEATURES

- For irrigation systems
- Full orifice solenoid valves
- Big connection sizes
- Suitable for water and air
- Working Temperature : -10°C / +50°C
- Not suitable for use with dangerous fluids listed in Group 1
- **Minimum operating differential pressure 1 bar**
- High reliability, quality and performance; long life
- Wide range of flow rate and orifice options
- **On request; flanged types**
- Ideal for the automatic control of media in a wide range of applications.
- Coils interchangeable
- Flow factor Kv of each valve is indicated, so that the flow Q can be calculated as a function of pressure
- Solenoid valves must be used with filtered fluids.
- Solenoid valve can be mounted in any position without affecting operation; vertical with coil upwards preferred.
- Standard pipe connection is G (BSP) (ISO 228-1)

ELECTRICAL CHARACTERISTICS

Continuous Duty	: ED %100
Coil Insulation Class	: H (180°C)
Coil Impregnation	: Polyester Fiber Glass
Coil Encapsulation Material	: Fiber Glass Reinforced
Ambient Temperature	: from -10°C; +60°C
Protection Degree	: IP 65 (EN 60529) with coil duly fitted with the plug connector
Electric Plug Connection	: DIN 46340 3-poles connectors (DIN 43650)
Connector Specification	: ISO 4400 / EN 175301-803, Form A, Spade plug (Cable Ø 6-8 mm)
Electrical Safety	: IEC 335
Standard Voltages	: For AC 12V, 24V, 48V, 110V, 230V For DC 12V, 24V, 48V, 110 V

Other voltages on request;
Voltage Tolerances : For AC -15%; +10%, For DC -5%; +10%
Frequency : 50 Hz, other frequencies on request; (60 Hz)
On request; connector with LED
Specify coil voltage with order

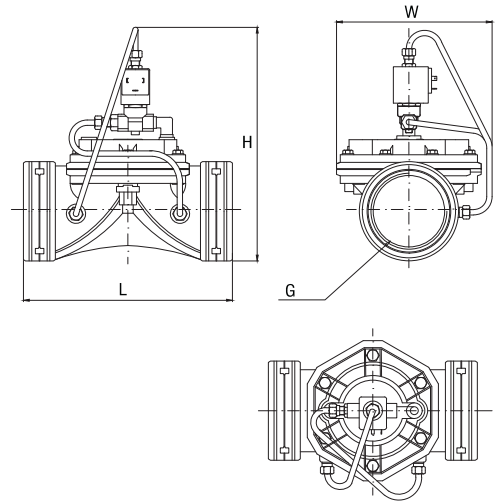
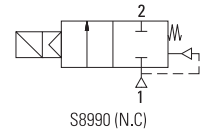
MATERIALS IN CONTACT WITH FLUID

Body : Reinforced Nylon
Internal Parts : Stainless Steel and brass
Sealing : NBR
Shading Ring : Copper
Seats : Brass
Core Tube : Stainless Steel
Springs : Stainless Steel
On request; sealing can be FPM (VITON), EPDM

TECHNICAL FEATURES

Max Viscosity : 5°E (~37cSt or mm²/s)
Response Time : Opening Time: 400 ms to ~ 1600 ms,
Closing Time : 1000 ms to ~ 2000 ms
Maximum Allowable Pressure : 15 bar
Fluid Temperature for FPM (VITON) from -10°C; +160°C, for
EPDM from -10°C; +140°C

Normally Closed



Dimensions (mm)

G	L	H	W
1"	135	197	120
1 1/2"	140	213	120
2"	185	241	165
2 1/2"	198	260	165
3"	210	270	176

Valve Type / Order no	Connection Size	Orifice size	Pressure		KV	Fluid Temperature		Seal	Weight
			min	max		min	max		
S8990	G	mm	bar	bar	lt/min	°C			(kg)
S 8990 .05	1"	31	1	10	300	-10	50	NBR	0.75
S 8990 .07	1 1/2"	45	1	10	433	-10	50	NBR	0.85
S 8990 .08	2"	57	1	10	1066	-10	50	NBR	1.25
S 8990 .09	2 1/2"	74	1	10	1150	-10	50	NBR	1.35
S 8990 .10	3"	86	1	10	1733	-10	50	NBR	1.5

Useful Informations

1 bar : 14,5 PSI : 10 mH₂O : 10 N/cm² : 1 kg/cm² : 100000 Pa, 1 PSI : 69 mbar, 1 m³/h : 4,405 GPM : 16,7 L/d 1 Gallon / minute : 0,227 m³/h, 0°C : 89,6 F
Sealings: NBR : Nitrile-Butylene Elastomer, FPM (VITON) : Fluoro-Carbon Elastomer, EPDM : Ethylene-Propylene Elastomer