

Spectrotec



Tapping points
industrial gases
ET65-BV

Tapping point series ET65-BV



Single-tapping points for non flammable gases, oxygen and flammable gases



Double-tapping point



Single-tapping point with flow gauge



Single-tapping point with flowmeter and control valve



Double-tapping point with connection block and flash back arrestor (optional)

Product features

- Tapping points for wall mounting
- For non-corrosive industrial gases
- For flows up to 50 m³/h
- Single-stage pressure regulator with high accuracy
- Central filter in the pressure regulator
- Safety pressure gauge acc. to DIN EN ISO 5171
- Inlet pressure shut off with ball valve
- For easy installation
- Single- and Double-tapping points available in the following configurations:
 - with adjustable outlet pressure (pressure gauge)
 - with adjustable flow (flow gauge)
 - with adjustable flow (flowmeter and control valve)
 - with flash back arrestor (optional) - see price list
- Single-tapping points also available with fixed outlet pressure including two flowmeters and control valves

*oxygen: max. 30 bar

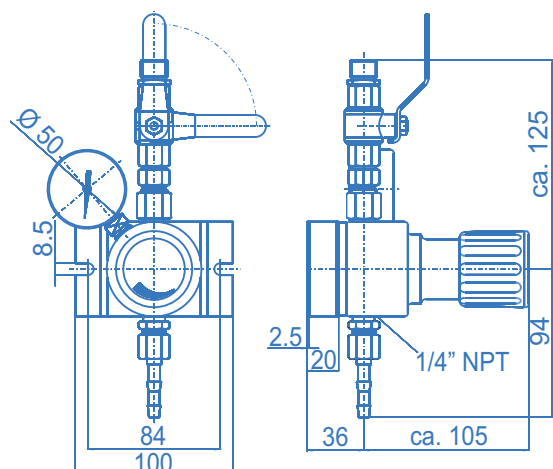
Technical data

Type	single-stage
Inlet pressure P_1	max. 40 bar*
for acetylene:	max. 1.5 bar
Outlet pressure P_2	
for $P_1 = 40$ bar:	1.5 / 2.5 / 10 / 20 bar
for $P_1 = 1.5$ bar (acetylene):	1.5 bar
Materials	
Body:	brass
Diaphragm:	EPDM
Valve cone:	PA
Temperature range	-30°C to +60°C
Leak rates	<10 ⁻⁴ mbar l/s He
Weight	approx. 1.5 kg
Inlet ball valve	
flammable gases:	G 3/8" LH male or G 3/8" RH female
other gases:	G 3/8" RH male or G 3/8" RH female
Outlet pressure regulator	
flammable gases:	G 3/8" LH male with 9 mm hose connection
other gases:	G 1/4" male with 6 mm hose connection
Pressure gauge ports:	G 1/4" - female

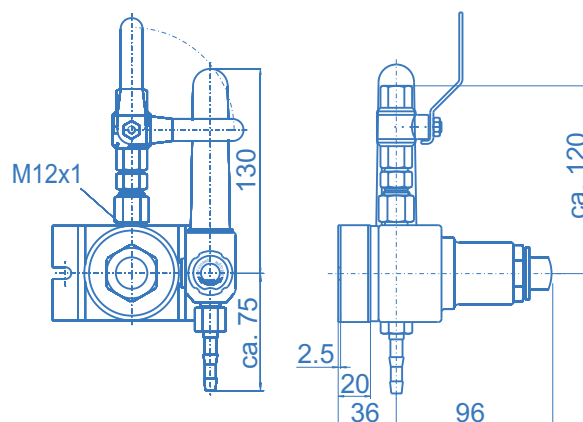
Tapping points ET65-BV



Dimensions - Single-tapping point ET65-1-BV

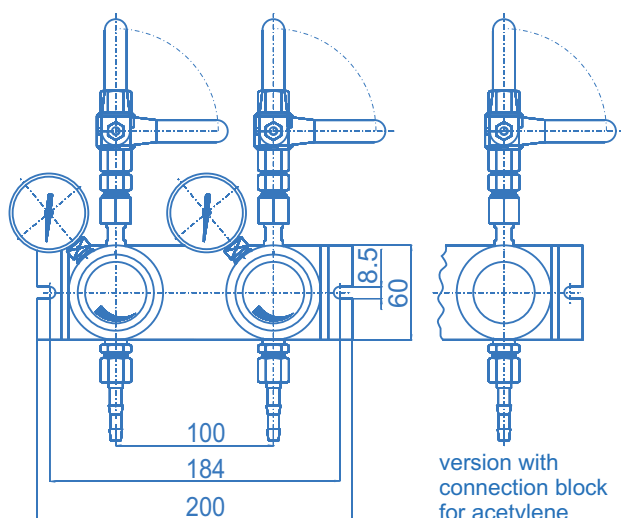


Version with adjustable outlet pressure and pressure gauge or flow gauge



Version with adjustable flow by flowmeter and control valve

Double-tapping point ET65-BV-2



version with connection block for acetylene

Versions of tapping point ET65-BV

a) Pressure gauge

gas type	P ₁ [bar]	P ₂ [bar]	outlet
oxygen*, non flammable and flammable gases	40 / 1.5	0.1 - 1.5 bar	6mm hose connection (9 mm for flammable gases)
	40	0.2 - 2.5 bar	
	40	1 - 10 bar	
	40	2 - 20 bar	

*P₁: 30 bar

b) Flow gauge

gas type	P ₁ [bar]	scale	outlet
argon / CO ₂	40	1 - 16 l/min	6mm hose connection
	40	4 - 32 l/min	

c) Flowmeter and control valve

gas type	P ₁ [bar]	P ₂ [bar]	scale	outlet
argon / CO ₂	40	1.4	0.1 - 1 l/min	6mm hose connection
	40	1.4	0.5 - 5 l/min	
	40	4	1 - 16 l/min	
	40	4	3 - 30 l/min	

Approximate values of flow rates for tapping points ET65-BV with adjustable outlet pressure:

Table 1:
Standard values for acetylene flow rates of the tapping point ET65 pressure regulator
Outlet pressure adjustable up to **1.5 bar**
Performance factor **L₁₀ = approx. 3**

Inlet press. 1.3 bar	Flow [m³/h] at outlet pressure P ₂		
	0.3 bar	0.5 bar	1 bar
	0.2	0.5	1

Table 2:
Standard values for compressed air flow rates of the tapping point ET65 pressure regulator
Outlet pressure adjustable up to **1.5 / 4 / 10 / 20 bar**
Performance factor **L₁₀ = approx. 3**

Inlet press. [bar]	Flow [m³/h] at outlet pressure P ₂ [bar]					
	0.3	0.5	3	6	10	20
40	-	5	15	20	40	50
25	2	5	15	20	30	45
20	2	5	15	20	25	-
10	2	5	12	15	-	-
1	1	1	-	-	-	-
0.5	0.5	-	-	-	-	-

Table 3:
Conversion factors from compressed air to other gases

For other types of gas the flow rate must be multiplied with the following factors:

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

Tapping points ET65-BV

spectrotec

Ordering information:
Tapping points ET65-BV

ET65-BV - 2M - O2 - M 10 / C2H2 - M 1.5

Single-tapping point or left side right side for Double-tapping point

Series

- 1M - Single-tapping point with G 3/8" male inlet
- 1F - Single-tapping point with G 3/8" female inlet
- 2M - Double-tapping point with G 3/8" male inlet
- 2F - Double-tapping point with G 3/8" female inlet

Type of gas

- O2 - oxygen
- C2H2 - acetylene
- NFG - non flammable gases
- FG - flammable gases

Flash back arrester: see price list

Version

Pressure gauge

- M 1.5 - P₂ adjustable max. 1.5 bar
- M 2.5 - P₂ adjustable max. 2.5 bar
- M 10 - P₂ adjustable max. 10 bar
- M 20 - P₂ adjustable max. 20 bar

Flow gauge

- DM16 - flow rate 1-16 l/min
- DM32 - flow rate 4-32 l/min

Flowmeter (see table below)

- FL 1 - flow rate 0.2-1 l/min (Ar-CO₂)
- FL 5 - flow rate 1-5 l/min (Ar)
- FL 16 - flow rate 2-16 l/min (Ar-CO₂, H₂ ...)
- FL 30 - flow rate 5-30 l/min (forming gas ...)

Double Flowmeter right + left (see table below)

- 2FL 1 - flow rate 0.2-1 l/min (Ar-CO₂)
- 2FL 5 - flow rate 1-5 l/min (Ar)
- 2FL 16 - flow rate 2-16 l/min (Ar-CO₂, H₂ ...)
- 2FL 30 - flow rate 5-30 l/min (forming gas ...)

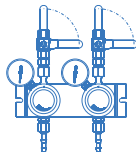
Without pressure regulator

- CB - connection block only for acetylene

Ordering example:
ET65-BV - 1F - NFG - M 10



Ordering example:
ET65-BV - 2F
O2 - M 10 -
C2H2 - M 1,5



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

Flowmeter FL

range [l/min.]	medium	pressure
FL 1: 0,2 - 1,0	Ar-CO ₂	1,4 bar
FL 5: 1,0 - 5,0	Argon	
FL 16: 2,0 - 16	Ar-CO ₂ Hydrogen Nitrogen Ar-H ₂	4 bar
FL 30: 5,0 - 30	Ar-CO ₂ Hydrogen Forming gas	