

AquiTron

AT-V-NC

Solenoid Valve

Normally Closed 230V



DATA SHEET



aquilar
leak detection solutions

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Normally Closed 230V



Brass bodied WRAS approved (certificate N. 2007001) pilot operated diaphragm valve for use with TraceTek and AquiTron leak detection systems. Normally Closed (fail safe), with manual release override. Suitable to shut off water (verify suitability of fluid with materials in contact). 230VAC 100% duty cycle solenoid coil. Option to mount in any position apart from coil facing down (coil facing up is recommended).

SIMPLE OPERATION

The AT-V-NC solenoid valve is a fail-safe normally closed valve. Meaning it is closed in an unpowered state. In an emergency situation it is possible to manually override this and open the valve without power. A small flat bladed screwdriver is required. This is inserted as shown in Figure 1 and the screw head rotated quarter of a turn in a clockwise direction. **Important:** For normal operation the grub screw head must be returned to its original position.

INSTALLATION

All AT-V-NC valves are supplied with the unions sealed in place from the manufacturer. If the unions are removed and refitted, PTFE tape or pipe sealing cord should not be used. As this could result in excess or loose tape/cord entering the solenoid valve body and preventing it from functioning correctly. The manufacturer recommends re-sealing unions in place using a thread sealant, such as Loctite 577. Care must be taken to not let excess sealant enter the valve body.

COIL DETAILS

Type	ZB10A
Encapsulation material	PA fiberglass reinforced
Insulation Class	F (155°C)
Ambient temperature	-10°C +60°C
Continuous duty	ED 100%
Electric connection	DIN 46340 – 3 pole connector
Protection degree	IP65 (EN60529) with connector
Voltage	230Vac 50-60Hz

MATERIALS IN CONTACT WITH FLUID

Body	Brass
Sealing	EPDM
Internal components	Brass and Stainless steel
Seat	Brass
Core tube	Stainless steel
Shading coil	Copper

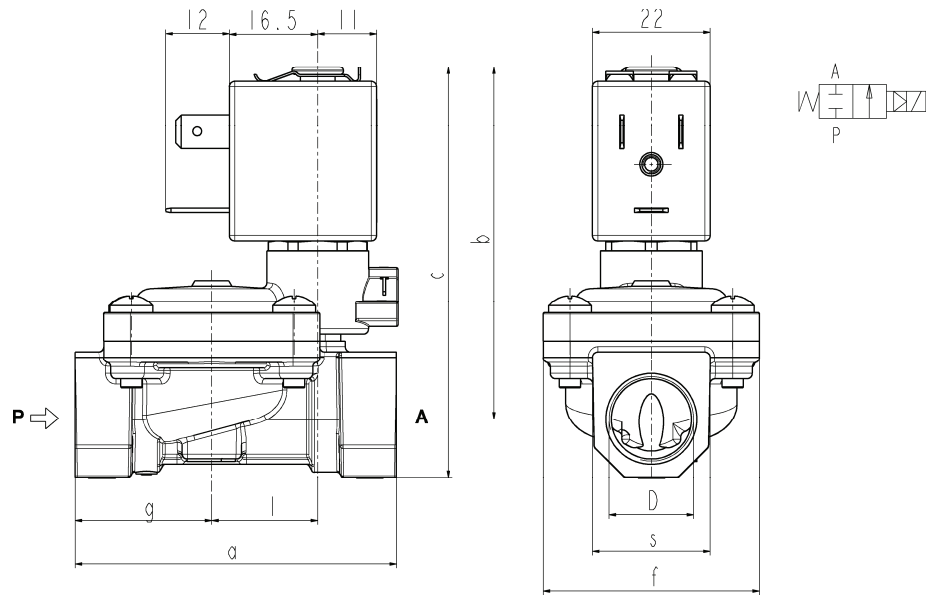


Emergency override manual release grub screw head.

TECHNICAL INFORMATION

Port size ISO 228	G½	G¾	G1	G1¼	G1½
Orifice size (mm)	13.5	18	24	30	45
Differential pressure (bar) Δp min	0.35	0.35	0.35	0.50	0.50
Differential pressure (bar) Δp Max Gasses	16	12	12	10	10
Differential pressure (bar) Δp Max Liquids	16	12	12	10	10
Maximum allowable pressure (bar)	20	20	20	15	15
Kv (m ³ /h)	3.8	5	12	15	27
Power absorption Inrush VA	12	12	12	23	23
Power absorption Holding VA	6	6	6	14	14
Power absorption Holding W	4	4	4	9	9
Opening time	from ~300ms to ~1500ms				
Closing time	from ~1000ms to ~2000ms				
Fluid temperature (°C) NBR	-10 to +90				
Fluid temperature (°C) EPDM	-10 to +140				
Max viscosity	5°E (~37 cStokes or mm ² /s)				
Weight (Kg)	0.38	0.52	1.08	1.59	2.51

Warning: Pilot operated solenoid valves are only designed to control water in one direction, and therefore not suitable for applications that may encounter water flowing in two directions, such as the return circuit in a 'flow and return' system. Please contact Aquilar for suitable alternatives.


Figure 1

DIMENSIONS

	D	A	B	C	F	G	I	S
15mm - 1/2"		66	68	82	40	29	20	27
22mm - 3/4"		79	72.5	89	50	35.5	24.5	33
28mm - 1"		105	85	106	71	46	28	42
35mm - 1 1/4"		113	106	132	81	50	40	52
42mm - 1 1/2"		140	110	140	110	64	53	60

ORDERING INFORMATION

Catalogue number	6300 AT-V-NC-15 15mm (1/2") Brass Solenoid Valve. Normally Closed. Manual Override. 230Vac
	6301 AT-V-NC-22 22mm (3/4") Brass Solenoid Valve. Normally Closed. Manual Override. 230Vac
	6302 AT-V-NC-28 28mm (1") Brass Solenoid Valve. Normally Closed. Manual Override. 230Vac
	6303 AT-V-NC-35 35mm (1 1/4") Brass Solenoid Valve. Normally Closed. Manual Override. 230Vac
	6304 AT-V-NC-42 42mm (1 1/2") Brass Solenoid Valve. Normally Closed. Manual Override. 230Vac

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