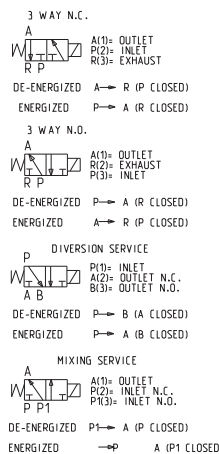
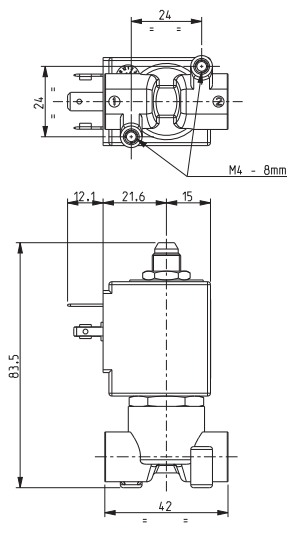


# ASCO™ SOLENOID VALVE

3/2 NC - NO - U (UNIVERSAL SERVICE) – DIRECT ACTING - G 1/4

**SERIES**  
**L321**



## General Features

Direct acting solenoid valve.

Suitable to shut off liquid and gaseous fluids (verify the compatibility of fluid with materials in contact).

| Technical Features              |                                       |
|---------------------------------|---------------------------------------|
| Maximum allowable pressure (PS) | 40 bar                                |
| Opening time                    | ~20ms                                 |
| Closing time                    | ~20ms                                 |
| Fluid temperature               | -10°C +90°C (NBR)<br>0°C +130°C (FPM) |
| Max viscosity                   | 5°E (~37 cStokes or mm²/s)            |

| Materials in Contact with Fluid |                 |
|---------------------------------|-----------------|
| Body                            | Brass           |
| Sealing                         | NBR or FPM      |
| Internal components             | Stainless steel |
| Seat                            | Brass           |
| Guide assembly                  | Stainless steel |
| Shading ring                    | Copper          |

| Coil                   |                                                                                                                          |
|------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Approval               | UL (class F) – for UL cl.H: ZA34 (E153691)                                                                               |
| Continuous duty        | ED 100%                                                                                                                  |
| Encapsulation material | PPS (Polyphenylsulfure) fiberglass reinforced                                                                            |
| Insulation class       | F (155°C) on request class H (180°C)                                                                                     |
| Ambient temperature    | -10°C +50°C                                                                                                              |
| Electric connections   | DIN 46340 - 3 poles connectors (EN175301-803)                                                                            |
| Protection degree      | IP 67 (EN 60529) with plug connector                                                                                     |
| Voltages               | DC <b>ZA10G:</b> 12-24V (+10% -5%)                                                                                       |
|                        | AC <b>ZA10A:</b> 24V/50Hz - 110V/50Hz (120V/60Hz) - 230V/50Hz (+10% -15%)<br>(Other voltages and frequencies on request) |

| Port size<br>ISO 228 | Orifice size<br>(mm) | Differential pressure (bar) |        |    |         | Kv<br>(m³/h) | Series and type |          | Power absorption |    |    | Sealings | Function Notes | Weight<br>(kg) |       |
|----------------------|----------------------|-----------------------------|--------|----|---------|--------------|-----------------|----------|------------------|----|----|----------|----------------|----------------|-------|
|                      |                      | Δp min                      | Δp max |    |         |              |                 |          |                  |    |    |          |                |                |       |
|                      |                      |                             | Gases  |    | Liquids |              |                 |          |                  |    |    |          |                |                |       |
|                      |                      |                             | AC     | DC | AC      |              | DC              |          |                  |    |    |          |                |                |       |
| G 1/4                | 2,3                  | 0                           | 8      | -  | 8       | -            | 0,14            | L321B02C | ZA10A            | 23 | 14 | -        | NBR            | NC - 1         | 0,300 |
|                      |                      |                             | -      | 8  | -       | 8            |                 |          | ZA10G            | -  | -  | 12       |                | NC             |       |
|                      |                      |                             | 8      | -  | 8       | -            |                 | L321V02C | ZA10A            | 23 | 14 | -        | FPM            | NC - 1         |       |
|                      |                      |                             | -      | 8  | -       | 8            |                 |          | ZA10G            | -  | -  | 12       |                | NC             |       |
|                      |                      |                             | 8      | -  | 8       | -            |                 | L321B02A | ZA10A            | 23 | 14 | -        | NBR            | NO – 1-2       |       |
|                      |                      |                             | -      | 8  | -       | 8            |                 |          | ZA10G            | -  | -  | 12       |                | NO - 2         |       |
|                      |                      |                             | 5      | -  | 5       | -            |                 | L321V02G | ZA10A            | 23 | 14 | -        | FPM            | U - 1          |       |
|                      |                      |                             | -      | 5  | -       | 5            |                 |          | ZA10G            | -  | -  | 12       |                | U              |       |

## Notes

- Sealings : NBR = Nitrile-butylene elastomer FPM = Fluoro-carbon elastomer
- NC: Normally closed NO: Normally open U: Universal
- IMQ CSV approval, see ZA10 datasheet for further details
- 1 - On request special coil ZA10X, class "F", with UL homologated windings – see overleaf.
- 2 - Model available on request only: ask for minimum quantity.

**SERIES**  
**L321**

**ASCO™ SOLENOID VALVE**  
3/2 NC - NO - U (UNIVERSAL SERVICE) – DIRECT ACTING - G 1/4

| Coil for Special Voltages ZA10X |                                               |
|---------------------------------|-----------------------------------------------|
| Approval                        | UL (class F); see voltages                    |
| Continuous duty                 | ED 100%                                       |
| Encapsulation material          | PPS (Polyphenylsulfure) fiberglass reinforced |
| Coil insulation class           | F (155°C)                                     |
| Ambient temperature             | -10°C +50°C                                   |

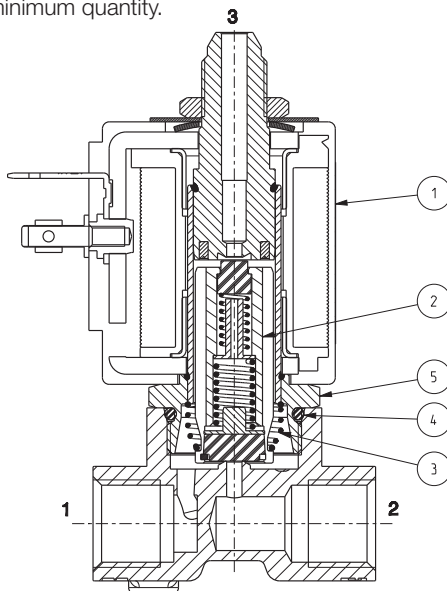
|                      |    |                                                                                                                                           |
|----------------------|----|-------------------------------------------------------------------------------------------------------------------------------------------|
| Electric connections |    | DIN 46340 - 3 poles connectors (EN175301-803)                                                                                             |
| Protection degree    |    | IP 67 (EN 60529) with plug connector                                                                                                      |
| Voltages             | AC | 24V/50-60Hz (UL) • 100V/50-60Hz<br>115-120V/60Hz • 200V/50-60Hz<br>220-230V/50Hz • 208-240V/60Hz (UL)<br>220-240V/50Hz (UL) • (+10% -15%) |

| Port size<br>ISO 228 | Orifice size<br>(mm) | Differential pressure (bar) |        |    |         |    |       | Kv<br>(m³/h) | Series and type |         | Power absorption |        |     | Sealings | Function Notes | Weight<br>(kg) |
|----------------------|----------------------|-----------------------------|--------|----|---------|----|-------|--------------|-----------------|---------|------------------|--------|-----|----------|----------------|----------------|
|                      |                      | Δp min                      | Δp max |    |         |    |       |              |                 |         |                  |        |     |          |                |                |
|                      |                      |                             | Gases  |    | Liquids |    |       |              |                 |         |                  |        |     |          |                |                |
|                      |                      |                             | AC     | DC | AC      | DC | Valve |              | Coil            | AC (VA) |                  | DC (W) |     |          |                |                |
|                      |                      |                             |        |    |         |    |       | Inrush       | Holding         |         |                  |        |     |          |                |                |
| G 1/4                | 2,3                  | 0                           | 8      | -  | 8       | -  | 0,14  | L321B02C     | ZA10X           | 23      | 14               | -      | NBR | NC       | 0,380          |                |
|                      |                      |                             | 8      |    | 8       |    |       | L321V02C     |                 |         |                  |        | FPM | NC       |                |                |
|                      |                      |                             | 8      |    | 8       |    |       | L321B02A     |                 |         |                  |        | NBR | NO - 1   |                |                |
|                      |                      |                             | 5      |    | 5       |    |       | L321V02G     |                 |         |                  |        | FPM | UF       |                |                |

**Notes**

- Sealings : NBR = Nitrile-butylene elastomer FPM = Fluoro-carbon elastomer
- NC: Normally closed NO: Normally open U: Universal
- 1 - Model available on request only; ask for minimum quantity.

**Spare Parts**



| Kit description        |            | Kit P.N.                | Consisting of:                                                       |
|------------------------|------------|-------------------------|----------------------------------------------------------------------|
| Core kit               | L321B02C   | G3038405                | Core pos. 2<br>Core return spring pos. 3<br>OR guide assembly pos. 4 |
|                        | L321V02C   | G3038404                |                                                                      |
|                        | L321B02A   | G3064902                |                                                                      |
|                        | L321V02G   | G3065101                |                                                                      |
| Core return spring kit | L321B-V02C | G3065701                | N.10 core return spring pos. 3                                       |
|                        | L321B02A   | G3063601                |                                                                      |
|                        | L321V02G   | G3022401                |                                                                      |
| OR guide assembly kit  | L321B02C-A | GU2421000017            | N.10 OR guide assembly pos. 5                                        |
|                        | L321V02C-G | GU2424000017            |                                                                      |
| Guide assembly         |            | 297779-001R             | Guide pipe assembly pos. 5                                           |
| Coil                   |            | ZA10A<br>ZA10G<br>ZA10X | Coil pos. 1                                                          |

**Installation**

- Solenoid valve can be mounted in any position; vertical with coil upwards preferred.