

# AB

## Miniature electropilots U2

Direct intervention electropilots with poppet valve system and bottom cushioned seals

- Assembly on sub-base
- Threaded connections on the body
- CNOMO interface
- Orientable coil (360°) separated from mechanical part
- Versions: 2/2 3/2 - NC NO
- Original Univer SPEED modular sub-base



### TECHNICAL CHARACTERISTICS

|                            |  |           |          |           |
|----------------------------|--|-----------|----------|-----------|
| Ambient temperature        | -10 ÷ +50 °C   |           |          |           |
| Fluid temperature          | max +95 °C   |           |          |           |
| Fluid                      | filtered air 10 µm, lubricated or not<br>(upon request other fluids can be used) |           |          |           |
| Commutation system         | direct intervention poppet valve system with cushioned seals                     |           |          |           |
| Ways/Positions             | <b>2/2 NC, 3/2 NC, 3/2 NO<sup>(a)</sup></b>                                      |           |          |           |
| Pressure                   | 2/2, 3/2 NC = 0 ÷ 10<br>3/2 NO = 3 ÷ 10  |           |          |           |
| Control                    | electric   |           |          |           |
| Return                     | mechanical spring  |           |          |           |
| Connections                | on sub-base or with threaded connections on the body                             |           |          |           |
|                            | sub-base   | G 1/8     | M5       | CNOMO     |
| Nominal Ø (mm)             | 2,1 ÷ 2,4  | 2,1 ÷ 2,4 | 1,6 ÷ 6  | 2,1 ÷ 2,4 |
| Nominal flow rate (NI/min) | 92 ÷ 150   | 100 ÷ 155 | 95 ÷ 650 | 92 ÷ 110  |

### CONSTRUCTIVE CHARACTERISTICS

Materials see features below

### ELECTRIC CHARACTERISTICS

|                   |   |
|-------------------|---|
| Series            | U2  |
| Coil              | DB  |
| Power consumption | 11W (DC) - 10 VA (AC)                             |
| Connector         | AM 5111   |
| Voltage           | 12 V DC - 24 V DC - 24 V AC - 110 V AC - 230 V AC |

For other electric features see section "Accessories>Coils"

(a) = Mechanical part designed to keep the air supply always from the body  
(Useful in case of assembly of more NC-NO pilots in series to have a unique supply port)



U2 2/2 - 3/2 Electropilot for assembling on sub-base

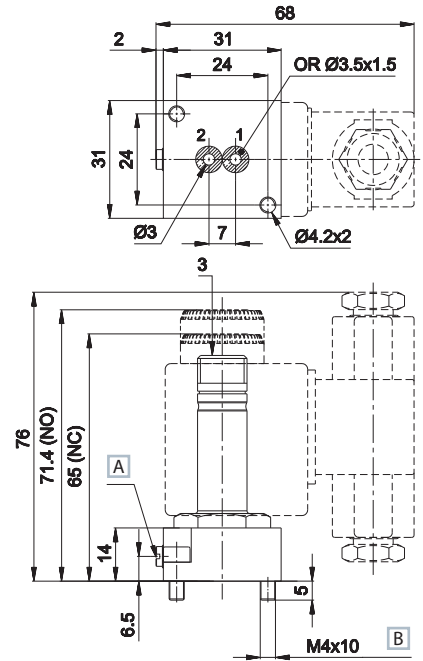


**Material:**  
 valve body zamak  
 sleeve treated brass  
 core and spring stainless steel  
 seals nitrile rubber

**Weight (Kg):** 0,125

|               | Symbol | Ø (d)<br>mm | Flow rate (NI/min) |     | Times (ms) |        | Manual<br>override | Part no. |
|---------------|--------|-------------|--------------------|-----|------------|--------|--------------------|----------|
|               |        |             | 1→2                | 2→3 | En.        | De-en. |                    |          |
| 3/2 NC        |        | 2,4         | 150                | 160 | 13         | 10     | —                  | AB-0681  |
| 3/2 NC        |        | 2,4         | 150                | 160 | 13         | 10     | ⊖                  | AB-0687  |
| 2/2 NC        |        | 2,1         | 130                | -   | 13         | -      | —                  | AB-0722  |
| 2/2 NC        |        | 2,1         | 130                | -   | 13         | -      | ⊖                  | AB-0728  |
| 3/2 NO<br>(c) |        | 2,4         | 92                 | 148 | 14         | 10     | (e)                | AB-0685  |

Sub-base: SPEED U2. Available upon request: stainless steel sleeve - other inner diameters.



**A** Manual override  
**B** ISO 4762  
 1 = Supply port  
 2 = Use  
 3 = Exhaust

U2 2/2 - 3/2 G1/8 Electropilot

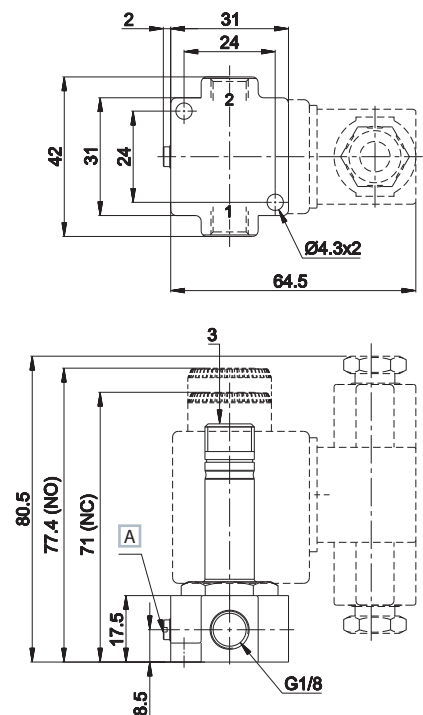


**Material:**  
 valve body zamak  
 sleeve treated brass  
 core and spring stainless steel  
 seals nitrile rubber

**Weight (Kg):** 0,145

|               | Symbol | Ø (d)<br>mm | Flow rate (NI/min) |     | Times (ms) |        | Manual<br>override | Part no. |
|---------------|--------|-------------|--------------------|-----|------------|--------|--------------------|----------|
|               |        |             | 1→2                | 2→3 | En.        | De-en. |                    |          |
| 3/2 NC        |        | 2,4         | 155                | 210 | 13         | 10     | —                  | AB-0751  |
| 3/2 NC        |        | 2,4         | 155                | 210 | 13         | 10     | ⊖                  | AB-0757  |
| 2/2 NC        |        | 2,1         | 155                | -   | 12         | -      | —                  | AB-0765  |
| 2/2 NC        |        | 2,1         | 155                | -   | 12         | -      | ⊖                  | AB-0771  |
| 3/2 NO<br>(c) |        | 2,4         | 100                | 150 | 14         | 11     | (e)                | AB-0755  |

Available upon request: stainless steel sleeve - other inner diameters.



**A** Manual override  
 1 = Supply port  
 2 = Use  
 3 = Exhaust

(c) = close the exhaust of the 3/2 NO electropilot to get the 2/2 NO one. (d) = the Ø shown on the 3/2 valves refers to the exhaust. ⊖ = with 2 position screw.  
 (e) = manual override on AM-5203 ring nut

Electropilots are supplied without coil, connector and locking ring

U2 3/2 G1/4 Electropilot

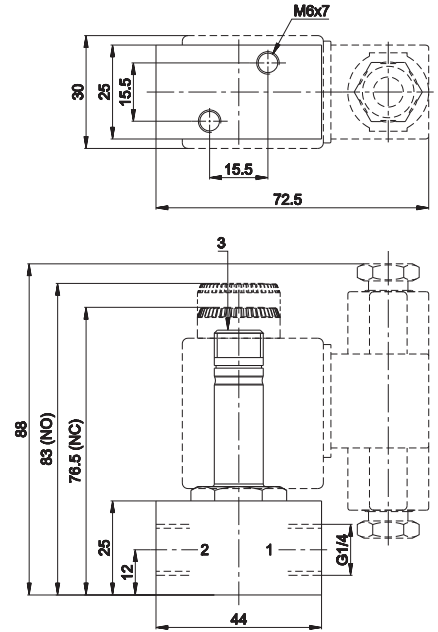


**Material:**  
 valve body brass  
 sleeve treated brass  
 core and spring stainless steel  
 seals nitrile rubber

Weight (Kg): 0,225

| Symbol         | Ø (d)<br>mm | Flow rate (NI/min) |     | Times (ms) |      | Manual<br>override | Part no. |
|----------------|-------------|--------------------|-----|------------|------|--------------------|----------|
|                |             | 1→2                | 2→3 | Ecc.       | Dis. |                    |          |
| 3/2 NC<br>     | 2,1         | 200                | 210 | 13         | 11   | —                  | AB-0822  |
| 3/2 NO (c)<br> | 2,1         | 95                 | 160 | 12         | 10   | (e)                | AB-0819  |

Suitable for use with non-aggressive liquids. Upon request: stainless steel body and sleeve.



1 = Supply port  
 2 = Use  
 3 = Exhaust

U2 2/2 G1/4 Electropilot

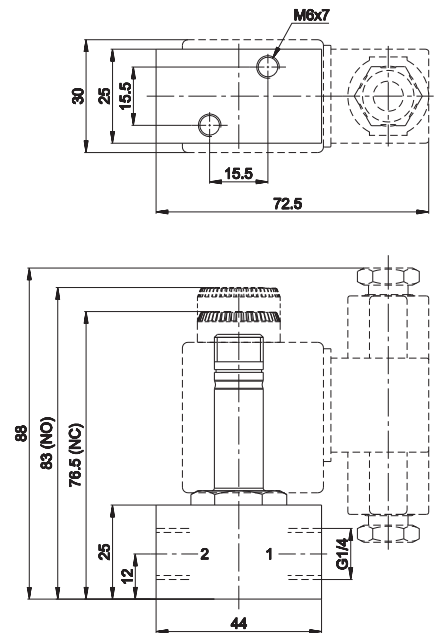


**Material:**  
 valve body brass  
 sleeve treated brass  
 core and spring stainless steel  
 seals nitrile rubber

Weight (Kg): 0,220

| Symbol     | Ø (d)<br>mm | Flow rate<br>(NI/min) | Pressure<br>bar | Times (ms) |       | Part no. |
|------------|-------------|-----------------------|-----------------|------------|-------|----------|
|            |             |                       |                 | En.        | De-en |          |
| 2/2 NC<br> | 1,6         | 108                   | 0÷30            | 6          | -     | AB-0824  |
|            | 2           | 165                   | 0÷20            | 9          | -     | AB-0825  |
|            | 2,4         | 210                   | 0÷15            | 11         | -     | AB-0826  |
|            | 3           | 280                   | 0÷10            | 12         | -     | AB-0827  |
|            | 3,5         | 350                   | 0÷9             | -          | 10    | AB-0828  |
|            | 4           | 450                   | 0÷8             | -          | 13    | AB-0829  |
|            | 4,5         | 500                   | 0÷7             | -          | 13    | AB-0830  |
|            | 5           | 550                   | 0÷6,5           | -          | 16    | AB-0831  |
|            | 5,5         | 600                   | 0÷6             | -          | 21    | AB-0832  |
|            | 6           | 650                   | 0÷5             | -          | 29    | AB-0833  |

Suitable for use with non-aggressive liquids.



1 = Supply port  
 2 = Use

|  |                 |  |
|--|-----------------|--|
|  | Coil U2 - 17 VA | Voltage<br>24V AC - 50/60 Hz DB-0607<br>110V AC - 50/60 Hz DB-0608<br>220V AC - 50/60 Hz DB-0610 |
|--|-----------------|--|

(c) = close the exhaust of the 3/2 NO electropilot to get the 2/2 NO one. (d) = the Ø shown on the 3/2 valves refers to the exhaust. ⊖ = with 2 position screw.  
 (e) = manual override on AM-5203 ring nut

Electropilots are supplied without coil, connector and locking ring

U2 CNOMO 2/2 - 3/2 Electropilot for mounting on sub-bases SPEED U2

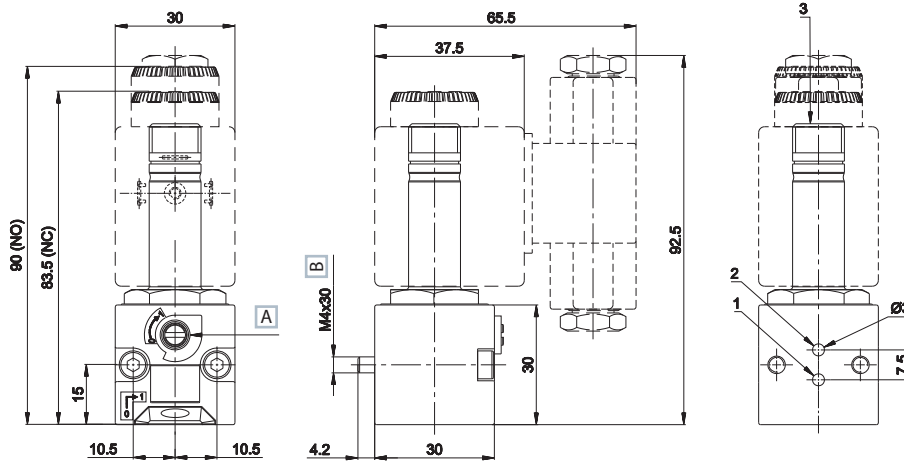


|                  |                 |
|------------------|-----------------|
| <b>Material:</b> |                 |
| valve body       | technopolymer   |
| sleeve           | treated brass   |
| core and spring  | stainless steel |
| seals            | nitrile rubber  |

Weight (Kg): 0,155

| Symbol | Ø (d)<br>mm | Flow rate (NI/min) |     | Times (ms) |        | Manual<br>override | Part no. |
|--------|-------------|--------------------|-----|------------|--------|--------------------|----------|
|        |             | 1→2                | 2→3 | En.        | De-en. |                    |          |
|        | 2,4         | 110                | 170 | 13         | 12     | ⊖                  | AB-0885  |
|        | 2,1         | 115                | -   | 12         | -      | ⊖                  | AB-0886  |
|        | 2,4         | 92                 | 148 | 13         | 10     | (e)                | AB-0888  |

Sub-base: SPEED U2. Available upon request: brass valve body (without manual override). Zamak valve body. Stainless steel sleeve - other inner diameters.

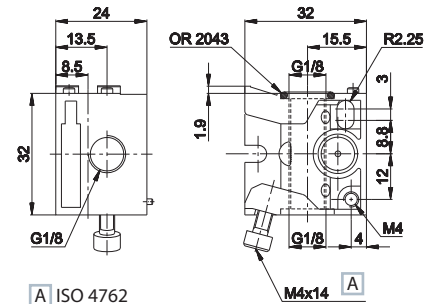


- A Override manual
- B ISO 4762
- 1 = Supply port
- 2 = Use
- 3 = Exhausts

Modular sub-base SPEED series U2 G1/8



| Electropilot | Connections | Material | Weight<br>kg | Part no. |
|--------------|-------------|----------|--------------|----------|
| U2 for base  | G 1/8       | zamak    | 0,075        | AB-0900  |



**Advantages**

The original UNIVER "Speed" series was realized to solve some operational problems

- Possibility of defining the number of sube-bases at the moment of use
- Possibility of freely increasing or reducing the number of elements
- Quick assembly with special screw (built-in) standard supplied
- Reduction of stock holding
- Easy technical intervention

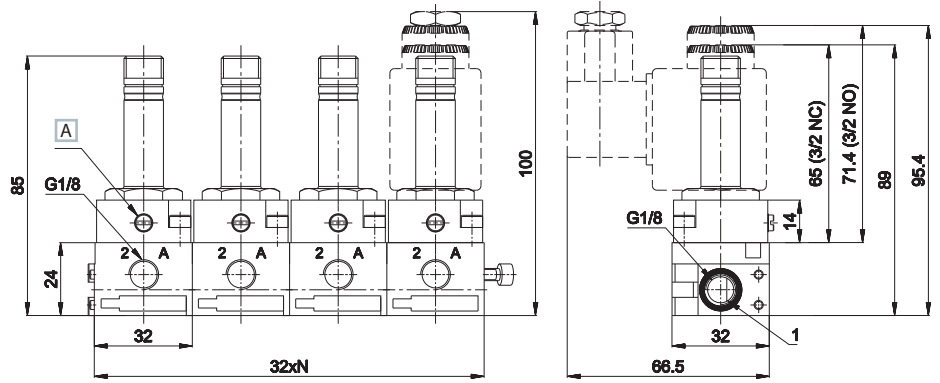
Air supply is rotated by 90° in comparison with side consumption  
Standard (built-in) screw and O-Ring

**When assembling the manifold, put the bases on a flat surface and tighten the screw until the manifold is perfectly aligned.**

(c) = close the exhaust of the 3/2 NO electropilot to get the 2/2 NO one (d) = the Ø shown on the 3/2 valves refers to the exhaust ⊖ = with 2 position screw  
(e) = manual override on ring nut AM-5203

Electropilots are supplied without coil, connector and locking ring

U2 G1/8 Sub-base

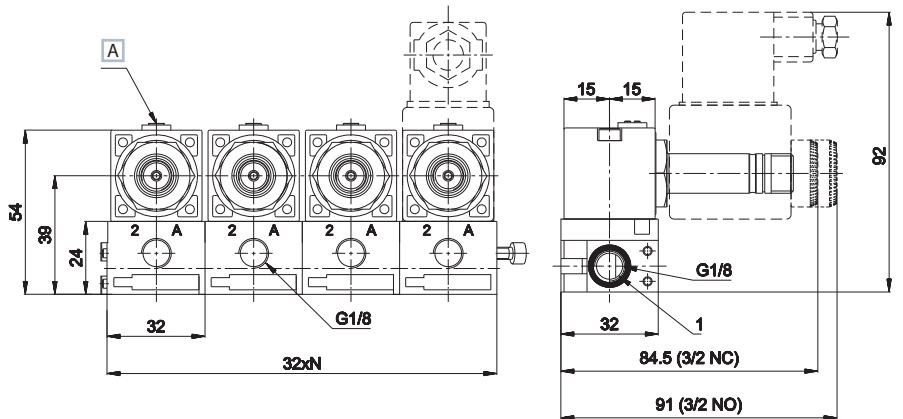


A Manual override

1 = Supply port  
2 - A = Use

N = Number of valve position

U2 G1/8 CNOMO Sub-base



A Manual override

1 = Supply port  
2 - A = Use

N = Number of valve position