

Pressure regulator U15

spectro **tec**



Pressure regulator
U15-O2-300
for oxygen

Product features

- Piston pressure regulator with balanced main valve
- For non-corrosive industrial gases
- Single-stage with high control accuracy
- Central filter in the pressure regulator
- Safety pressure gauge acc. to DIN EN 562
- Pressure regulator with integrated relief valve
- Pressure regulator for oxygen with filter in inlet fitting
- Accessories like wall brackets and in-/outlet fittings are also available

Technical Data

Type	single-stage
Flow rate Q	max. 700 m ³ /h
Inlet pressure P₁	max. 300 bar
Outlet pressure P₂	20 - 60 bar
Materials	
Body regulator:	brass
Bonnet:	brass
Piston:	brass
Valve seat:	PA
In- and outlets	
Inlet:	G 1/2" - female M24 x 1.5 (oxygen)
Outlet:	G 1/2" - female
Pressure gauge ports:	G 1/4" - female
Outlet relief valve:	G 3/8" - male
Temperature range	-30°C to +60°C
Leak rate	<10 ⁻³ mbar l/s He
Weight	approx. 3.8 kg

Flow rates and performance factor for the pressure regulator U15

The table below indicates approximate values for the flow rate in standard cubicmeters of compressed air at the indicated operating conditions. The flow rates for other gas types may be calculated using the conversion factors from the table on the right. For detailed flow rate calculations please refer to our data sheet "Performance diagram".

Performance factor $L_{10} = 5.5$
i-factor: $i = 0.06$

Inlet pressure P ₁ [bar]	Flow rate at outlet pressure P ₂ [bar]				
	20	30	40	50	60
120	480 m ³ /h	490 m ³ /h	500 m ³ /h	510 m ³ /h	510 m ³ /h
100	410 m ³ /h	420 m ³ /h	420 m ³ /h	430 m ³ /h	430 m ³ /h
80	250 m ³ /h	350 m ³ /h	380 m ³ /h	400 m ³ /h	-
60	230 m ³ /h	250 m ³ /h	350 m ³ /h	330 m ³ /h	-
40	175 m ³ /h	100 m ³ /h	-	-	-

Conversion factors

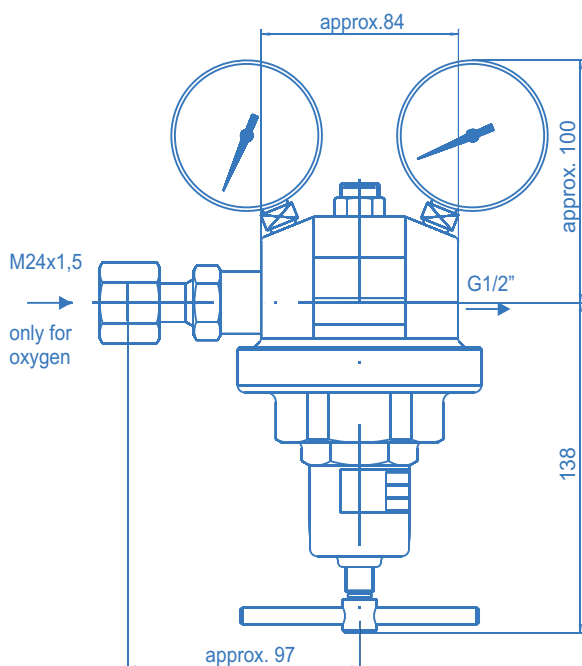
Gas type	factor
Oxygen	0.95
Nitrogen	1.02
Hydrogen	3.79
Argon	0.85
Carbon dioxide	0.81
Helium	2.69

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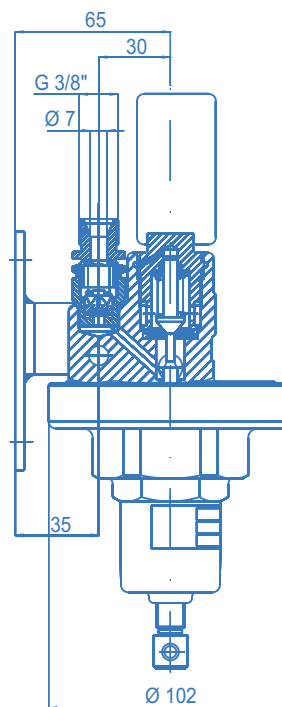


Dimensions and connections of the pressure regulator U15

Dimensions (front view)



Dimensions with **wall bracket 512.07600**
(as accessory available)



Ordering information: Pressure regulator U15

In- and outlet-fittings:
see data sheet "Fittings"

U15 - NFG - 300

Type of gas

NFG - non flammable gases
FG - flammable gases
O₂ - oxygen

Inlet pressure P₁

40 - max. 40 bar
200 - max. 200 bar
300 - max. 300 bar