

Hydralectric, 5 High Road Byfleet, Surrey KT14 7QE England T: 01932 334200 F: 01932 334222 E: info@hydralectric.com



# TECHNICAL DATA SHEET

# **SOLENOID VALVE DIRECT ACTING**



#### **DESCRIPTION**

An extensive range of direct acting solenoid valves to provide safe conveyance, distribution and control of water services in a wide range of applications. The key attributes are:

- Robust construction and long service life
- Wide selection of standard port connections
- Modular platform to facilitate client specific port options

#### **APPLICATION**

- Drinks dispense machines
- · Low pressure appliances

#### **GENERAL PERFORMANCE DATA**

VOLTAGE:	220 - 240 vac, 110 - 120 vac, 24, 12V AC/DC				
FREQUENCY:	50 - 60 Hz & DC				
POWER DRAW:	6 Watts (230vac) & 9 Watts (24Vdc)				
COIL INSULATION:	Class F (140°C Operating Temperature)				
INSULATION:	Class II. Fully double insulated. No Earth required.				
AMBIENT TEMPERATURE:	60°C maximum				
MEDIUM:	Potable water, 90°C maximum				
DUTY CYCLE 100%:	Tu 60°C (ambient), Tm 25°C (Cold Water)				
DUTY CYCLE:	3min ON/5 Min Off Tu 60°C (ambient), Tm 90°C (Hot Water)				
OPERATING PRESSURE:	0 - 0.2 Bar				
EMC:	Fully compliant				
TERMINALS:	Two 6.35 x 0.8 mm male tab terminals				

#### **COIL OPTIONS**

Solenoid coils are supplied with the standard 6.5 x 0.8 terminals; options are available for RAST 5 and RAST 2.5 subject to minimum order volumes.

COLOUR	(V)	VOLTAGE TOLERANCE	FREQUENCY (HZ)	CURRENT (AMPS)	POWER (W)	RESISTANCE (Ω)	DUTY CYCLE
BROWN	230	10	50-60	0.035	5.8	3820	100%
BEIGE	230	10	50-60	0.03	5.0	4060	100%
BLACK	110	10	50-60	0.45	4.0	1180	100%
YELLOW	24	10	50-60	0.19	2.78	60	100%
YELLOW	24	10	DC	0.39	9.4	60	3min on, 5min off
GREY	12	10	50-60	0.38	4.5	14.5	100%
GREY	12	10	DC	0.82	9.0	14.5	3min on, 5min off



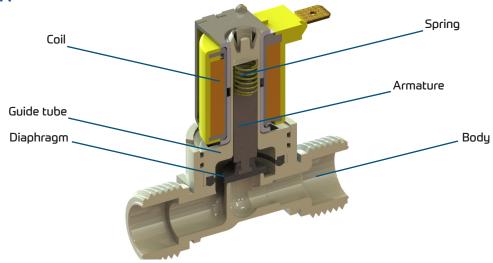
Hydralectric, 5 High Road Byfleet, Surrey KT14 7QE England T: 01932 334200 F: 01932 334222 E: info@hydralectric.com



## **TECHNICAL DATA SHEET**

# **SOLENOID VALVE DIRECT ACTING**

#### **SCHEMATIC DIAGRAM**



## **GENERAL CONSTRUCTION DATA**

COMPONENT	MATERIAL		
BODY	NYLON PA 6.6 30% Glass Filled		
GUIDE TYPE	NYLON PA 6.6 30% Glass Filled		
SPRING	AISI 316 stainless steel		
ARMATURE	Stainless Steel Z6CDF18.2 (ASTM XM 34)		
DIAPHRAGM AND ARMATURE TIP	EPDM		
COIL BOBBIN	Nylon PA 6.6 heat stabllised		
COIL ENCAPSULATION	Nylon PA 6 heat stabilised		
MAGNETIC CIRCUIT	Mild Steel 1.2 Galvanised bichromated		
MOUNTING BRACKET	Mild Steel 1.2 Galvanised bichromated		

CHEMICAL RESISTANCE If using strong or aggressive chemicals please verify the material compatability from the list above.

Chemical resistance information is available at: www.hydralectric.com/h/chemical-resistance.

**MOUNTING** 

The valves can be mounted via 2 self-tapping screws from the underside of the main body.

Note: Avoid penetrating the diaphragm chamber with excess screw length.

# **INSTALLATION REQUIREMENTS**

OPERATING PRESSURE:	Maximum 0.2bar
INLET MATING CONNECTION:	Maximum torque setting 4.0 Nm
WATER QUALITY:	Solenoid valves are designed for use on potable clean water systems, excessive particulates can cause failure. Avoid direct connection to hot water boilers which may cause excess build up of calcium deposits
INLET FILTER:	0.4 mesh filter must be fitted up stream of the valve; failure to use a filter upstream of diaphragm can cause failure
SERVICE LIFE:	50,000 operations under hot and cold water conditions, service life will vary according to local water conditions and temperature



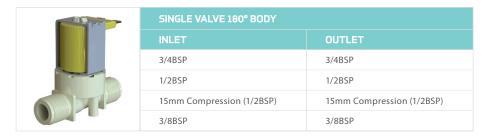
Hydralectric, 5 High Road Byfleet, Surrey KT14 7QE England T: 01932 334200 F: 01932 334222 E: info@hydralectric.com

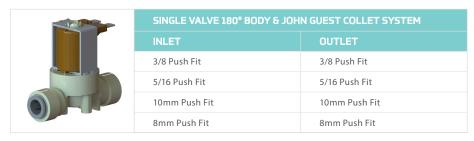


## TECHNICAL DATA SHEET

## **SOLENOID VALVE DIRECT ACTING**

#### **PORT CONNECTIONS**







#### **SINGLE VALVE 180° BODY**

Ports can be customised to specific applications allowing more effective integration into the client equipment. The mould tool construction is modular allowing for the inlet and outlet ports to be customised.

#### **STANDARDS**

The Solenoid Valves range is subjected to compliance testing and approval to following standards:

- ACS: Attestation de conformité sanitaire
- RoHS: European Directive 2002/95/EC
- UK: BS6920

# **TECHNICAL ASSISTANCE**

Please contact our Sales or Technical Support team on 0044 (0) 1932 334200, or visit our website www.hydralectric.com