

**CLARK SOLUTIONS****Model 1393, 2-Way, NC or NO Solenoid Valve***1/4", 3/8", 1/2" Pipe Size, Direct Acting Solenoid for Steam & Hot Fluids***DESCRIPTION**

Model 1393 two-way normally closed and normally open solenoid valves have a forged brass body.

Model 1393 is suitable for steam and compatible hot fluids. Close off is accomplished with a stainless steel blade type closure on Teflon seats. Unlike conventional valves, the flow passage is straight reducing pressure drop and turbulence.

This valve is ideal for applications such as steam dryers, autoclaves, boiling pans, fryers, condensation draining, coffee machines etc.

Options include weather proof housing and energized coil indicator light.

**SPECIFICATIONS****GENERAL**

Operation: Normally closed or normally open

Valve Body : Nickel-plated forged brass

Valve Life: > 1,000,000 cycles, field rebuild kits available

Plunger: AISI 430F Stainless steel

Plunger Tower: 304L or 305 non-magnetic stainless steel

Valve Seals & Seats: Teflon

Connections: 1/4", 3/8", 1/2" BSP or NPT

Operating Voltage- 24V, 220V, 240V, AC 60Hz

Standard Solenoid Housing: Encapsulated, includes  
DIN 43650 connector (PG-9)

Connector Wire Connection: Screw terminal

Optional IP65/NEMA4 Weather Proof: Encapsulated  
coil, 1/2" NPT potted conduit connection with  
flying leads

Coil Rating: Class H Coil to 180°C: 60 Hz, 25 W

Options: Weatherproof housing, energized coil  
indicator light



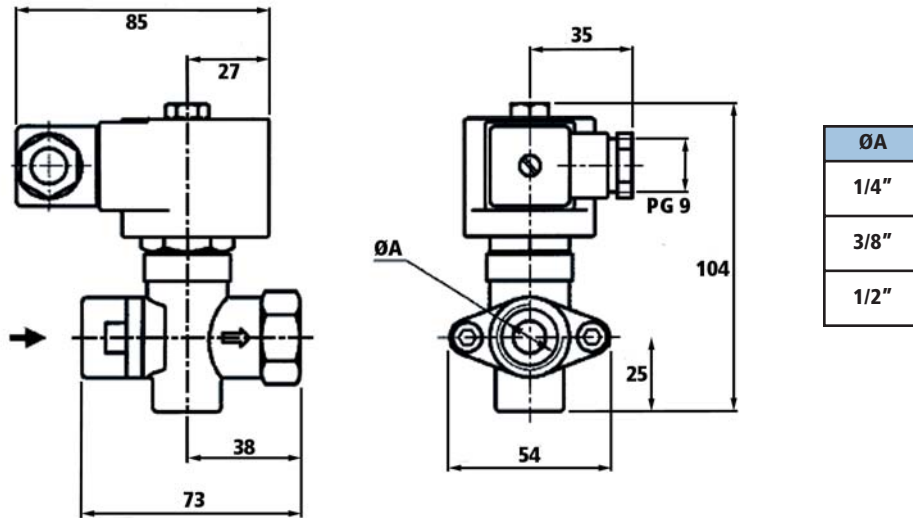
File LR87427 2M - LR108921-1



File MH16855 Vol. 2 Sec. 2

Connection	Orifice Dia. (mm)	Cv Coef. (GPM)	Kv Coef. (m <sup>3</sup> /h)	Differential Pressure (bar)		Weight (kg)	Max. Temperature (°C)	Catalog Number	
				Minimum	Maximum			Brass	Nickel Plated
<b>Normally Closed</b>									
1/4"	8	2.106	1.80	0	4	0.83	180	1393BS082	1393NS082
3/8"		3.276	2.80			0.75		1393BS083	1393NS083
1/2"		3.276	2.80			0.77		1393BS084	1393NS084
<b>Normally Open</b>									
1/4"	8	2.106	1.80	0	4	0.83	180	1393BS082NA	1393NS082NA
3/8"		3.276	2.80			0.75		1393BS083NA	1393NS083NA
1/2"		3.276	2.80			0.77		1393BS084NA	1393NS084NA

## DIMENSIONS (MM)



ØA
1/4"
3/8"
1/2"

Flow Calculation, Liquids:

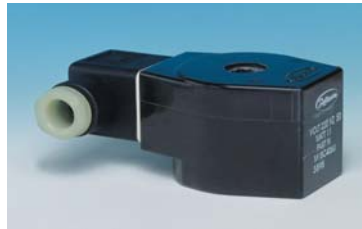
$$Q = Cv \sqrt{\frac{DP}{G}}$$

Q= Flow Rate, GPM (U.S.A.)

Cv= Valve Flow Coefficient

DP= Valve Pressure Drop, PSID

G= Specific Gravity of Liquid (= 1.0 for Water)



Standard Coil and DIN43650 Connector



Option YC Weather Proof Housing with 1/2" NPT Threaded Conduit Connector

## ORDERING INFORMATION

SELECT ITEM FROM EACH COLUMN IN CHART BELOW FROM LEFT TO RIGHT

EXAMPLE: 1393BS082NAT120AC

Model Number Information							
Model	Body Material	Orifice Size (mm)	Pipe Connection	Valve Configuration	Connection Threads	Voltage	Options
1393	BS= Brass NS= Nickel Plated Brass	08= 8mm	2=1/4" 3= 3/8" 4= 1/2"	- = Normally Closed NA=Normally Open	T= NPT - = BSP	120AC= 120VAC 240AC= 240VAC 24AC= 24VAC	Prefix YC= Weather Proof Housing (1/2" NPT Thread)  Coil Indicator Light= Consult Factory

## INSTALLATION RECOMMENDATIONS

Place a strainer with a porosity  $\leq 100\mu$  upstream of valve (see Clark Solutions Model 1359 Y Strainer). Mount **only** on a horizontal run of pipe with coil upright.