



# Oxygen Therapy Devices

# Medicop Medical Equipment

Dear clients,

With present brochure we would like to introduce our newest oxygen therapy devices, which comply with demands of relevant international standards and include the most advanced technical solutions, based on our 30 years experiences with production of medical equipment. In this brochure you will find the most important benefits which devices offer, while detailed technical data and drawings are available in our Technical Catalogue.

Our entire production program of medical equipment includes the following product-groups:

Central System  
of Medical Gases

Medical  
Suction Units

Oxygen  
Therapy Devices

Bed Head  
Units

Medical  
Supporting Equipment

## Content

### 4 PORTABLE UNITS

Enable patients to remain mobile and active despite their permanent need of oxygen supply and assure all the time sufficient quantity of gas. Patients can be supplied with oxygen either in open area, or rooms where there is no availability of central oxygen supply. Basically three different models of portable devices are available:

- model with a bag,
- model with portable plate and
- model with trolley.

At all models the oxygen is stored in a cylinder.

### 10 PRESSURE REGULATORS

Assure absolutely clean gas out of regulator, enable easy connections/disconnections to the cylinder, and absolutely safe handle with high pressure.

### 14 FLOWMETERS

Enable to adjust the flow-capacity, humidity and pressure of oxygen in a very comprehensive and easy way.



# PORTABLE UNITS

Therapy device with shoulder bag

## PORTABLE DEVICE WITH A BAG WITH WHICH THE PATIENT CAN MOVE ON THE FIELD AS FREE AS POSSIBLE

Portable device with a bag includes smaller cylinder of capacity 2 liters. **This is very light cylinder (2.4 kg only). This will help patient to move on the field as free as possible.**

It is possible also to use this device in a car or any other transport equipment.

The oxygen flow can be regulated between 0 and 25 lit/min by stepwise adjustable pressure regulator. This type of regulator can be placed in any position because its position does not have any influence on flow-rate.

Patient can breath-in oxygen through nasal cannula, which is also part of complete unit. The bag has two separate places, so also the other things might be stored in that bag in addition to oxygen therapy device.

## THERAPHY DEVICE WITH SHOULDER BAG

TECHNICAL DATA	
Dimensions:	460 × 150 × 200 mm
Weight (total):	4 kg
Outlet flow regulation:	0, 1, 2, 3, 4, 7, 10, 16, 20, 25 l/min, 0, 1, 2, 3, 4, 5, 6, 7, 10, 15 l/min, 0, 0.5, 0.75, 1, 1.25, 1.5, 2, 3, 4, 5 l/min.
Impulse flowmeter regulation:	0 - 12 l/min
Cylinder capacity:	to 2 liters (Equal 300 liters of gas at 150 bar)
Pressure of filled cylinder:	up to 200 bar
Time of emptying the cylinder:	5 hours, at constant outlet-flow of 1 l/min
AVAILABLE MODELS	
1330001	OXYMED, portable device for oxygen therapy with shoulder bag
1330002	OXYMED, portable device for oxygen therapy with shoulder bag, including electronic conserver system with charger



Regulator with adjustable flow.

1330001 OXYMED, portable device for oxygen therapy with shoulder bag

# PORTABLE UNITS

## Therapy Device with Plate

### PORTABLE DEVICE WITH A PLATE WHICH ALLOWS VERY QUICKLY AND SIMPLY TO CHANGE EMPTY CYLINDER WITH FULL ONE

Oxygen cylinder (usually of capacity 3 liters) is fixed in vertical position to the steel plate. So the complete device **can stand alone anywhere on the floor.**

However, the plate is designed in such a shape that **it is possible to hang a device to the wall rail or any other carrier.** Configuration of complete device can be defined by user regarding to his specific needs. It is possible to use flowmeter (0 - 15 lit/min) with reusable or single-use humidifier, resuscitator and the suction units for these model of portable oxygen therapy device.

Cylinder is fixed to the plate by quick-release connectors and hence also the regulator can be disassembly by hands only, **it is possible very quickly and simply to change empty cylinder with full one.**

### THERAPHY DEVICE WITH PLATE

#### TECHNICAL DATA

<b>Dimensions:</b>	335 × 140 × 620 mm
<b>Weight (total):</b>	9 kg
<b>Oxygen flow regulation range:</b>	0 - 15 l/min
<b>Vacuum regulation range:</b>	0 to -0.8 bar (with installed ejector)
<b>Free air flow aspiration:</b>	15 l
<b>Cylinder capacity:</b>	3 litres (equals 450 litres of gas at 150 bar)
<b>Pressure of filled cylinder:</b>	up to 200 bar
<b>Time of emptying the cylinder:</b>	7.5 hours, at constant outlet-flow of 1 l/min
<b>Volume of humidifier canister:</b>	300 ml or 340 ml or 500 ml or 650 ml
<b>Volume of suction jar:</b>	1 liter

#### AVAILABLE MODELS

<b>1320001</b>	Portable oxygen therapy device with carrying plate; including cylinder (3 l), pressure reducer, flowmeter with humidifier and mask
<b>1320002</b>	Portable oxygen therapy device with carrying plate; including cylinder (3 l), pressure reducer, flowmeter with humidifier, mask, suction unit and suction jar
<b>1320003</b>	Portable oxygen therapy device with carrying plate; including cylinder (3 l), pressure reducer, flowmeter, mask and resuscitation bag
<b>1320004</b>	Portable oxygen therapy device with carrying plate; including cylinder (3 l), pressure reducer, flowmeter, mask, suction unit, suction jar and resuscitation bag



**1320004** Portable oxygen therapy device with carrying plate; including cylinder (3 l), pressure reducer, flowmeter, mask, suction unit, suction jar and resuscitation bag



**1320001** Portable oxygen therapy device with carrying plate; including cylinder (3 l), pressure reducer, flowmeter with humidifier and mask



**1320002** Portable oxygen therapy device with carrying plate; including cylinder (3 l), pressure reducer, flowmeter with humidifier, mask, suction unit and suction jar



**1320003** Portable oxygen therapy device with carrying plate; including cylinder (3 l), pressure reducer, flowmeter, mask and resuscitation bag



# PORTABLE UNITS

## Therapy Device with Trolley

### PORTABLE DEVICE WITH A VERY STABLE TROLLEY

Oxygen cylinder (usually of capacity 5 liters or 10 liters) is fixed in vertical position to the trolley. Trolley is very stable.

It is made of steel body and includes 5 castors with antistatic rubber. As an option the trolley includes also cover for the cylinder.

**Configuration of complete device can be defined by user** regarding to his specific needs. It is possible to use flowmeter (0 - 15 lit/min) with reusable or single-use humidifier, resuscitator and the suction units for these model of portable oxygen therapy device. Cylinder is fixed to the plate by quick-release connectors and hence also the regulator can be disassembly by hands only, **it is possible very quickly and simply to change empty cylinder with full one.**



**1310001** Mobile oxygen therapy device; including cylinder (10 l), pressure reducer, flowmeter with humidifier and mask



**1310002** Mobile oxygen therapy device; including cylinder (10 l), pressure reducer, flowmeter with humidifier, mask, suction unit and suction jar



**1310003** Mobile oxygen therapy device; including cylinder (10 l), pressure reducer, flowmeter, mask and resuscitation bag



**1310004** Mobile oxygen therapy device; including cylinder (10 l), pressure reducer, flowmeter, mask, suction unit, suction jar and resuscitation bag

### MOBILE O<sub>2</sub> THERAPY DEVICE

TECHNICAL DATA	
Dimensions:	700 × 700 × 1140 mm
Weight (total):	40 kg
Oxygen flow regulation range:	0 - 15 l/min
Vacuum regulation range:	0 to -0.8 bar (with installed ejector)
Free air flow aspiration:	15 l
Cylinder capacity:	10 litres (equals 1500 litres of gas at 150 bar)
Pressure of filled cylinder:	up to 200 bar
Time of emptying the cylinder:	25 hours, at constant outlet-flow of 1 l/min
Volume of humidifier canister:	300 ml or 340 ml or 500 ml or 650 ml
Volume of suction jar:	1 liter

AVAILABLE MODELS	
1310001	Mobile oxygen therapy device; including cylinder (10 l), pressure reducer, flowmeter with humidifier and mask
1310002	Mobile oxygen therapy device; including cylinder (10 l), pressure reducer, flowmeter with humidifier, mask, suction unit and suction jar
1310003	Mobile oxygen therapy device; including cylinder (10 l), pressure reducer, flowmeter, mask and resuscitation bag
1310004	Mobile oxygen therapy device; including cylinder (10 l), pressure reducer, flowmeter, mask, suction unit, suction jar and resuscitation bag



# PRESSURE REGULATORS

Safety on the first place

Our pressure regulators are designed to be **reliable, accurate and most of all safety for use.**

Complete body of regulator is made of brass and it is chromed. Inside of regulator there is a core or membrane, which enables absolute accurate pre-set of outlet pressure level. Each model is equipped with mechanical safety valve, so it is absolute impossible that high pressure will come out of regulator to medical device or patient.

## HOW CLEAN IS THE GAS WHICH FLOWS THROUGHOUT THE REGULATOR?

On the inlet of each model there is a sinter filter, so that **the gas** which flows throughout the regulator **is always absolute clean.** Once it gets dirty the sinter filter can be easily removed by screwdriver. It is not necessary to remove any other part of regulator to access sinter filter.

Each regulator has a manometer with very clear display, so the user can always see very clearly how much gas there is left in a cylinder.



## HOW FAST CAN YOU CONNECT REGULATOR TO CYLINDER?

Body of manometer is chromed. As an option also rubber-ring is available for manometer to protect it against shocks. Regulators with adjustable outlet flow, or adjustable outlet pressure are equipped also with manometer showing outlet pressure or outlet flow.

For connection of regulator to cylinder we have available several different types of connections. Each connection has a handle, so that **user does not need any tool to connect/disconnect the regulator to/from the cylinder.** Everything can be done by hands only.

There are also special models of pressure regulators available: with included flowmeter, humidifier or even the suction unit.



# PRESSURE REGULATORS

Safety on the first place

TECHNICAL DATA	
<b>Max. inlet pressure:</b>	up to 200 bar
<b>Outlet pressure:</b>	5 ± 0.5 bar
<b>Outlet pressure (ID 1300030):</b>	adjustable from 0 - 5 bar
<b>Outlet flow (max):</b>	150 l/min
<b>Outlet flow regulation:</b>	(ID 1300001): adjustable from 0 - 15 l/min (ID 1300011): 0, 1, 2, 3, 4, 7, 10, 15, 20, 25 l/min, (ID 1300018): 0, 2, 3, 4, 5, 6, 7, 10, 15 l/min, (ID 1300022): 0, 0.5, 0.75, 1, 1.25, 1.5, 2, 3, 4, 5 l/min
<b>Compatibility:</b>	oxygen (O <sub>2</sub> ), air, CO <sub>2</sub>
<b>Standard:</b>	EN ISO 10524-1
<b>Classification by MDD 93/42:</b>	IIb

AVAILABLE MODELS	
<b>1300001</b>	Pressure regulator with adjustable outlet-flow (0 - 15 l/min)
<b>1300007</b>	Pressure regulator with fixed outlet-flow
<b>1300008</b>	Pressure regulator with direct outlet-flow
<b>1300009</b>	Pressure regulator with direct outlet-flow and non-return valve
<b>1300011</b>	Pressure regulator with stepwise adjustable outlet-flow (0 - 25 l/min)
<b>1300018</b>	Pressure regulator with stepwise adjustable outlet-flow (0 - 15 l/min)
<b>1300022</b>	Pressure regulator with stepwise adjustable outlet-flow (0 - 5 l/min)
<b>1300030</b>	Pressure regulator with adjustable outlet-pressure (0 - 5 bar)
<b>1300002</b>	Pressure regulator with flowmeter (0 - 15 l/min) and reusable humidifier-300 ml
<b>1300003</b>	Pressure regulator with flowmeter (0 - 15 l/min)
<b>1300012</b>	Pressure regulator with flowmeter (0 - 15 l/min), reusable humidifier-300 ml and suction unit
<b>1300013</b>	Pressure regulator with flowmeter (0 - 15 l/min), and suction unit

AVAILABLE CONNECTIONS	
<b>High pressure connections</b>	
Country-specific thread (PIN-INDEX, DIN 477, Bull-Nose, SIST, BS 341)	



**1300001** Pressure regulator with adjustable outlet-flow (0 - 15 l/min)



**1300008** Pressure regulator with direct outlet-flow, including outlet clutch



**1300011** Pressure regulator with stepwise adjustable outlet-flow (0 - 25 l/min)



**1300030** Pressure regulator with adjustable outlet-pressure (0 - 5 bar)



**1300002** Pressure regulator with flowmeter (0 - 15 l/min) and reusable humidifier-300 ml



**1300003** Pressure regulator with flowmeter (0 - 15 l/min)

# FLOWMETERS

Reliable and accurate

We offer **very reliable and accurate medical flowmeters**.

Recently we developed new measuring tube for our flowmeters, which enables very fine adjustment of flow in the range between 0 and 15 lit/min.

Because flowmeters are used in plenty different ways in the health care institutions, we have available several different configurations of flowmeters in order to satisfy specific needs of each single user.

Our configurations are as follows:

## DIRECT WALL - MOUNTED AND RAIL - MOUNTED FLOWMETERS

If an user does not have rail for fixation of medical equipment, the direct flowmeter is recommended. Because there are different direct-probes used in different countries, we can equip our flowmeters with probes of plenty different standards (DIN, AFNOR, British, UNI, C&U, Japanese, etc).

## TYPE OF GAS

Flow meters for oxygen and air are available.



## HUMIDIFIER

For long - term inhalation of oxygen a humidifier is needed. We have available **reusable humidifiers as well as single-use humidifiers**.

Reusable humidifiers are completely made of polysulfone and so they could be sterilized up to 134°C. The capacity of bottle is large (300 ml). User can also choose between bubbles-humidifiers and nebulizers.

Reusable humidifiers have the possibility for connection of thin mask-hose or large hose of 22 mm diameter.

## SINGLE AND DOUBLE MODELS

With double flowmeter a user can treat two patients from one gas source at the same time, which means that you save time and reduce costs.

## DIFFERENT COLORS OF ACCESSORIES

Because different standards prescribe different colors for medical gases, our accessories for flowmeters (hoses, connectors) are available in different colors to meet requirements of specific standards.



## FLOW METERS

TECHNICAL DATA	
Medium:	O <sub>2</sub> , AIR (other gases on request)
Inlet pressure:	5 bar (DIN) 3.5 bar (AFNOR) 4 bar (BS)
Outlet flow regulation:	0 - 15 l/min
Stepwise outlet-flow regulation:	0, 1, 2, 3, 4, 7, 10, 15, 20, 25 l/min, 0, 1, 2, 3, 4, 5, 6, 7, 10, 15 l/min, 0, 0.5, 0.75, 1, 1.25, 1.5, 2, 3, 4, 5 l/min.
Outlet connection:	M34 × 1.5, 9/16" or nozzle 6 mm
Accuracy:	±10 %
Method of humidifying:	a.) bubbles effect b.) nebulizing effect
Available capacities of humidifier:	300 ml-reusable, 500 ml-disposable
Dimensions (W × H × D) and weight of single flowmeter:	40 × 155 × 125 mm / 0.45 kg
Dimensions (W × H × D) and weight of double flowmeter:	120 × 155 × 150 mm / 0.95 kg
Dimensions (W × H × D) and weight of single stepwise flowmeter:	50 × 60 × 115 mm / 0.30 kg
Dimensions (W × H × D) and weight of double stepwise flowmeter:	140 × 60 × 180 mm / 0.80 kg
Dimension and weight of humidifier 300 ml:	ø65 × 200 mm / 0.25 kg
Standard:	EN ISO 15002, EN ISO 8185
Gas color coding:	ISO or neutral
Classification by MDD 93/42:	Ila

# FLOWMETERS

Reliable and accurate

## AVAILABLE MODELS

Pediatric 0-8 l/min	Adult 0-15 l/min	
1040310	1040001	Flowmeter for oxygen, directly
1040311	1040002	Flowmeter for oxygen, rail mounted
1040312	1042001	Flowmeter for oxygen, with reusable humidifier-300 ml, directly
1040313	1042100	Flowmeter for oxygen, with reusable humidifier-300 ml, rail mounted
1040314	1040003	Double flowmeter for oxygen, directly
1040315	1042021	Double flowmeter for oxygen, with reusable humidifier-300 ml, directly
1040316	1040004	Double flowmeter for oxygen, rail mounted
1040317	1042121	Double flowmeter for oxygen, with reusable humidifier-300 ml, rail mounted
1040320	1040005	Flowmeter for air, directly
1040321	1040007	Flowmeter for air, rail mounted
1040322	1040006	Flowmeter for air, with reusable humidifier-300 ml, directly
1040323	1040008	Flowmeter for air, with reusable humidifier-300 ml, rail mounted
1040324	1040009	Double flowmeter for air, directly
1040325	1040010	Double flowmeter for air, rail mounted
1040326	1040011	Double flowmeter for air, with reusable humidifier-300 ml, directly
1040327	1040013	Double flowmeter for air, with reusable humidifier-300 ml, rail mounted



1040001 Flowmeter for oxygen (0 - 15 l/min), directly



1042001 Flowmeter for oxygen (0 - 15 l/min), with reusable humidifier-300 ml, directly



1042100 Flowmeter for oxygen (0 - 15 l/min) with reusable humidifier-300 ml, rail mounted



1042021 Double flowmeter for oxygen (0 - 15 l/min) with reusable humidifier-300 ml, directly



1042121 Double flowmeter for oxygen (0 - 15 l/min) with reusable humidifier-300 ml, rail mounted

## Stepwise adjustable flowmeters

## AVAILABLE MODELS

1045048	Flowmeter, stepwise adjustable 0 - 15 lit/min, directly
1045041	Flowmeter, stepwise adjustable 0 - 15 lit/min, directly with humidifier
1045042	Flowmeter, stepwise adjustable 0 - 15 lit/min, rail mounted with humidifier
1045049	Flowmeter, stepwise adjustable 0 - 15 lit/min, rail mounted
1045002	Flowmeter, stepwise adjustable 0 - 5 lit/min, directly
1045040	Flowmeter, stepwise adjustable 0 - 5 lit/min, directly with humidifier
1045043	Flowmeter, stepwise adjustable 0 - 5 lit/min, rail mounted with humidifier
1045050	Flowmeter, stepwise adjustable 0 - 5 lit/min, rail mounted

## AVAILABLE CONNECTIONS

### High pressure connections

Country-specific thread (PIN-INDEX, DIN 477, Bull-Nose, SIST, BS 341)



1045048 Flowmeter, stepwise adjustable 0 - 15 lit/min, directly



1045049 Flowmeter, stepwise adjustable 0 - 15 lit/min, rail mounted



1045041 Flowmeter, stepwise adjustable 0 - 15 lit/min, directly with humidifier



1045042 Flowmeter, stepwise adjustable 0 - 15 lit/min, rail mounted with humidifier

# CONNECTIONS & ACCESSORIES

## High pressure connections for pressure regulators PIN-INDEX, DIN 477, CGA, SIST, BS 341 and others upon request



**1045011**  
Connecting yoke for oxygen cylinder (BS)



**1045008**  
Connecting yoke for oxygen cylinder (DIN 3/4")



**1045019**  
Connecting yoke for oxygen cylinder (DIN 5/8")



**1045045**  
Connecting yoke for oxygen cylinder (CGA)



**1045009**  
Connecting yoke for oxygen cylinder (PIN-INDEX)



DISS-outlet



NIST-outlet



hose barb 1/4"



hose barb 5/16"

## Low pressure connections for flowmeters DIN, BS, ANFOR, UNI, CIG, C&U, SS and others upon request



**1046007**  
Inlet probe for AIR, DIN standard



**1046004**  
Inlet probe for AIR, BS standard



**1046003**  
Inlet probe for AIR, AFNOR standard



**1047026**  
Inlet probe for AIR, C&U standard



**1047021**  
Inlet probe for AIR, CIG standard



**1048015**  
Inlet probe for AIR, SS standard



**1045007**  
Inlet probe for O<sub>2</sub>, DIN standard



**1045004**  
Inlet probe for O<sub>2</sub>, BS standard



**1045003**  
Inlet probe for O<sub>2</sub>, AFNOR standard



**1047027**  
Inlet probe for O<sub>2</sub>, C&U standard



**1047022**  
Inlet probe for O<sub>2</sub>, CIG standard



**1048024**  
Inlet probe for O<sub>2</sub>, SS standard



**1140015**  
Hose barb for humidifier



**1140021**  
Hose barb for flowmeter



**1052073**  
Connection for disposable humidifier 9/16"

## Humidifiers for oxygen

Disposable humidifier

Reusable humidifier



**1052075**  
Container with distilled water, 500 ml



**1042000**  
Complete reusable humidifier for Oxygen with capacity of 300 ml, bubbles effect

**1042003**  
Complete reusable humidifier for Oxygen with capacity of 300 ml, nebulizing effect

## Flexible hoses



**1540100**  
Silicon hose ø12/6 mm



**1050000**  
Silicon hose ø17/11 mm



- 1053001** Flexible pressure hose ø12/6 mm; yellow color
- 1053002** Flexible pressure hose ø12/6 mm; blue color
- 1053003** Flexible pressure hose ø12/6 mm; white color
- 1053004** Flexible pressure hose ø12/6 mm; grey color
- 1053005** Flexible pressure hose ø12/6 mm; black color
- 1053006** Flexible pressure hose ø12/6 mm; green color
- 1053007** Flexible pressure hose ø12/6 mm; black-white color

## Breathing masks



- 1140003** Breathing mask for adults, without hose
- 1140004** Breathing mask for adults, with thin hose
- 1140006** Breathing mask for children, without hose
- 1140007** Breathing mask for children, with thin hose
- 1140008** Nasal catheter, universal

## Cylinders



- 1050003** Cylinder for oxygen with shut-off valve, water capacity of 2 liters
- 1050002** Cylinder for oxygen with shut-off valve, water capacity of 3 liters
- 1050006** Cylinder for oxygen with shut-off valve, water capacity of 5 liters
- 1050001** Cylinder for oxygen with shut-off valve, water capacity of 10 liters

O<sub>2</sub>

**Medicop**<sup>®</sup>  
EQUIPMENT SPECIALIST

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All products comply with:  
MDD 93/42/EEC and 2007/47/EEC

