



Solenoid valve 3/2 way N.C. Direct acting

31A1AR10
+
31A1AR25

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: Hot water
Steam (180°C)

PIPES: subplate mounting

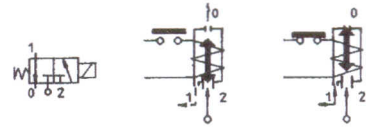
COILS: 8W - Ø 13
BDA - BDS - BSA 155°C (class F)
BDP 160°C (high temperature)
BDF 180°C (class H)
SDH 180°C (class H)

MOULDING AND BOBBIN ARE MADE BY 100% VIRGIN MATERIAL.

Max. allowable pressure (PS) 40 bar
Environment temperature:
with class **F** or high temperature coils - 40°C + 60°C
with class **H** coil - 40°C + 80°C



Gaskets	Temperature	Medium
R=RUBY	- 40°C + 180°C	Hot water, Steam



Pipe	Code	Max viscosity		Ø mm	Kv l/mn	Power (watt)	Pressure		
		cSt	°E				min bar	M.O.P.D.	
								AC bar	DC bar
SUBPLATE MOUNTING	31A1AR10	-	-	1*	0,45	8	0	20	20
	31A1AR15			1,5*	1,4			15	15
	31A1AR20			2*	2			10	10
	31A1AR25			2,5*	3,2			6	6

ODE 1 31A1AR10-V 3/2 + 220V
ODE 2 31A1AR15-V 3/2 + 24V AC
ODE 3 31A1AR15-V 3/2 + 24V DC

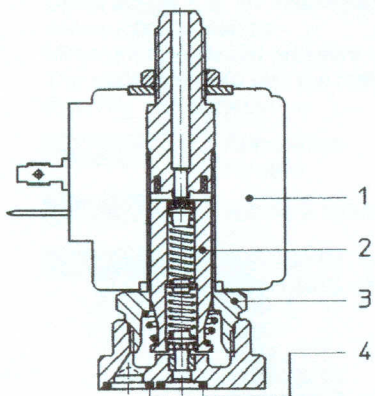
Note

* 3rd way exhaust= Ø 2,5 mm

Also available with brass body without lead.

The use of rigid sealings usually implies a slight leakage, limited within 2scc/min at the pressure of 1 bar.

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



MATERIALS:

Body	Brass - UNI EN 12165 CW617N
Armature tube	Stainless steel AISI series 300
Fixed core	Stainless steel AISI series 400
Plunger	Stainless steel AISI series 400
Phase displacement ring	Copper - Cu 99,9%
Spring	Stainless steel AISI series 300
Seal	R=RUBY
Orifice: Insert slot	Stainless steel AISI 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.

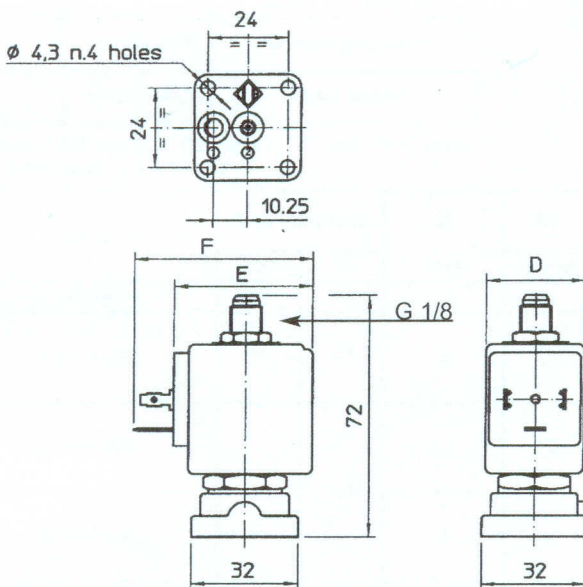
SPARE PARTS:

1. **Coil:**
See coils list
2. **Complete plunger:**
Code R450873
3. **Complete armature tube:**
Code R450944/AL
4. **Gasket O-Ring:**
Code R990002/S

KIT:

KT130AR30-A=2+3

DIMENSIONS:



COIL	POWER ABSORPTION		TYPE	DIMENSIONS		
	Inrush VA ~	Hold VA ~		D mm	E mm	F mm
8 W	25	14,5	B	30	42	54
			S	32		



Solenoid valve 2/2 way N.C. Direct acting

21A1KV15
+
21A1KV30

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: Automation
Heating

PIPES: subplate mounting

COILS:

8W - Ø 13 (1)	
BDA - BDS - BSA	155°C (class F)
BDP	160°C (high temperature)
BDF	180°C (class H)
SDH	180°C (class H)
12W - Ø 13	
UDA	155°C (class F)
14W - Ø 13	
GDH	180°C (class H)

(1) Explosion-proof housing for coils with electrical connections EN 175301-803 on request.

MOULDING AND BOBBIN ARE MADE BY 100% VIRGIN MATERIAL.

Max. allowable pressure (PS) 40 bar

Environment temperature:

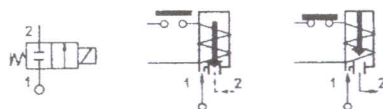
with coil class F and high temperature -10°C + 60°C

with coil class H -10°C + 80°C



Gaskets	Temperature	Medium
V=FKM (fluoroelastomer)	- 10°C +140°C	Mineral oils (2°E), gasoline gas oil, fuel oils (7°E)
B=NBR (nitrile rubber)	- 10°C + 90°C	Air, inert gas, water
E=EPDM (ethylene-propylene)	- 10°C +140°C	Water, steam

For seals other than FKM replace the letter "V" with the ones corresponding to the other seals. E.I. 21A1KB15.



Pipe	Code	Max viscosity		Ø mm	Kv (l/mn)	Power (watt)	Pressure		
		cSt	°E				min bar	M.O.P.D. AC bar DC bar	
SUBPLATE MOUNTING	21A1KV15	12	~ 2	1,5	1,4	8	0	30	18
	21A1KV20	37	~ 5	2	2			12	22
						14		35	30
						8		14	9
	21A1KV25	53	~ 7	2,5	3,2	12		30	25
						14		10	6
						8		25	18
	21A1KV30			3	4	12		25	18
						14			20
						8			

ODE 4 21A1KV25-ORV + 220V

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

MATERIALS:

Body Brass - UNI EN 12165 CW617N
Armature tube Stainless steel AISI series 300
Fixed core Stainless steel AISI series 400
Plunger Stainless steel AISI series 400
Phase displacement ring Copper - Cu 99,9%
Spring Stainless steel AISI series 300
Seal Standard: V=FKM
 On request: B=NBR E=EPDM
 Stainless steel AISI series 300

Orifice: Insert slot

On request:

Connector Pg 9 or Pg 11
Connector conformity ISO 4400

FEATURES:

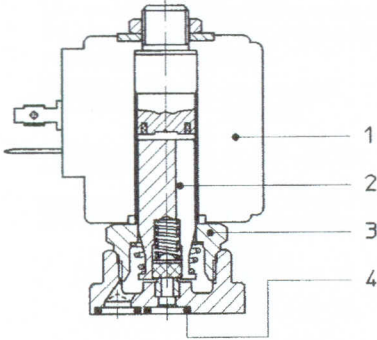
Electrical conformity IEC 335
Protection degree IP 65 EN 60529 (DIN 40050)
 with coil fitted by connector.

SPARE PARTS:

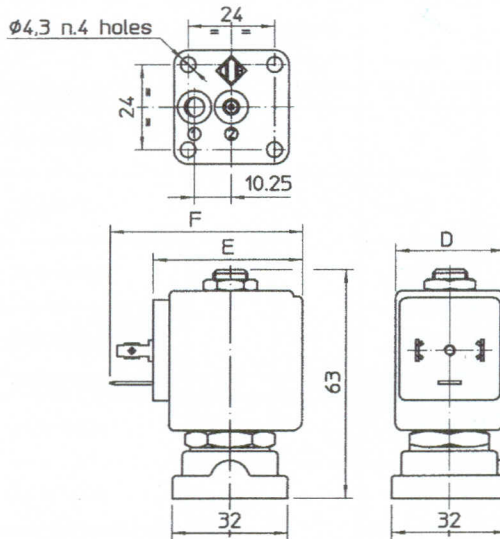
- 1. Coil:**
See coils list
- 2. Complete plunger:**
Code R450886/V
- 3. Complete armature tube:**
Code R450606
- 4. Gasket O-Ring:**
Code R990002/V

KIT:

KT130KV30-A=2+3



DIMENSIONS:



COIL W ---	POWER ABSORPTION		TYPE	DIMENSIONS		
	Inrush VA ~	Hold VA ~		D mm	E mm	F mm
8 W	25	14,5	B	30	42	54
			S	32		
12 W	35	25	U	36	48	60
14 W	43	27	G	52	55	67



Solenoid valve 2/2 way N.C. Direct acting

21A3KV15
+
21A2KV55

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: Automation
Heating

PIPES: G 1/8 - G 1/4

COILS:

8W - Ø 13 (1)	
BDA - BDS - BSA	155°C (class F)
BDP	160°C (high temperature)
BDF	180°C (class H)
SDH	180°C (class H)
12W - Ø 13	
UDA	155°C (class F)
14W - Ø 13	
GDH	180°C (class H)

(1) Explosion-proof housing for coils with electrical connections EN 175301-803 on request.

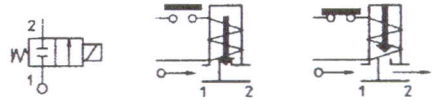


MOULDING AND BOBBIN ARE MADE BY 100% VIRGIN MATERIAL.

Gaskets	Temperature	Medium
V=FKM (fluoroelastomer)	- 10°C +140°C	Mineral oils (2°E), gasoline gas oil, fuel oils (7°E)
B=NBR (nitrile rubber)	- 10°C + 90°C	Air, inert gas, water
E=EPDM (ethylene-propylene)	- 10°C +140°C	Water, steam

For seals other than FKM replace the letter "V" with the ones corresponding to the other seals. E.I. 21A2KE20.

Max. allowable pressure (PS) 40 bar
Environment temperature:
with coil class F and high temperature - 10°C + 60°C
with coil class H - 10°C + 80°C



Pipe ISO 228/1	Code	Max viscosity		Ø mm	Kv l/min	Power (watt)	Pressure			
		cSt	°E				min bar	M.O.P.D. AC bar DC bar		
G 1/8	21A3KV15	12	~ 2	1,5	1,4	8	0	30	18	
								22	16	
	21A3KV20	37	~ 5	2	2	12		35	30	
						14				
	21A3KV25	53	~ 7	2,5	3,2	8		14	9	
						12		30	25	
21A3KV30	53	~ 7	3	4	8	10		6		
					12	25		18		
21A3KV45	53	~ 7	4,5	6,5	14	25		20		
					8	5		2		
G 1/4	21A2KV15	12	~ 2	1,5	1,4	8		0	30	18
									22	16
	21A2KV20	37	~ 5	2	2	12	35		30	
						14				
	21A2KV25	53	~ 7	2,5	3,2	8	14		9	
						12	30		25	
	21A2KV30	53	~ 7	3	4	8	10		6	
						12	25		18	
	21A2KV45	53	~ 7	4,5	6,5	14	25		20	
						8	5		2	
	21A2KV55	53	~ 7	5,5	9	8	12		7	
						12	12		8	
							3	1		
							7	2,5		
							10	5		

Note Also available with brass body without lead.

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

ODE 5 21A2KV25 + 220V ~ 2/2 1/4
 ODE 6 21A2KV25 + 24V = 2/2 1/4
 ODE 8 21A3KV25 + 220V ~ 2/2 1/8
 ODE 9 21A3KV25 + 24V = 2/2 1/8

MATERIALS:

Body Brass - UNI EN 12165 CW617N
Armature tube Stainless steel AISI series 300
Fixed core Stainless steel AISI series 400
Plunger Stainless steel AISI series 400
Phase displacement ring Copper - Cu 99,9%
Spring Stainless steel AISI series 300
Seal Standard: V=FKM
 On request: B=NBR E=EPDM

Orifice:
 < 3 mm **Insert slot** Stainless steel AISI series 300
 > 3 mm Brass - UNI EN 12165 CW617N

On request: Pg 9 or Pg 11
Connector ISO 4400
Connector conformity

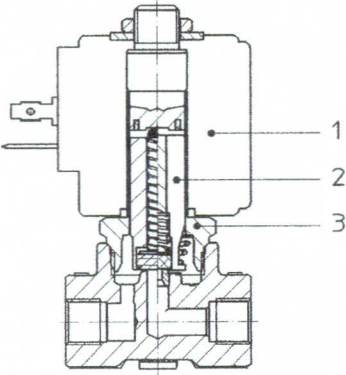
FEATURES:

Electrical conformity IEC 335
Protection degree IP 65 EN 60529 (DIN 40050)
 with coil fitted by connector.

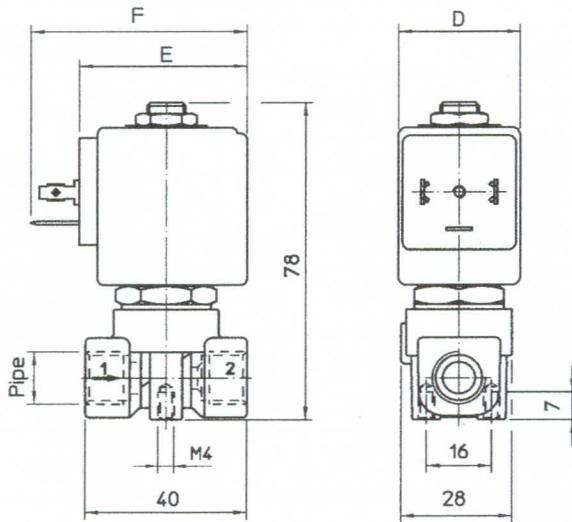
SPARE PARTS:

- 1. Coil:**
 See coils list
- 2. Complete plunger:**
 For orifice ≤ 3 mm
 Code R450886/V
 For orifice > 3 mm
 Code R450898/V
- 3. Complete armature tube:**
 Code R450606

KIT:
 ≤ 3 mm
 KT130KV30-A=2+3
 > 3 mm
 KT130KV55-A=2+3



DIMENSIONS:



Type	Pipe ISO 228/1
21A3KV	G 1/8
21A2KV	G 1/4

COIL W ---	POWER ABSORPTION		TYPE	DIMENSIONS		
	Inrush VA ~	Hold VA ~		D mm	E mm	F mm
8 W	25	14,5	B	30	42	54
			S	32		
12 W	35	25	U	36	48	60
14 W	43	27	G	52	55	67



Solenoid valve 3/2 way N.C. Direct acting

31A3AV10
+
31A2AV30

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: Automation
Heating

PIPES: G 1/8 - G 1/4

COILS: 8W - Ø 13 (1)
BDA - BDS - BSA 155°C (class F)
BDP 160°C (high temperature)
BDF 180°C (class H)
SDH 180°C (class H)

(1) Explosion-proof housing for coils with electrical connections EN 175301-803 on request.

MOULDING AND BOBBIN ARE MADE BY 100% VIRGIN MATERIAL.

Max. allowable pressure (PS) 40 bar
Environment temperature:
with class **F** or high temperature coils - 10°C + 60°C
with class **H** coil - 10°C + 80°C



Gaskets	Temperature		Medium
V=FKM (fluoroelastomer)	- 10°C	+140°C	Mineral oils (2°E), gasoline gas oil
B=NBR (nitrile rubber)	- 10°C	+ 90°C	Air, inert gas, water

For seals other than FKM replace the letter "V" with the ones corresponding to the other seals. E.I. 31A3AB15.



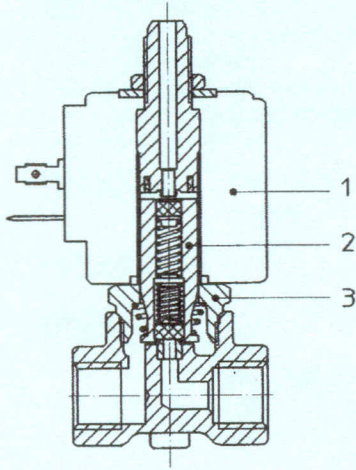
Pipe ISO 228/1	Code	Max viscosity		Ø mm	Kv l/mn	Power (watt)	Pressure				
		cSt	°E				min bar	M.O.P.D. AC bar DC bar			
G 1/8	31A3AV10	12	~ 2	1*	0,45	8	0	20	20		
	31A3AV15			1,5*	1,4			15	15		
	31A3AV20	37	~ 5	2*	2			10	10		
	31A3AV25	53	~ 7	2,5*	3,2			6	6		
	31A3AV30			3*	4			5	5		
G 1/4	31A2AR10	12	~ 2	1*	0,45			8	0	20	20
	31A2AV15			1,5*	1,4					15	15
	31A2AV20	37	~ 5	2*	2					10	10
	31A2AV25	53	~ 7	2,5*	3,2					6	6
	31A2AV30			3*	4					5	5

Note

* 3rd way exhaust= Ø 2,5 mm
Also available with brass body without lead.

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

ODE 31A2AV25 + 220V ~ 3/2 1/4



MATERIALS:

Body Brass - UNI EN 12165 CW617N
Armature tube Stainless steel AISI series 300
Fixed core Stainless steel AISI series 400
Plunger Stainless steel AISI series 400
Phase displacement ring Copper - Cu 99,9%
Spring Stainless steel AISI series 300
Seal Standard: V=FKM
 On request: B=NBR
Orifice: Insert slot Stainless steel AISI series 300

On request:
Connector Pg 9 or Pg 11
Connector conformity ISO 4400

FEATURES:

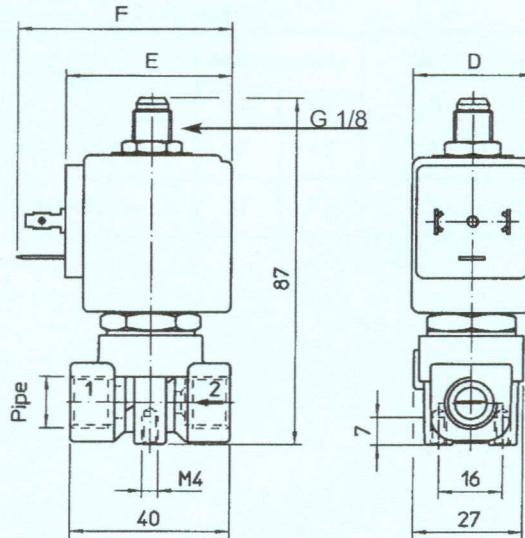
Electrical conformity IEC 335
Protection degree IP 65 EN 60529 (DIN 40050)
 with coil fitted by connector.

SPARE PARTS:

- 1. **Coil:**
See coils list
- 2. **Complete plunger:**
Code R450675/V
- 3. **Complete armature tube:**
Code R450944

KIT:
 KT130AV30-A=2+3

DIMENSIONS:



Type	Pipe ISO 228/1
31A3AV	G 1/8
31A2AV	G 1/4

COIL	POWER ABSORPTION		TYPE	DIMENSIONS		
	W	Inrush VA ~		Hold VA ~	D mm	E mm
8 W	25	14,5	B	30	42	54
			S	32		



Solenoid valve 2/2 way N.C. Direct acting

21JN1R0V12

+

21JN1R0V23

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: Automation
Heating

PIPES: G 1/8

COILS: 2,5W - Ø 10
LBA 155°C (class F)
5W - Ø 10
LBA 155°C (class F)
LBF 180°C (class H)

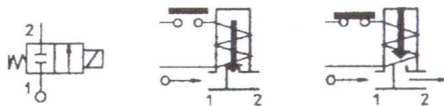
MOULDING AND BOBBIN ARE MADE BY 100% VIRGIN MATERIAL.

Max. allowable pressure (PS) 40 bar
Environment temperature:
with class F or high temperature coils - 10°C + 60°C
with class H coil - 10°C + 80°C



Gaskets	Temperature		Medium
V=FKM (fluoroelastomer)	- 10°C	+140°C	Mineral oils (2°E), gasoline gas oil, fuel oils (5°E)
B=NBR (nitrile rubber)	- 10°C	+ 90°C	Air, inert gas, water

For seals other than FKM replace the letter "V" with the ones corresponding to the other seals. E.I. 21JN1R0B12.



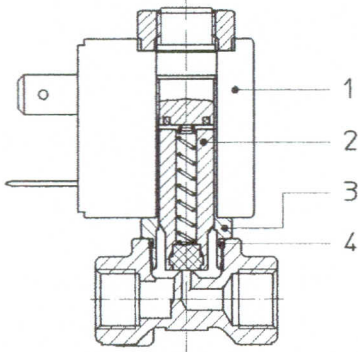
Pipe ISO 228/1	Code	Max viscosity		Ø mm	Kv (l/mn)	Power (watt)	Pressure		
		cSt	°E				min bar	M.O.P.D. AC bar DC bar	
G 1/8	21JN1R0V12	12	~ 2	1,2	1	2,5	0	20	3,5
						5		25	12
	21JN1R0V23	37	~ 5	2,3	2,3	2,5		6	-
						5		18	8

Note

Available also with brass body without lead.

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

ODE 10 21JNR0V23 + 220V ~ 2/2 1/8
ODE 11 21JNR0V23 + 24V = 2/2 1/8



MATERIALS:

Body Brass - UNI EN 12165 CW617N
Armature tube Stainless steel AISI series 300
Fixed core Stainless steel AISI series 400
Plunger Stainless steel AISI series 400
Phase displacement ring Copper - Cu 99.9%
Spring Stainless steel AISI series 300
Seal Standard: V=FKM
 On request: B=NBR
Orifice Brass - UNI EN 12165 CW617N

On request: Pg 9 or Pg 11
Connector ISO 4400
Connector conformity

FEATURES:

Electrical conformity IEC 335
Protection degree IP 65 EN 60529 (DIN 40050)
 with coil fitted by connector.

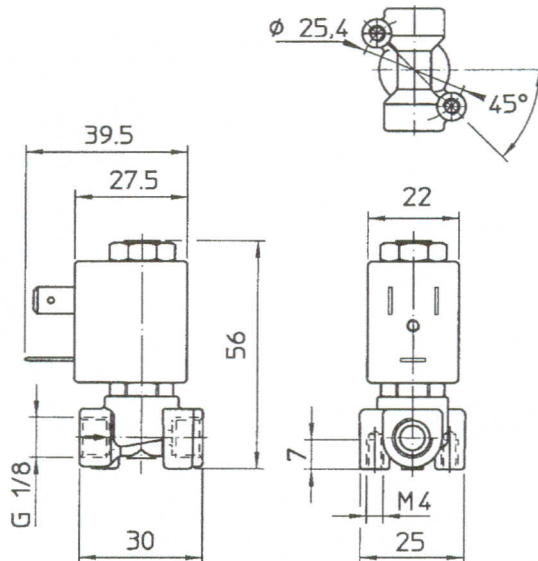
SPARE PARTS:

- 1. Coil:**
See coils list
- 2. Complete plunger:**
Code R451101/V
- 3. Complete armature tube:**
Code R452062
- 4. Gasket O-Ring:**
Code R990597/V

KIT:

KT100R0V25-FJ=2+3+4

DIMENSIONS:



COIL	POWER ABSORPTION	
	Inrush VA ~	Hold VA ~
2,5 W	7	4
5 W	15	11