



**Reliable.  
Efficient.  
Versatile.**

Providing quality hydraulic valves  
and individualized services



[www.ris-valves.com](http://www.ris-valves.com)



HIGH QUALITY  
PRODUCT



OPTIMIZED  
DESIGN



+30 YEARS OF  
EXPERIENCE



PROFESSIONAL  
MANAGEMENT



INTERNATIONAL  
STANDARD



TRUSTED PARTNER  
FROM 1000+ CLIENTS

## About RIS Valves



RIS Valves is the hydraulic control valve design and manufacturing division of RIS Iberia. With the aim of promoting and making automated irrigation with the use of hydraulic valves more accessible, we market our range of control valves with an attractive design.

RIS valves are a highly versatile product capable of working in the most adverse situations. They can be used in the automation of water pipes for irrigation and industrial processes.



# Plastic threaded valves

THREAD: 1 1/2", 2", 3", 4" (BSP, NPT)



## COMMON FUNCTIONS

- Electric Valve
- Level control (float valve)
- Pressure reducing
- Flow control
- Pressure sustaining
- Security valve

## ADVANTAGES

- Low Pressure losses
- Easy maintenance
- Quick opening and closing time

## TECHNICAL FEATURES

### Material body and cover:

Glass fiber reinforced polyamide (PA+GF)

**Diaphragm:** Natural rubber (NR),  
(EPDM, VITON optional)

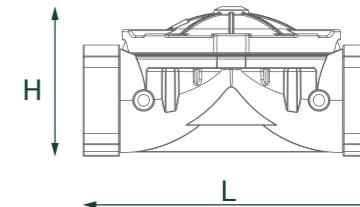
**Spring:** Stainless steel AISI 304

### Working Pressure:

LP Diaphragm: 0,5 to 3 bar

Standard Diaphragm: 0,8 to 6 bar

HP Diaphragm: 1,5 to 10 bar



Size	Kv	L (mm)	H (mm)	Weight (kg)
1 1/2"	49	198	110	0,93
2"	50	198	110	0,98
2 1/2"	53	237	117	1,07
3"	97	284	127	1,85
4"	200	375,5	178	3,1

## HEAD LOSSES (M.C.A.) ACCORDING TO MODEL AND FLOW

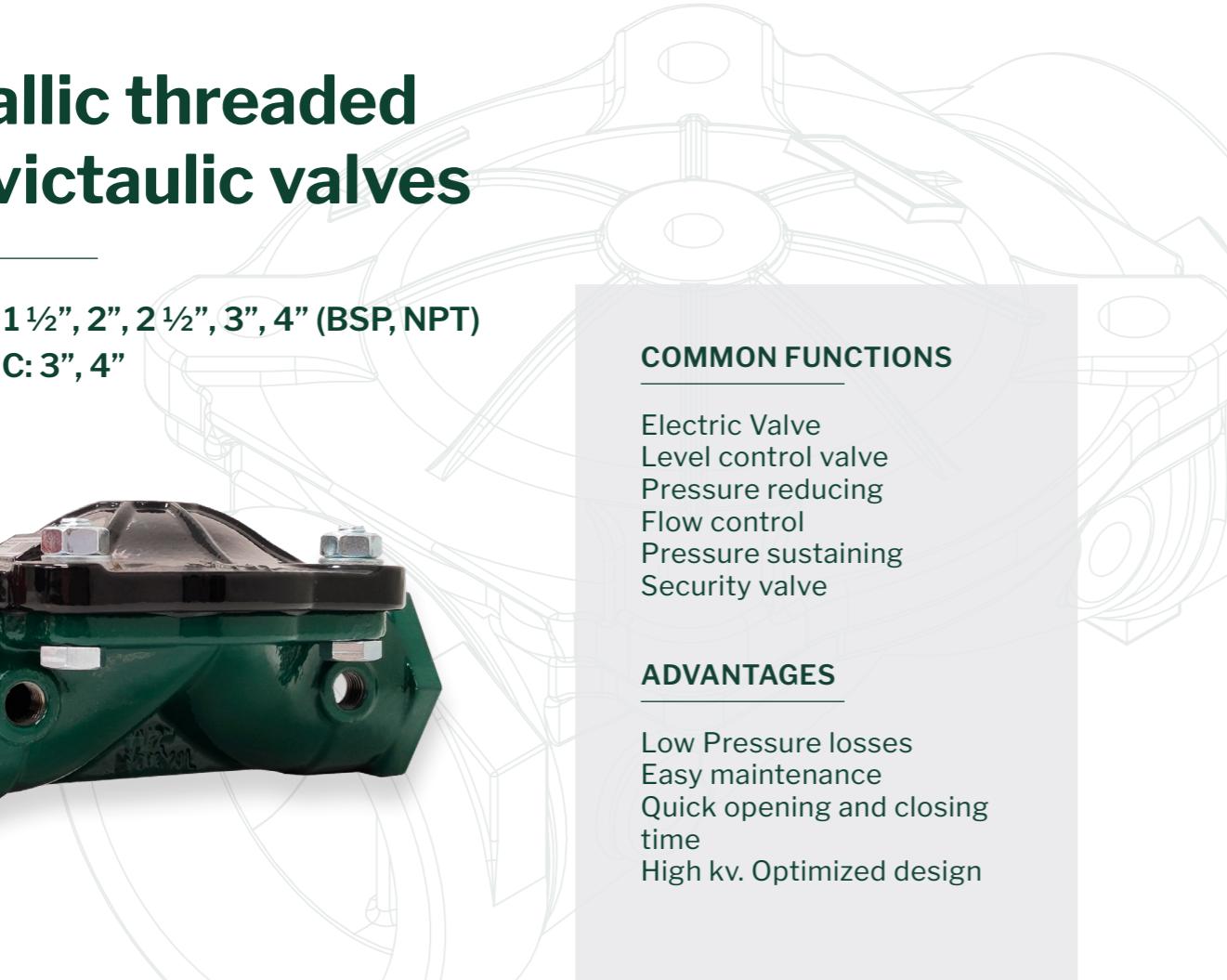
Q	5	10	15	20	25	30	35	40	45	50	60	65	70	80	90	100	
<b>1 1/2"</b>	<b>0,10</b>	<b>0,42</b>	<b>0,94</b>	<b>1,67</b>	<b>2,60</b>	<b>3,75</b>	<b>5,10</b>										
<b>2"</b>	<b>0,10</b>	<b>0,40</b>	<b>0,90</b>	<b>1,60</b>	<b>2,50</b>	<b>3,60</b>	<b>4,90</b>										
<b>2 1/2"</b>			<b>0,36</b>	<b>0,80</b>	<b>1,42</b>	<b>2,22</b>	<b>3,20</b>	<b>4,36</b>	<b>5,70</b>	<b>7,21</b>							
<b>3"</b>				<b>0,24</b>	<b>0,43</b>	<b>0,66</b>	<b>0,96</b>	<b>1,30</b>	<b>1,70</b>	<b>2,15</b>	<b>2,66</b>	<b>3,22</b>	<b>3,83</b>	<b>4,49</b>	<b>5,21</b>	<b>6,80</b>	
<b>4"</b>					<b>0,40</b>	<b>0,63</b>	<b>0,90</b>	<b>1,23</b>	<b>1,60</b>	<b>2,03</b>	<b>2,50</b>	<b>3,03</b>	<b>3,60</b>	<b>4,23</b>	<b>4,90</b>	<b>6,40</b>	<b>8,10</b>

Recommended flow in bold

# Metallic threaded and victaulic valves

THREAD: 1½", 2", 2½", 3", 4" (BSP, NPT)

VICTAULIC: 3", 4"



## COMMON FUNCTIONS

- Electric Valve
- Level control valve
- Pressure reducing
- Flow control
- Pressure sustaining
- Security valve

## ADVANTAGES

- Low Pressure losses
- Easy maintenance
- Quick opening and closing time
- High kv. Optimized design

## TECHNICAL FEATURES

Material body and cover: Cast iron GG25

Coating: Powder polyester. Fusion - DIN30 306771/2

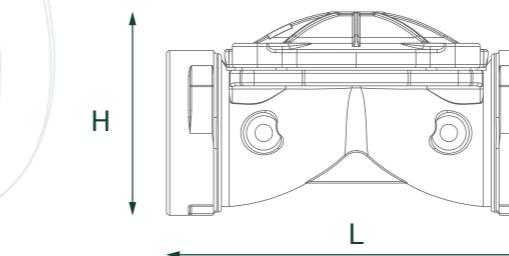
Diaphragm: Natural rubber (NR), (EPDM, VITON optional)

Spring: Stainless steel AISI 304

Working Pressure: LP Diaphragm: 0,5 to 3 bar

Standard Diaphragm: 0,8 to 6 bar

HP Diaphragm: 1,5 to 16 bar



Size	Kv	L (mm)	H (mm)	Weight (kg)
1½"	45	185	93	3,5
2"	52	185	93	3,6
2½"	80	195	104	4,4
3"	112	242	124	6,7
4"	217	294	153	9,9

## HEAD LOSSES (M.C.A.) ACCORDING TO MODEL AND FLOW

Flow m <sup>3</sup> /h	5	10	15	20	25	30	35	40	45	50	60	65	70	80	90	100	125
1½"	<b>0,12</b>	<b>0,49</b>	<b>1,11</b>	1,98	3,09	4,44	6,05										
2"	0,09	0,37	<b>0,83</b>	<b>1,48</b>	<b>2,31</b>	3,33	4,53	5,92									
2½"			0,39	0,89	<b>1,59</b>	<b>2,49</b>	<b>3,59</b>	4,88	6,38	8,07							
3"				0,18	0,32	0,50	<b>0,72</b>	<b>0,98</b>	<b>1,28</b>	1,61	1,99	2,41	2,87	3,91	5,10	6,46	
4"					0,08	0,13	0,19	0,26	0,34	<b>0,43</b>	<b>0,53</b>	<b>0,64</b>	<b>0,76</b>	1,04	1,36	1,72	2,12

Recommended flow in bold

# Metallic flanged valves

DIN 2502 PN16:  
PN 80, 100, 125, 150, 200, 250, 300



## COMMON FUNCTIONS

Electric Valve  
Level control valve  
Pressure reducing  
Flow control  
Pressure sustaining  
Security valve

## ADVANTAGES

Low Pressure losses  
Easy maintenance  
Quick opening and closing time  
High kv. Optimized design

## TECHNICAL FEATURES

Material body and cover:

Cast iron GG25

Coating: Powder polyester.

Fusion - DIN30 306771/2

Diaphragm: Natural rubber (NR),  
(EPDM, VITON optional)

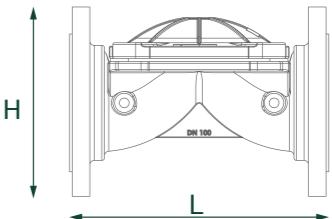
Spring: Stainless steel AISI 304

Working Pressure:

LP Diaphragm: 0,5 to 3 bar

Standard Diaphragm: 0,8 to 6 bar

HP Diaphragm: 1,5 to 16 bar



Size	Kv	L (mm)	H (mm)	Weight (kg)
<b>DN 80</b>	115	242	137	13
<b>DN 100</b>	220	294	219	20
<b>DN 125</b>	222	294	247	23
<b>DN 150</b>	560	396	285	53
<b>DN 200</b>	575	520	396	86
<b>DN 250</b>	1250	560	430	105
<b>DN 300</b>	1800	580	495	165

## HEAD LOSSES (M.C.A.) ACCORDING TO MODEL AND FLOW

Flow m <sup>3</sup> /h	20	30	40	50	60	70	80	90	100	125	150	200	300	400	500	600	700	800	900	1000
<b>DN 80</b>	0,30	<b>0,68</b>	1,21	<b>1,89</b>	2,72	3,71	4,84	6,12	7,56	11,81										
<b>DN 100</b>	0,08	0,19	<b>0,33</b>	<b>0,52</b>	<b>0,74</b>	<b>1,01</b>	<b>1,32</b>	1,67	2,07	3,23	4,65									
<b>DN 125</b>		0,16	0,32	0,51	0,73	<b>0,99</b>	<b>1,30</b>	<b>1,64</b>	<b>2,03</b>	3,17	4,57	8,12								
<b>DN 150</b>				0,08	0,11	0,16	0,20	0,26	<b>0,32</b>	<b>0,50</b>	<b>0,72</b>	<b>1,28</b>	2,87	5,10	7,07					
<b>DN 200</b>									0,25	0,31	0,49	<b>0,70</b>	<b>1,25</b>	<b>2,82</b>	5,01	7,83				
<b>DN 250</b>														<b>0,62</b>	<b>0,66</b>	<b>0,70</b>	<b>0,74</b>	0,78	0,83	0,88
<b>DN 300</b>														0,30	0,32	0,34	<b>0,36</b>	<b>0,38</b>	<b>0,40</b>	0,42

Recommended flow in bold

# Metallic 90° flanged valves

DIN 2502 PN16: PN 80, 100, 125



## COMMON FUNCTIONS

Electric Valve  
Level control valve  
Pressure reducing  
Flow control  
Pressure sustaining  
Security valve

## ADVANTAGES

Low Pressure losses  
Easy maintenance  
Quick opening and closing time  
High kv. Optimized design

## TECHNICAL FEATURES

Material body and cover: Cast iron GG25

Coating: Powder polyester.

Fusion - DIN30 306771/2

Diaphragm: Natural rubber (NR), (EPDM, VITON optional)

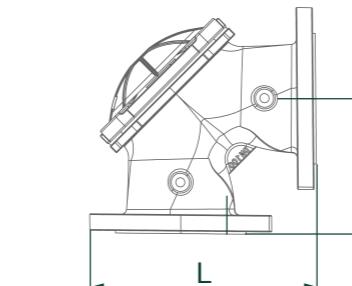
Spring: Stainless steel AISI 304

Working Pressure:

LP Diaphragm: 0,5 to 3 bar

Standard Diaphragm: 0,8 to 6 bar

HP Diaphragm: 1,5 to 16 bar



Size	Kv	L (mm)	H (mm)	Weight (kg)
<b>DN 80</b>	130	250,93	149,62	16
<b>DN 100</b>	240	274,78	164,78	24
<b>DN 125</b>	250	282,33	159,3	23

## HEAD LOSSES (M.C.A.) ACCORDING TO MODEL AND FLOW

Flow m <sup>3</sup> /h	20	30	40	50	60	70	80	90	100	125	150	200	300	400	500
<b>DN 80</b>	<b>0,28</b>	<b>0,63</b>	<b>1,12</b>	<b>1,75</b>	<b>2,52</b>	<b>3,43</b>	<b>4,48</b>	<b>5,67</b>	<b>7,00</b>	<b>10,94</b>					
<b>DN 100</b>		<b>0,16</b>	<b>0,28</b>	<b>0,43</b>	<b>0,63</b>	<b>0,85</b>	<b>1,11</b>	<b>1,41</b>	<b>1,74</b>	<b>2,71</b>	<b>3,91</b>	<b>6,94</b>			
<b>DN 125</b>			<b>0,26</b>	<b>0,40</b>	<b>0,58</b>	<b>0,78</b>	<b>1,02</b>	<b>1,30</b>	<b>1,60</b>	<b>2,50</b>	<b>3,60</b>	<b>6,40</b>	<b>8,10</b>	<b>10,00</b>	

Recommended flow in bold

# Backwash Valves

2", 3" (VICTAULIC + BSP)



## FUNCTIONS

It can be used as an automatic backwash system in automatic sand or disc filtering equipment.

Also as a water supply system using water supply pipes to redirect the current to an angled or straight direction.

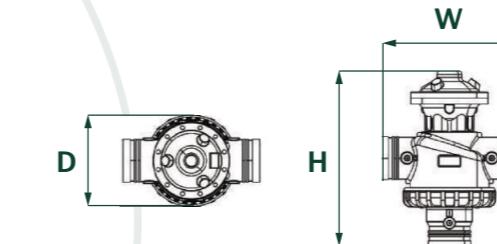
## TECHNICAL CHARACTERISTICS

High resistance plastic and watertight closure

Stabilizes the flow and prevents the mixing of clean and dirty water

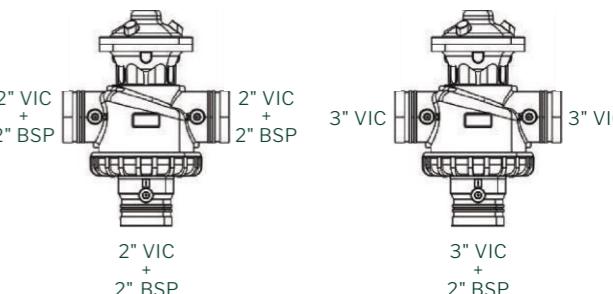
Corrosion-proof, long-lasting polypropylene

Easy disassembly system for proper maintenance



Size	L (mm)	W (mm)	D (mm)	Weight (kg)
2"	274	180	160	2.8
3"	378	287	192	5.5

Size	Connection	Max. Flow [m³/h]	Max. Pressure
2"	2" x 2" x 2"	30	0.7 - 10
3"	3" x 3"/2" x 3"	50	0.7 - 10



# Pressure reducing control valve

## AVAILABLE MODELS:

PLASTIC VALVES 1½", 2", 2½", 3", 4"

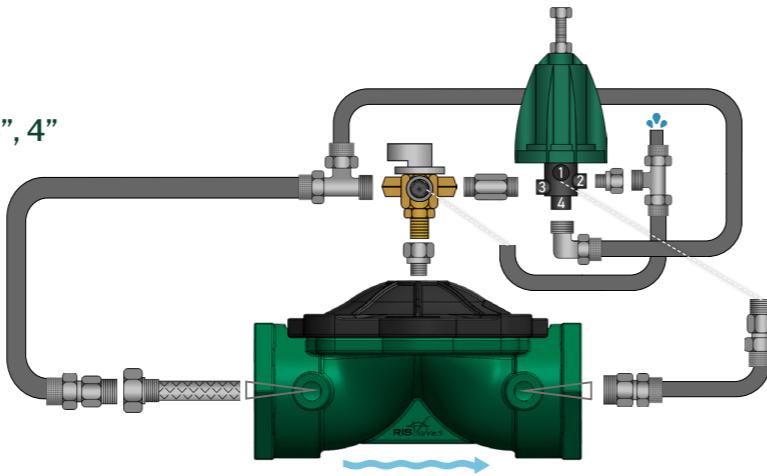
METAL VALVES THREADED 1½", 2", 2½", 3", 4"

METAL VALVES VICTAULIC 3", 4"

METAL VALVES FLANGED DN80, DN100,  
DN 125, DN150, DN200, DN250, DN 300

## APPLICATIONS

Downstream pressure control



## DESCRIPTION

Hydraulic control valve used to reduce the inlet pressure to a preset lower level pressure in the outlet by means of a three way reducing pilot incorporated. This valve controls the outlet pressure and maintains it constant without being affected from upstream flow and pressure variations.

When upstream pressure value is lower than the downstream preset pressure value, the valve opens completely.



# Pressure sustaining control valve

## AVAILABLE MODELS:

PLASTIC VALVES 1½", 2", 2½", 3", 4"

METAL VALVES THREADED 1½", 2", 2½", 3", 4"

METAL VALVES VICTAULIC 3", 4"

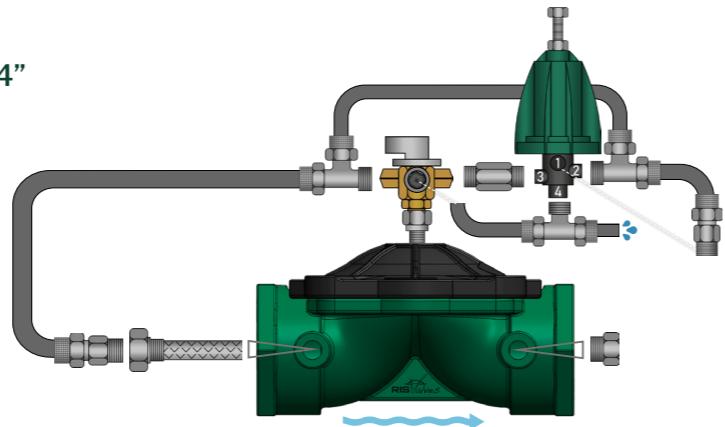
METAL VALVES FLANGED DN80, DN100,  
DN 125, DN150, DN200, DN250, DN 300

## APPLICATIONS

Upstream pressure control.

Pump system protection  
against excessive demand.

Quick release valve/Security  
valve



## DESCRIPTION

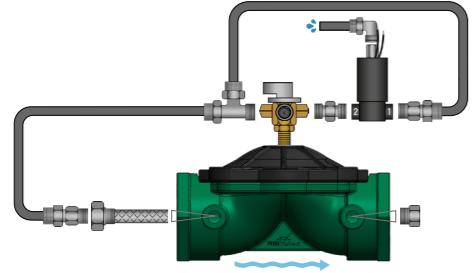
Hydraulic control valve used to maintain upstream pressure value constant. The valve opens when the inlet pressure reaches a preset level by means of a three way plastic reducing pilot incorporated. This valve controls the inlet pressure and maintains it constant without being affected from upstream flow and pressure variations.

When upstream pressure valve is lower than the preset pressure value, the valve closes completely.

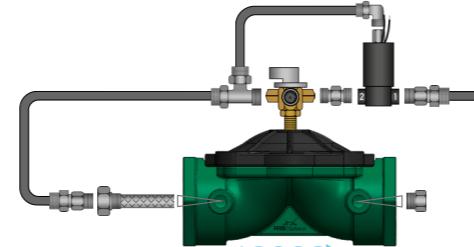


# Control Kits

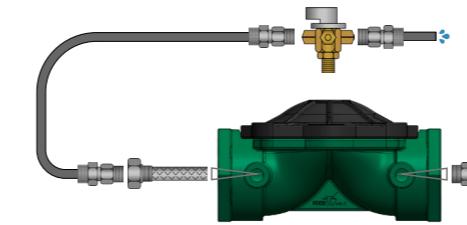
We have a wide variety of applications where our valves can be used, safety valves, pressure regulating valves, quick relief valves, float valves and pressure sustainers. RIS Valves has a complete range of components for the assembly of these applications: Regulator Pilots, Latch Solenoids, 24V Solenoids, 3-way valves, hydraulic fitting



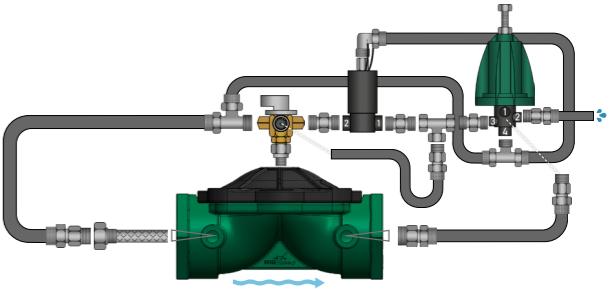
ELECTRIC CONTROL N.O. VALVE



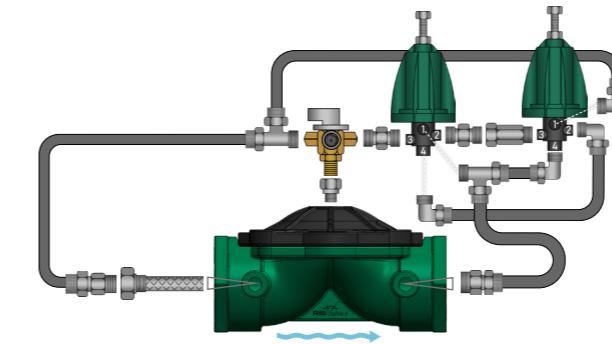
ELECTRIC CONTROL N.C. VALVE



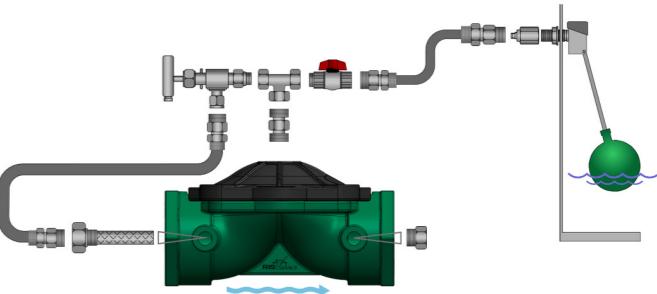
PRESSURE REDUCING CONTROL VALVE



PRESSURE REDUCING WITH ELECTRIC CONTROL VALVE



PRESSURE REDUCING AND SUSTAINING CONTROL VALVE



LEVEL CONTROL VALVE



# RS 1000 Solenoid Series

**RS1001L 3W 1/8" Latch NO**  
**RS1002L 3W 1/8" 24V AC NO**  
**RS1002V 3W 1/8" 24V AC NC**  
**RS1002V 3W 1/8" 24V CC NO**

Long life even in extreme conditions.

High quality polyurethane injection. Encapsulated in nylon cover.



Specs	RS1000 Latch	RS1000 24V
<b>Functions</b>	2 wires, 3 ways, NC and NO	
<b>Hole</b>	1,5 mm	
<b>Max. Working Pressure</b>	10 bar	
<b>Piston material</b>	Inox AISI 316	
<b>Seal material</b>	EPDM	
<b>Weight</b>	108 gr.	
<b>Ambient temperature / flow</b>	60°C / 80°C	
<b>Wire section</b>	Ø 2,4 mm	
<b>Coil resistance</b>	5,2 Ohms. (20°C)	66 Ohms. (20°C)
<b>Voltage</b>	9 - 12 VDC / 0,13 A	24 VAC / 0,13 A
<b>Launch force - retention</b>	> 7N	
<b>Connections</b>	1/8" BSP	
<b>Protection</b>	IP66. 500V/min	



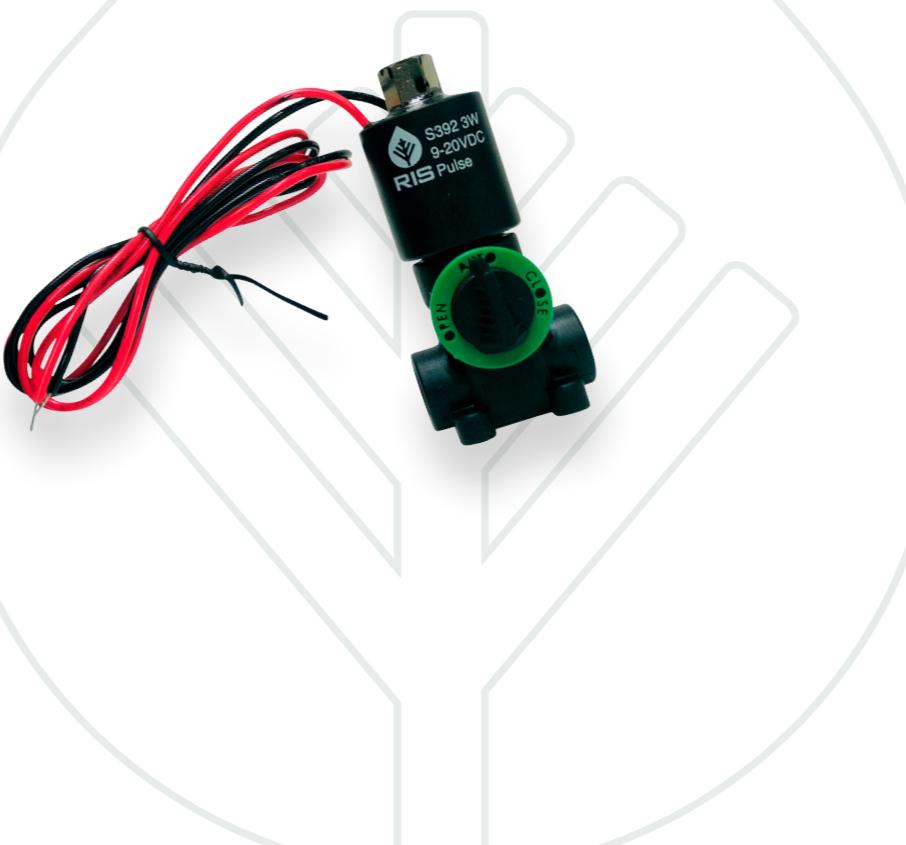
# RIS 392-3W

## Latch Solenoid

The 392-3W Solenoid is a compact 3-way solenoid consisting of two main components: a solenoid and a 3-way hydraulic pilot. This solenoid latch can control valves independently or in combination with other control accessories.

This model consumes power only when it changes position, using a very short electrical pulse. This extends the life of the batteries and allows solar recharging.

The hydraulic base features a three position manual valve and includes a bracket to attach to the valve or solenoid manifold.



Specs	RIS 392 Latch - 3W
<b>Core connections</b>	C: Camera: 1/4" NPT I: Atmosphere: 1/4" NPT P: Pressure: 1/8" NPT
<b>Valve anchor</b>	By screws at the base of the solenoid +Red -Black: the solenoid drains +Black -Red: the solenoid pressurizes
<b>Operation modes (electric connections)</b>	
<b>Work pressure range</b>	0 - 10 bar
<b>Base hole diameter</b>	2,0 mm
<b>Hole</b>	1,6 mm
<b>Base flow factor</b>	$Kv = 0,08 \text{ m}^3/\text{h} @ 1 \text{ bar}$ $\Delta P$ $Cv = 0,09 \text{ GPM} @ 1 \text{ PSI} \Delta P$
<b>Voltage Range</b>	9-20 VDC
<b>Coil resistance</b>	6 Ohms.
<b>Coil Inductance</b>	15/18 mH (off/on)
<b>Maximum ambient temperature</b>	60°C
<b>Max. Fluid Temperature</b>	70°C

# GEM-SOL®

## Baccara Solenoid

3W 1,6MM 24V AC N/C    3W 2MM LATCH 9-12V N/C  
 3W 1,6MM 24V AC N/O    3W 2MM LATCH 9-12V N/O  
 3W 1,6MM 12V DC N/C    3W 1,6MM 110V AC N/C  
 3W 1,6MM 12V DC N/O    3W 1,6MM 110V AC N/O

\* Consult for other models

**Functions:** 2 wires,  
3 ways, NC and NO

**Core connection:** 1/8"  
and 1/4" BSP and NPT

**Temperature:**  
Liquid: -10°C to 80°C  
Ambient: -10°C to 50°C

**Materials:**  
Manual opening:  
Brass screw

Valve base:  
Brass or Inox AISI 316  
Solenoid: Inox AISI 300

Seals: EPDM

**IP65 Protection**



### MAXIMUM PRESSURE (bar)

Intensity	Hole (mm)						
	0,8	1,2	1,6	2,0	2,4	3,0	4,0
<b>ADC *</b>	60	50	35	20	15	10	5
<b>AC 8W.DC/10W</b>	80	80	60	38	30	18	8
<b>AC 5,5W</b>	80	60	40	28	20	15	6
<b>AC 2,5W</b>	60	50	35	20	15	9	5
<b>DC 5,5W</b>	60	30	18	12	9	6	3
<b>DC 3,5W</b>	40	20	12	8	6	4	2
<b>KV (l/min)</b>	0,5	1,1	1,7	2,5	3,5	4,5	5

### MAXIMUM PRESSURE (bar) 2W NO

Intensity	Hole (mm)					
	0,8	1,2	1,6	2,0	2,4	3,0
<b>ADC *</b>	25	25	25	20	15	10
<b>KV (l/min)</b>	0,5	1,1	1,4	2,5	3,0	3,5

# Regulating Pilots

## PLASTIC AND METAL PILOTS

### APPLICATIONS

Regulating pilots are used in hydraulic valves for upstream and downstream pressure regulation.

They can also be used as quick relief valves.



Transform a hydraulic valve into a pressure reducing valve or sustaining valve by changing the connection scheme of the pilot ways.

**PRESSURE REDUCER**, the pilot reduces the outlet pressure to a predetermined pressure, which is set through the screw at the top.

**PRESSURE SUSTAINER**, the pilot opens or closes the valve up to the predetermined upstream pressure, releasing excess pressure in the pipeline.

**REDUCER-SUPPORTER** at the same time.

### TECHNICAL FEATURES

#### Material

**Body:** Polyamide with fiberglass /

Brass

**Screw:** INOX M8

**Diaphragm:** EPDM

**O-Rings:** NBR

**Spring:** INOX

#### Connections

**BSP 1/8"**

Material	Model	Max. Inlet Pressure	Regulated Max. Pressure
Plastic	○ 10/4 bar	10 bar	4 bar
Plastic	● 10/6 bar	10 bar	6 bar
Plastic	● 12/10 bar	12 bar	10 bar
Brass	16 bar	16 bar	12 bar



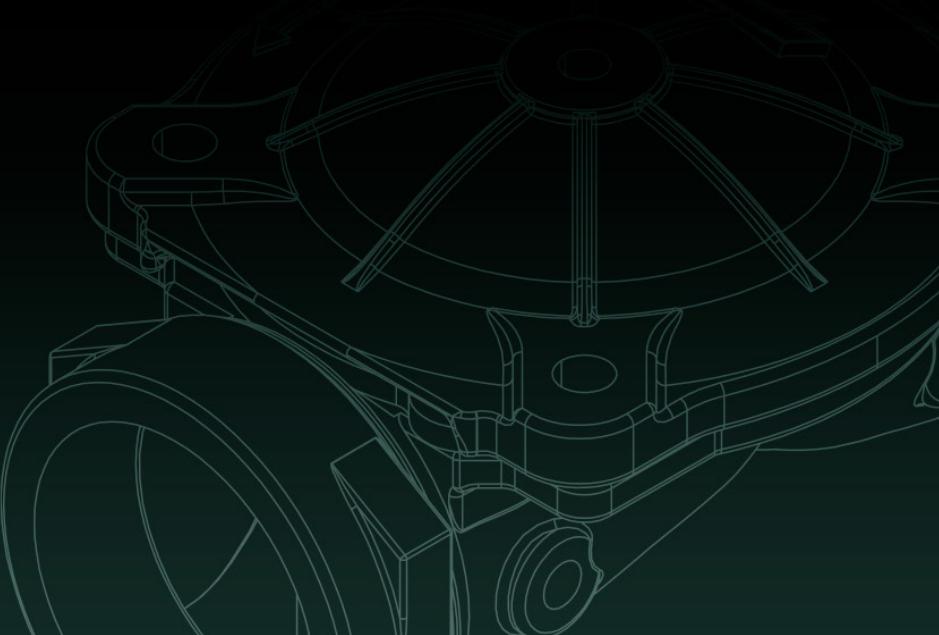
**RIS** Valves



**ZARAGOZA**  
C/ Los Ángeles, 9  
Polígono Centrovía  
50196 La Muela  
976 144 700

**SEVILLA**  
C/ San Nicolás Diez, 33B  
Polígono San Nicolás  
41500 Alcalá de Guadaira  
955 996 784

**MADRID**  
C/ Tales de Mileto, 15, Nave 29  
Polígono Mapfre  
28806 Alcalá de Henares  
918 020 292



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