

# ASCO DRY SOLENOID VALVES



plastic valves for aggressive fluids



## Fittings

### Description

Total isolation solenoid valves (DRY) combine the traditional characteristics of strength and reliability with construction solutions that make them particularly suitable for the control of aggressive and/or non contaminable fluids. The fluid comes into contact solely with the valve body and the separation lever or the separation diaphragm, thus protecting the fluid from contamination that could alter the chemical and physical properties of the fluid and excessive temperature changes. Produced in 2/2 or 3/2 normally closed, open or universal service versions plus miniaturized, silent versions and with a latching actuator. The numerous versions available, the variety of materials employed and the possibility of studying special solutions make this range of solenoid valves particularly versatile, suitable for applications in the food, biotechnology, chemical/pharmaceutical and physiological/medical sectors.

### Options

Specially designed solenoid valves with non-standard performances can be supplied for particular applications.

On request and by quantity: other materials for seals and bodies, silent models, bi-stable versions, coils with flying leads, class H coils with international approval (UL, VDE etc.).

### Flowrate

The flow rate is indicated by the flow factor Kv, which represents the quantity of water, expressed in m<sup>3</sup>/h, that flows through the solenoid valve with a pressure drop of 1 bar and a temperature between 5 °C and 30 °C (Standard VDI/VDE2173).

### Response time

The time requested to pass from fully open to fully closed or vice versa, changes according different parameters. In particular, the voltage value, the type of fluids, the pressure, the valve, its mobile parts dimensions and the operating system are all factors that affect the response time. For the valves of the Dry series, the response time is about few tens of milliseconds for direct acting valves and hundreds (in some cases thousands) of milliseconds for pilot operated valves.



## Specifications

- o suitable for aggressive fluids and gases which can be tolerated by the materials used
- o features:
  - valve bodies made from technopolymer and generally fitted with gas thread connections
  - stainless steel internal components
  - seals for specific use
- o maximum viscosity: 37 cStokes or mm<sup>2</sup>/s
- o fluid temperature: according to table
- o voltage:
  - 24-110-220-230V/50Hz and 12-24VDC as standard
  - other frequencies and voltages on request
  - voltage tolerances: +10% -15% for AC; +10% -5% for DC
- o coils comply with EC standard (73/23CEE) and modification 93/68EEC
- o coils fit for 100% ED, ambient temperature from -10 to +60 °C
- o seals: FPM, EPDM or VMQ
- o 2/2 or 3/2, NC or NO

## Capacity Sirai™ solenoid valves with separation lever

PORT SIZE	ORFICE SIZE mm	BODY	SEALS	DIFFERENTIAL PRESSURE					PS (BAR)	Kv (m³/h)	MEDIUM TEMPERATURE		ABSORBED POWER			VALVE	COIL	NOTES	WEIGHT
				K P MIN	K P MAX								AC		DC (W)				
					GASES		LIQUIDS						VA	VA					
					DC	AC	DC	AC			INRUSH	HOLDING							
G 1/4	3,2	PEI	SBR	0	10	10	2,4	10	12	0,32	-10	100	23	14	9	D144A4	Z530A	b-c	0,255
	3,2	PEI	EPDM	0	10	10	2,4	10	12	0,32	-10	100	23	14	9	D144D4	Z530A	b-c	0,255
	3,2	PEI	VMQ	0	1,5	1,5	1,5	1,5	12	0,32	-10	100	23	14	9	D144S4	Z530A	b-c	0,255
	3,2	PEI	FPM	0	2,4	10	2,4	10	12	0,32	-10	100	23	14	9	D144V4	Z530A	b-c	0,255
	5,5	PEI	SBR	0	1	4,5	1	4,5	12	0,55	-10	100	23	14	9	D144A4	Z530A	b-c	0,255
	5,5	PEI	EPDM	0	1	4,5	1	4,5	12	0,55	-10	100	23	14	9	D144D4	Z530A	b-c	0,255
	5,5	PEI	VMQ	0	1	1,5	1	1,5	12	0,55	-10	100	23	14	9	D144S4	Z530A	b-c	0,255
	5,5	PEI	FPM	0	1	4,5	1	4,5	12	0,55	-10	100	23	14	9	D144V4	Z530A	b-c	0,255
G 1/2	9	PPS	SBR	0	0,25	1,6	0,25	1,6	2	1,6	-10	90	44	24	13	D132A20	Z130A	-	0,54
	9	PPS	EPDM	0	0,25	1,6	0,25	1,6	2	1,6	-10	90	44	24	13	D132D20	Z130A	-	0,54
	9	PPS	FPM	0	0,25	1,6	0,25	1,6	2	1,6	-10	90	44	24	13	D132V20	Z130A	-	0,54

PS = max pressure

PEI = Polyeterimide

PPS = Polyphenylene-sulfide