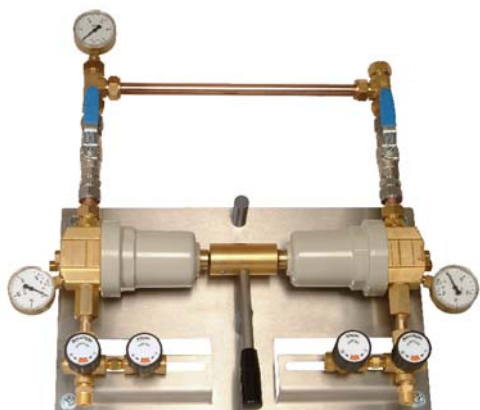


# Pressure control panel BU13&15-2U



BU13-2Ux1-15-M-KH-M-N2



BU15-2Ux1-40-M-0-0-N2

## Product features

- Pressure control panels with automatic change-over function for high flows
- For non-corrosive technical gases
- Single-stage with compensated main valve
- Modular design (to be extended to 2x2, 2x3 ect. cylinders / bundles)
- Central filter in pressure regulators
- Pressure regulators with highly stable and accurate outlet pressure complete with integrated relief valve
- Shut-off valves with On/Off-position indicators
- Process gas and purge valve on the inlet pressure side
- Option: ball valves and optional gauge on the outlet
- Safety pressure gauges acc. to DIN EN ISO 5171
- Compact design for easy installation
- Tested and approved for use with oxygen
- Suitable for inlet pressures of up to 300 bar
- Variable outlet pressure

## Technical data

|   |   |
|---|---|
| <b>Type</b>                             | single-stage with compensated main valve        |
| <b>Inlet pressure <math>P_1</math></b>  | max. 300 bar                                    |
| <b>Outlet pressure <math>P_2</math></b> | 15 / 20 / 40 / 60 bar                           |
| <b>Materials</b>                        |   |
| Body:                                   | Brass   |
| Diaphragm (BU13):                       | NBR   |
| Piston (BU15):                          | Brass   |
| Valve seat regulator:                   | PA  |
| Filter process gas valve:               | Sintered bronze                                 |
| Filter pressure regulator:              | Nickel  |
| Mounting plates:                        | Stainless steel                                 |
| <b>Connectors</b>                       |   |
| Inlets:                                 | G 1/2" male                                     |
| Outlet relief valve:                    | G 3/8" male                                     |
| Outlet:                                 | Brass compression fitting for 18 mm copper tube |
| <b>Temperature range</b>                | -20°C to +60°C                                  |
| <b>Leak rate</b>                        | $\leq 10^{-4}$ mbar l/s He                      |
| <b>Weight</b>                           | BU15-2Ux1: 17 kg<br>BU13-2Ux1: 15 kg            |

## Flow rates Q [m³/h] Nitrogen

The tables below provide the values for the flow rate in standard cubic metres of Nitrogen at the indicated operating conditions. The flow rates of other gas types may be estimated using the conversion factors from the table on the right.

For more specific flow rate calculations please refer to our data sheet "Performance diagram". The tables show the flow rates with only one side delivering the gas!

## Conversion factors

| Gas type       | factor |
|----------------|--------|
| Argon          | 0,83   |
| Helium         | 2,64   |
| Carbon Dioxide | 0,79   |
| Air            | 0,98   |
| Oxygen         | 0,93   |
| Hydrogen       | 3,71   |

| BU13-2U (15) | $P_1$ [bar] |    |    |     |     |     |     |     |
|--------------|-------------|----|----|-----|-----|-----|-----|-----|
|              | 10          | 15 | 20 | 40  | 80  | 100 | 120 | 200 |
| $P_2$ [bar]  |             |    |    |     |     |     |     |     |
| 5            | 40          | 62 | 86 | 150 | 205 | 221 | 237 | 261 |
| 10           | -           | 50 | 80 | 159 | 228 | 258 | 260 | 289 |
| 15           | -           | -  | 60 | 156 | 251 | 260 | 280 | 300 |

| BU13-2U (20) | $P_1$ [bar] |    |    |     |     |     |     |     |
|--------------|-------------|----|----|-----|-----|-----|-----|-----|
|              | 10          | 15 | 20 | 40  | 80  | 100 | 120 | 200 |
| $P_2$ [bar]  |             |    |    |     |     |     |     |     |
| 15           | -           | -  | 40 | 130 | 225 | 235 | 250 | 270 |
| 20           | -           | -  | -  | 134 | 210 | 236 | 250 | 300 |

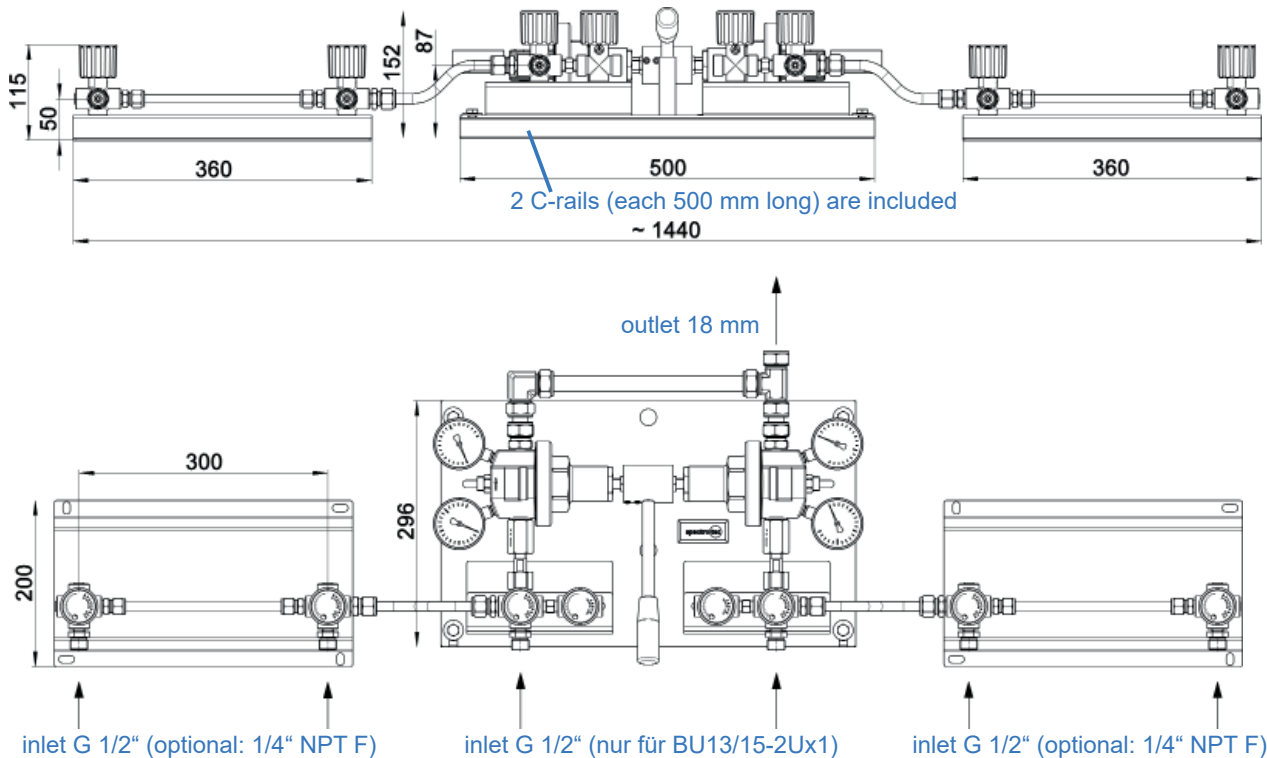
| BU15-2U (40) | $P_1$ [bar] |     |     |     |     |
|--------------|-------------|-----|-----|-----|-----|
|              | 45          | 80  | 100 | 120 | 200 |
| $P_2$ [bar]  |             |     |     |     |     |
| 30           | 88          | 213 | 262 | 265 | 305 |
| 40           | 65          | 213 | 242 | 265 | 431 |

| BU15-2U (60) | $P_1$ [bar] |     |     |     |     |
|--------------|-------------|-----|-----|-----|-----|
|              | 45          | 80  | 100 | 120 | 200 |
| $P_2$ [bar]  |             |     |     |     |     |
| 40           | 65          | 213 | 243 | 273 | 431 |
| 50           | -           | 250 | 365 | 440 | 500 |
| 60           | -           | 255 | 388 | 440 | 550 |

# Pressure control panel BU13&15-2U



## Dimensions



## Ordering information: Pressure control panel BU13&15-2U

**BU15 - 2U - x1 - 20 - M - 0 - 0 - N2**

For pressure control panel with manual change-over: see data sheet "BU13"

### Type

- 13** outlet pressure: 15 / 20 bar
- 15** outlet pressure: 40 / 60 bar

### Design

- x1** automatic change-over 2x1 panel
- x2** automatic change-over 2x2-panel
- xn** automatic change-over 2xn-panel

### Outlet pressure $P_2^*$

- 15** 13-17 bar (BU13-2U)
- 20** 18-22 bar (BU13-2U)
- 40** 38-42 bar (BU15-2U)
- 60** 58-62 bar (BU13-2U)

### Gas type

Please specify the type of gas with our order!

### Pressure gauge (outlet)

- 0** on each pressure regulator
- M** only one common in outlet

### Ball valves (outlet)

- 0** without
- KH** ball valves in the outlet

### Inlet pressure indication

- M** pressure gauge
- K** contact pressure gauge

\* The stated pressure is the middle pressure. If a certain minimum or maximum pressure is required, this has to be specified.