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

**21A3K*V*10 ÷ 21A2K*V*55**

## :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 - BSA 155°C (class F)
BDV 180°C (class H)
12W - Ø 13
UDA 155°C (class F)
14W - Ø 13
GDH - GDV 180°C (class H)

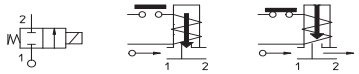
(1) Explosion-proof housing for coils with electrical connections EN 175301-803 on request.

**COIL HOUSING AND COIL FORMER MATERIAL 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 |

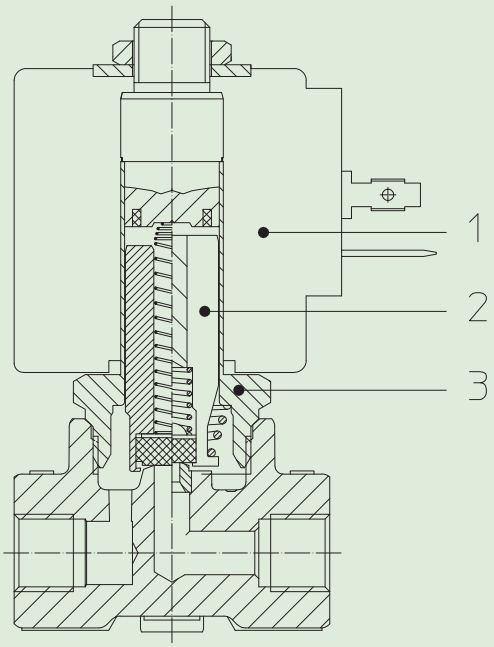
For seals other than FKM replace the letter "**V**" with the ones corresponding to the other seals. E.I. 21A2K**E**20.

Max. allowable pressure (PS) 40 bar
Ambient temperature:
See coils catalogue page for its compatibility.



| Pipe ISO 228/1 | Code | Max viscosity | | Ø | Kv | Power | Pressure | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | min | M.O.P.D. | |
| | | cSt | °E | mm | l/mn | watt | bar | AC bar | DC bar |
| G 1/8 | 21A3K**V**10 | 12 | ~ 2 | 1 | 0,45 | 8 | 0 | 35 | 35 |
| | | | | | | 12 | | | |
| | 21A3K**V**15 | | | 1,5 | 1,4 | 8 | | 30 | 18 |
| | | | | | | | | 22 | 16 |
| | 21A3K**V**20 | 37 | ~ 5 | 2 | 2 | 12 | | 35 | 30 |
| | | | | | | 14 | | | |
| | 21A3K**V**25 | 53 | ~ 7 | 2,5 | 3,2 | 8 | | 14 | 9 |
| | | | | | | 12 | | 30 | 25 |
| | | | | | | 14 | | | |
| | 21A3K**V**30 | | | 3 | 4 | 8 | | 10 | 6 |
| | | | | | | 12 | | 25 | 18 |
| | | | | | | 14 | | | 20 |
| | 21A3K**V**45 | | | 4,5 | 6,5 | 8 | | 5 | 2 |
| | | | | | | 12 | | 12 | 7 |
| | | | | | | 14 | | | 8 |
| G 1/4 | 21A2K**V**10 | 12 | ~ 2 | 1 | 0,45 | 8 | | 35 | 35 |
| | | | | | | 12 | | | |
| | 21A2K**V**15 | | | 1,5 | 1,4 | 8 | | 30 | 18 |
| | | | | | | | | 22 | 16 |
| | 21A2K**V**20 | 37 | ~ 5 | 2 | 2 | 12 | | 35 | 30 |
| | | | | | | 14 | | | |
| | 21A2K**V**25 | 53 | ~ 7 | 2,5 | 3,2 | 8 | | 14 | 9 |
| | | | | | | 12 | | 30 | 25 |
| | | | | | | 14 | | | |
| | 21A2K**V**30 | | | 3 | 4 | 8 | | 10 | 6 |
| | | | | | | 12 | | 25 | 18 |
| | | | | | | 14 | | | 20 |
| | 21A2K**V**45 | | | 4,5 | 6,5 | 8 | | 5 | 2 |
| | | | | | | 12 | | 12 | 7 |
| | | | | | | 14 | | | 8 |
| | 21A2K**V**55 | | | 5,5 | 9 | 8 | | 3 | 1 |
| | | | | | | 12 | | 7 | 2,5 |
| | | | | | | 14 | | 10 | 5 |

**Note** Also available with brass body without lead.




## 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<br>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** | IP 65 EN 60529 (DIN 40050)<br>with coil fitted by connector. |

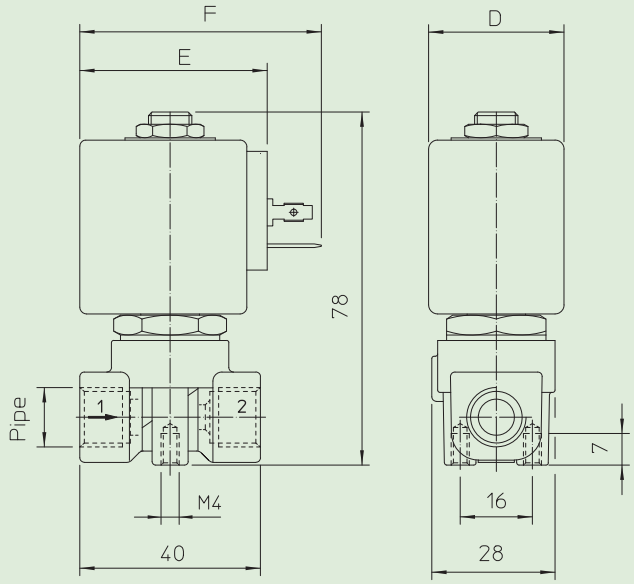
## SPARE PARTS:

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
KT130K***V***30-A=***2+3***
> 3 mm
KT130K***V***55-A=***2+3***

## DIMENSIONS:




| Type | Pipe ISO 228/1 |
|---|---|
| 21A3K**V** | G 1/8 |
| 21A2K**V** | G 1/4 |

| 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 |

# Solenoid valve 2/2 way N.O.
# Direct acting

**21A3Z*R*15D ÷ 21A2Z*R*30G**

## :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 carries out ensure maximum reliability and duration.


**USE:** Hot water, Heating
Steam (180°C)

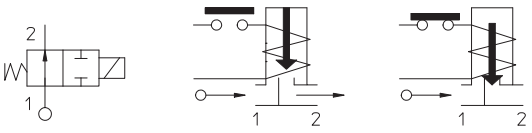
**PIPES:** G 1/8 - G 1/4

**COILS:**

| | | |
|---|---|---|
| 8W - Ø 13 | | |
| BDA - BSA | 155°C | (class F) |
| BDV | 180°C | (class H) |
| 12W - Ø 13 | | |
| UDA | 155°C | (class F) |
| 14W - Ø 13 | | |
| GDH - GDV | 180°C | (class H) |

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

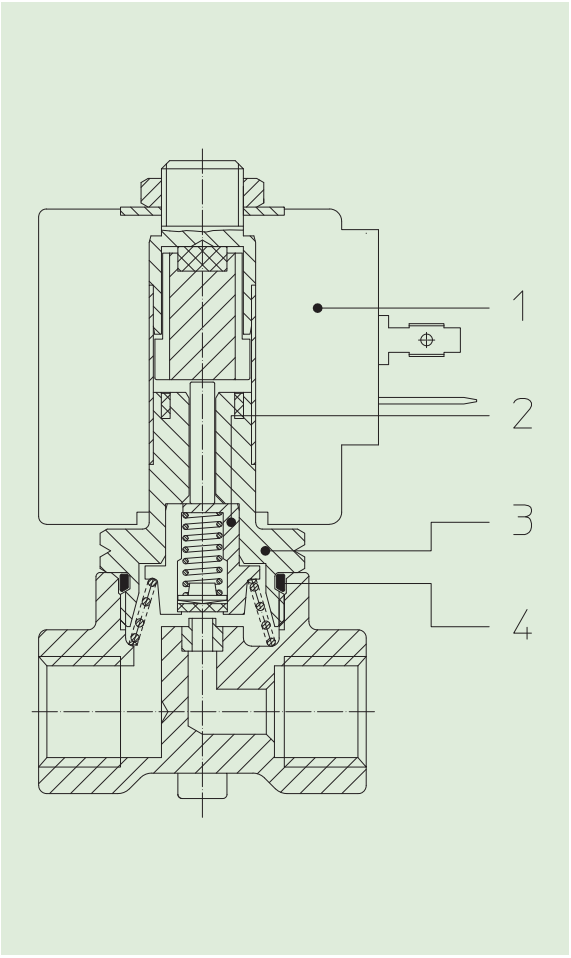
Max. allowable pressure (PS) 40 bar
Ambient temperature:
See coils catalogue page for its compatibility.




| Gaskets | Temperature | | Medium |
|---|---|---|---|
| **R**=RUBY | - 40°C | +180°C | Steam, water, mineral oils (2°E), gas oil, fuel oils (7°E) |

| Pipe ISO 228/1 | Code | Max viscosity | | Ø | Kv | Power | Pressure | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | min | M.O.P.D. | |
| | | cSt | °E | mm | l/mn | watt | bar | AC bar | DC bar |
| G 1/8 | 21A3Z**R**15D | 12 | ~ 2 | 1,5 | 1,4 | 8 | 0 | 35 | 35 |
| | 21A3Z**R**20D | 37 | ~ 5 | 2 | 2 | | | 30 | 30 |
| | 21A3Z**R**25D | 53 | ~ 7 | 2,5 | 3,2 | | | 16 | 16 |
| | 21A3Z**R**25G | | | | | 12 | | 17 | 17 |
| | | | | | | 14 | | | |
| | 21A3Z**R**30D | | | 3 | 4 | 8 | | 10 | 10 |
| | 21A3Z**R**30G | | | | | 12 | | 15 | 15 |
| | | | | | | 14 | | | |
| G 1/4 | 21A2Z**R**15D | 12 | ~ 2 | 1,5 | 1,4 | 8 | | 35 | 35 |
| | 21A2Z**R**20D | 37 | ~ 5 | 2 | 2 | | | 30 | 30 |
| | 21A2Z**R**25D | 53 | ~ 7 | 2,5 | 3,2 | | | 16 | 16 |
| | 21A2Z**R**25G | | | | | 12 | | 17 | 17 |
| | | | | | | 14 | | | |
| | 21A2Z**R**30D | | | 3 | 4 | 8 | | 10 | 10 |
| | 21A2Z**R**30G | | | | | 12 | | 15 | 15 |
| | | | | | | 14 | | | |

**Note**
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.




## 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. |

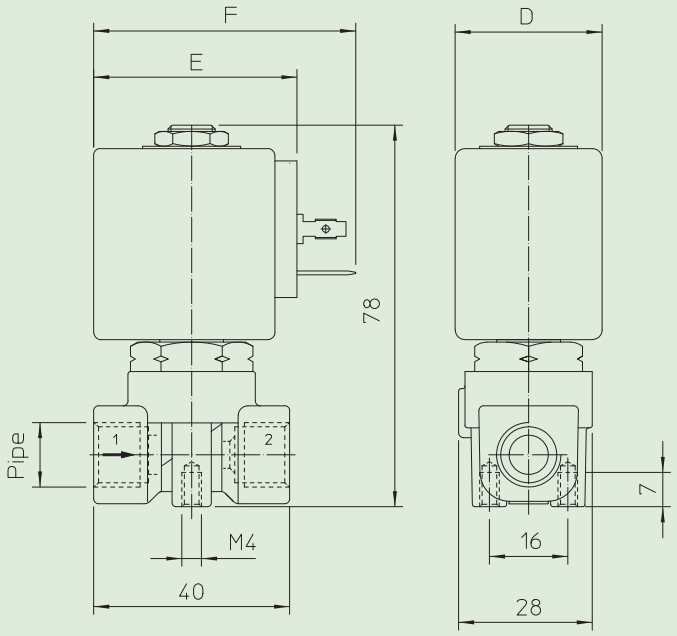
## SPARE PARTS:

1. **Coil:**
   See coils list
2. **Complete diaphragm support:**
   8W Code R450789
   12W - 14W Code R450789/14
3. **Complete armature tube without gasket:**
   Code R450573
4. **Gasket O-Ring:**
   Code R990000/***V***

## KIT:

8W
KT130Z***R***30-F=***2+3+4***
12W - 14W
KT130Z***R***30-G=***2+3+4***

## DIMENSIONS:




| Type | Pipe ISO 228/1 |
|---|---|
| 21A3Z**R** | G 1/8 |
| 21A2Z**R** | G 1/4 |

| 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 |

# 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

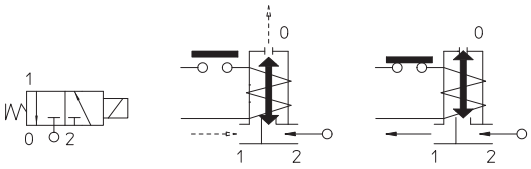
| | | |
|---|---|---|
| BDA - BSA | 155°C | (class F) |
| BDV | 180°C | (class H) |

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

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

Max. allowable pressure (PS) 40 bar
Ambient temperature:
See coils catalogue page for its compatibility.

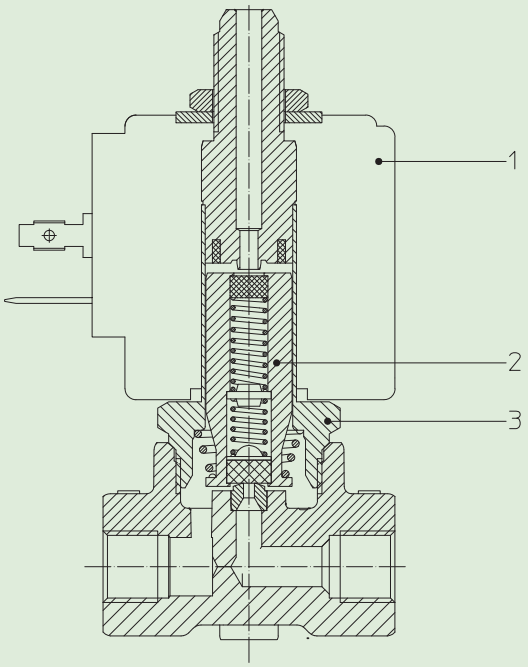
| Gaskets | Temperature | | Medium |
|---|---|---|---|
| **V**=FKM (fluoroelastomer) | - 10°C | +140°C | Mineral oils (2°E),gasoline gas oil |
| **B**=NBR (nitrile rubber) | - 10°C | + 90°C | Air, inert gas, water |




For seals other than FKM replace the letter "**V**" with the ones corresponding to the other seals. E.I. 31A3A**B**15.

| Pipe ISO 228/1 | Code | Max viscosity | | Ø | Kv | Power | Pressure | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | min | M.O.P.D. | |
| | | cSt | °E | mm | l/mn | watt | bar | AC bar | DC bar |
| G 1/8 | 31A3A**V**10 | 12 | ~ 2 | 1* | 0,45 | 8 | 0 | 20 | 20 |
| | 31A3A**V**15 | | | 1,5* | 1,4 | | | 15 | 15 |
| | 31A3A**V**20 | 37 | ~ 5 | 2* | 2 | | | 10 | 10 |
| | 31A3A**V**25 | 53 | ~ 7 | 2,5* | 3,2 | | | 6 | 6 |
| | 31A3A**V**30 | | | 3* | 4 | | | 5 | 5 |
| G 1/4 | 31A2A**V**10 | 12 | ~ 2 | 1* | 0,45 | | | 20 | 20 |
| | 31A2A**V**15 | | | 1,5* | 1,4 | | | 15 | 15 |
| | 31A2A**V**20 | 37 | ~ 5 | 2* | 2 | | | 10 | 10 |
| | 31A2A**V**25 | 53 | ~ 7 | 2,5* | 3,2 | | | 6 | 6 |
| | 31A2A**V**30 | | | 3* | 4 | | | 5 | 5 |

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




## 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<br>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)<br>with coil fitted by connector |

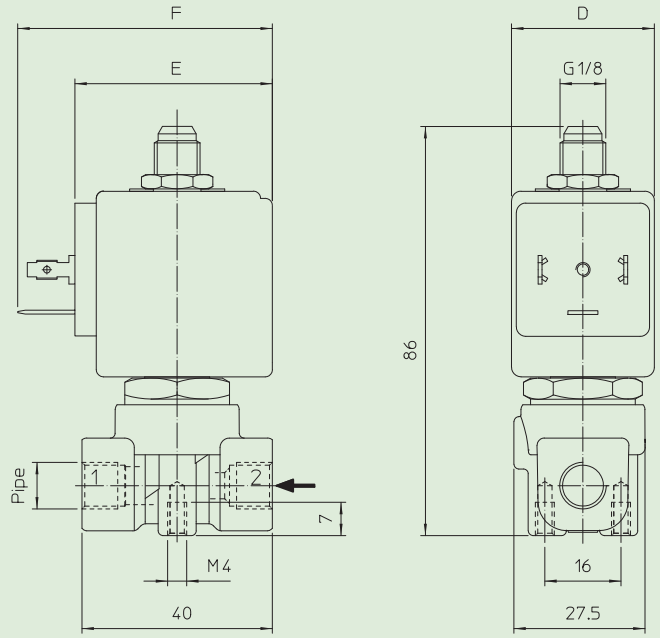
## SPARE PARTS

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

## KIT:

KT130A***V***30-A=***2+3***

## DIMENSIONS:




| Type | Pipe ISO 228/1 |
|---|---|
| 31A3A**V** | G 1/8 |
| 31A2A**V** | G 1/4 |

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

# Solenoid valve 2/2 way N.C.
# With pilot control

**21WA3K0*B*130 ÷ 21WA4K0*B*130**

## PRESENTATION:

S.V. with pilot control for 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.


**USE:** Automation
Heating

**PIPES:** G 3/8 - G 1/2

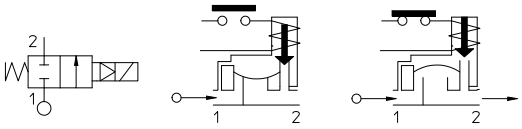
**COILS:** 8W - Ø 13
BDA - BSA 155°C (class F)
BDV 180°C (class H)

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

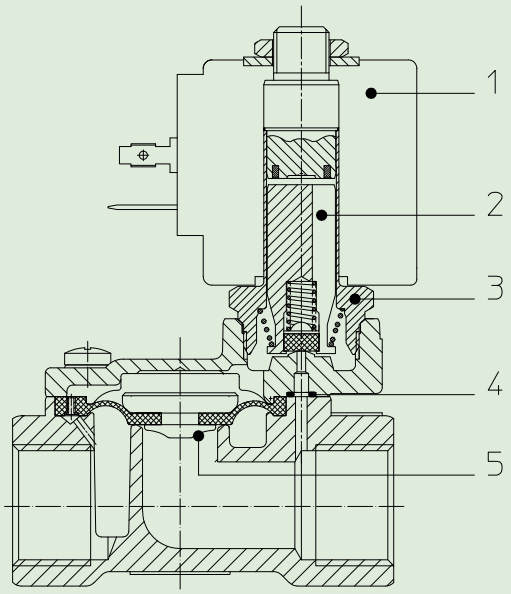
Max. allowable pressure (PS) 25 bar
Ambient temperature:
See coils catalogue page for its compatibility.

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

For seals other than NBR replace the letter "**B**" with the ones corresponding to the other seals. E.I. 21WA3K0**V**130.




| Pipe ISO 228/1 | Code | Max viscosity | | Ø | Kv | Power | Pressure | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | min | M.O.P.D. | |
| | | cSt | °E | mm | l/mn | watt | bar | AC bar | DC bar |
| G 3/8 | 21WA3K0**B**130 | 12 | ~ 2 | 13 | 60 | 8 | 0,2 | 16 | 16 |
| G 1/2 | 21WA4K0**B**130 | | | | 70 | | | | |




## 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<br>On request: V=FKM |
| **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** | IP 65 EN 60529 (DIN 40050)<br>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 diaphragm:**
   Code R452186/***B***

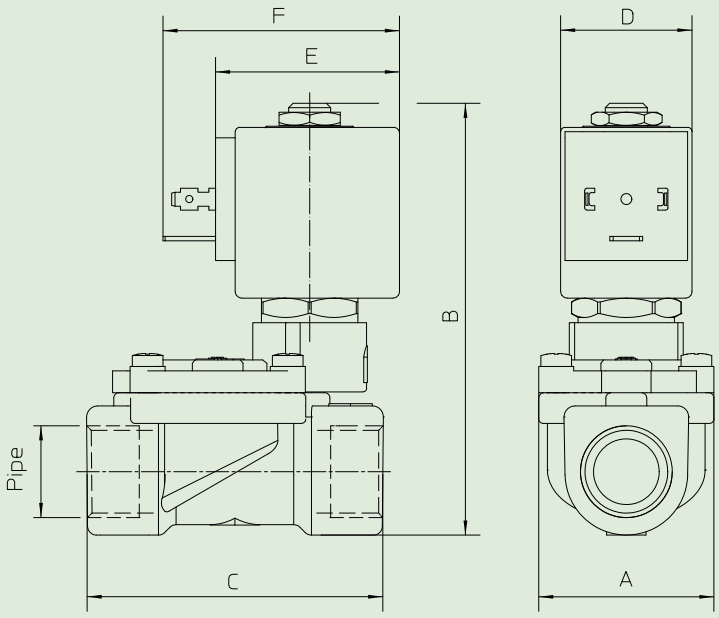
## KIT:

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

## MAINTENANCE KIT:

KTGWA3K0***B***13**= *2+4+5***

## DIMENSIONS:




| Type | Pipe ISO 228/1 | A mm | B mm | C mm |
|---|---|---|---|---|
| 21WA3K0**B**130 | G 3/8 | 40 | 97 | 60 |
| 21WA4K0**B**130 | G 1/2 | | | 66 |

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

# Solenoid valve 2/2 way N.C.
# With pilot control

**21W3K*B*190 ÷ 21W7K*B*500**

## PRESENTATION:

S.V. with pilot control for 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.

## USE:

Automation
Heating

## PIPES:

G 3/4 - G 2

## COILS:

8W - Ø 13

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

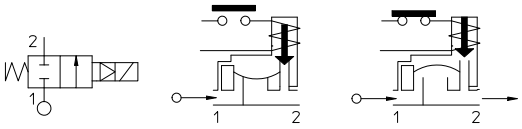
**COIL HOUSING AND COIL FORMER MATERIAL ARE MADE BY 100% VIRGIN MATERIAL.**

Max. allowable pressure (PS)

| | |
|---|---|
| G 3/4 - G 1 | 23 bar |
| G 1 1/4 - G 2 | 16 bar |

Ambient temperature:
See coils catalogue page for its compatibility.

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




For seals other than NBR replace the letter "**B**" with the ones corresponding to the other seals. E.I. 21W3K**E**190.

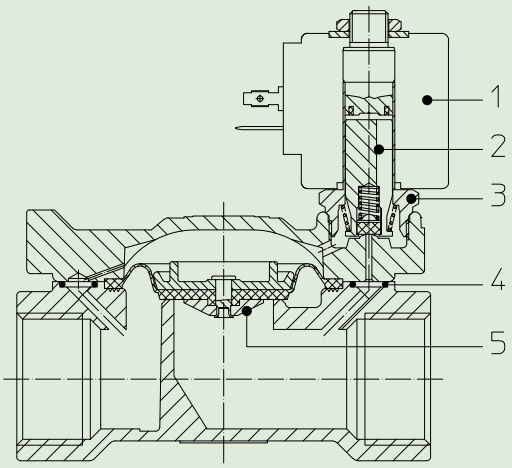
| Pipe ISO 228/1 | Code | Max viscosity | | Ø | Kv | Power | Pressure | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | min | M.O.P.D. | |
| | | cSt | °E | mm | l/mn | watt | bar | AC bar | DC bar |
| G 3/4 | 21W3K**B**190 | 12 | ~ 2 | 19 | 140 | 8 | 0,2 | 16 | 16 |
| G 1 | 21W4K**B**250 | | | 25 | 190 | | | | |
| G 1 1/4 | 21W5K**B**350 | | | 35 | 400 | | | 10 | 10 |
| G 1 1/2 | 21W6K**B**400 | | | 40 | 520 | | | | |
| G 2 | 21W7K**B**500 | | | 50 | 750 | | | | |

CE

**CE Approval**

**(Pressure Equipment Directive 97/23/CE)**

for S.V. 21W5÷21W7




## 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<br>On request: E=EPDM V=FKM |
| **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** | IP 65 EN 60529 (DIN 40050)<br>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:**
   G 3/4-G 1 Code R990002/***B***
   G 1 1/4-G 1 1/2 Code R990005/***B***
   G 2 Code R990081/***B***
5. **Complete diaphragm:**
   G 3/4-G 1 Code R450431/***B***
   G 1 1/4-G 1 1/2 Code R450466/***B***
   G 2 Code R450432/***B***

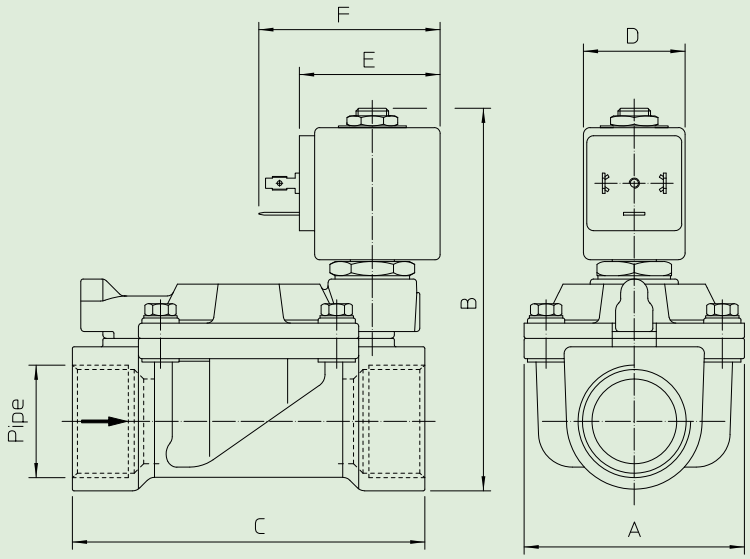
## KIT:

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

## MAINTENANCE KIT:

G 3/4-G 1
KTG0W3K***B***19=***2+4+5***
G 1 1/4-G 1 1/2
KTG0W5K***B***35=***2+4+5***
G 2
KTG0W7K***B***50=**2+4+5**

## DIMENSIONS:




| Type | Pipe ISO 228/1 | A mm | B mm | C mm |
|---|---|---|---|---|
| 21W3K**B**190 | G 3/4 | 65 | 105 | 104 |
| 21W4K**B**250 | G 1 | | 112 | |
| 21W5K**B**350 | G 1 1/4 | 98 | 125 | 144 |
| 21W6K**B**400 | G 1 1/2 | | | |
| 21W7K**B**500 | G 2 | 118 | 141 | 172 |

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