



Applications:

- Pumps, laundry equipments.
- Irrigation. Compressors. Pollution control.
- Heating with medium or high pressure steam.
- Spraying. Irrigation.
- Air dryers. Water treatment.
- Autoclaves. Industrial laundry equipments.

Main characteristics

Normally closed and normally open.
Piston servo-operated action.
Brass, stainless steel body.
BSP or NPT threaded connections.
Buna N seats for neutral fluids up to 80 °C and PTFE up to 180 °C.
Encapsulated coils. Shape A DIN 43650 Connection.
IP65 and NEMA4 Protection.

Options:

- Energized coil indicator light.
- Explosion and / or weather proof coils and housings.
- Manual operator.

Operating pressure differential

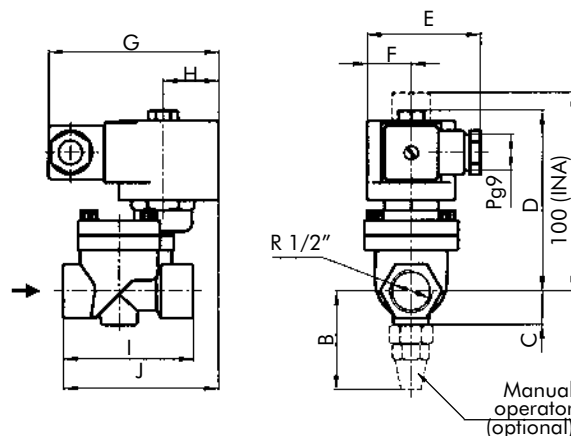
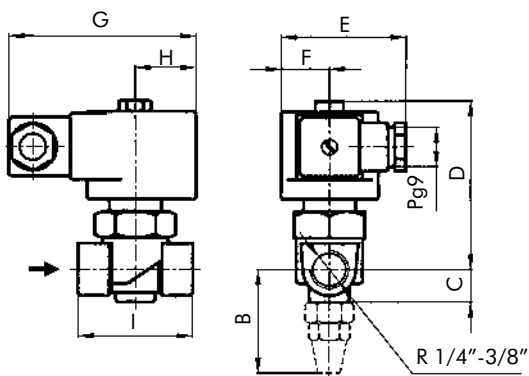
***Advise:** when using direct current (DC), a 25% reduction on the maximum operating pressure differential is expected

Type	Minimum		Maximum steam				Maximum other fluids	
			PTFE seat		EPDM seat			
	bar	psi	bar	psi	bar	psi	bar	psi
NC	0.1	1.5	10	150	3	45	15 *	225 *
NO	0.1	1.5	10	150	3	45	10	150

Technical specifications - Brass body

Ø Pipe ins	Ø Orifice		Flow factor		Weight		Maximum temp. and catalog N° according to seat material				
	mm	ins.	Kv	Cv	kg	Lb	Buna "N"	Neoprene	EPDM	FKM	PTFE
							80 °C / 176 °F	80 °C / 176 °F	145 °C / 293 °F	150 °C / 302 °F	180 °C / 356 °F
Normally closed											
1/4"	6	0.24	0.80	0.94	0.70	1.6	1390BA2	1390BN2	1390BE2	1390BV2	1390BT2
3/8"	9	0.35	1.60	1.87	0.65	1.4	1390BA3	1390BN3	1390BE3	1390BV3	1390BT3
1/2"	12	.47	2.35	2.75	0.90	2.00	1390BA4	1390BN4	1390BE4	1390BV4	1390BT4
Normally open											
1/4"	6	0.24	0.80	0.94	0.70	1.6	1390BA2INA	1390BN2INA	1390BE2INA	1390BV2INA	1390BT2INA
3/8"	9	0.35	1.60	1.87	0.65	1.4	1390BA3INA	1390BN3INA	1390BE3INA	1390BV3INA	1390BT3INA
1/2"	12	.47	2.35	2.75	0.90	2.00	1390BA4INA	1390BN4INA	1390BE4INA	1390BV4INA	1390BT4INA

General dimensions 1390



øA	B	C	D	E	F	G	H	I	J
R 1/4"	48	15	77	57	22	85	27	52	-
R 3/8"									-
R 1/2"	50	17	91	57	22	85	27	65	78

Measurements: mm

øA	B	C	D	E	F	G	H	I	J
R 1/4"	1.89	0.59	3.03	2.24	0.87	3.35	1.06	2.05	-
R 3/8"									-
R 1/2"	1.97	0.67	3.58	2.24	0.87	3.35	1.06	2.56	3.07

Measurements: ins.

Special constructions

Stainless steel body:

- AISI304: change letter **B** for **S** in the catalog N^o.
Example: 1390ST4.
- AISI316: change letter **B** for **I** in the catalog N^o.
Example: 1390IT4.

Options	Prefix	Suffix	Examples
Water, weather and saline corrosion proof coils.	YC		YC1390BA4
Explosion and weather proof coils.	ZC		ZC1390BA4
Weather proof housing.	Y		Y1390BA4
Explosion and weather proof housing.	Z		Z1390BA4
Manual operator: on the main orifice	(*)	- M	1390BA4-M
NPT connections		T	1390BA4T
Energized coil indicator light	See coils.		

(*) Only NC versions.

Coil characteristics

Electric power supply	Coil type	Power W	VA (volt-amp)		Maximum temperature		Available tensions
			Inrush	Holding	°C	°F	
AC 50 Hz	MF11C	11	40	22	155	311	1
	MH11C	11	40	22	180	356	1
AC 60 Hz	MF13C	13	45	27	155	311	2
	MH13C	13	45	27	180	356	2
DC	MH19C	19	19	19	180	356	3

1-(12,24,110,220,240)V 2-(12,24,110,120,220,240)V 3-(12,24,110,220)V

Recommendations for installation

Place a strainer upstream the valve with a porosity ≤ 100m. Mount the valve in any position, preferably over horizontal pipeline with the coil upright. The valve input pressure must always be > than the pressure downstream from the valve. For the normally closed or normally open valve to open, the minimum pressure indicated in each model must be observed.

Application according to seat material

Seat material	Buna "N"	Neoprene	EPDM	FKM	PTFE
Maximum temperature	+80 °C / 176 °F	+80 °C / 176 °F	+145 °C / 293 °F	+150 °C / 302 °F	+180 °C / 356 °F
Uses	Water, air, light oils. Neutral gases. Kerosene, low and medium vacuum	Oxygen, alcohol, argon, other non-corrosive light gases and liquids, Freon 12.	Water steam, hot water, acetone.	Benzene, naphta, aromatics, etc., hot gases, diesel oil.	Steam, hot oils, corrosive fluids.