#### PRESENTATION:

Direct acting S.V. for interception of fluids compatible with the construction materials.

Minimum operational pressure is not required.

The materials used and the tests carried out ensure maximum reliability and duration.

USE: Vending

PIPES: G 1/8

COIL: 2,5W - Ø 10

LBA 155°C (class F)

5W - Ø 10 LBA 155°C (class F) LBF - LBV 180°C (class H)

# COIL HOUSING AND COIL FORMER MATERIAL ARE MADE BY 100% VIRGIN MATERIAL.

Max. allowable pressure (PS) 16 bar

Ambient temperature:

See coils catalogue page for its compatibility.



Gaskets	Temperature		Medium
V=FKM (fluoroelastomer)	- 10°C	+ 140°C	Water, air, steam







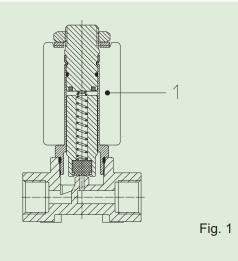
5.			May vicesity		Ø	Kv	Power	Pressure		
<b>Pipe</b> ISO 228/1	Code	Fig.	WIAX VI	Max viscosity		ΚV	Power	min	M.O.P.D.	
100 220/1			cSt	°E	mm	l/mn	watt	bar	AC bar	DC bar
	21JP1RR <b>V</b> 12	1			1,2	1	2,5			3,5
	21JF1RR <b>V</b> 12	'	12	~ 2			5		15	12
	21JP1R1 <b>V</b> 12 -T0 •	• 2					2,5			3,5
G 1/8	2131 11(11/12-10	_					5	0		12
	21JP1RR <b>V</b> 23	1	37	~ 5	2.2	2,1	2,5		6	-
	21JP1R1 <i>V</i> 23-T0 •						5		15	8
		2			2,3		2,5		6	-
	2 10F 11X 1 V 20-10	-					5		15	8

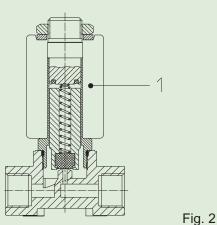


#### Note

Max torque for fittings 1,5 Nm, coil nut assembly 2 Nm max; armature tube 4 Nm | Evaluate tightening torque for tapered fittings | Use the seal fittings compatible with the material of the body I Available with coil Ex nA | The use of rigid sealings (Ruby or PTFE) usually implies a slight leakage, limited within 2scc/min at the pressure of 1 bar | For application with steam or with PS above the 16 bar, please consult our Technical Service|Available on request and with minimum quantities.

The "ODE" reserves the right to carry out technical and aesthetic modifications without prior notice.





### MATERIALS:

PPS **Body** 

Armature tube (fig.1) Armature tube (fig.2) Brass - UNI EN 12165 CW617N Stainless steel AISI series 300 **Fixed core** Stainless steel AISI series 400 Plunger Stainless steel AISI series 400

Phase displacement ring (fig.1) Copper - Cu 99,9%
Phase displacement ring (fig.2) Gold plated copper
Spring Stainless steel AISI series 300

Spring Seal V=FKM

Orifice PPS

On request:

Pg 9 or Pg 11 ISO 4400 Connector **Connector conformity** 

FEATURES:

**Electrical conformity** IEC 335

**Protection degree** IP 65 EN 60529 (DIN 40050)

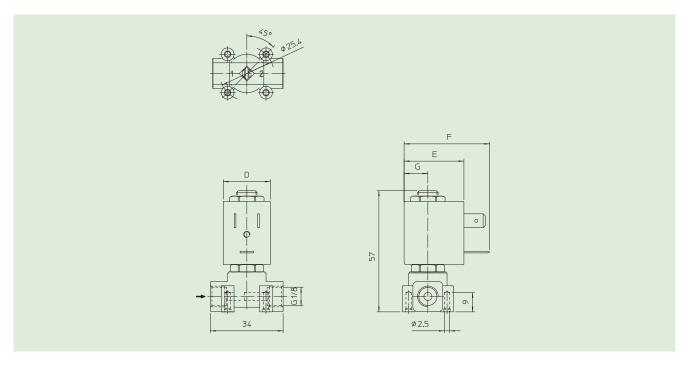
with coil fitted by connector.

### SPARE PARTS:

#### 1. Coil:

See coils list

### **DIMENSIONS:**



COIL	PO	WER ABSO	RPTION	DIMENSIONS			
TYPE	<b>&gt;</b>	Hold VA ~	Inrush VA ~	D mm	E mm	F mm	G mm
1	2,5	5	7	22	27.5	30.5	11
L	5	10	15	22 27,5		33,3	''



# Solenoid valve 3/2 way N.C. Direct acting - NSF Certified

31AP1A1R15-13T0 ÷ 31AP1A1R30-13T0

#### PRESENTATION:

Direct acting S.V. for interception of fluids compatible with the construction materials.

Minimum operational pressure is not required.

The materials used and the tests carried out ensure maximum reliability and duration.

USE: Vending

PIPES: G 1/8

COIL: 8W - Ø 13

BDA - BSA 155°C (class F) BDV 180°C (class H)

COIL HOUSING AND COIL FORMER MATERIAL ARE MADE BY 100% VIRGIN MATERIAL.

Ambient temperature:

See coils catalogue page for its compatibility.



Gaskets	Temperature		Medium
<b>R</b> =RUBY	- 40°C	+ 180°C	Water, air, steam







Max allowable pressure (PS) 16 bar - According to EN 60730-2-8 - Factor of safety for domestic applications equal to 5 times PS

<b>Pipe</b> ISO 228/1		Max viscosity		Ø	Kv	Power	Pressure		
	Code				I IV	rowei	min	M.O.P.D	
		cSt	°E	mm	l/mn	watt	bar	AC bar	DC bar
	31AP1A1 <b>R</b> 15-13T0	12	~ 2	1,5*	1,1		_	15	15
G 1/8	31AP1A1 <b>R</b> 20-13T0	37	~ 5	2*	1,8	8		10	10
0 1/0	31AP1A1 <b>R</b> 25-13T0	53	~ 7	2,5*	2,5	0	0	6	6
	31AP1A1 <b>R</b> 30-13T0	] 33	~ ′	3*	3,4	]		5	5

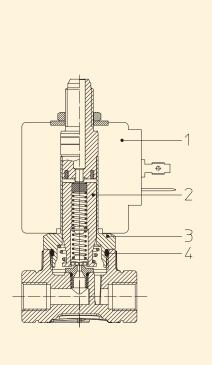
Max allowable pressure (PS) 25 bar - Safety factor for industrial application equal to 3 times PS

<b>Pipe</b> ISO 228/1		Max viscosity Ø		Ø	Kv	Power	Pressure		
	Code				I KV	rowei	min	M.O.P.D	
		cSt	°E	mm	l/mn	watt	bar	AC bar	DC bar
	31AP1A1 <b>R</b> 15-13T0	12	~ 2	1,5*	1,1			15	15
G 1/8	31AP1A1 <b>R</b> 20-13T0	37	~ 5	2* 1,8	8	0	10	10	
G 1/6	31AP1A1 <b>R</b> 25-13T0	53	~ 7	2,5*	2,5			6	6
	31AP1A1 <b>R</b> 30-13T0	] 33		3*	3,4			5	5

#### Note

The "ODE" reserves the right to carry out technical and aesthetic modifications without prior notification.

<sup>\* 3</sup>rd way exhaust= Ø 2,5 mm | Max torque for fittings 1,5 Nm, coil nut assembly 2 Nm, armature tube 3 Nm | Evaluate tightening torque for tapered fittings | Use the seal fittings compatible with the material of the body | Available with coil Ex nA; | The use of rigid sealings usually implies a slight leakage, limited within 2 cc/min at the pressure of 1 bar | For application with steam, please consult our Technical Service | Available on request and with minimum quantities.



### MATERIALS:

**Body** PPS

Armature tube Stainless steel AISI series 300
Fixed core Stainless steel AISI series 400
Plunger Stainless steel AISI series 400

Phase displacement ring Gold plated copper

Spring Stainless steel AISI series 300

Seal R=RUBY

Orifice: Inserted slot Stainless steel series 300

On request:

**Connector** Pg 9 or Pg 11 **Connector conformity** ISO 4400

#### **FEATURES:**

Electrical conformity IEC 335

Protection degree IP 65 EN 60529 (DIN 40050)

with coil fitted by connector.

#### SPARE PARTS:

1. Coil:

See coils list

2. Complete plunger:

Code R453258/*RVX* 

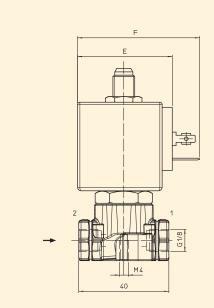
3. Complete armature tube:

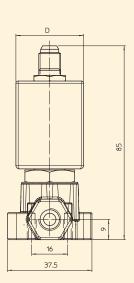
Code R451830/D

4. Gasket O-Ring:

Code R990000/VX

## **DIMENSIONS:**





COIL	PO	WER ABSO	DIM	DIMENSIONS			
TYPE	L L L L L L L L L L L L L L L L L		Inrush VA ~	D mm	E mm	F mm	
В	8	14,5	25	30	42	54	



# Solenoid valve 3/2 way N.C. Direct acting - NSF Certified

31AP2A1*R*15-13T0 ÷ 31AP2A1R30-13T0

#### PRESENTATION:

Direct acting S.V. for interception of fluids compatible with the construction materials.

Minimum operational pressure is not required.

The materials used and the tests carried out ensure maximum reliability and duration.

USE: Vending

PIPES: G 1/4

COIL: 8W - Ø 13

BDA - BSA 155°C (class F) BDV 180°C (class H)

COIL HOUSING AND COIL FORMER MATERIAL ARE MADE BY 100% VIRGIN MATERIAL.

Ambient temperature:

See coils catalogue page for its compatibility.



Gaskets	Temperature		Medium
<b>R</b> =RUBY	- 40°C	+ 180°C	Water, air, steam







Max allowable pressure (PS) 16 bar - According to EN 60730-2-8 - Factor of safety for domestic applications equal to 5 times PS

Pipe ISO 228/1 Code		Max viscosity		Ø	Kv	Power	Pressure		
	Code				l Kv		min	M.O.P.D	
		cSt	°E	mm	l/mn	watt	bar	AC bar	DC bar
	31AP2A1 <b>R</b> 15-13T0	12	~ 2	1,5*	1,1		0	15	15
G 1/4	31AP2A1 <b>R</b> 20-13T0	37	~ 5	2*	1,8	8		10	10
G 1/4	31AP2A1 <b>R</b> 25-13T0	53	~ 7	2,5*	2,5			6	6
	31AP2A1 <b>R</b> 30-13T0	] 33	~ /	3*	3,4			5	5

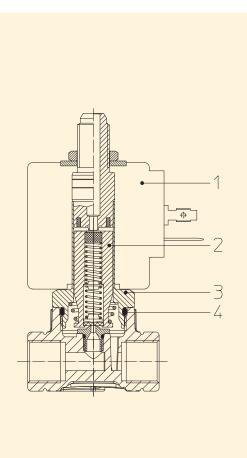
Max allowable pressure (PS) 25 bar - Safety factor for industrial application equal to 3 times PS

<b>Pipe</b> ISO 228/1		May vi	soosity	Ø	Kv	Power	Pressure		
	Code	IVIAX VI	viscosity 9		'\\	1 OWEI	min	M.O.P.D	
		cSt	°E	mm	l/mn	watt	bar	AC bar	DC bar
	31AP2A1 <b>R</b> 15-13T0	12	~ 2	1,5*	1,1			15	15
G 1/4	31AP2A1 <b>R</b> 20-13T0	37	~ 5	2*	1,8	8	0	10	10
G 1/4	31AP2A1 <b>R</b> 25-13T0	53	~ 7	2,5*	2,5			6	6
	31AP2A1 <b>R</b> 30-13T0	] 33	~ /	3*	3,4			5	5

#### Note

The "ODE" reserves the right to carry out technical and aesthetic modifications without prior notification.

<sup>\* 3</sup>rd way exhaust= Ø 2,5 mm | Max torque for fittings 1,5 Nm, coil nut assembly 2 Nm, armature tube 3 Nm | Evaluate tightening torque for tapered fittings | Use the seal fittings compatible with the material of the body | Available with coil Ex nA | The use of rigid sealings usually implies a slight leakage, limited within 2 cc/min at the pressure of 1 bar | For application with steam, please consult our Technical Service | Available on request and with minimum quantities.



### MATERIALS:

**Body** PPS

Armature tube Stainless steel AISI series 300
Fixed core Stainless steel AISI series 400
Plunger Stainless steel AISI series 400

Phase displacement ring Gold plated copper

Spring Stainless steel AISI series 300

Seal Standard: V=FKM

On request: B=NBR E=EPDM

Orifice: Insert slot PPS

On request:

**Connector** Pg 9 or Pg 11 **Connector conformity** ISO 4400

#### **FEATURES**:

Electrical conformity IEC 335

Protection degree IP 65 EN 60529 (DIN 40050)

with coil fitted by connector.

#### SPARE PARTS:

1. Coil:

See coils list

2. Complete plunger:

Code R453258/RVX

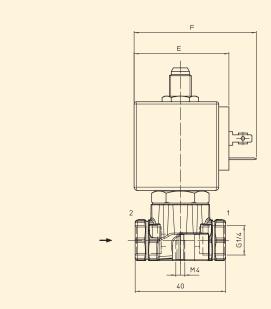
3. Complete armature tube:

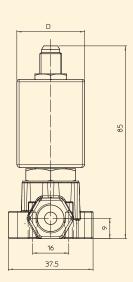
Code R451830/D

4. Gasket O-Ring:

Code R990000/VX

## **DIMENSIONS:**





COIL	PO	WER ABSO	DIM	DIMENSIONS			
TYPE	L L L L L L L L L L L L L L L L L		Inrush VA ~	D mm	E mm	F mm	
В	8	14,5	25	30	42	54	