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# ODE ANGLE SEAT - 211A4 to 211A9

2 way N.C. | Direct Acting | Stainless Steel



**PRESENTATION:**

Flow direction below seat, angle seat pilot valve.  
 Pneumatically actuated, high flow rate due to the body's angle seat configuration.  
 Anti water-hammer functioning with entry below seat.  
 Pneumatic controlled valve with stainless steel body.  
 Pneumatic actuator (360° rotation).  
 Optical position indicator.  
 Can be used with back pressure for gases (the back pressure must not pass the functioning max pressure - see MOPD chart).  
 Self trimming packing gland - maintenance free.  
 Can be setup in all positions.

**PIPES:** G1/2 - G2

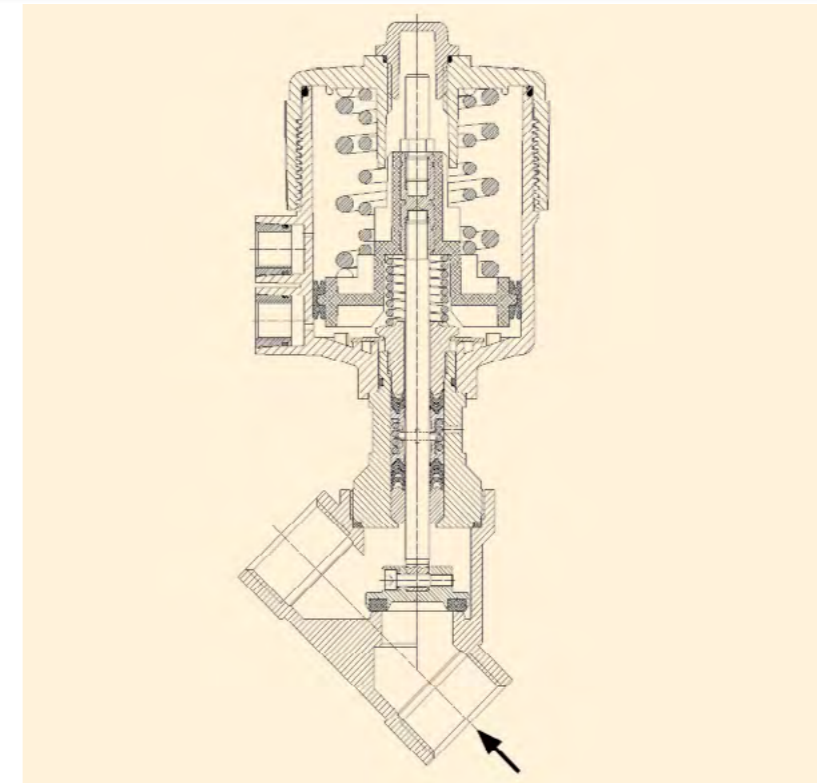
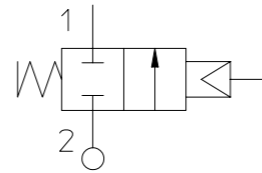
**USE:** Automation, Heating, Water, Hot Water, Steam(180°C), Aggressive, Food Fluids

**VALVE FEATURES:**

Fluid Temperature -10°C +180°C  
 Environment Temp. -10°C +60°C  
 Material Stainless Steel AISI Series 316  
 Seal PTFE  
 Packing Gland PTFE, FKM

**PILOT ACTUATOR FEATURES:**

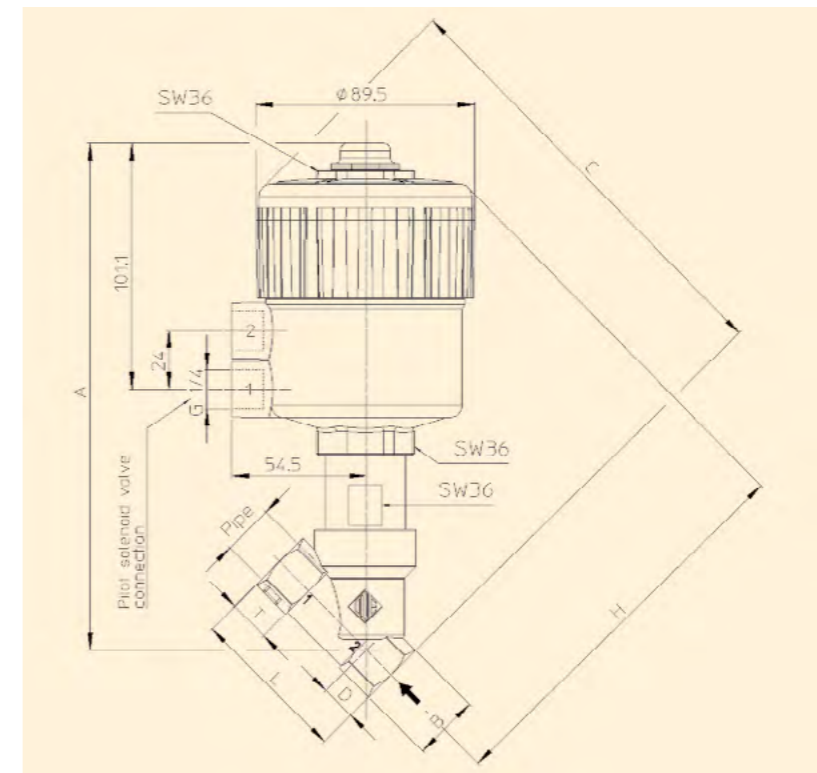
Fluid Dry air or lubricated, gas and neutral fluids  
 Fluid Temperature Max +60°C  
 Body Polyamide 66 with 30% glass  
 Gaskets NBR  
 Actuator Ø70



Pipe ISO 228/1	Code	Ø mm	Kv	Actuator pilot pressure (bar)		Differential pressure (bar)		Max. allowable pressure PS (bar)K	Weight g
				l/mn	ax	minm	ax		
G1 /2	211 A4T15G C2	15	80	4	10	0	16	40	1,4
G3 /4	211 A5T20G C2	20	150				10		1,5
G1	211 A6T25G C2	25	190				10		1,8
G1 1/4	211 A7T32G C2	32	340				7	2,4	
G1 1/2	211 A8T40G C2	40	430				4,5	2,7	
G2	211 A9T50G C2	50	620				3	3,9	

Note :  
 Available on request - Pilot Valve 31A2AV20+BDA.  
 Together with male thread nipple G1/4 - G1/4.  
 Material compatibility with the fluids to be checked.  
 The "ODE " reserves the right to carry out technical and aesthetic modifications without prior notification.

Pipe ISO 228/1	A mm	B mm	C mm	D mm	E mm	H mm	L mm	T mm
G 1/2	206,8	SW 27	178,7	15,4	SW 30	163,3	65	17
G 3/4	211,7	SW 32	188,6	21,9	SW 36	166,7	75,5	19
G1	220,1	SW 41	197,8	25,1	SW 36	172,7	90	21
G1 1/4	235,9	SW 50	212,3	28,5	SW 41	183,8	110	24
G1 1/2	238,9	SW 55	217,0	31,0	SW 41	186	122	25,2
G2	247,8	SW 70	229,7	37,5	SW 41	192,2	151	28,5



**CE Approval**  
 (Pressure Equipment Directive 97/23/CE)  
 for S.V. 211A7 - 211A9

2-WAY ANGLE SEAT

2-WAY ANGLE SEAT

# ODE SOLENOID - 21A3K to 21A2K

2 way N.C. | Direct Acting



**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.

**PIPES:** G1/8 - G1/4

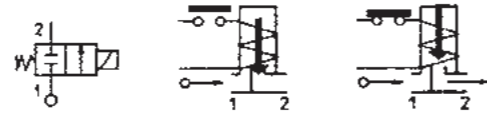
**USE:** Automation, Heating

**VALVE FEATURES:**

- 8W - Ø13\*
- BDA - BDS - BSA 155°C (class F)
- BDP 160°C (high temp.)
- BDF 180°C (class H)
- SDH 180°C (class H)
- 12W - Ø13
- UDA 155°C (class F)
- 14W - Ø13
- GDH 180°C (class H)

\* Explosion-proof housing for coils with electrical connections EN 175301-803 on request.

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 (nitrilerubber)	-10°C +90°C	Air, inert gas, water
E=EPDM (ethylene-propylene)	-10°C +140°C	Water, steam

**HIGHLIGHTED ITEMS ARE EX STOCK**

For seals other than FKM replace the letter "V" with the ones corresponding to the other seals. i.e. 21A3KE20.

**21A3K TABLE**

Pipe ISO 228/1	Code	Max viscosity		Ø mm	Kv l/min	Power (watt)	Pressure		
		cSt*	E				mi bar	M.O.P.D. AC bar DC bar	
G 1/8	21A3K V151	2~	2	1.5	1.4	8	0	30	18
	21A3K V203							22	16
	21A3K V25	7~	5	2.5	3.2	12		35	30
						14		14	9
						8		10	6
						12		30	25
	21A3K V30	53	~7	3	4	8		25	18
						12		20	7
						14		5	2
						8		12	7
	21A3K V45			4.5	6.5	12		7	2.5
						14		10	5

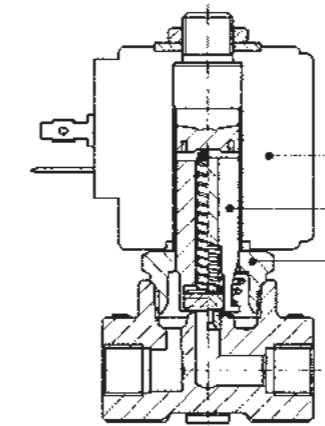
Note: Also available with brass body without lead.  
"ODE" reserves the right to carry out technical and aesthetic modifications without prior notification.

**HIGHLIGHTED ITEMS ARE EX STOCK**

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

**21A2K TABLE**

Pipe ISO 228/1	Code	Max viscosity		Ø mm	Kv /min	Power (watt)	Pressure		
		cSt*	EI				min bar	M.O.P.D. AC bar DC bar	
G 1/4	21A2K V151	12	~2	1.5	1.4	8	0	30	18
	21A2K V20							22	16
	21A2K V25	37~	5	2	2	12		35	30
						14		14	9
						8		10	6
						12		30	25
	21A2K V30	53	~7	3	4	8		25	18
						12		20	7
						14		5	2
						8		12	8
	21A2K V45			4.5	6.5	12		7	2.5
						14		10	5
21A2K V55			5.5	9	8	3	1		
					12	7	2.5		
					14	10	5		



**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:**

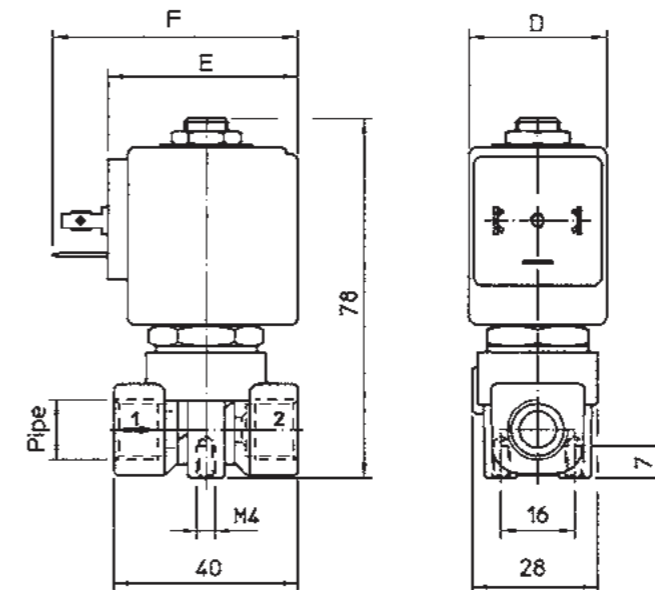
- Connector: Pg 9 or Pg 11
- Connector conformity: ISO 4400

**FEATURES:**

- Electrical conformity: IEC 335
- Protection degree: IP65 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



**DIMENSIONS:**

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

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

2-WAY DIRECT ACTING

2-WAY DIRECT ACTING



# ODE SOLENOID - 21A5K to 21A8K

2 way N.C. | Direct Acting



**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.

**PIPES:** G3/8 - G1/2

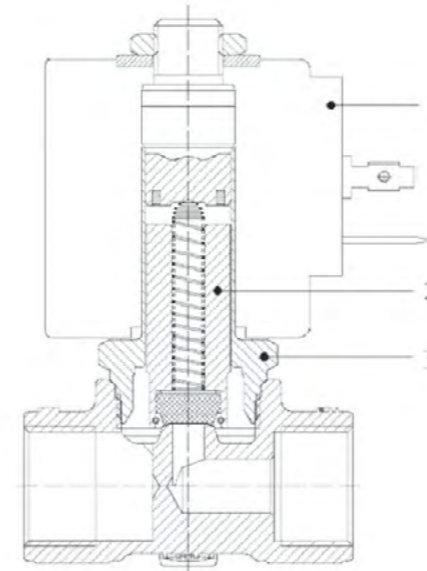
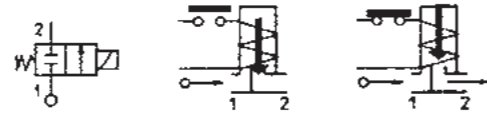
**USE:** Automation, Heating

**VALVE FEATURES:**

8W - Ø13		
BDA - BDS - BSA	155°C	(class F)
BDF - BDV	180°C	(class H)
12W - Ø13		
UDA	155°C	(class F)
14W - Ø13		
GDH - GDV	180°C	(class H)

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

Gaskets	Temperature	Medium
T=PTFE (polytetrafluorethylen)	-40°C +180°C	Water, Steam



**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	T=PTFE
Orifice	Brass - UNI EN 12165 CW617N

**ON REQUEST:**

Connector conformity ISO 4400

**FEATURES:**

Electrical conformity IEC 335  
 Protection degree IP65 EN 60529 (DIN 40050) with coil fitted by connector.

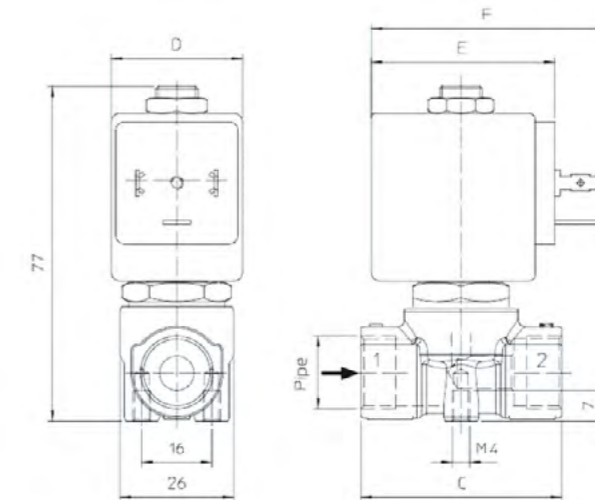
**SPARE PARTS:**

1. Coil: See coils list
2. Complete plunger: Code R451234/T
3. Complete armature tube: Code R450606

**KIT:**

KT130KT55-A=2+3

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 3/8	21A5KT45	-	-	4,5	6,5	8	0	5	1,5
						12		10	3,5
						14		12	6
	21A5KT55			5,5	9	8		3,5	1
						12		6	2
						14		7	5
G 1/2	21A8KT45	-	-	4,5	6,5	8	0	5	1,5
						12		10	3,5
						14		12	6
	21A8KT55			5,5	9	8		3,5	1
						12		6	2
						14		7	5



Type	Pipe ISO 228/1	C mm
21A5KT	G 3/8	46
21A8KT	G 1/2	58

COIL TYPE	POWER ABSORPTION			DIMENSIONS		
	W	Hold VA ~	Inrush VA ~	D mm	E mm	F mm
B	8	14,5	25	30	42	54
U	12	23	35	36	48	60
G	14	27	43	52	55	67

2-WAY DIRECT ACTING

2-WAY DIRECT ACTING

# ODE SOLENOID - 21JN1R0

2 way N.C. | Direct Acting



**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.

**PIPES:** G1/8

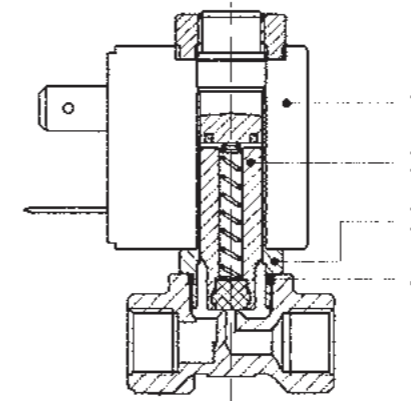
**USE:** Automation, Heating

**COILS:**

2.5W - Ø10		
LBA	155°C	(class F)
5W - Ø10		
LBA	155°C	(class F)
LBF	180°C	(class H)

**MOULDING AND BOBBIN ARE MADE WITH 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



**MATERIALS:**

Body	Brass
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

**ON REQUEST:**

Connector	Please request
Connector conformity	ISO 4400

**FEATURES:**

Electrical conformity	IEC 335
Protection degree	IP65 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 R452061
4. Gasket O-Ring: Code R990597/V

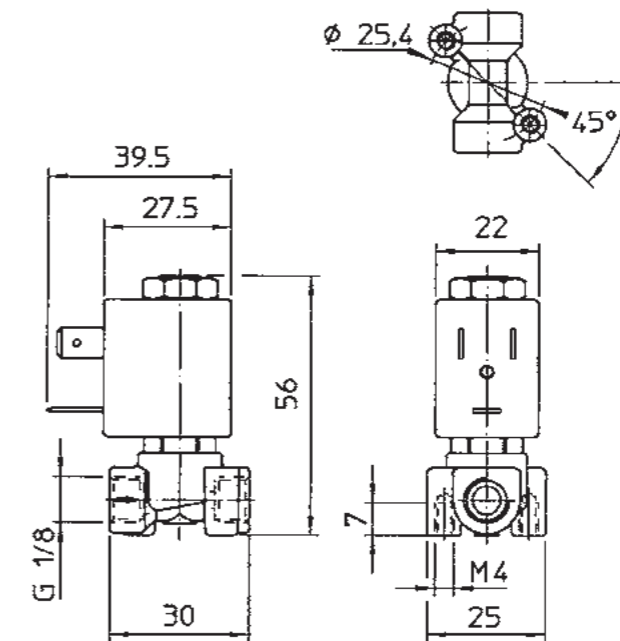
**MAINTENANCE KIT:** KT100R0V25-FJ = 2+3+4

Gaskets	Temperature	Medium
V=FKM (fluoroelastomer)	-40°C +140°C	Mineral oils (2°E), gasoline gas oil, fuel oils (5E)
B=NBR (nitrilerubber)	-40°C +90°C	Air, inert gas, water

For seals other than FKM replace the letter "V" with the ones corresponding to the other seals. i.e. 21H7KV120.

Pipe ISO 228/1	Code	Max viscosity		Ø mm	Kv /min	Power (watt)	Pressure		
		cSt*	EI				minM bar	O.P.D. AC bar DC bar	
G 1/8	21JN1R0 V12	12	~2	1,2	1	2,5	0	20	3,5
						5		25	12
	21JN1R0 V23	37	~5	2,3	2,3	2,5	0	6	-
						5		18	8

Note: Also available with brass body without lead.  
"ODE" reserves the right to carry out technical and aesthetic modifications without prior notification.



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

2-WAY DIRECT ACTING

2-WAY DIRECT ACTING

# ODE SOLENOID - 21H7K to 21H8K

2 way N.C. | Pilot Control



**PRESENTATION:**

S.V. with pilot control with interception of fluids compatible with the construction materials.

Minimum operational pressure of 0.1bar is required.

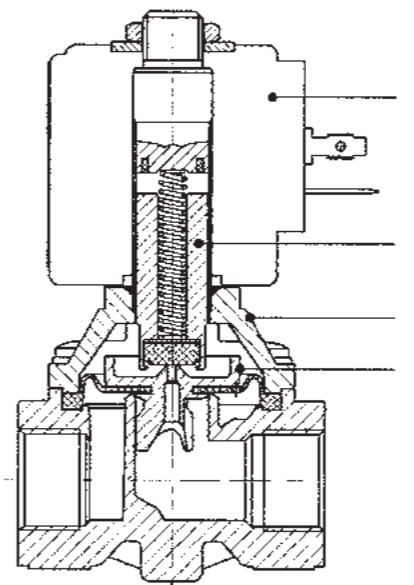
The materials used and the tests carried out ensure maximum reliability and duration.

**PIPES:** G3/8 - G1/2

**USE:** Automation, Heating

**VALVE FEATURES:**

8W - Ø13		
BDA - BDS - BSA	155°C	(class F)
BDP	160°C	(high temp.)
BDF	180°C	(class H)
SDH	180°C	(class H)
12W - Ø13		
UDA	155°C	(class F)
14W - Ø13		
GDH	180°C	(class H)



**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:**

Brass - UNI EN 12165 CW617N

**ON REQUEST:**

Connector	Pg 9 or Pg 11
Connector conformity	ISO 4400

**FEATURES:**

Electrical conformity	IEC 335
Protection degree	IP65 EN 60529 (DIN 40050) with coil fitted by connector.

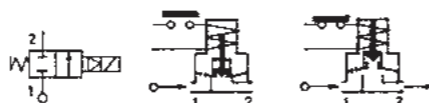
**SPARE PARTS:**

1. Coil: See coils list	
2. Complete plunger:	Code R450284/V
3. Complete armature tube:	Code R450938
4. Complete diaphragm:	Code R450916/V

**MAINTENANCE:**

KTGOH7KV12=2+4

Max. allowable pressure (PS)	20 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
B=NBR (nitrile rubber)	-10° + 90°	Air, inert gas, water
E=EPDM (ethylene-propylene)	-10°C +140°	Water, low pressure steam

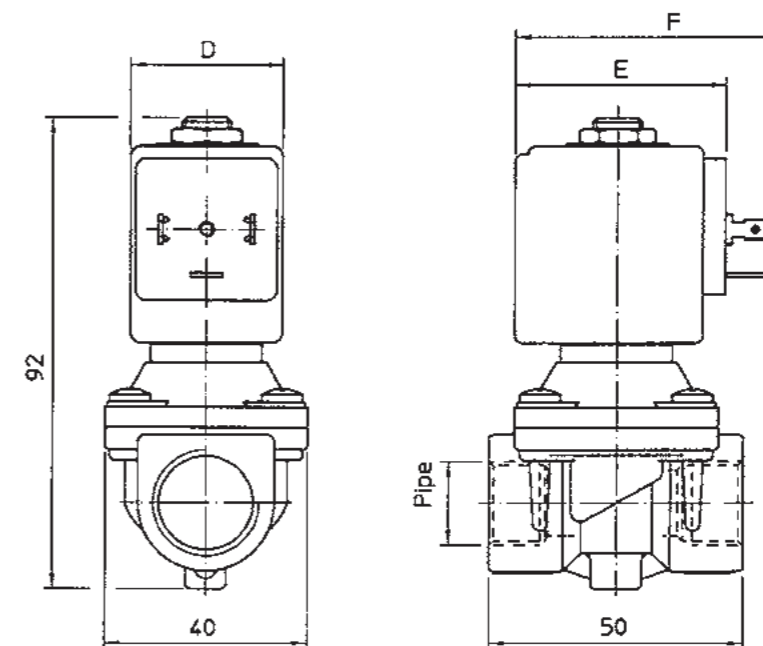
**HIGHLIGHTED ITEMS ARE EX STOCK**

For seals other than FKM replace the letter "V" with the ones corresponding to the other seals. i.e. 21H7KV120.

Pipe ISO 228/1	Code	Max viscosity		Ø mm	Kv /min	Power (watt)	Pressure		
		cSt*	EI				minM bar	AC bar	O.P.D. DC bar
G 3/8	21H7K V 120	12	~2	12	35	8	0,1	20	10
						12			20
						14			10
G 1/2	21H8K B 120	12	~2	12	45	8	0,1	20	10
						12			20
						14			20

Note: Also available with brass body without lead.

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



Type	Pipe ISO 228/1
21H7KV120	G 3/8
21H8KV120	G 1/2

COIL W	POWER ABSORPTION		TYPE	DIMENSIONS		
	Inrush VA~	Hold VA~		DE mm	F mm	mm
8 W	25	14,5	B3 S3	0 2	42	54
12 W	35	25	U3	64	86	0
14 W	43	27	G5	25	56	7

2-WAY DIRECT ACTING

2-WAY DIRECT ACTING



# ODE SOLENOID - 21WA3KO to 21WA4KO

2 way N.C. | Pilot Control



**PRESENTATION:**

S.V. with pilot control with interception of fluids compatible with the construction materials.

A minimum operational pressure of 0,2 bar is required. The materials used and the tests carried out ensure maximum reliability and duration.

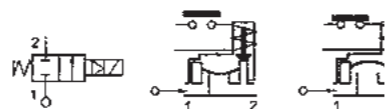
**PIPES:** G3/8 - G1/2

**USE:** Automation, Heating

**COILS:** 8W - Ø13

BDA - BDS - BSA	155°C	(class F)
BDP	160°C	(high temp.)
BDF	180°C	(class H)
SDH	180°C	(class H)

Max. allowable pressure (PS)	20 bar
Environment temperature:	
With coil class F and high temperature	- 10°C + 60°C
With coil class H	- 10°C + 80°C



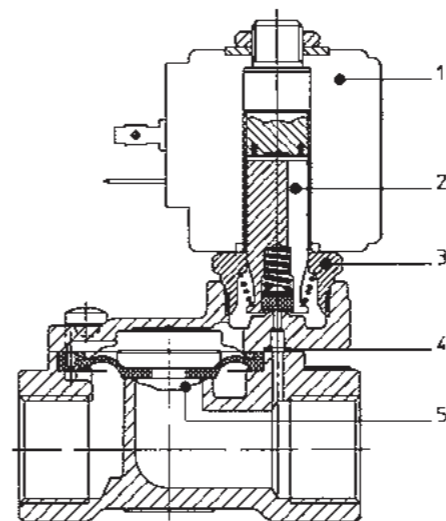
Gaskets	Temperature	Medium
B=NBR (nitrile rubber)	- 10°C + 90°C	Air, inert gas, water
V=FKM (fluoroelastomer)	- 10°C + 140°C	mineral oils (2°E), gasoline, gas oil

**HIGHLIGHTED ITEMS ARE EX STOCK**

For seals other than FKM replace the letter "V" with the ones corresponding to the other seals. i.e. 21WA3KOV130.

Pipe ISO 228/1	Code	Max viscosity		Ø m	Kv (l/min)	Power watt	Pressure		
		cSt°	Em				min bar	M.O.P.D. AC bar	DC bar
G 3/82	21WA3KOV130	12	~2	13	60	8	0,2	16	16
G 1/22	21WA4KOV130								

Note: Also available with brass body without lead. "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: B=NBR On request: V=VKM

**ORIFICE:** Brass - UNI EN 12165 CW617N

**ON REQUEST:** Connector Please request  
Connector conformity ISO 4400

**FEATURES:**

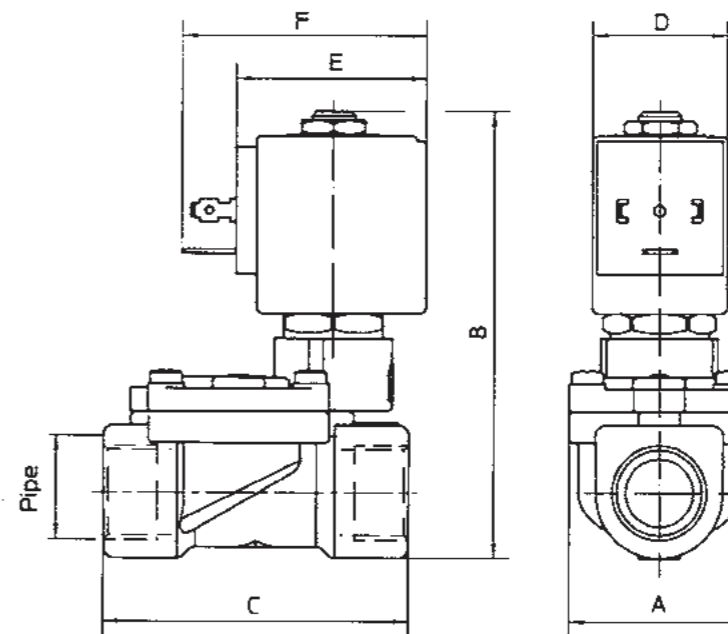
Electrical conformity	IEC 335
Protection degree	IP65 EN 60529 (DIN 40050) with coil fitted by connector.

**SPARE PARTS:**

1. Coil: See coils list
2. Complete plunger: Code R450886/B
3. Complete armature tube: Code R450606
4. Gasket O-Ring: Code R990300/B
5. Complete Diagram: Code R452186/B

**KIT:** KT130K B 30 - A = 2+3

**MAINTENANCE KIT:** KTGWA3K0 B 13 = 2+4+5



Type	Pipe ISO 228/1	A mm	B mm	C mm
21WA3K0B130	G 3/8	40	97	60
21WA4K0B130	G 1/2			66

W	COILD		POWER ABSORPTION		TYPE	DIMENSIONS		
	Inrush VA~	Hold VA~	D mm	E mm		F mm		
8W	25	14,5	B3	0	42	54		
			S3	2				

2-WAY  
DIRECT ACTING

2-WAY  
DIRECT ACTING

# ODE SOLENOID - 21HT3K to 21HT5K

2 way N.C. | Combined Operation



**PRESENTATION:**

Combined operation S.V. for interception of fluids compatible with construction materials.

Minimum operational pressure is not required.

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

**PIPES:** G3/8 - G3/4

**USE:** Automation, Vacuum Packaging, Heating

**VALVE FEATURES:**

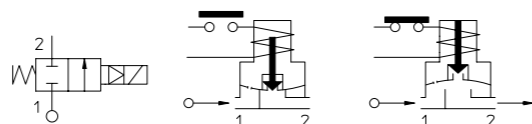
8W - Ø13		
BDA - BDS - BSA	155°C	(class F)
BDF - BDV	180°C	(class H)
12W - Ø13		
UDA	155°C	(class F)
14W - Ø13		
GDH - GDV	180°C	(class H)

Max. allowable pressure (PS) 16 bar

Environment temperature:

With coil class F - 10°C + 60°C

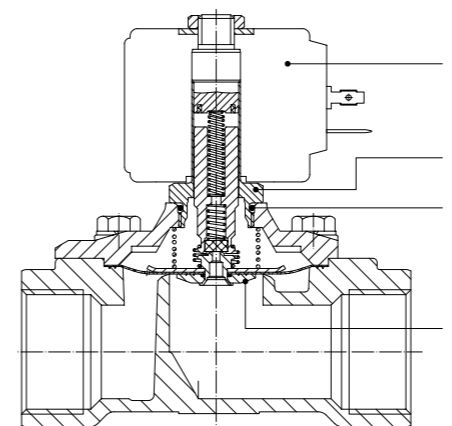
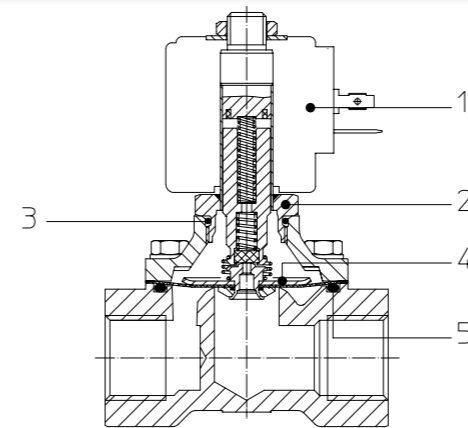
With coil class H - 10°C + 80°C



Gaskets	Temperature	Medium
Y=NBR (nitrile rubber)+P A (polyamide)	- 10°C + 90°C	Air, gasoline, fuel oils, inert gas, water
V=FKM+ PA (fluorelastomer+poliamide)	- 10°C +140°C	Mineral oils (2°E), gasoline gas oil

For seals other than FKM replace the letter "V" with the ones corresponding to the other seals. E.I. 21HT3K0Y110.

Pipe ISO 228/1	Code	Max viscosity		Ø mm	Kv l/mn	Power (watt)	Pressure		
		cSt	°E				min barA	M.O.P.D. Cb ar	DC bar
G3/8	21HT3K0Y110	12	~2	11	20	8	0	14	5
						12			14
						14			14
G 1/2	21HT4K0Y160	12	~2	16	40	8	0	14	2,5
						12			11
						14			14
G 3/4	21HT5K0Y160	12	~2	16	40	8	0	14	1,5
						12			11
						14			14



**MATERIALS:**

Body  
Armature tube  
Fixed core  
Plunger  
Phase displacement ring  
Spring  
Seal

Brass - UNI EN 12165 CW617N  
Stainless steel AISI series 300  
Stainless steel AISI series 400  
Stainless steel AISI series 400  
Copper - Cu 99,9%  
Stainless steel AISI series 300  
Standard: Y=NBR+PA  
On request: V=FKM+PA

**ORIFICE:**

Brass - UNI EN 12165 CW617N

**ON REQUEST:**

Connector  
Connector conformity

Pg 9 or Pg 11  
ISO 4400

**FEATURES:**

Electrical conformity  
Protection degree

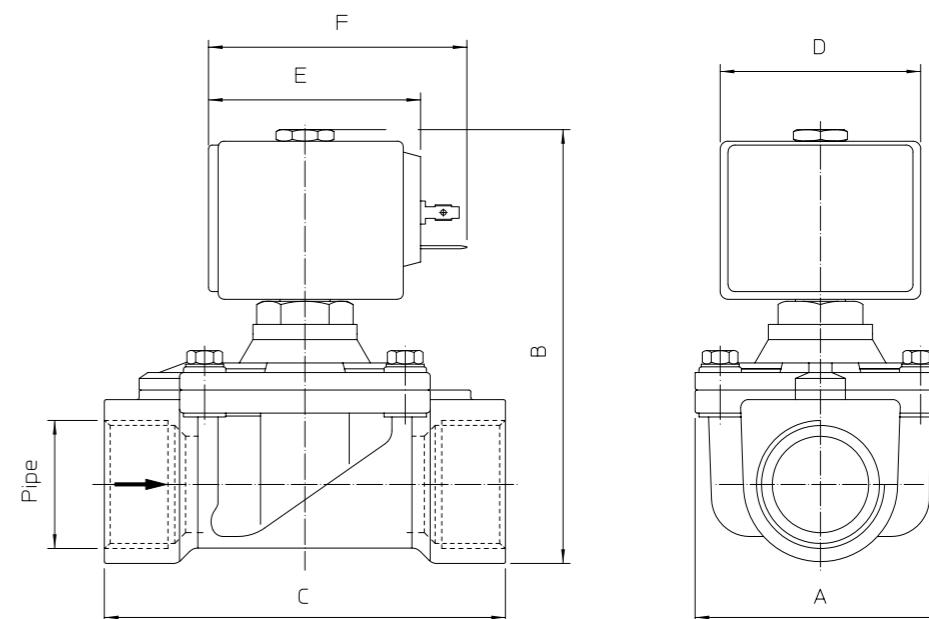
IEC 335  
IP65 EN 60529 (DIN 40050)  
with coil fitted by connector.

**SPARE PARTS:**

- Coil: See coils list
- Complete armature tube without gasket:  
G3/8-G3/4 Code R450691
- Gasket O-ring: Code R990000/B
- Complete diaphragm with plunger:  
G3/8 Code R452126/B  
G12-3/4 Code R452125/B
- Gasket O-ring: G3/8-G3/4 Code R990105

**MAINTENANCE KIT:**

G3/8 KTGHT3K0Y11=4+5  
G1/2-G3/4 KTGHT4K0Y16=4+5



Type	Pipe ISO 228/1	A mm	B mm	C mm
21HT3K0Y110	G3 /8	50	89	56
21HT4K0Y160	G1 /2		100	70
21HT5K0Y160	G3 /4			

COIL TYPE	POWER ABSORPTION			DIMENSIONS		
	W =	Hold VA~	Inrush VA~	D mm	E mm	F mm
B	8	14,5	25	30	42	54
U	12	23	35	36	48	60
G	14	27	43	52	55	67

2-WAY  
COMBINED OP.

2-WAY  
COMBINED OP.



# ODE SOLENOID - 21HF6K to 21HF8K

2 way N.C. | Combined Operation



**PRESENTATION:**

Combined operation S.V. for interception of fluids compatible with construction materials.  
Minimum operational pressure is not required.  
The materials used and the tests carried out ensure maximum reliability and duration.

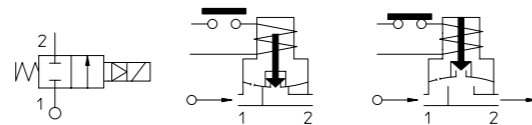
**PIPES:** G1 - G1 1/2

**USE:** Automation, Heating

**VALVE FEATURES:**

8W - Ø13		
BDA - BDS - BSA	155°C	(class F)
BDF - BDV	180°C	(class H)
12W - Ø13		
UDA	155°C	(class F)
14W - Ø13		
GDH - GDV	180°C	(class H)

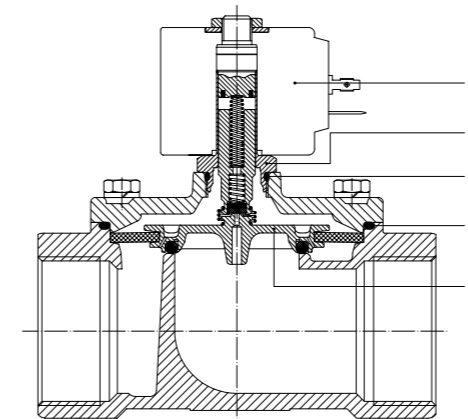
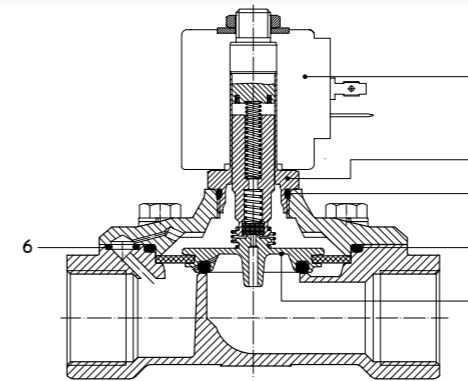
Max. allowable pressure (PS) 16 bar  
Environment temperature:  
With coil class F -10°C + 60°C  
With coil class H -10°C + 80°C



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

For seals other than FKM replace the letter "V" with the ones corresponding to the other seals. E.I. 21HF6K0B250.

Pipe ISO 228/1	Code	Max viscosity		Ø mm	Kv l/mn	Power (watt)	Pressure		
		cSt	°E				minM barA	O.P.D. Cb ar DC bar	
G1	21HF6K0V250	12	~2	25	140	8	01	6	5
						12			16
						14			
G1 1/4	21HF7K0V350	12	~2	35	270	8	01	6	-
						12			6
						14			
G1 1/2	21HF8K0V400	12	~2	40	280	8	01	6	-
						12			6
						14			



**MATERIALS:**

Body  
Armature tube  
Fixed core  
Plunger  
Phase displacement ring  
Spring  
Seal

Brass - UNI EN 12165 CW617N  
Stainless steel AISI series 300  
Stainless steel AISI series 400  
Stainless steel AISI series 400  
Copper - Cu 99,9%  
Stainless steel AISI series 300  
Standard: V=FKM  
On request: E=EPDM, B=NBR

**ORIFICE:**

Brass - UNI EN 12165 CW617N

**ON REQUEST:**

Connector  
Connector conformity

Pg 9 or Pg 11  
ISO 4400

**FEATURES:**

Electrical conformity  
Protection degree

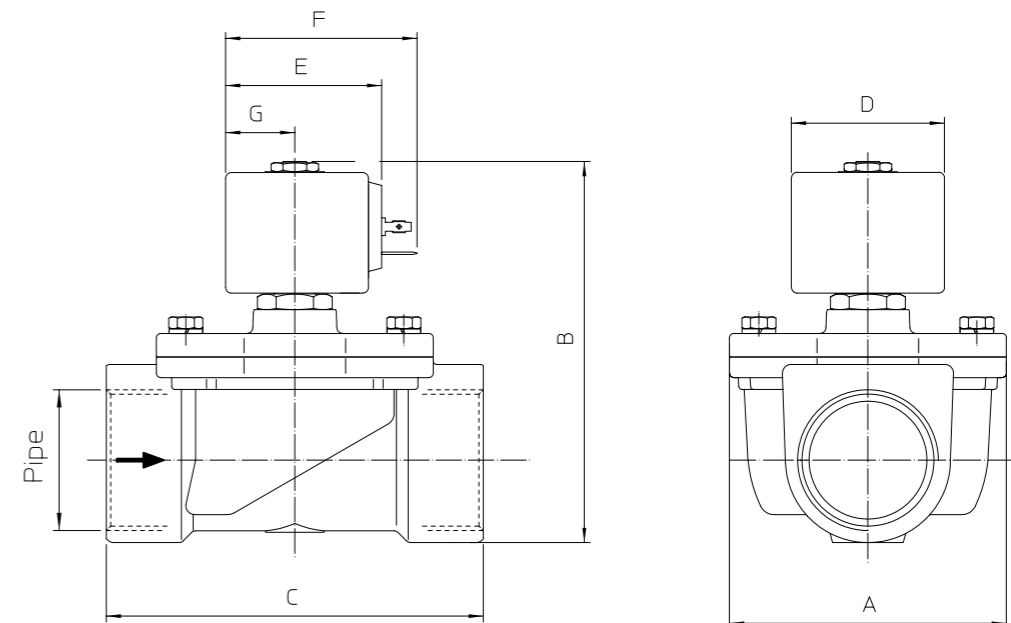
IEC 335  
IP65 EN 60529 (DIN 40050)  
with coil fitted by connector.

**SPARE PARTS:**

- Coil: See coils list
- Complete armature tube: Code R450603
- Gasket O-ring: Code R990000/B
- Gasket O-ring:
  - G1 Code R990153/V
  - G1 1/4 - G1 1/2 Code R992061/V
- Complete diaphragm with plunger:
  - G1 Code R452269/V
  - G1 1/4 - G1 1/2 Code R452395/V
- Gasket O-ring: G1 Code R990002/V

**MAINTENANCE KIT:**

- G1 KTGHF5K0V20=4+5+6
- G1 1/4 - G1 1/2 KTGHF7K0V35=4+5



Type	Pipe ISO 228/1	A mm	B mm	C mm
21HF6K0V250	G1	65	110	104
21HF7K0V350	G1 1/4	94	130	128
21HF8K0V400	G1 1/2			

COIL TYPE	POWER ABSORPTION			DIMENSIONS		
	WH	old VA~	Inrush VA~	D mm	E mm	F mm
B	8	14,5	25	30	42	54
U	12	23	35	36	48	60
G	14	27	43	52	55	67



CE Approval

(Pressure Equipment Directive 97/23/CE)

2-WAY  
COMBINED OP.

# ODE SOLENOID - 31A1A-R

3 way N.C. | Direct Acting



**PRESENTATION:**

Direct acting S.V. for interception of fluids compatible with the construction materials.  
A minimum operational pressure is not required.  
The materials used and the tests carried out ensure maximum reliability and duration.

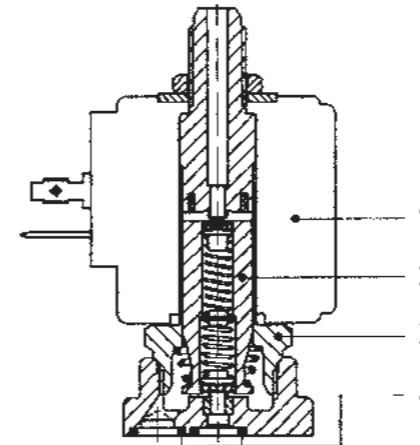
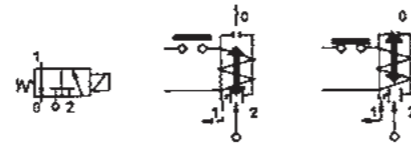
**PIPES:** Subplate mounting

**USE:** Hot water, Steam (180°C)

**COILS:**

8W - Ø13		
BDA - BDS - BSA	155°C	(class F)
BDP	160°C	(high temp.)
BDF	180°C	(class H)
SDH	180°C	(class H)

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



**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: R=Ruby

**ORIFICE:** Insert slot

Stainless steel AISI series 300

**ON REQUEST:**

Connector	Please request
Connector conformity	ISO 4400

**FEATURES:**

Electrical conformity	IEC 335
Protection degree	IP65 EN 60529 (DIN 40050) with coil fitted by connector.

**SPARE PARTS:**

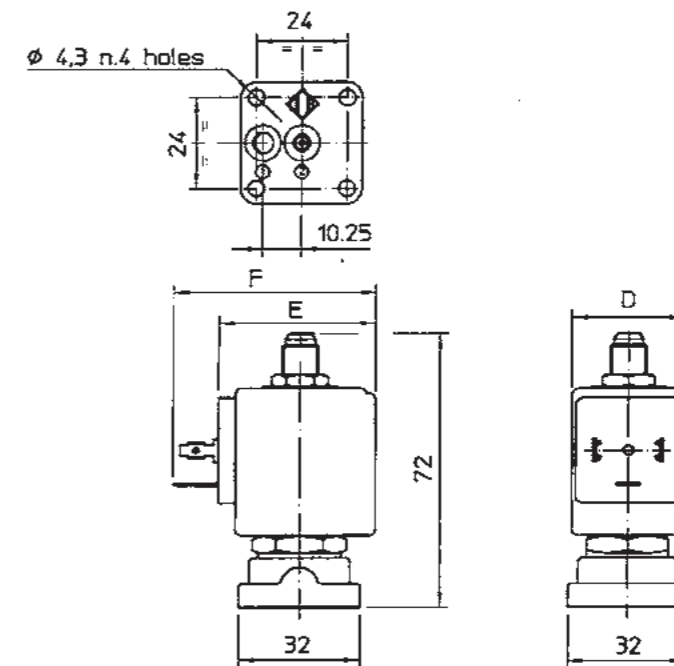
1. Coil: See coils list
2. Complete plunger: Code R450873
3. Complete armature tube: Code R450944/AL
4. Gasket O-Ring: Code R990002/S

**KIT:** KT130 AR 30 - A = 2+3

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				minM bar	.O.P.D. AC bar DC bar	
SUBPLATE MOUNTING	31A1AR10	-	-	1*	0,45	8	0	20	20
	31A1AR15	-	-	1,5*	1,4			15	15
	<b>31A1AR20</b>	-	-	2*	2			10	10
	31A1AR25	-	-	2,5*	3,2			6	6

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.



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		

3-WAY  
DIRECT ACTING

3-WAY  
DIRECT ACTING

# ODE SOLENOID - 31JN1XP

Hose Connection Exhaust | 3 way N.C. | Direct Acting



**PRESENTATION:**

Direct acting S.V. for interception of fluids compatible with the construction materials.  
A minimum operational pressure is not required.  
The materials used and the tests carried out ensure maximum reliability and duration.

**PIPES:** G1/8

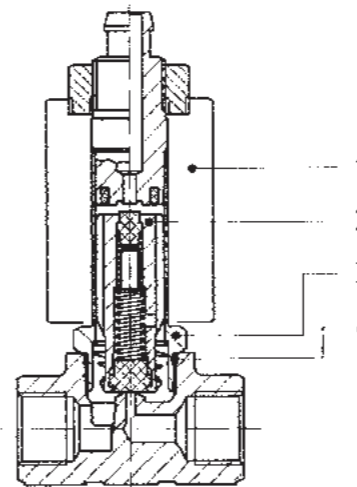
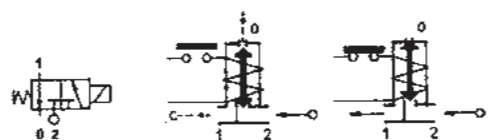
**USE:** Automation, Heating

**COILS:**

5W - Ø10  
LBA 155°C (class F)  
LBF 160°C (class H)

**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



**MATERIALS:**

Body	Brass
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

**ORIFICE:** Brass

**ON REQUEST:**

Connector	Please request
Connector conformity	ISO 4400

**FEATURES:**

Electrical conformity	IEC 335
Protection degree	IP65 EN 60529 (DIN 40050) with coil fitted by connector.

**SPARE PARTS:**

1. Coil: See coils list
2. Complete plunger: Code R4502061/V
3. Complete armature tube: Code R452095
4. Gasket O-Ring: Code R990597/V

**KIT:** KT100XPV25 - IJ = 2+3+4

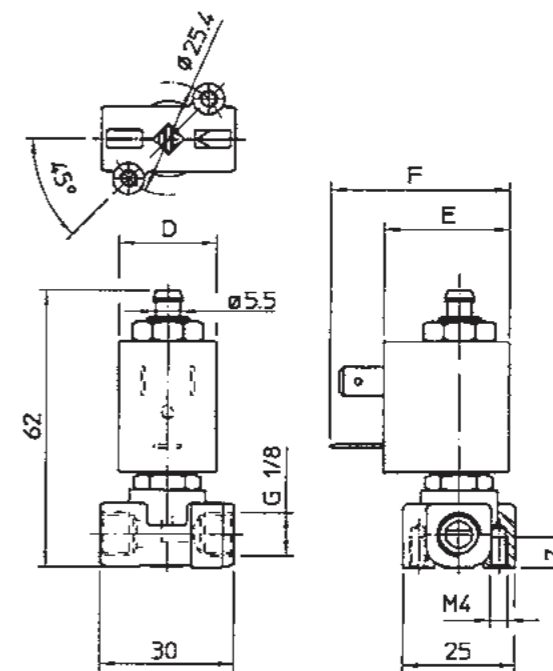
Gaskets	Temperature	Medium
V=FKM (fluoroelastomer)	- 10°C + 140°C	Mineral oils (2°E), gasoline gas oil, fuel oils (5°E)

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	31JN1XPV12	12	~ 2	1,2*	1	5	0	15	-
	31JN1XPV23	37	~ 5	2,3*	2,3			5	

Note: \* 3rd way exhaust= Ø 1,7mm

Also available with brass body without lead.

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



COIL	POWER ABSORPTION		TYPE	DIMENSIONS		
	W	Hold VA~		D mm	E mm	F mm
5W	15	11	L	22	27,5	39,5

3-WAY DIRECT ACTING

3-WAY DIRECT ACTING



# ODE SOLENOID - 31A3A to 31A2A

3 way N.C. | Direct Acting



**PRESENTATION:**

Direct acting S.V. for interception of fluids compatible with the construction materials.  
A minimum operational pressure is not required.  
The materials used and the tests carried out ensure maximum reliability and duration.

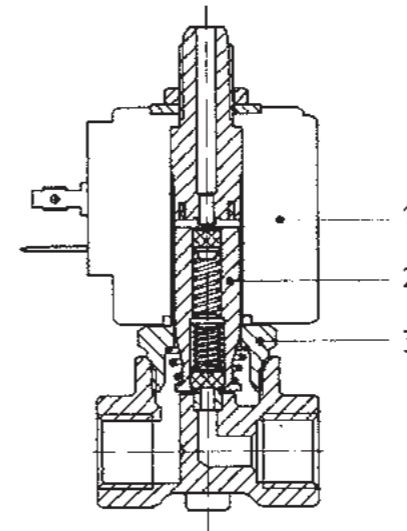
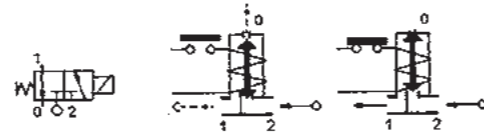
**PIPES:** G1/8 - G1/4

**USE:** Automation, Heating

**COILS:**

8W - Ø13\*  
BDA - BDS - BSA 155°C (class F)  
BDP 160°C (high temp.)  
BDF 180°C (class H)  
SDH 180°C (class H)  
\*Explosion proof housing for coils with electrical connections EN 175301-803 on request.

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



**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	Please request
Connector conformity	ISO 4400

**FEATURES:**

Electrical conformity	IEC 335
Protection degree	IP65 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:** KT130 AV 30 - A = 2+3

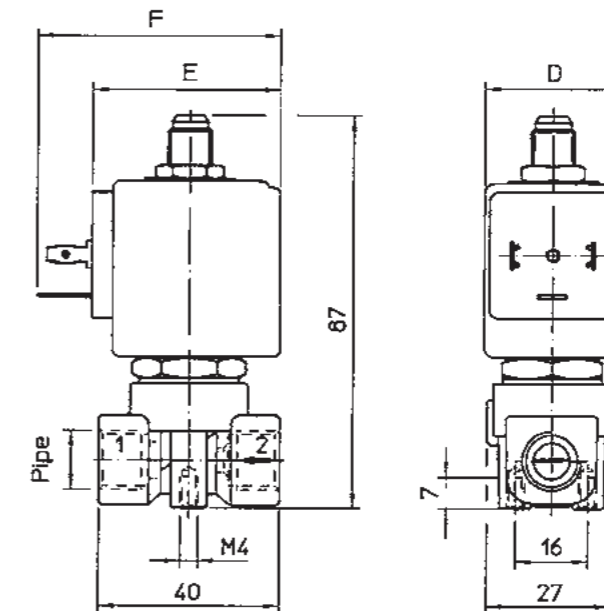
Gaskets	Temperature	Medium
V=FKM (fluoroelastomer)	-10°C +140°C	Mineral oils (2°E), gasoline gas oil
B=NBR (nitrile rubber)	-10°C +90°C	Air, inert gas, water

**HIGHLIGHTED ITEMS ARE EX STOCK**

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

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

Note: \* 3rd way exhaust= Ø 2,5 mm  
Also available with brass body without lead.  
"ODE" reserves the right to carry out technical and aesthetic modifications without prior notification.



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

3-WAY  
DIRECT ACTING

3-WAY  
DIRECT ACTING

# ODE SOLENOID - 4743K0V120

CAR WASH | 2 way N.C. | Modular w/Pilot Control



**PRESENTATION:**

Direct acting S.V. for interception of fluids compatible with the construction materials.  
A minimum operational pressure of 0.1bar is required.  
The materials used and the tests carried out ensure maximum reliability and duration.

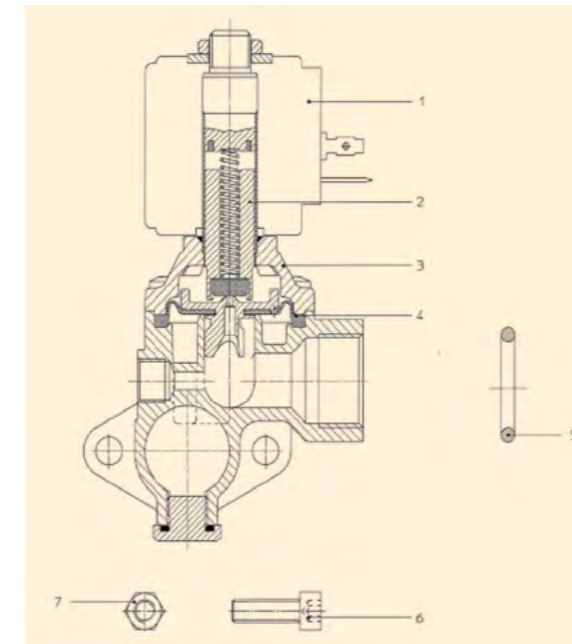
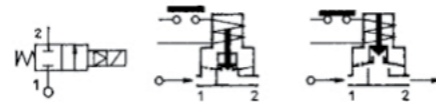
**PIPES:** Inlet Flange - G1/2 Outlet

**USE:** CAR WASH

**COILS:**

8W - Ø13		
BDA-BDS-BSA	155°C	(class F)
BDP	160°C	(high temp.)
BDF	180°C	(class H)
UDA	155°C	(class F)

Moulding and bobbin are made by 100% virgin material  
Max. allowable pressure (PS) 20 bar  
Environment temperature:  
With coil class F and high temperature - 10°C + 60°C  
With coil class H - 10°C + 80°C



**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

**ORIFICE:** Brass - UNI EN 12165 CW617N

**ON REQUEST:**

Connector	Please request
Connector conformity	ISO 4400

**FEATURES:**

Electrical conformity	IEC 335
Protection degree	IP65 EN 60529 (DIN 40050) with coil fitted by connector.

**SPARE PARTS:**

1. Coil: See coils list
2. Complete plunger: Code R451284/V
3. Complete cover with armature tube: Code R450938
4. Complete diaphragm: Code R450916/V
5. Guarnizione: O-Ring: Code 990146/V
6. Screw M5x16: Code 990455
7. Nut M5x4: Code R990468

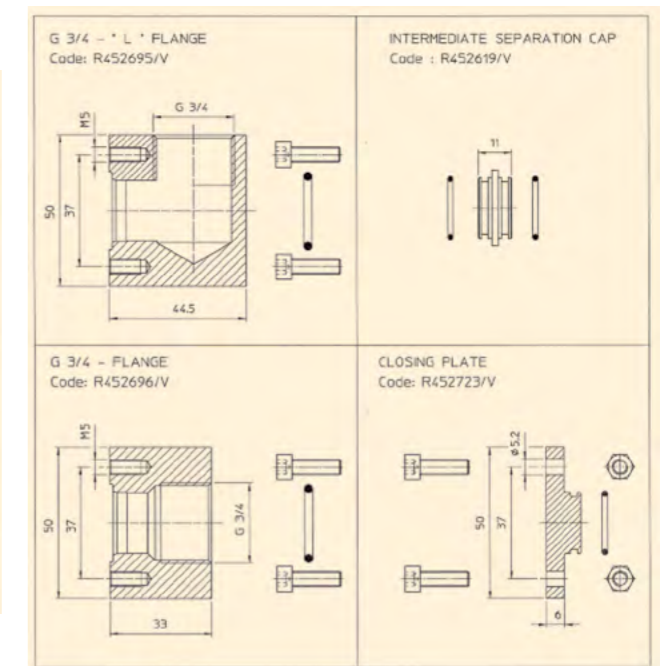
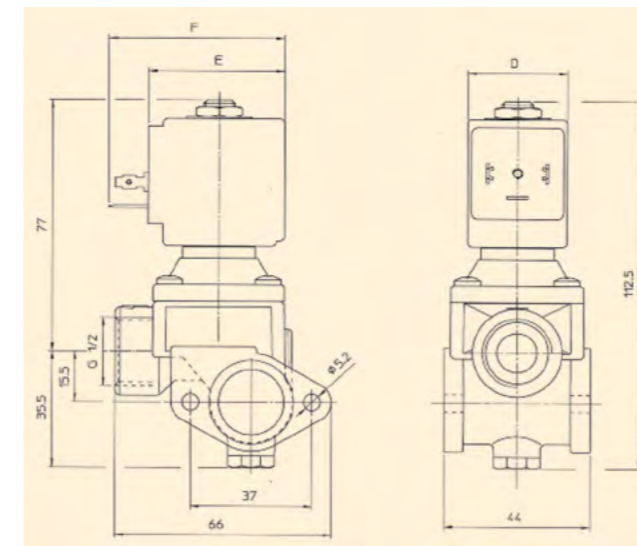
**KIT:** KTG0H7KV12 = 2+4

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

Pipe	Code	Max viscosity		Ø mm	Kv l/mn	Power (watt)	Pressure		
		cSt	°E				min barA	M.O.P.D. Cb ar DC bar	
FLANGE	4743K0V120	12	~2	12	40	8	0,1	16	10
								12	-

Note: Available on request and with minimum quantities.  
"ODE" reserves the right to carry out technical and aesthetic modifications without prior notification.

**SPECIAL ITEM - NOT STANDARD**



COIL W	POWER ABSORPTION		TYPE	DIMENSIONS		
	Inrush VA~	Hold VA~		D mm	E mm	F mm
8W	25	14,5	B	30	42	54
12 W	35	25	U	36	48	60

# ODE SOLENOID - 21K72KR to 26K72KR

2 way N.C. | Flow Regulation/Direct Acting



**PRESENTATION:**

Bank S.V. for automatic drink dispensers.  
A minimum operational pressure is not required.  
The materials used and the tests carried out ensure maximum reliability and duration..

**PIPES:** Next page - (A-B-D-I-L-R)

**USE:** AUTOMATIC DRINK DISPENSERS

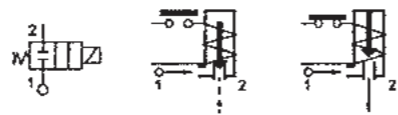
**COILS:**

8W - Ø13		
BDA-BDS-BSA	155°C	(class F)
BDP	160°C	(high temp.)
BDF	180°C	(class H)

**Moulding and bobbin are made by 100% virgin material**

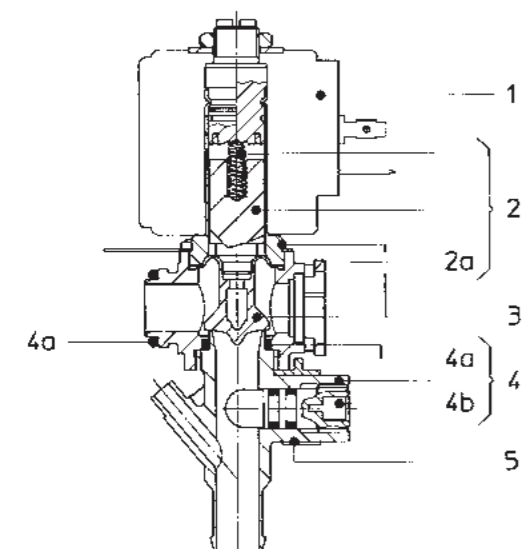
Environment temperature:  
With coil class F and high temperature - 10°C + 60°C  
With coil class H - 10°C + 80°C

Gaskets	Temperature		Medium
	+ 2°C	+100°C	
S=VMQ (silicone)			Water

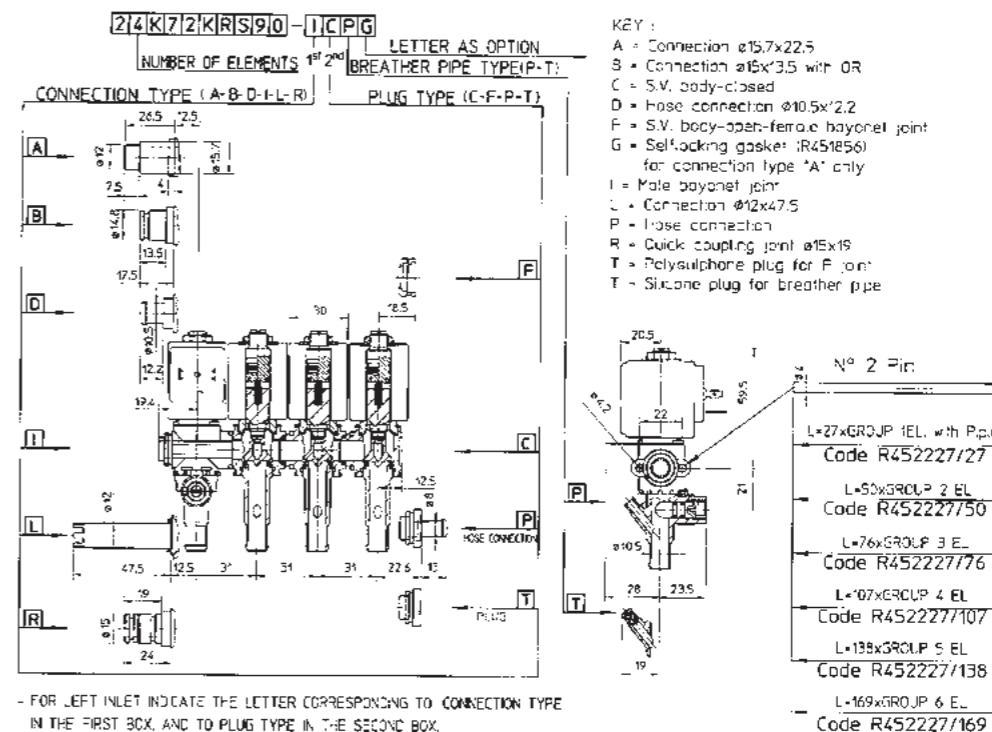


Pipe	Code	Max viscosity		Ø mm	Kv l/mn	Power (watt)	Pressure		
		cSt	°E				min bar	M.O.P.D. AC bar DC bar	
See connection types overleaf (A-B-D-I-L-R)	21K72KRS90-000	-	-	9	*	8	0	0,3	0,3
	22K72KRS90-000								
	23K72KRS90-000								
	24K72KRS90-000								
	25K72KRS90-000								
26K72KRS90-000									

Note: \*Flow rate with head of 80mm = 2,5L/min  
"ODE" reserves the right to carry out technical and aesthetic modifications without prior notification.



NSF CERTIFIED



**MATERIALS:**

- |                            |                                      |
|----------------------------|--------------------------------------|
| Body                       | PSU (Polysulphone)                   |
| Lower body                 | PSU (Polysulphone)                   |
| Lower body clamping device | PA (Polyamide)                       |
| Armature tube              | Brass - UNI EN 12165 CW617N          |
| 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      |
| Bellow membrane            | Standard: S=VMQ<br>On request: W=MFQ |

**SPARE PARTS:**

- Coil: See coils list
- Complete plunger: Code R452491/S
- 2a. Bellow membrane: Code R452489/S
- Complete armature tube: Code R452197
- Lower body assembly: Code R452493
- 4a. Gasket O-Ring: Code R990052/S
- 4b. Flow setting screw with O-Ring: Code R452226
- Lower body clamping device: Code R452259

**KIT:** KR130KRS90-L3 = 2+3

COIL W	POWER ABSORPTION		TYPE
	Inrush VA~	Hold VA~	
8 W	25	14,5	B

DRINK/COFFEE DISPENSERS

DRINK/COFFEE DISPENSERS



# ODE SOLENOID - 21K72RRS to 26K72RR

2 way N.C. | Flow Regulation/Direct Acting



**PRESENTATION:**

Bank S.V. for automatic drink dispensers.  
A minimum operational pressure is not required.  
The materials used and the tests carried out ensure maximum reliability and duration..

**PIPES:** Next page - (A-B-D-I-L-R)

**USE:** AUTOMATIC DRINK DISPENSERS

**COILS:**

12W ED 50% - Ø10  
ICA 155°C (class F)

**Moulding and bobbin are made by 100% virgin material**

Environment temperature: - 10°C + 60°C

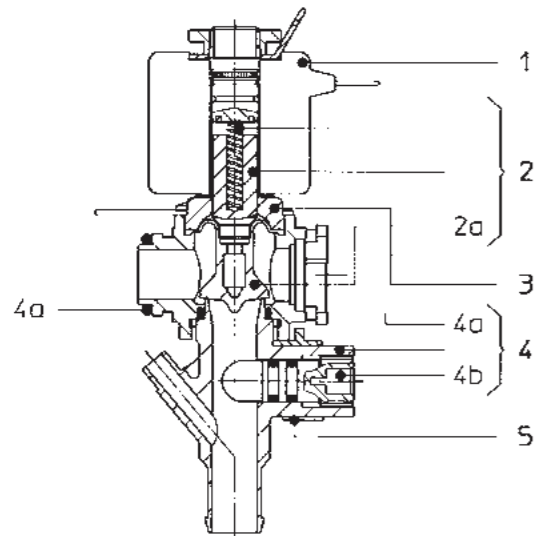


Gaskets	Temperature	Medium
S=VMQ (silicone)	+ 2°C +100°C	Water

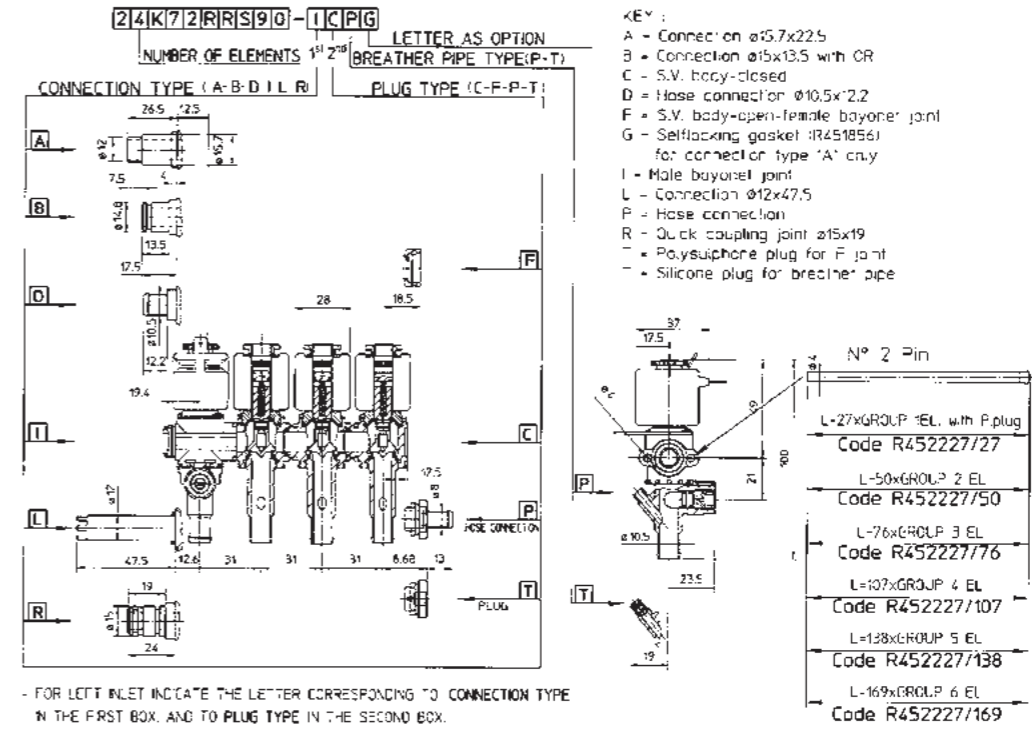
Pipe	Code	Max viscosity		Ø mm	Kv l/mn	Power (watt)	Pressure		
		cSt	°E				min barA	M.O.P.D. C barD C bar	
See connection types overleaf (A-B-D-I-L-R)	21K72RRS90-000	-	-	9	*	12 ED 50%	0	0,3	0,3
	22K72RRS90-000								
	23K72RRS90-000								
	24K72RRS90-000								
	25K72RRS90-000								
26K72RRS90-000									

Note: \* FLOW RATE WITH HEAD OF 80 mm = 2,5 l/min  
Available on request and with minimum quantities.

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



NSF CERTIFIED



- FOR LEFT INLET INDICATE THE LETTER CORRESPONDING TO CONNECTION TYPE IN THE FIRST BOX, AND TO PLUG TYPE IN THE SECOND BOX.  
- FOR RIGHT INLET INDICATE THE LETTER CORRESPONDING TO CONNECTION TYPE IN THE SECOND BOX, AND TO PLUG TYPE IN THE FIRST BOX.

**MATERIALS:**

- Body: PSU (Polysulphone)
- Lower body: PSU (Polysulphone)
- Lower body clamping device: PA (Polyamide)
- Armature tube: Brass - UNI EN 12165 CW617N
- 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
- Bellow membrane: Standard: S=VMQ  
On request: W=MFQ

**SPARE PARTS:**

- 1. Coil: See coils list
- 2. Complete plunger: Code R452236/S
- 2a. Bellow membrane: Code R452224/S
- 3. Complete armature tube: Code R452241
- 4. Lower body assembly: Code R452294
- 4a. Gasket O-Ring: Code R990052/S
- 4b. Flow setting screw with O-Ring: Code R452226
- 4c. Lower body clamping device: Code R452259

**KIT:** KR130RRS90-L2 = 2+3

COIL W	POWER ABSORPTION		TYPE
	Inrush VA~	Hold VA~	
12 W	30	21	I

DRINK/COFFEE DISPENSER

DRINK/COFFEE DISPENSER



- 2 way valves small and large
- 3 way valves small and large
- Vibrator pumps
- Total separation valves for 'instant' machines

- Coffee head valves both flanged and threaded
- Hot and cold water valves
- Steam valves
- Spares, coils and plugs

**Coffee/Head Valves**

- Industry standard sub plate mount
- Or 1/8 or 1/4 ports
- Viton or ruby seats
- Various orifice sizes
- High temperature C



31A1A-R (pg17&18)



31A3A/31A2A (pg21&22)

**Compact size Steam, Hot and Cold water valves**

- 2 and 3 way functions
- 1/8 ports
- Viton seats
- Various orifice sizes
- High temperature coil



21JN1R0 (pg7&8)



31JN1XP (pg19-20)

**Standard size Steam, Hot and Cold water valves**

- 2 and 3 way function
- 1/8 or 1/4 ports
- Viton or ruby seats
- High temperature coil



21A3K (pg3&4)



31A3A (pg21&22)

**Pump – vibrator type**

- Interchangeable with other brands
- High performance
- Rubber mounts available



(for more info contact MVP)

**Total separation valves - for 'Instant' coffee machines**

- Interchangeable with other brands
- Can be single or multiple valves
- Various coil voltages
- Integral flow controls



21K72KR (pg25&26)



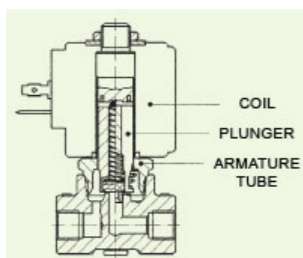
21K72RR (pg27&28)

**Valve Spares**

- Plunger compact 2 way
- Plunger compact 3 way
- Plunger standard 2 way Viton
- Plunger standard 2 way Ruby
- Plunger standard 3 way Viton

- Plunger standard 3 way Ruby
- Armature tube compact 2 way
- O-ring for 2 way armature tube
- Armature tube standard 3 way with hose tail exhaust

- Coil Standard valve 8 watt
- Coil compact valve 5 watt



5Watt (pg30)



8Watt (pg30)



Square DIN (pg30)

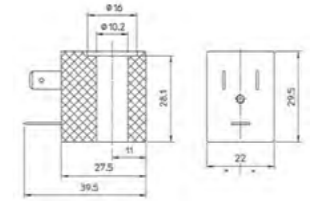


Rectangular DIN (pg30)

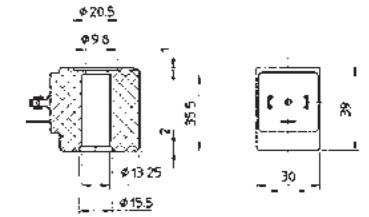
- Plug compact coil rectangular
- Plug standard coil square



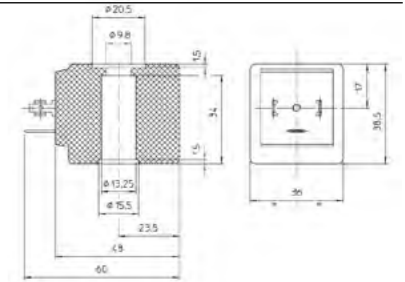
**5 WATT COILS - 22mm x Ø10mm**  
LBA - Molding material: PA - Black Polyamide  
Class F (155°C)



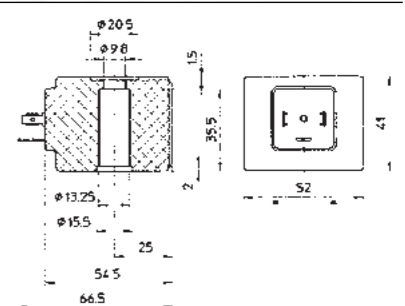
**8 WATT COILS - 30mm x Ø13mm**  
BDA - Molding material: PA - Black Polyamide  
Class F (155°C)



**12 WATT COILS - 36mm x Ø13mm**  
UDA - Molding material: EP - Black Epoxy Resin  
Class F (155°C)



**14 WATT COILS - 52mm x Ø13mm**  
GDH - Molding material: EP - Black Epoxy Resin  
Class H (180°C)



CODE	POWER	VOLTAGE	DESCRIPTION	APPROVALS
5W12D	5 WATT	12 VDC	COMPACT	CE
5W24D	5 WATT	24 VDC	COMPACT	CE
5W24A	5 WATT	24 V 50Hz	COMPACT	CE
5W110A	5 WATT	110 V 50Hz	COMPACT	CE UL
5W230A	5 WATT	230 V 50Hz	COMPACT	CE
12D	8 WATT	12 VDC	STANDARD	
24D	8 WATT	24 VDC	STANDARD	CE
24A	8 WATT	24 VDC	STANDARD	CE
110A	8 WATT	110 V 50Hz	STANDARD	CE
240A	8 WATT	240 V 50Hz	STANDARD	CE
400A	8 WATT	400 V 50Hz	STANDARD	
14W12D	14 WATT	12 VDC	HI PERFORMANCE	
14W24D	14 WATT	24 VDC	HI PERFORMANCE	CE
14W24A	14 WATT	24 V 50Hz	HI PERFORMANCE	CE
14W110A	14 WATT	110 V 50Hz	HI PERFORMANCE	CE
14W220A	14 WATT	220 V 50Hz	HI PERFORMANCE	CE

mpmDIN Square DIN Plug for 8 and 14 WATT Coils



mPmREC Rectangular Plug for 5 WATT Coils



Nominal Voltage DC +10% -5%  
Tolerances: AC +10% -15%

Other voltages and power absorptions available on demand and for quantities.

