

## 4. Start-up

- 4.1 Before starting the work this operating instruction are to be read and be considered during the work.
- 4.2 Examine whether the connecting threads are clean and without damage.  
In the case of damage or contamination the tapping point may not be attached.
- ▲ 4.3 After the assembly of the connection to the gas supply all connections have to be proofed.

## 5. Operation and maintenance

- 5.1 Make sure that seals, sealing surfaces and pressure gauges are in good condition.
- 5.2 Tapping points have to be protected against damage. (Visual inspection in regular intervals)
- 5.3 In case of malfunctions, e.g. an increase of outlet pressure during the supply, or in case of leakage versus atmosphere or a defective pressure gauge, shut down the upstream gas supply and take the tapping point out of operation.

## 6. Shut-down

- ▲ 6.1 Short interruption: close the ball valve.
- 6.2 For longer interruptions or end of work: close ball valve.

## 7. Repair

- ▲ 7.1 Repairs may only be carried out in authorised workshops by expert persons.
- 7.2 Only original spare parts may be used. The materials have been adapted to the gas type in each instance. So always specify the gas type
- ▲ 7.3 After being repaired, the tapping point must be checked with respect to proper function, leak-tightness and cleanliness of the gas-wetted surfaces. When the system is used again, a purging has to be carried out first.
- ▲ 7.4 In case of unauthorised repairs or use of non-original spare parts, any from of liability or resulting damages will expire as well as the manufacturer's warranty.
- 7.5 Before disconnecting of the tapping point make sure that the gauges display 0.

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## 1. Application

### 1.1 Designated use

Use the tapping point ET65-BV for gases dissolved under pressure, compressed or liquified gases.

The tapping points ET65-BV reduces an inlet pressure to an as constant as possible outlet pressure.

### 1.2 Not-designated use

- ▲ Do not use the tapping point ET65-BV for liquids.
- ▲ Do not use unsuitable gas types or caustic gases.

### 1.3 Flow

Inlet press. [bar]	Flow [m <sup>3</sup> /h] at outlet press. P <sub>2</sub> [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	-	-	-	-	-

The flow rate of other gases will be multiplied with the following factors:

oxygen	1,05
Hydrogen	4,00
argon	0,90
carbon dioxide	0,85

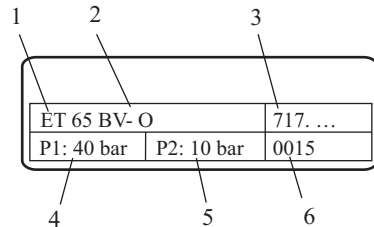
*This equipment requires the attention of this operating instruction and in particular the safety instructions.*

## 2. Safety instructions

- 2.1 The information marked with ▲ are important safety instructions.
- 2.2 This tapping point corresponds to state-of-the-art technology and to the demands of the existing standards and regulations.
- ▲ 2.3 Changes or modifications are not allowed to be made to the tapping point for without the prior consent of the manufacturer.
- 2.4 Do not connect the tapping point to a gas cylinder.
- 2.5 Improper handling and use can evolve risks for the user and other persons as well as damage to the device.
- 2.6 Attention has to be paid to the country specific laws, regulations procedures concerning the use of this equipment.
- 2.7 All parts coming in contact with oxygen must be kept in oil-free and grease-free condition.
- Fire or explosion hazard!**
- 2.8 Smoking or open fire in the vicinity of your gas supply system is strictly prohibited!
- Fire or explosion hazard!**
- 2.9 Only for gases, which are indicated in the labelling at the pressure regulator (see item 3, Labelling)
- 2.10 The tapping point must not be exposed to ambient temperatures below -30°C and above +60°C.

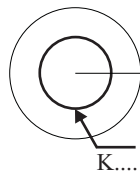


## 3. Labelling/Technical data



- 1 Type  
2 Gas type  
3 Article No.  
4 max. Inlet pressure  
5 max. Outlet pressure  
6 date of manufacture

Gas type	Synonym
Acetylen	A
Oxygen	O
Hydrogen	H
Compressed air	D
LPG	P
MPS	Y
Natural gas	M
CO <sub>2</sub> , nitrogen, rare	N

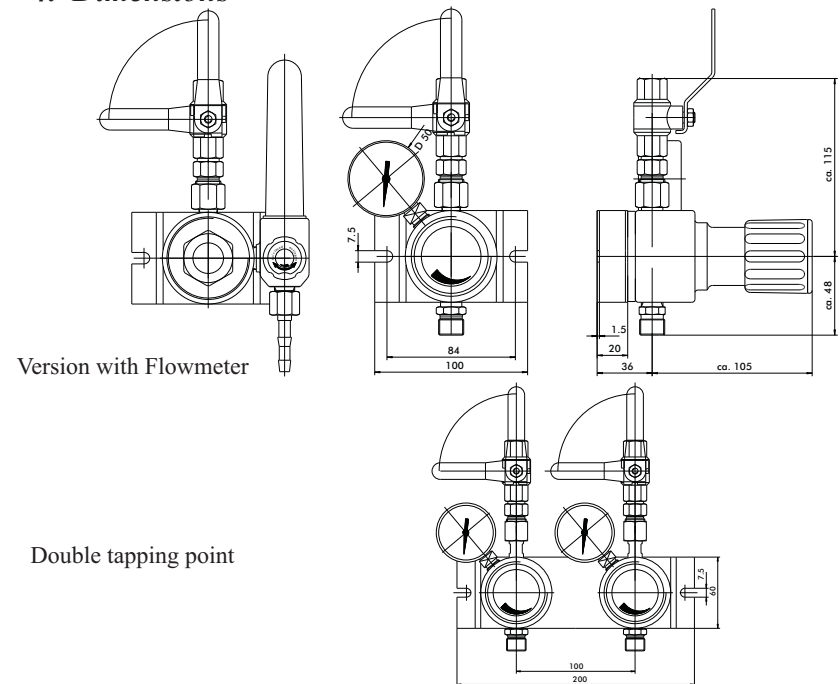


Back of the pressure regulator:  
inspection stamp confirming  
successfully passed test.

## Technical data

<b>Type:</b>	<b>single stage</b>
<b>Inlet pressure P<sub>1</sub>:</b>	max. 40 bar
for Acetylen:	max. 1,5 bar
<b>Outlet pressure P<sub>2</sub>:</b>	
for P <sub>1</sub> = 1,5 bar (Acetylen):	1,5 bar
for P <sub>1</sub> = 40 bar (other gases):	1,5 / 2,5 / 10 / 20 bar
<b>materials:</b>	
Body, bonnet:	brass
Diaphragm, Regulator seat:	EPDM
<b>Temperature:</b>	-30°C bis +60°C
<b>Leak rate:</b>	10 <sup>-4</sup> mbar l/s He
<b>Weight:</b>	ca. 2,0 kg
<b>Connections:</b>	
Gauge connection:	G 1/4" - female
Inlet: Flammable gas:	G 3/8" LH - female
Other gases:	G 3/8" - female
Outlet:	
Flammable gas:	G 3/8" LH - male
Other gases:	G 1/4" - male

## 4. Dimensions



Version with Flowmeter

Double tapping point