

# Pressure regulator U11



Pressure regulator  
U11-W6 E-NFG-40

## Product features

- Diaphragm pressure regulator
- For non-corrosive technical gases
- Single-stage type with high control accuracy
- Central filter in the regulator
- Safety pressure gauges acc. to DIN EN 562
- Pressure regulator with integrated relief valve
- Wall mounting bracket and in-/outlet fittings available as accessories

## Technical data

<b>Type</b>	single-stage
<b>Inlet pressure <math>P_1</math></b>	max. 40 bar
<b>Outlet pressure <math>P_2</math></b>	max. 16 bar
<b>Materials</b>	
Body regulator:	brass
Bonnet:	Alu (epoxy-coated)
Diaphragm regulator:	NBR
Valve seat regulator:	PA
<b>Connectors</b>	
In- / Outlets:	G 1/2" - female
Pressure gauge ports:	G 1/4" - female
Outlet relief valve:	G 3/8" - male
<b>Temperature range</b>	-30°C to +60°C
<b>Leak rate</b>	<10 <sup>-3</sup> mbar l/s He
<b>Weight</b>	approx. 2,5 kg

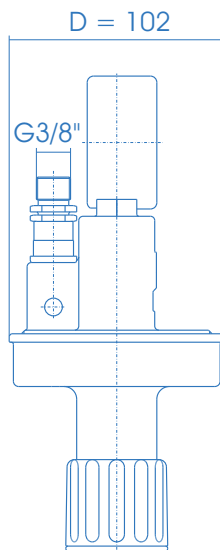
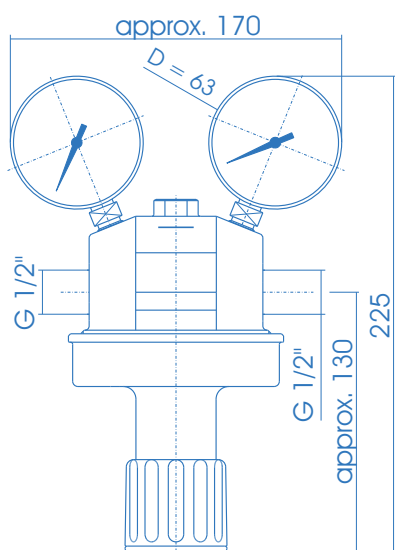
## Performance factors and outlet pressures to find the flow rates of the pressure regulators U11

Series		U11W6				U11W5
Type		E	F	L	S	E
Performance factor	$L_5$ (5% pressure drop)	3	2,5	2,5	3,5	3
	$L_{10}$ (10% pressure drop)	4,5	4	4	5	4,5
	$L_{max}$	6	5,5	5,5	6,5	6
max. outlet pressure $P_2$ [bar] at 40 bar inlet pressure		6,5	3	2	16	8
Outlet pressure variations [%] relating to inlet pressure variation		1		2,7	4,2	1,25

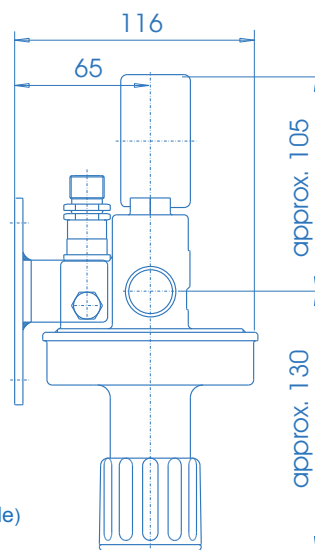
# Pressure regulator U11

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## Dimensions and connections of the pressure regulator U11



Drawing left:  
Dimensions U11  
(Front- and side view)



Drawing right:  
Dimensions U11  
with wall bracket  
512.07600  
(as accessories available)

## Ordering information: Pressure regulator U11

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

**U11 W6 E - NFG**

### Type

See table "Performance factors..."  
on page 1

### Type of gas

NFG - non flammable gases  
FG - flammable gases  
O<sub>2</sub> - oxygen

### Specifications

- SPECTROTEC - components guarantee maximum quality by using high grade materials and a quality assurance program acc. to DIN ISO 9001
- All components which come into contact with the medium are cleaned free of oil and grease before the assembly.
- SPECTROTEC - components undergo a 100% leak- and function test

### Applications

- For all gases compatible with the materials used in the products, e.g. compressed air, oxygen, nitrogen, carbon dioxide, forming gas, hydrogen, methane and rare gases.

### Important note regarding component selection

- A shut-off valve should be fitted into the supply line to the pressure regulator in such a way that the pressure gauges can be observed when the valve is opened.
- A shut-off valve in the piping between the pressure regulator and the tapping point is required if there is no means of shutting off the line at the tapping point or if the tapping point is a long way away from the pressure regulator. The piping must be designed to withstand the maximum line pressure.
- The relief valve is set to approximately 20% above the max. outlet pressure. Downstream equipment must be designed for at least this pressure.

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