

## Valves Series

### Solenoid Valves



**01V**

Pg. 18.3

### Inox Solenoid Valves



**X1V**

Pg. 18.42

### Solenoid Valves



**07V**

Pg. 18.50

### Namur Solenoid Valves



**08V**

Pg. 18.53

### Miniature Electropilots U1



**AA**

Pg. 18.60

### Universal Valves G1/8 - G1/4



**CL - CM**

Pg. 18.67

### Rotary Hand Lever Valves



**12V**

Pg. 18.96

### Micro Valves



**AI JET**

Pg. 18.99

### Micro Valves



**AI JET2**

Pg. 18.104

### 16mm Valves - Mechanical and Manual Operators



**CH**

Pg. 18.107

### Pedal Valves



**AM**

Pg. 18.110

## FIELDBUS Valves Series

### Fieldbus Electropneumatic Valves



**16V**

Pg. 18.114

### Fieldbus Electropneumatic Valves



**17V**

Pg. 18.121

## ISO Valves Series

### Valves ISO 5599 - Size 1 - 2 - 3 - 4



**BE**

Pg. 18.156

## COILS & CONNECTORS Series

### Solenoid and Connectors



**Coils & Connectors**

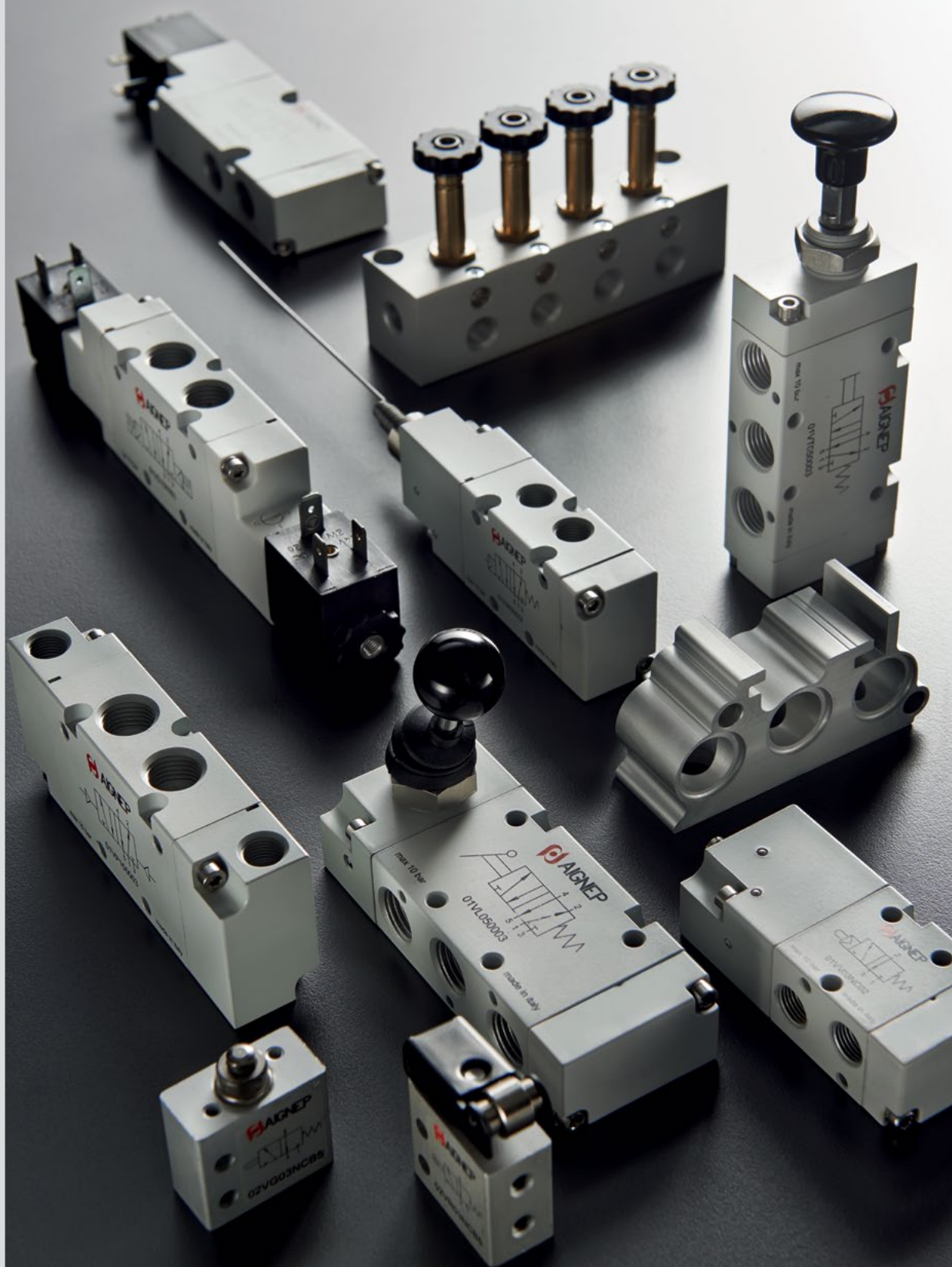
Pg. 18.169

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MANUAL, PNEUMATIC, SOLENOID PILOT,  
FIELDBUS AND ISO VALVES

# Valves Series



## BE SERIES - VALVES ISO 5599/1



### ISO 5599/1 Valves

- Compliant with international ISO 5599/1 standards
- Complete range: sizes 1 - 2 - 3 - 4
- Two switching systems available: mixed and spool type
- High flow rate
- Short internal stroke
- No lubrication required
- Version with M12 electrical connection for the Automotive industry (sizes 1 - 2 - 3)
- Modular and individual manifolds available
- Possibility of combining different sub-base sizes through dedicated interfaces



|                            |                                                                                                     |        |        |        |
|----------------------------|-----------------------------------------------------------------------------------------------------|--------|--------|--------|
| Fluid                      | 50 µm filtered air (mixed system)<br>50 µm filtered air, with or without lubrication (spool system) |        |        |        |
| Ambient temperature        | +14 ÷ +122 °F (-10 ÷ +50 °C)                                                                        |        |        |        |
| Fluid temperature          | Max +122 °F (+50 °C)                                                                                |        |        |        |
| Commutation system         | mixed system, spool system                                                                          |        |        |        |
| Ways/Positions             | 5/2, 5/3                                                                                            |        |        |        |
| Pressure                   | Max 145 psi (10 bar)                                                                                |        |        |        |
| Control                    | indirect electro-pneumatic, pneumatic                                                               |        |        |        |
| Return                     | mechanical spring, pneumomechanical spring, pneumatic, electric                                     |        |        |        |
| Connections                | ISO 5599/1 interface                                                                                |        |        |        |
|                            | size 1                                                                                              | size 2 | size 3 | size 4 |
| Nominal Ø (mm)             | 8                                                                                                   | 10     | 15     | 19     |
| Nominal flow rate (NI/min) | 1480                                                                                                | 2300   | 4200   | 6600   |
| Valve body                 | acetalic resin                                                                                      |        |        |        |
| Cover                      | aluminium                                                                                           |        |        |        |
| Seals                      | mixed system: nitrile rubber and polyurethane<br>spool system: nitrile rubber                       |        |        |        |
| Sub-base                   | zamak - aluminium                                                                                   |        |        |        |
| Actuators                  | technopolymer                                                                                       |        |        |        |
| Spool                      | aluminium                                                                                           |        |        |        |
| Electropilot               | AA series                                                                                           |        |        |        |
| Coil                       | series U3                                                                                           |        |        |        |
| Power consumption          | 2,5 W (DC) - 5 VA (AC)                                                                              |        |        |        |
| Voltage                    | 12 V DC - 24 V DC - 24 V AC - 110 V AC - 230 V AC                                                   |        |        |        |
| Connector                  | CONU 3                                                                                              |        |        |        |
| Manual override            | impulse screw - 2 positions, button with tool (BE)<br>recessed button - 1 position (BE12)           |        |        |        |

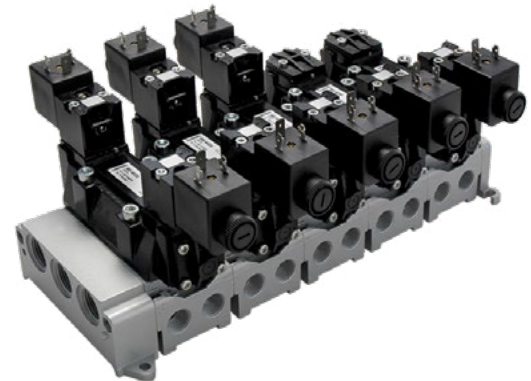


### Reference Standard

II 2G Ex h IIC T5 Gb



II 2D Ex h IIIC T100°C Db



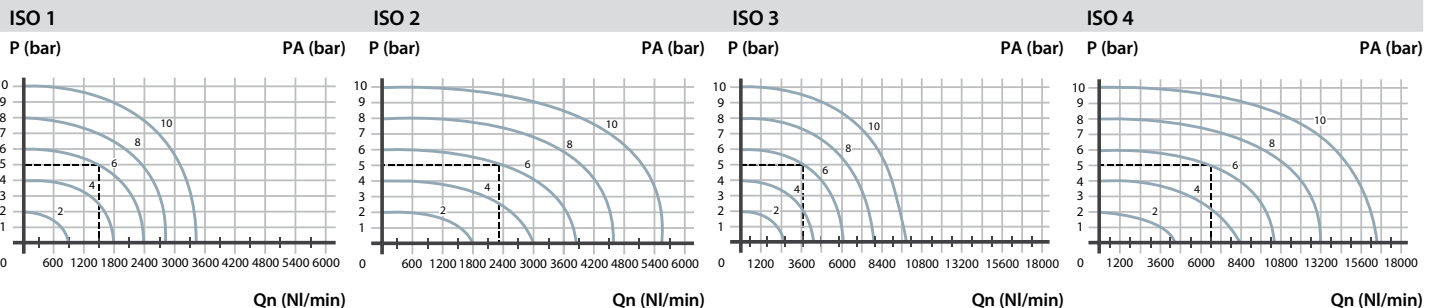
**MIXED**  
for heavy applications



**SPOOL**  
for all applications



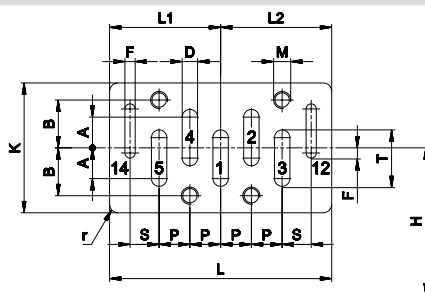
### FLOW RATE CHARACTERISTICS



P = Working pressure  
PA = Supply pressure  
Qn = Nominal flow rate

## ISO 5599/1 STANDARD

The ISO standard for pneumatic valves is accepted by industry and by the majority of the main important pneumatic valve manufactures throughout the world. The choice of valves according to ISO standard guarantees to the user the interchangeability of both the valve body and the electromagnetic part.



1 = Supply port  
3 - 5 = Exhaust  
2 - 4 = Use  
12 - 14 = Pilots

|       | A           | B          | D          | F        | H          | K          | L           | L1           | L2           | M  | P         | r          | S           | T            |
|-------|-------------|------------|------------|----------|------------|------------|-------------|--------------|--------------|----|-----------|------------|-------------|--------------|
| ISO 1 | .354 (9)    | .551 (14)  | .177 (4.5) | .118 (3) | 1.693 (43) | 1.496 (38) | 2.559 (65)  | 1.280 (32.5) | 1.280 (32.5) | M5 | .354 (9)  | .098 (2.5) | .335 (8.5)  | .650 (16.5)  |
| ISO 2 | .394 (10)   | .748 (19)  | .276 (7)   | .118 (3) | 2.205 (56) | 1.969 (50) | 3.189 (81)  | 1.594 (40.5) | 1.594 (40.5) | M6 | .472 (12) | .118 (3)   | .394 (10)   | .866 (22)    |
| ISO 3 | .453 (11.5) | .945 (24)  | .394 (10)  | .157 (4) | 2.795 (71) | 2.520 (64) | 4.173 (106) | 2.087 (53)   | 2.087 (53)   | M8 | .630 (16) | .157 (4)   | .512 (13)   | 1.142 (29)   |
| ISO 4 | .571 (14.5) | 1.142 (29) | .512 (13)  | .157 (4) | 3.228 (82) | 2.913 (74) | 5.591 (142) | 3.051 (77.5) | 2.539 (64.5) | M8 | .787 (20) | .157 (4)   | .610 (15.5) | 1.437 (36.5) |

fixes the dimensions of the bearing surface of the valve and provides accommodation between two contiguous planes while guaranteeing, at the time of replacement, that any suitable valve can be inserted in the manifold assembly. It also provides a clear numbering system for the ports. Main connecting ports:

(e.g. single electrical impulse solenoid mounted side 14 single pneumatic impulse control at 14)



## Key



Screwdriver adjustment



Pressure applied with a tool

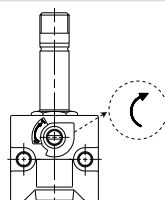


Manual adjustment

## MANUAL CONTROL STANDARD



TWO-POSITION SCREWDRIVER

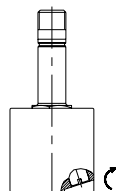

Standard **BE**

## MANUAL CONTROLS ON REQUEST



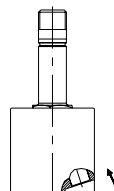
TWO-POSITION SCREWDRIVER

LETTER TO BE ADDED AT THE END OF THE ELECTROPILOT CODE

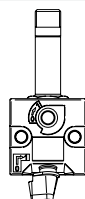

**A**  
EXAMPLE:  
**UBE 5150A**


PRESSURE-OPERATED WITH TOOL

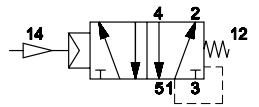
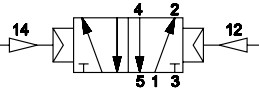
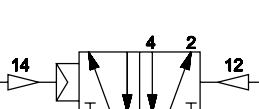
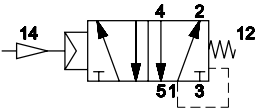
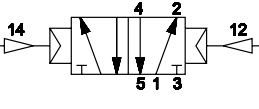
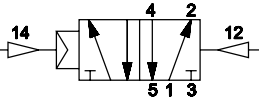
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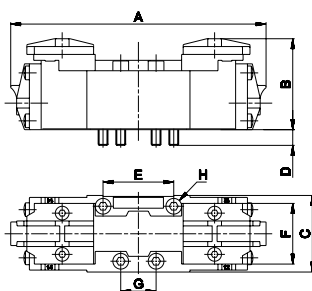

**U**  
EXAMPLE:  
**UBE 5150U**


LEVER


**R**  
EXAMPLE:  
**UBE 5150R**

## PNEUMATIC IMPULSE

|                                                                                   | Code         | Way          | Size ISO | Control 14          | Return 12                              | Pressure psi (bar)  | Response Time (ms)  |    | Weight lb (kg) |                                                                                       |                                                                                      |
|-----------------------------------------------------------------------------------|--------------|--------------|----------|---------------------|----------------------------------------|---------------------|---------------------|----|----------------|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|                                                                                   | MIXED SYSTEM |              |          |                     |                                        |                     |                     |    |                |                                                                                       |                                                                                      |
|  | UBE 3100     | 5/2          | 1        | pneumatic amplified | pneumatic + spring                     | 29 ÷ 145 (2 ÷ 10)   | 9                   | 18 | 0.66 (0.30)    |    |                                                                                      |
|                                                                                   | UBE 4100     | 5/2          | 2        | pneumatic amplified | pneumatic + spring                     | 33 ÷ 145 (2.3 ÷ 10) | 11                  | 14 | 0.88 (0.40)    |                                                                                       |                                                                                      |
|                                                                                   | UBE 5100     | 5/2          | 3        | pneumatic amplified | pneumatic + spring                     | 36 ÷ 145 (2.5 ÷ 10) | 19                  | 49 | 1.43 (0.65)    |                                                                                       |                                                                                      |
|                                                                                   | UBE 6100     | 5/2          | 4        | pneumatic amplified | pneumatic + spring                     | 44 ÷ 145 (3 ÷ 10)   | 23                  | 46 | 1.92 (0.87)    |                                                                                       |                                                                                      |
|                                                                                   | UBE 3150     | 5/2          | 1        | pneumatic amplified | pneumatic amplified                    | 15 ÷ 145 (1 ÷ 10)   | 5                   | 5  | 0.66 (0.30)    |    |                                                                                      |
|                                                                                   | UBE 4150     | 5/2          | 2        | pneumatic amplified | pneumatic amplified                    | 15 ÷ 145 (1 ÷ 10)   | 6                   | 6  | 0.88 (0.40)    |                                                                                       |                                                                                      |
|                                                                                   | UBE 5150     | 5/2          | 3        | pneumatic amplified | pneumatic amplified                    | 15 ÷ 145 (1 ÷ 10)   | 10                  | 10 | 1.43 (0.65)    |                                                                                       |                                                                                      |
|                                                                                   | UBE 6150     | 5/2          | 4        | pneumatic amplified | pneumatic amplified                    | 19 ÷ 145 (1.3 ÷ 10) | 12                  | 12 | 1.92 (0.87)    |                                                                                       |                                                                                      |
|                                                                                   | UBE 3170     | 5/2          | 1        | pneumatic amplified | pneumatic non-amplified (differential) | 29 ÷ 145 (2 ÷ 10)   | 5                   | 16 | 0.66 (0.30)    |    |                                                                                      |
|                                                                                   | UBE 4170     | 5/2          | 2        | pneumatic amplified | pneumatic non-amplified (differential) | 29 ÷ 145 (2 ÷ 10)   | 6                   | 13 | 0.88 (0.40)    |                                                                                       |                                                                                      |
|                                                                                   | UBE 5170     | 5/2          | 3        | pneumatic amplified | pneumatic non-amplified (differential) | 32 ÷ 145 (2.2 ÷ 10) | 10                  | 35 | 1.43 (0.65)    |                                                                                       |                                                                                      |
|                                                                                   | UBE 6170     | 5/2          | 4        | pneumatic amplified | pneumatic non-amplified (differential) | 32 ÷ 145 (2.2 ÷ 10) | 12                  | 32 | 1.92 (0.87)    |                                                                                       |                                                                                      |
|                                                                                   |              | SPOOL SYSTEM |          |                     |                                        |                     |                     |    |                |                                                                                       |                                                                                      |
|                                                                                   |              | UBE 3800     | 5/2      | 1                   | pneumatic amplified                    | pneumatic + spring  | 26 ÷ 145 (1.8 ÷ 10) | 11 | 22             | 0.66 (0.30)                                                                           |  |
|                                                                                   |              | UBE 4800     | 5/2      | 2                   | pneumatic amplified                    | pneumatic + spring  | 29 ÷ 145 (2 ÷ 10)   | 13 | 19             | 0.88 (0.40)                                                                           |                                                                                      |
|                                                                                   |              | UBE 5800     | 5/2      | 3                   | pneumatic amplified                    | pneumatic + spring  | 32 ÷ 145 (2.2 ÷ 10) | 21 | 52             | 1.43 (0.65)                                                                           |                                                                                      |
| UBE 6800                                                                          |              | 5/2          | 4        | pneumatic amplified | pneumatic + spring                     | 41 ÷ 145 (2.8 ÷ 10) | 24                  | 29 | 1.92 (0.87)    |                                                                                       |                                                                                      |
| UBE 3850                                                                          |              | 5/2          | 1        | pneumatic amplified | pneumatic amplified                    | 12 ÷ 145 (0.8 ÷ 10) | 6                   | 6  | 0.66 (0.30)    |  |                                                                                      |
| UBE 4850                                                                          |              | 5/2          | 2        | pneumatic amplified | pneumatic amplified                    | 15 ÷ 145 (1 ÷ 10)   | 7                   | 7  | 0.88 (0.40)    |                                                                                       |                                                                                      |
| UBE 5850                                                                          |              | 5/2          | 3        | pneumatic amplified | pneumatic amplified                    | 15 ÷ 145 (1 ÷ 10)   | 12                  | 12 | 1.43 (0.65)    |                                                                                       |                                                                                      |
| UBE 6850                                                                          |              | 5/2          | 4        | pneumatic amplified | pneumatic amplified                    | 15 ÷ 145 (1 ÷ 10)   | 14                  | 14 | 1.92 (0.87)    |                                                                                       |                                                                                      |
| UBE 3870                                                                          |              | 5/2          | 1        | pneumatic amplified | pneumatic non-amplified (differential) | 22 ÷ 145 (1.5 ÷ 10) | 6                   | 15 | 0.66 (0.30)    |  |                                                                                      |
| UBE 4870                                                                          |              | 5/2          | 2        | pneumatic amplified | pneumatic non-amplified (differential) | 26 ÷ 145 (1.8 ÷ 10) | 7                   | 14 | 0.88 (0.40)    |                                                                                       |                                                                                      |
| UBE 5870                                                                          |              | 5/2          | 3        | pneumatic amplified | pneumatic non-amplified (differential) | 29 ÷ 145 (2 ÷ 10)   | 12                  | 38 | 1.43 (0.65)    |                                                                                       |                                                                                      |
| UBE 6870                                                                          |              | 5/2          | 4        | pneumatic amplified | pneumatic non-amplified (differential) | 29 ÷ 145 (2 ÷ 10)   | 14                  | 31 | 1.92 (0.87)    |                                                                                       |                                                                                      |

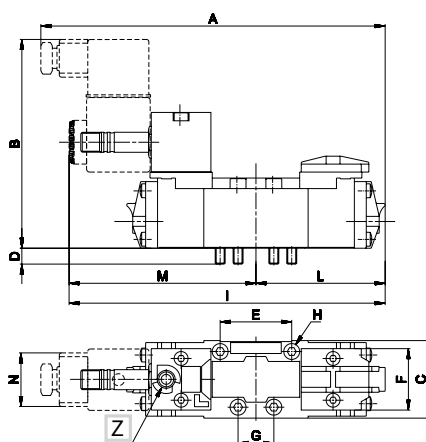
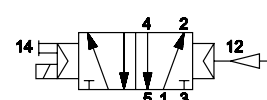
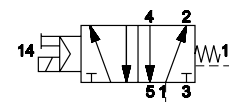
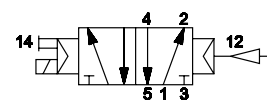
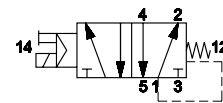


|   | ISO 1       | ISO 2       | ISO 3       | ISO 4       |
|---|-------------|-------------|-------------|-------------|
| A | 5.039 (128) | 5.709 (145) | 7.520 (191) | 8.740 (222) |
| B | 1.850 (47)  | 1.850 (47)  | 2.480 (63)  | 2.480 (63)  |
| C | 1.535 (39)  | 2.047 (52)  | 2.520 (64)  | 2.913 (74)  |
| D | .197 (5)    | .197 (5)    | .394 (10)   | .394 (10)   |
| E | 1.417 (36)  | 1.890 (48)  | 2.520 (64)  | 3.150 (80)  |
| F | 1.102 (28)  | 1.496 (38)  | 1.890 (48)  | 2.283 (58)  |
| G | .709 (18)   | .945 (24)   | 1.260 (32)  | 1.575 (40)  |
| H | M5x38       | M6x35       | M8x50       | M8x50       |

For manual version with button, add "U" to the end of the part number  
The solenoid valves are supplied without coil and connector.

## SINGLE ELECTRIC IMPULSE

| Code         | Way | Size ISO | Control 14         | Return 12           | Pressure psi (bar)  | Response Time (ms) En. | De-en. | Weight lb (kg) |
|--------------|-----|----------|--------------------|---------------------|---------------------|------------------------|--------|----------------|
| MIXED SYSTEM |     |          |                    |                     |                     |                        |        |                |
| UBE 3000     | 5/2 | 1        | electric amplified | pneumatic + spring  | 29 ÷ 145 (2 ÷ 10)   | 20                     | 32     | 0.82 (0.37)    |
| UBE 4000     | 5/2 | 2        | electric amplified | pneumatic + spring  | 33 ÷ 145 (2.3 ÷ 10) | 24                     | 25     | 1.04 (0.47)    |
| UBE 5000     | 5/2 | 3        | electric amplified | pneumatic + spring  | 36 ÷ 145 (2.5 ÷ 10) | 32                     | 71     | 1.81 (0.82)    |
| UBE 6000     | 5/2 | 4        | electric amplified | pneumatic + spring  | 44 ÷ 145 (3 ÷ 10)   | 38                     | 62     | 2.29 (1.04)    |
| UBE 3060     | 5/2 | 1        | electric amplified | pneumatic amplified | 15 ÷ 145 (1 ÷ 10)   | 16                     | 6      | 0.82 (0.37)    |
| UBE 4060     | 5/2 | 2        | electric amplified | pneumatic amplified | 15 ÷ 145 (1 ÷ 10)   | 17                     | 7      | 1.04 (0.47)    |
| UBE 5060     | 5/2 | 3        | electric amplified | pneumatic amplified | 15 ÷ 145 (1 ÷ 10)   | 23                     | 15     | 1.81 (0.82)    |
| UBE 6060     | 5/2 | 4        | electric amplified | pneumatic amplified | 19 ÷ 145 (1.3 ÷ 10) | 25                     | 16     | 2.29 (1.04)    |
| SPOOL SYSTEM |     |          |                    |                     |                     |                        |        |                |
| UBE 3700     | 5/2 | 1        | electric amplified | pneumatic + spring  | 29 ÷ 145 (2 ÷ 10)   | 21                     | 35     | 0.82 (0.37)    |
| UBE 4700     | 5/2 | 2        | electric amplified | pneumatic + spring  | 32 ÷ 145 (2.2 ÷ 10) | 24                     | 30     | 1.04 (0.47)    |
| UBE 5700     | 5/2 | 3        | electric amplified | pneumatic + spring  | 33 ÷ 145 (2.3 ÷ 10) | 33                     | 74     | 1.81 (0.82)    |
| UBE 6700     | 5/2 | 4        | electric amplified | pneumatic + spring  | 41 ÷ 145 (2.8 ÷ 10) | 39                     | 68     | 2.29 (1.04)    |
| UBE 3760     | 5/2 | 1        | electric amplified | pneumatic amplified | 15 ÷ 145 (1 ÷ 10)   | 17                     | 8      | 0.82 (0.37)    |
| UBE 4760     | 5/2 | 2        | electric amplified | pneumatic amplified | 15 ÷ 145 (1 ÷ 10)   | 18                     | 9      | 1.04 (0.47)    |
| UBE 5760     | 5/2 | 3        | electric amplified | pneumatic amplified | 15 ÷ 145 (1 ÷ 10)   | 26                     | 17     | 1.81 (0.82)    |
| UBE 6760     | 5/2 | 4        | electric amplified | pneumatic amplified | 19 ÷ 145 (1.3 ÷ 10) | 27                     | 18     | 2.29 (1.04)    |

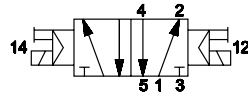
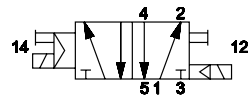
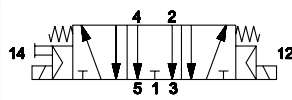
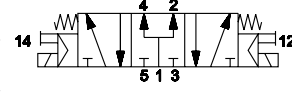
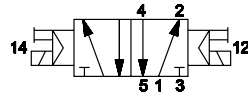
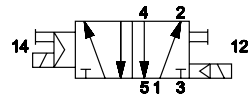
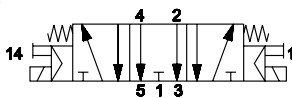
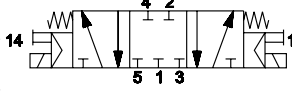


|   | ISO 1         | ISO 2         | ISO 3         | ISO 4       |
|---|---------------|---------------|---------------|-------------|
| A | 6.673 (169.5) | 7.697 (195.5) | 8.622 (219)   | 9.961 (253) |
| B | 4.134 (105)   | 4.134 (105)   | 4.646 (118)   | 4.646 (118) |
| C | 1.535 (39)    | 2.047 (52)    | 2.520 (64)    | 2.913 (74)  |
| D | .197 (5)      | .197 (5)      | .394 (10)     | .394 (10)   |
| E | 1.417 (36)    | 1.890 (48)    | 2.520 (64)    | 3.150 (80)  |
| F | 1.102 (28)    | 1.496 (38)    | 1.890 (48)    | 2.283 (58)  |
| G | .709 (18)     | .945 (24)     | 1.260 (32)    | 1.575 (40)  |
| H | M5x38         | M6x35         | M8x50         | M8x50       |
| I | 6.280 (159.5) | 6.929 (176)   | 8.209 (208.5) | 9.252 (235) |
| L | 2.520 (64)    | 2.854 (72.5)  | 3.760 (95.5)  | 4.370 (111) |
| M | 3.760 (95.5)  | 4.075 (103.5) | 4.449 (113)   | 4.882 (124) |
| N | 1.181 (30)    | 1.181 (30)    | 1.181 (30)    | 1.181 (30)  |

**Z** Two position manual control

For manual version with button, add "U" to the end of the part number  
The solenoid valves are supplied without coil and connector.

## DOUBLE ELECTRIC IMPULSE

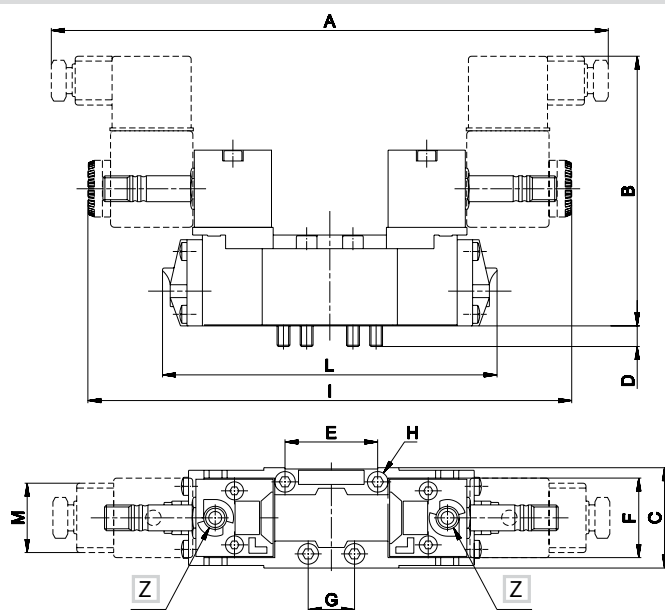
|                                                                                   | Code         | Way      | Size ISO           | Control 14                          | Return 12                           | Pressure psi (bar)  | Response Time (ms) En. | De-en.      | Weight lb (kg)                                                                        |                                                                                       |  |
|-----------------------------------------------------------------------------------|--------------|----------|--------------------|-------------------------------------|-------------------------------------|---------------------|------------------------|-------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--|
|  | MIXED SYSTEM |          |                    |                                     |                                     |                     |                        |             |                                                                                       |                                                                                       |  |
|                                                                                   | UBE 3020     | 5/2      | 1                  | electric amplified                  | electric amplified                  | 15 ÷ 145 (1 ÷ 10)   | 16                     | 16          | 0.86 (0.39)                                                                           |    |  |
|                                                                                   | UBE 4020     | 5/2      | 2                  | electric amplified                  | electric amplified                  | 15 ÷ 145 (1 ÷ 10)   | 17                     | 17          | 1.41 (0.64)                                                                           |                                                                                       |  |
|                                                                                   | UBE 5020     | 5/2      | 3                  | electric amplified                  | electric amplified                  | 15 ÷ 145 (1 ÷ 10)   | 23                     | 23          | 2.29 (1.04)                                                                           |                                                                                       |  |
|                                                                                   | UBE 6020     | 5/2      | 4                  | electric amplified                  | electric amplified                  | 19 ÷ 145 (1.3 ÷ 10) | 25                     | 25          | 2.67 (1.21)                                                                           |                                                                                       |  |
|                                                                                   | UBE 3030     | 5/2      | 1                  | electric amplified                  | electric unamplified (differential) | 29 ÷ 145 (2 ÷ 10)   | 16                     | 34          | 0.86 (0.39)                                                                           |    |  |
|                                                                                   | UBE 4030     | 5/2      | 2                  | electric amplified                  | electric unamplified (differential) | 29 ÷ 145 (2 ÷ 10)   | 17                     | 29          | 1.41 (0.64)                                                                           |                                                                                       |  |
|                                                                                   | UBE 5030     | 5/2      | 3                  | electric amplified                  | electric unamplified (differential) | 32 ÷ 145 (2.2 ÷ 10) | 23                     | 54          | 2.29 (1.04)                                                                           |                                                                                       |  |
|                                                                                   | UBE 6030     | 5/2      | 4                  | electric amplified                  | electric unamplified (differential) | 32 ÷ 145 (2.2 ÷ 10) | 25                     | 45          | 2.67 (1.21)                                                                           |                                                                                       |  |
|                                                                                   | UBE 3200     | 5/3 O.C. | 1                  | electric amplified                  | electric amplified                  | 44 ÷ 145 (3 ÷ 10)   | 50                     | 26          | 0.86 (0.39)                                                                           |    |  |
|                                                                                   | UBE 4200     | 5/3 O.C. | 2                  | electric amplified                  | electric amplified                  | 44 ÷ 145 (3 ÷ 10)   | 54                     | 24          | 1.41 (0.64)                                                                           |                                                                                       |  |
|                                                                                   | UBE 5200     | 5/3 O.C. | 3                  | electric amplified                  | electric amplified                  | 44 ÷ 145 (3 ÷ 10)   | 108                    | 36          | 2.29 (1.04)                                                                           |                                                                                       |  |
|                                                                                   | UBE 6200     | 5/3 O.C. | 4                  | electric amplified                  | electric amplified                  | 44 ÷ 145 (3 ÷ 10)   | 115                    | 115         | 2.67 (1.21)                                                                           |                                                                                       |  |
|                                                                                   | UBE 3205     | 5/3 P.C. | 1                  | electric amplified                  | electric amplified                  | 29 ÷ 145 (2 ÷ 10)   | 50                     | 26          | 0.86 (0.39)                                                                           |   |  |
|                                                                                   | UBE 4205     | 5/3 P.C. | 2                  | electric amplified                  | electric amplified                  | 33 ÷ 145 (2.3 ÷ 10) | 54                     | 24          | 1.41 (0.64)                                                                           |                                                                                       |  |
|                                                                                   | UBE 5205     | 5/3 P.C. | 3                  | electric amplified                  | electric amplified                  | 36 ÷ 145 (2.5 ÷ 10) | 108                    | 36          | 2.29 (1.04)                                                                           |                                                                                       |  |
|                                                                                   | UBE 6205     | 5/3 P.C. | 4                  | electric amplified                  | electric amplified                  | 44 ÷ 145 (3 ÷ 10)   | 115                    | 115         | 2.67 (1.21)                                                                           |                                                                                       |  |
|                                                                                   | SPOOL SYSTEM |          |                    |                                     |                                     |                     |                        |             |                                                                                       |                                                                                       |  |
|                                                                                   | UBE 3720     | 5/2      | 1                  | electric amplified                  | electric amplified                  | 15 ÷ 145 (1 ÷ 10)   | 17                     | 17          | 0.86 (0.39)                                                                           |  |  |
|                                                                                   | UBE 4720     | 5/2      | 2                  | electric amplified                  | electric amplified                  | 15 ÷ 145 (1 ÷ 10)   | 18                     | 18          | 1.41 (0.64)                                                                           |                                                                                       |  |
|                                                                                   | UBE 5720     | 5/2      | 3                  | electric amplified                  | electric amplified                  | 15 ÷ 145 (1 ÷ 10)   | 26                     | 26          | 2.29 (1.04)                                                                           |                                                                                       |  |
|                                                                                   | UBE 6720     | 5/2      | 4                  | electric amplified                  | electric amplified                  | 15 ÷ 145 (1 ÷ 10)   | 27                     | 27          | 2.67 (1.21)                                                                           |                                                                                       |  |
|                                                                                   | UBE 3730     | 5/2      | 1                  | electric amplified                  | electric unamplified (differential) | 26 ÷ 145 (1.8 ÷ 10) | 17                     | 28          | 0.86 (0.39)                                                                           |  |  |
|                                                                                   | UBE 4730     | 5/2      | 2                  | electric amplified                  | electric unamplified (differential) | 26 ÷ 145 (1.8 ÷ 10) | 18                     | 25          | 1.41 (0.64)                                                                           |                                                                                       |  |
| UBE 5730                                                                          | 5/2          | 3        | electric amplified | electric unamplified (differential) | 36 ÷ 145 (2.5 ÷ 10)                 | 26                  | 46                     | 2.29 (1.04) |                                                                                       |                                                                                       |  |
| UBE 6730                                                                          | 5/2          | 4        | electric amplified | electric unamplified (differential) | 36 ÷ 145 (2.5 ÷ 10)                 | 27                  | 42                     | 2.67 (1.21) |                                                                                       |                                                                                       |  |
| UBE 3900                                                                          | 5/3 O.C.     | 1        | electric amplified | electric amplified                  | 33 ÷ 145 (2.3 ÷ 10)                 | 17                  | 25                     | 0.86 (0.39) |  |                                                                                       |  |
| UBE 4900                                                                          | 5/3 O.C.     | 2        | electric amplified | electric amplified                  | 36 ÷ 145 (2.5 ÷ 10)                 | 18                  | 27                     | 1.41 (0.64) |                                                                                       |                                                                                       |  |
| UBE 5900                                                                          | 5/3 O.C.     | 3        | electric amplified | electric amplified                  | 36 ÷ 145 (2.5 ÷ 10)                 | 26                  | 50                     | 2.29 (1.04) |                                                                                       |                                                                                       |  |
| UBE 6900                                                                          | 5/3 O.C.     | 4        | electric amplified | electric amplified                  | 36 ÷ 145 (2.5 ÷ 10)                 | 30                  | 47                     | 2.67 (1.21) |                                                                                       |                                                                                       |  |
| UBE 3940                                                                          | 5/3 C.C.     | 1        | electric amplified | electric amplified                  | 33 ÷ 145 (2.3 ÷ 10)                 | 17                  | 25                     | 0.86 (0.39) |  |                                                                                       |  |
| UBE 4940                                                                          | 5/3 C.C.     | 2        | electric amplified | electric amplified                  | 36 ÷ 145 (2.5 ÷ 10)                 | 18                  | 27                     | 1.41 (0.64) |                                                                                       |                                                                                       |  |
| UBE 5940                                                                          | 5/3 C.C.     | 3        | electric amplified | electric amplified                  | 36 ÷ 145 (2.5 ÷ 10)                 | 26                  | 50                     | 2.29 (1.04) |                                                                                       |                                                                                       |  |
| UBE 6940                                                                          | 5/3 C.C.     | 4        | electric amplified | electric amplified                  | 36 ÷ 145 (2.5 ÷ 10)                 | 30                  | 47                     | 2.67 (1.21) |                                                                                       |                                                                                       |  |

O.C. = open centres C.C. = closed centres P.C. = pressurized centres

For manual version with button, add "U" to the end of the part number

For version with manual override contact our Sales Department

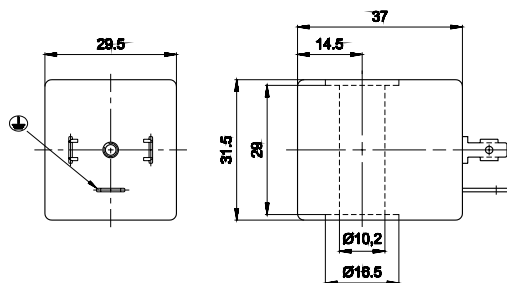
## DOUBLE ELECTRIC IMPULSE



|   | ISO 1       | ISO 2       | ISO 3       | ISO 4        |
|---|-------------|-------------|-------------|--------------|
| A | 8.307 (211) | 8.898 (226) | 9.724 (247) | 10.551 (268) |
| B | 4.134 (105) | 4.134 (105) | 4.646 (118) | 4.646 (118)  |
| C | 1.535 (39)  | 2.047 (52)  | 2.520 (64)  | 2.913 (74)   |
| D | .197 (5)    | .197 (5)    | .394 (10)   | .394 (10)    |
| E | 1.417 (36)  | 1.890 (48)  | 2.520 (64)  | 3.150 (80)   |
| F | 1.102 (28)  | 1.496 (38)  | 1.890 (48)  | 2.283 (58)   |
| G | .709 (18)   | .945 (24)   | 1.260 (32)  | 1.575 (40)   |
| H | M5x38       | M6x35       | M8x50       | M8x50        |
| I | 7.520 (191) | 8.150 (207) | 8.898 (226) | 9.764 (248)  |
| L | 5.039 (128) | 5.709 (145) | 7.520 (191) | 8.740 (222)  |
| M | 1.181 (30)  | 1.181 (30)  | 1.181 (30)  | 1.181 (30)   |

Z Two position manual control

## U3 30 MM COIL TO BE USED WITH BE ELECTROPILOT



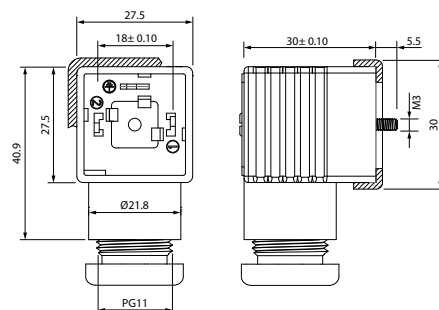
30 mm

10 mm

| Code     | Duty cycle ED (a) % | Power consumption W |            | Tolerance tension % | Rated voltage     | Weight            |
|----------|---------------------|---------------------|------------|---------------------|-------------------|-------------------|
|          |                     | Hold                | Inrush     |                     |                   |                   |
| UDC 0301 | 100                 | 2,5                 | 2,5        | ±10                 | 12 V DC           | 0.18 lb (0.08 kg) |
| UDC 0302 | 100                 | 2,5                 | 2,5        | ±10                 | 24 V DC           | 0.18 lb (0.08 kg) |
| UDC 0307 | 100                 | 3,3 VA (Max)        | 5 VA (Max) | ±10                 | 24 V AC/50-60 HZ  | 0.18 lb (0.08 kg) |
| UDC 0309 | 100                 | 3,3 VA (Max)        | 5 VA (Max) | ±10                 | 110 V AC/50-60 HZ | 0.18 lb (0.08 kg) |
| UDC 0310 | 100                 | 3,3 VA (Max)        | 5 VA (Max) | ±10                 | 230 V AC/50-60 HZ | 0.18 lb (0.08 kg) |

(a) Solenoid valves operating at 110 V–230 V must be built-in (EN 60204-1).

In continuous operation, the operating temperature does not affect the operation of the coil, provided that the unit is installed in a well-ventilated area.



|                | Size             | Colour      | Characteristics   |
|----------------|------------------|-------------|-------------------|
| * CONU3 100 01 | CULUS 30 - 36 mm | BLACK       | 2 PINS            |
| * CONU3 202 40 | CULUS 30 - 36 mm | TRANSPARENT | LED + VDR 0 - 24V |
| * CONU3 211 00 | CULUS 30 - 36 mm | TRANSPARENT | LED + VDR 110V    |
| * CONU3 225 00 | CULUS 30 - 36 mm | TRANSPARENT | LED + VDR 220V    |

\*: UL 1977 AND CAN/CSA C22.2 NO. 182.3

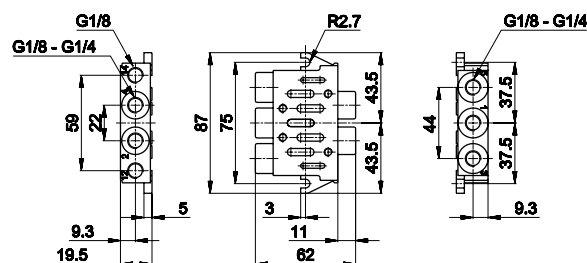
VDR: Fitted with varistors as surge protection device.

The solenoid valves are supplied without coil and connector.

## SINGLE SUB-BASE, SIDE CONNECTIONS

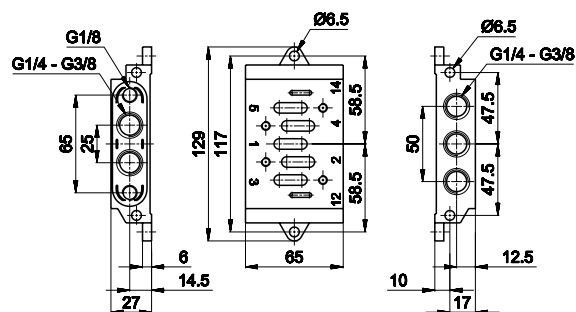
|  | Code     | Size ISO | Note                        | Connection | Material  | Weight lb (kg) |
|--|----------|----------|-----------------------------|------------|-----------|----------------|
|  | UBF 1060 | 1        | in line connections         | G1/8       | Zamak     | 0.55 (0.25)    |
|  | UBF 1061 | 1        | in line connections         | G1/4       | Zamak     | 0.55 (0.25)    |
|  | UBF 1150 | 2        | in line connections         | G1/4       | Zamak     | 1.43 (0.65)    |
|  | UBF 1151 | 2        | in line connections         | G3/8       | Zamak     | 1.43 (0.65)    |
|  | UBF 3060 | 3        | in line connections         | G1/2       | Aluminium | 1.63 (0.74)    |
|  | UBF 3061 | 3        | in line connections         | G3/4       | Aluminium | 1.63 (0.74)    |
|  | UBF 4060 | 4        | in line connections         | G3/4       | Aluminium | 2.82 (1.28)    |
|  | UBF 4061 | 4        | dorsal and side connections | G1         | Aluminium | 2.82 (1.28)    |

## ISO 1



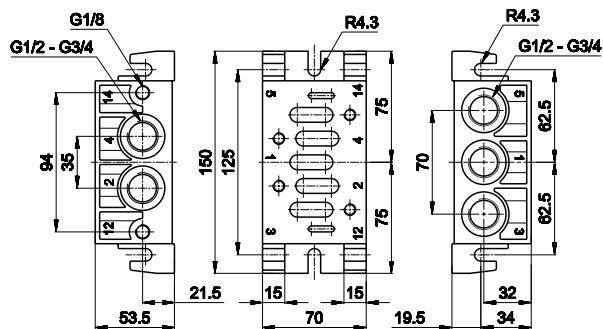
1= Supply port  
2 - 4 = Use  
3 - 5 = Exhaust  
12 - 14 = Pilots

## ISO 2



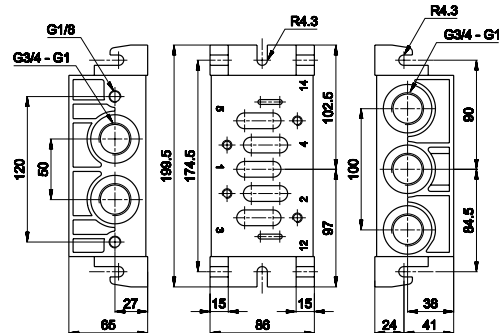
1= Supply port  
2 - 4 = Use  
3 - 5 = Exhaust  
12 - 14 = Pilots

## ISO 3



1= Supply port  
2 - 4 = Use  
3 - 5 = Exhaust  
12 - 14 = Pilots

## ISO 4

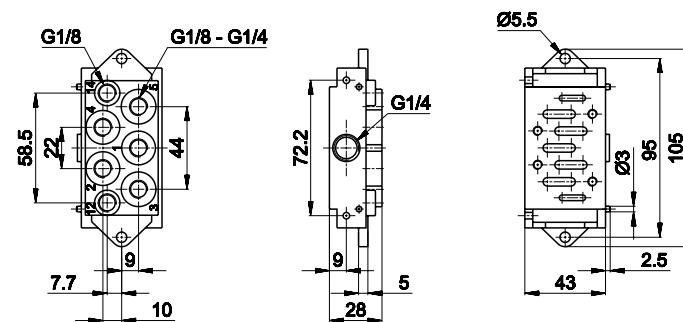


1= Supply port  
2 - 4 = Use  
3 - 5 = Exhaust  
12 - 14 = Pilots

SINGLE SUB-BASE, DORSAL CONNECTIONS

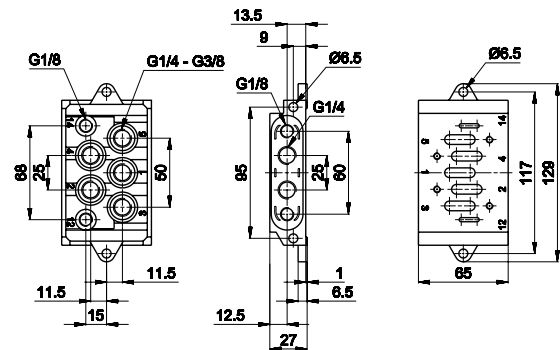
|                                                                                                                                                                                                                                     | Code     | Size ISO | Note               | Connection | Material  | Weight lb (kg) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|--------------------|------------|-----------|----------------|
|                                                                                                                                                                                                                                     | UBF 1062 | 1        | dorsal connections | G1/8       | Zamak     | 0.77 (0.35)    |
|                                                                                                                                                                                                                                     | UBF 1063 | 1        | dorsal connections | G1/4       | Zamak     | 0.77 (0.35)    |
| Single modular or Manifold sub-base, dorsal connections, separate exhausts<br>Single assembly: close side ports (G1/8 - G1/4). Manifold assembly with common inlet: close dorsal connections n.1. With incorporated screws and seal |          |          |                    |            |           |                |
|                                                                                                                                                                                                                                     | UBF 1152 | 2        | dorsal connections | G1/4       | Zamak     | 1.43 (0.65)    |
|                                                                                                                                                                                                                                     | UBF 1153 | 2        | dorsal connections | G3/8       | Zamak     | 1.43 (0.65)    |
|                                                                                                                                                                                                                                     | UBF 3063 | 3        | dorsal connections | G3/4       | Aluminium | 1.59 (0.72)    |
|                                                                                                                                                                                                                                     |          |          |                    |            |           |                |
|                                                                                                                                                                                                                                     | UBF 4062 | 4        | dorsal connections | G3/4       | Aluminium | 2.73 (1.24)    |
|                                                                                                                                                                                                                                     | UBF 4063 | 4        | dorsal connections | G1         | Aluminium | 2.73 (1.24)    |

ISO 1



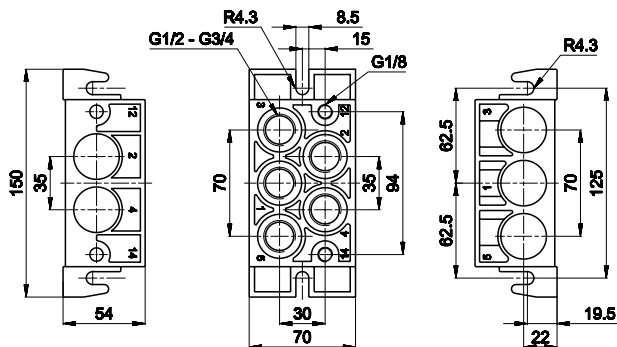
1= Supply port  
2 - 4 = Use  
3 - 5 = Exhaust  
12 - 14 = Pilots

ISO 2



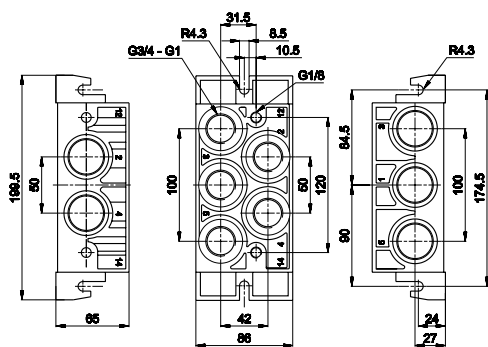
1= Supply port  
2 - 4 = Use  
3 - 5 = Exhaust  
12 - 14 = Pilots

ISO 3



1= Supply port  
2 - 4 = Use  
3 - 5 = Exhaust  
12 - 14 = Pilots

ISO 4



1= Supply port  
2 - 4 = Use  
3 - 5 = Exhaust  
12 - 14 = Pilots

## ISO 1 - MANIFOLD UNIVERSAL SYSTEM SUB-BASE

|                                                                                   | Code                                                                               | Note                        | Connection | Material  | Weight lb (kg) |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------------------|------------|-----------|----------------|
|  | MANIFOLD UNIVERSAL SYSTEM SUB-BASE, DORSAL AND SIDE CONNECTIONS, CONVEYED EXHAUSTS |                             |            |           |                |
|                                                                                   | UBF 1071                                                                           | dorsal and side connections | G1/8       | Aluminium | 0.62 (0.28)    |
|                                                                                   | UBF 1072                                                                           | dorsal and side connections | G1/4       | Aluminium | 0.62 (0.28)    |
|                                                                                   | UBF 1071S                                                                          | side pneumatic impulses     | G1/8       | Aluminium | 0.66 (0.30)    |
|                                                                                   | UBF 1072S                                                                          | side pneumatic impulses     | G1/4       | Aluminium | 0.66 (0.30)    |

Dorsal and side connections possible. Close unused ports with caps. With incorporated screws, seals and caps included

## MANIFOLD UNIVERSAL SYSTEM INLET PLATE

|                                                                                   |                 |                     |      |           |             |
|-----------------------------------------------------------------------------------|-----------------|---------------------|------|-----------|-------------|
|  | <b>UBF 1065</b> | on top connections  | G3/8 | Zamak     | 0.77 (0.35) |
|                                                                                   | <b>UBF 1066</b> | dorsal connections  | G3/8 | Zamak     | 0.77 (0.35) |
|  | <b>UBF 1068</b> | in line connections | G3/8 | Aluminium | 0.26 (0.12) |

When battery exceeds 4 units, the mounting of 2 plates is recommended Mixed version available upon request. With incorporated screws and seal

## MANIFOLD UNIVERSAL SYSTEM DIAPHRAGM

|                                                                                     |                 |   |   |       |             |
|-------------------------------------------------------------------------------------|-----------------|---|---|-------|-------------|
|  | <b>UBF 1070</b> | - | - | Zamak | 0.20 (0.09) |
|-------------------------------------------------------------------------------------|-----------------|---|---|-------|-------------|

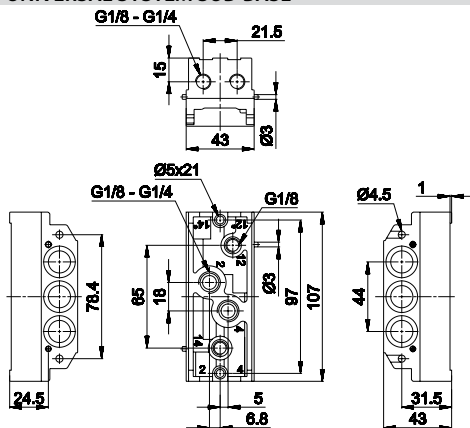
The diaphragm is not only the end plate of the manifold but it is also coupled with the exhaust regulator to separate two sub-bases and regulate the valves independently. In this case break the central blind hole. To get two or more pressures, break the two side blind holes.

## CLOSING PLATE FOR SUB-BASE 1

|                                                                                     |                 |   |   |       |             |
|-------------------------------------------------------------------------------------|-----------------|---|---|-------|-------------|
|  | <b>UBF 1085</b> | - | - | Steel | 0.07 (0.03) |
|-------------------------------------------------------------------------------------|-----------------|---|---|-------|-------------|

(for all sub-base versions)

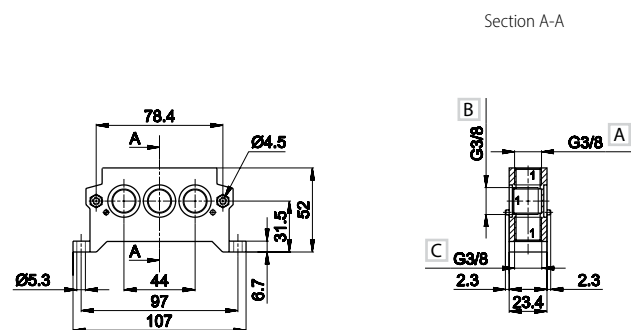
## MANIFOLD UNIVERSAL SYSTEM SUB-BASE



1= Supply port  
2 - 4 = Use  
3 - 5= Exhaust

12 - 14 = Pilots  
12\* - 14\* = Sideways Pilots

**MANIFOLD UNIVERSAL SYSTEM INLET PLATE**



1= Supply port  
3 - 5= Exhausta

- A** On top connections
- B** In line connections
- C** Dorsal connections

UNIVERSAL MANIFOLD IN-LINE SYSTEM INLET PLATE

MANIFOLD UNIVERSAL SYSTEM DIAPHRAGM

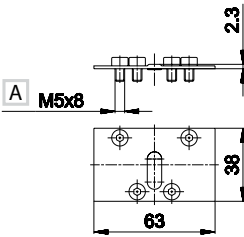
Sezione A-A



1= Supply port  
3 - 5= Exhaust

D Outlets in-line only

CLOSING PLATE FOR SUB-BASE



A ISO 4762

## ISO 2 - MANIFOLD UNIVERSAL SYSTEM SUB-BASE

| Code                                                                       | Note | Connection | Material | Weight lb (kg) |
|----------------------------------------------------------------------------|------|------------|----------|----------------|
| UNIVERSAL MANIFOLD BASE WITH REAR AND SIDE OUTLETS FOR CHANNELLED EXHAUSTS |      |            |          |                |



|          |                             |      |       |             |
|----------|-----------------------------|------|-------|-------------|
| UBF 1160 | dorsal and side connections | G1/4 | Zamak | 1.76 (0.80) |
| UBF 1161 | dorsal and side connections | G3/8 | Zamak | 1.76 (0.80) |

Dorsal and side connections possible. Close unused ports with caps. With incorporated screws, seals and caps included

**MANIFOLD UNIVERSAL SYSTEM INLET PLATE**



|          |                     |      |       |             |
|----------|---------------------|------|-------|-------------|
| UBF 1154 | in line connections | G1/2 | Zamak | 1.01 (0.46) |
| UBF 1155 | in line connections | G1/2 | Zamak | 1.01 (0.46) |

When battery exceeds 4 units, the mounting of 2 plates is recommended Mixed version available upon request. With incorporated screws and seal

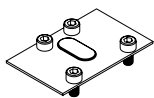
## UNIVERSAL MANIFOLD DIAPHRAGM



|          |   |   |       |             |
|----------|---|---|-------|-------------|
| UBF 1162 | - | - | Zamak | 0.35 (0.16) |
|----------|---|---|-------|-------------|

The diaphragm is not only the end plate of the manifold but it is also coupled with the exhaust regulator to separate two sub-bases and regulate the valves independently. In this case break the central blind hole. To get two or more pressures, break the two side blind holes.

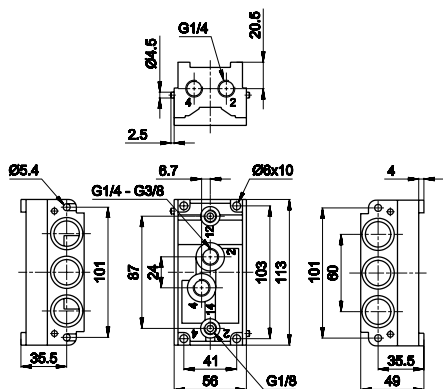
## CLOSING PLATE FOR SUB-BASE



|          |   |   |       |             |
|----------|---|---|-------|-------------|
| UBF 1175 | - | - | Steel | 0.11 (0.05) |
|----------|---|---|-------|-------------|

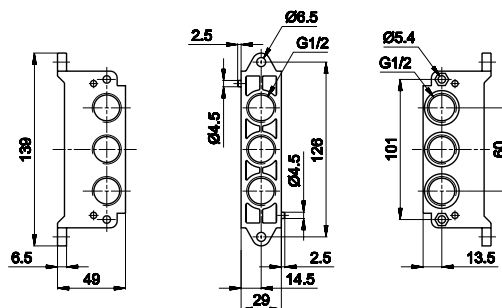
(for all sub-base versions)

## MANIFOLD UNIVERSAL SYSTEM SUB-BASE

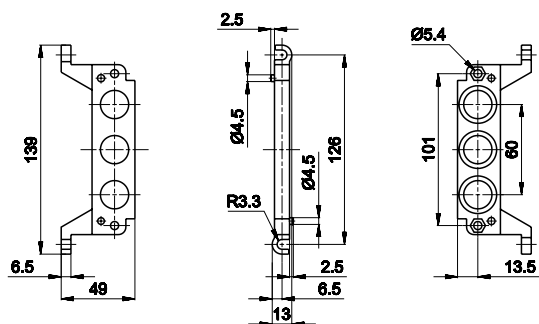


1 = Supply port  
2 - 4 = Use  
3 - 5 = Exhaust  
12 - 14 = Pilots

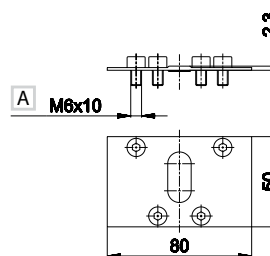
## MANIFOLD UNIVERSAL SYSTEM INLET PLATE



## UNIVERSAL MANIFOLD DIAPHRAGM



## CLOSING PLATE FOR SUB-BASE 2



ISO 3 - MANIFOLD UNIVERSAL SYSTEM SUB-BASE

|                                                                                    | Code | Note | Connection | Material | Weight lb (kg) |
|------------------------------------------------------------------------------------|------|------|------------|----------|----------------|
| MANIFOLD UNIVERSAL SYSTEM SUB-BASE, DORSAL AND SIDE CONNECTIONS, CONVEYED EXHAUSTS |      |      |            |          |                |



|          |                             |      |           |             |
|----------|-----------------------------|------|-----------|-------------|
| UBF 3071 | dorsal and side connections | G1/2 | Aluminium | 2.43 (1.10) |
| UBF 3072 | dorsal and side connections | G3/4 | Aluminium | 2.43 (1.10) |

Dorsal and side connections possible. Close unused ports with caps. With incorporated screws, seals and caps included

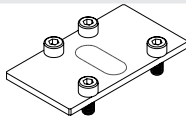
MANIFOLD UNIVERSAL SYSTEM INLET PLATE



|          |                     |    |           |             |
|----------|---------------------|----|-----------|-------------|
| UBF 3064 | in line connections | G1 | Aluminium | 0.97 (0.44) |
|----------|---------------------|----|-----------|-------------|

When battery exceeds 4 units, the mounting of 2 plates is recommended. Mixed version available upon request. With incorporated screws and seals

CLOSING PLATE FOR SUB-BASE



|          |   |   |           |             |
|----------|---|---|-----------|-------------|
| UBF 3175 | - | - | Aluminium | 0.18 (0.08) |
|----------|---|---|-----------|-------------|

(for all sub-base versions)

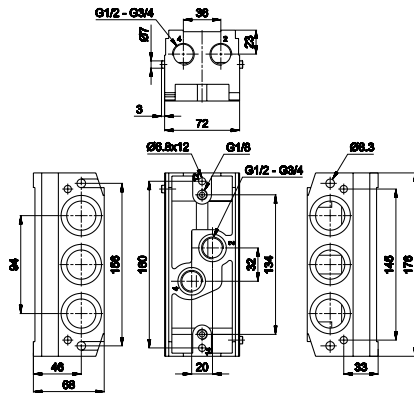
UNIVERSAL SYSTEM CAP



|          |   |   |           |             |
|----------|---|---|-----------|-------------|
| UBF 3082 | - | - | Aluminium | 0.04 (0.02) |
|----------|---|---|-----------|-------------|

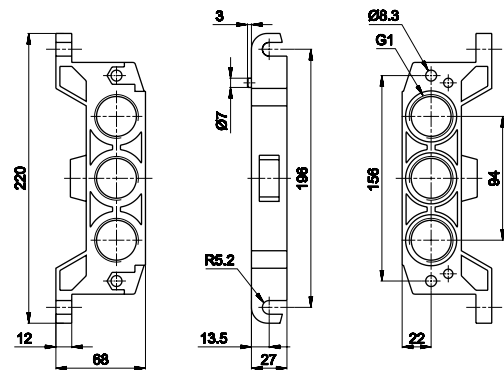
To be used to reach two pressures

MANIFOLD UNIVERSAL SYSTEM SUB-BASE

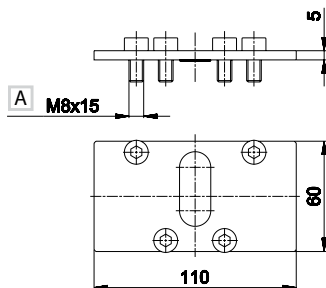


1 = Supply port  
2 - 4 = Use  
3 - 5 = Exhaust  
12 - 14 = Pilots

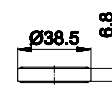
MANIFOLD UNIVERSAL SYSTEM INLET PLATE



CLOSING PLATE FOR SUB-BASE

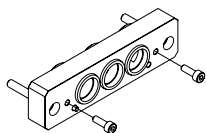


UNIVERSAL SYSTEM CAP



# CONNECTION INTERFACE FOR UNIVERSAL BASE PLATES

| Code                                                      | Material | Weight lb (kg) |
|-----------------------------------------------------------|----------|----------------|
| CONNECTING INTERFACE FOR UNIVERSAL SUB-BASES SIZE 1 AND 2 |          |                |



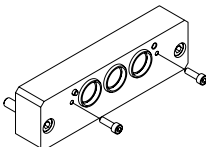
UBF 1190

Aluminium

0.24 (0.11)

It allows the use of size 1 and 2 valves in one manifold with conveyed pressure and exhausts. (Upon request: pressure and/or exhausts separated)

# CONNECTING INTERFACE FOR UNIVERSAL SUB-BASES SIZE 2 AND 3



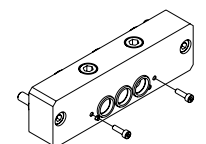
UBF 3190

Aluminium

1.26 (0.57)

It allows the use of size 1 and 2 valves in one manifold with conveyed pressure and exhausts. (Upon request: pressure and/or exhausts separated)

# CONNECTING INTERFACE FOR UNIVERSAL SUB-BASES SIZE 1 AND 3



UBF 3191

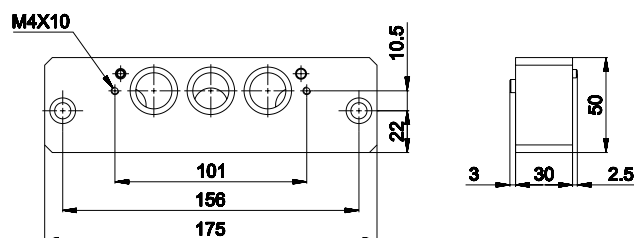
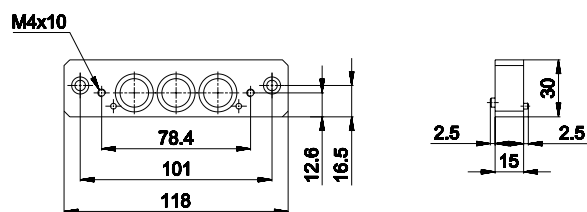
Aluminium

1.26 (0.57)

It allows the use of size 1 and 2 valves in one manifold with conveyed pressure and exhausts. (Upon request: pressure and/or exhausts separated)

# CONNECTING INTERFACE FOR UNIVERSAL SUB-BASES SIZE 1-2

# CONNECTING INTERFACE FOR UNIVERSAL SUB-BASES SIZE 2-3



# CONNECTING INTERFACE FOR UNIVERSAL SUB-BASES SIZE 1-3

