

878 X

Series

Zero Differential 2 Way Normally Closed

**Petroleum Solenoid Valves**

3/4" to 3" NPT Threaded Connections



## Main Characteristics

The 878X Series is a **Heavy Duty** two way normally closed, one directional flow, **direct lift solenoid valve** with threaded connections.

The valve opens when energized such as when a dispenser or pump is switched on. It does not need pressure to operate, the valve fully opens with zero pressure on the line. Ideal for **anti-siphon control on Aboveground Storage Tanks** applications. The piston assembly makes it possible to have high flow compared to lower flow diaphragm valves.

Compatible for use with a number of fluids, like fuel, diesel, gasoline, Jet Fuel, bio-fuels, ethanol, methanol, oil, gasoil, and any other petroleum derivatives.

## Features

- UL Approved - Listed for US and Canada E510184
- Zero Differential - Direct Lift
- Industrial Grade Piston/Disc with Viton Seats
- Investment Cast Stainless Steel 316 or Bronze Body
- Higher Flow than Diaphragm Valves
- Explosion Proof Housing meets UL, CSA and ATEX directives
- Minimum Fluid Temperature -42F
- Female Threaded NPT Connections
- Internal pressure relief to help absorb thermal expansion in the fuel supply or transfer line.



## Threaded NPT Valve Specifications

Pipe Size (ins.)	Bronze Valve Part Number	Stainless Steel Valve Part Number	Orifice Size (mm)	Cv Flow Factor	Operating Pressure Differential (psi)		Max Fluid Temp. (F)	Watt Rating / Insulation	
					Min.	Max.		AC	DC (*)
3/4"	2CN-06XXRVZ-878X	2CN-06XXSVZ-878X	19	7	0	100	180	30/H	48/H
1"	2CN-08XXRVZ-878X	2CN-08XXSVZ-878X	25	12	0	100	180	30/H	48/H
1 1/2"	2CN-12XXRVZ-878X	2CN-12XXSVZ-878X	38	19	0	100	180	30/H	48/H
2"	2CN-16XXRVZ-878X	2CN-16XXSVZ-878X	38	27	0	100	180	30/H	48/H
3"	2CN-24XXRVZ-878X	2CN-24XXSVZ-878X	76	91	0	45	180	48/H	

## Standard Voltage:

24, 120, 208, 240 and 480 volts AC60Hz or 110 and 220 AC50Hz

12, 24, 48, 110 volts DC (\*) Max diff press 50psi - Max Fluid temp 122F (3" DC not available)

Must be specified when ordering. Add voltage to the end of the Catalog Number. For example: 2CN-16XXRVZ-878X-120/60

## Current Draw for frequently used voltages (amps):

Volt/Hz	120/60	208/60	240/60	220/50 240/50	12V/DC	24/DC
Holding	0.66	0.38	0.33	0.31/0.28	4.0	2.0
Inrush	2.23	1.28	1.11	1.09/1.0	4.0	2.0

Table is for 3/4" to 2" valves (3" Valves draw approx. 60% more amps)



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878 X

Series

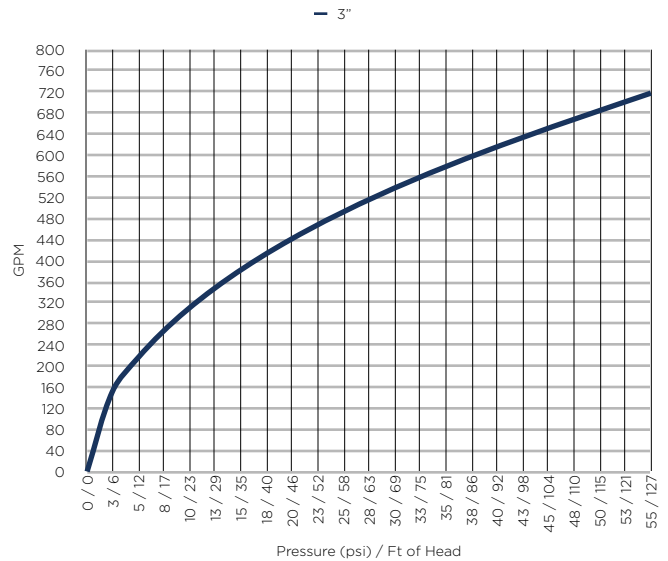
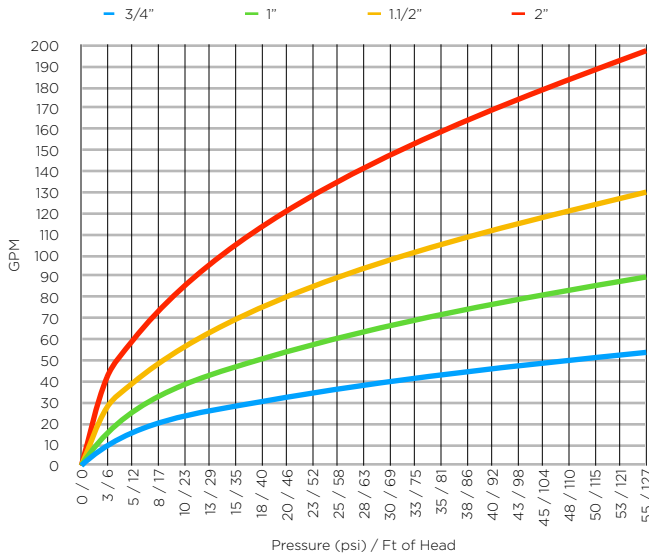
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# Petroleum Solenoid Valves

3/4" to 3" NPT Threaded Connections



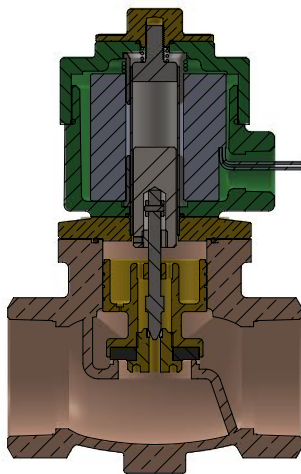
## Flow Chart



## Wetted Parts

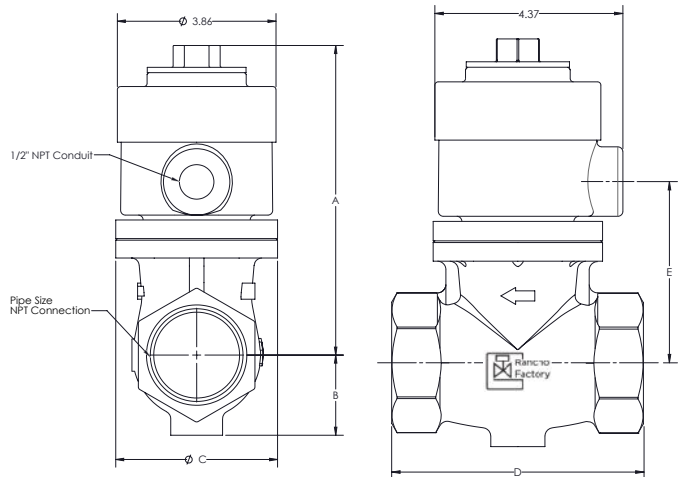
Part	Stainless Steel Valve	Bronze Valve
Body	Stainless Steel 316	Brass
Piston	Stainless Steel 316	Brass (*)
Seat	FKM	FKM
Seals	FKM	FKM
Core Tube	SS 316L	SS 316L
Core	SS 430	SS 430

(\*) 3" Aluminum



## Valve Dimensions (in.)

Pipe Size	3/4"	1"	1.1/2"	2"	3"
(A) Height	6.39	6.81	7.53	7.53	9.29
(B) Height	1.30	1.61	1.95	1.95	4.33
(C) Width	3.00	3.54	3.94	3.94	6.42
(D) Face to Face	3.94	4.8	5.85	5.85	9.02
(E) Center to Center	3.12	3.27	4.21	4.21	5.98
Flying Leads	18"	18"	18"	18"	18"



## Important Installation Instructions

A strainer or filter (100 microns) should always be installed as close as possible to the inlet of the solenoid valve. Valve must be mounted on a horizontal pipe with coil vertical and upright.



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