

## GAS MANIFOLD DUPLEX - MC80 (FLOW 200 M<sup>3</sup>/H)

The MC80 gas manifold is suitable for medium to large sized hospitals. It has a flow capacity of up to 200 m<sup>3</sup>/h and is conveniently designed in modules. The MC80 reduces the gas pressure in two steps to a constant distribution pressure. Service and tests can be carried out with no disturbance in the supply of gas to the gas distribution system.

### THE DUPLEX MC80 CONSISTS OF THE THREE FOLLOWING UNITS:

#### 1. MC80 - HP UNIT

This module contains two regulators with pressure relieve valves and it is connected to two various cylinder banks with high pressure hoses. When the cylinder bank, which has been connected for operation, has been emptied the other duty side is automatically connected.

#### 2. MC80 - STABILIZER

The stabilizer makes the operating pressure in the distribution system remain constant. The module contains two regulators with pressure relieve valves. Since the gas pressure is reduced in two steps the drop in pressure, when changing from the operating cylinder to the other bank of cylinders, is kept to a minimum. The unit is prepared for connection to a liquid oxygen supply tank (LOX).

#### 3. GAS ALARM SYSTEM - based on the product variant

Alarm systems from GCE are user friendly solutions, with simple control and lots of extra functionality. It surveils electronically and the alarm sounds when the following happens:

1. Too high or too low distribution pressure,
  2. Too high intermediate pressure,
  3. Leakage on the reserve gas cylinder bank,
  4. When change of operating side has been effected,
- When connected to a liquid tank the following disturbances will be reported:

1. Too high or too low distribution pressure,
2. Too high intermediate pressure,
3. Leakage from the reserves,
4. When change of operating side has been effected.

The product is either equipped with an alarm system or a sensor only (as stated in column "Alarm" in the product table below).

### SPECIFICATION

#### DUPLEX (MC80) INCLUDES THE FOLLOWING COMPONENTS:

- > MC80 – HP Unit
- > MC80 – Stabilizer
- > Sensors 4-20mA. Alarm based on item in column "Signalization"
- > Evacuating kits for collecting pipe
- > Shut-off valve for the distribution line
- > HP filters

#### FOR A COMPLETE DUPLEX (MC80) STANDBY MANIFOLD ADD:

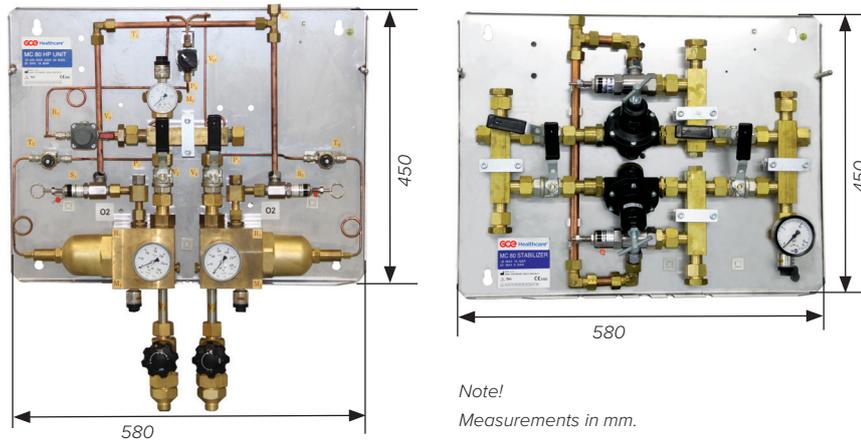
- > Collecting pipe set (high pressure valves, and non-return valves, high pressure components)
- > High pressure hoses with safety wire
- > Gas name sign
- > Connection pipe 90 degree
- > Extension pipes if needed

(For more information, please see accessories pages 17–21)

Item No.	Denomination	Gas	PRV	Signalization
0732328	DUPLEX 2x1	O <sub>2</sub>	Manual activation	Alarm TMA9705
0732329	DUPLEX 2x1	Air	Manual activation	Alarm TMA9705
0732330	DUPLEX 2x1	N <sub>2</sub> O/CO <sub>2</sub>	Manual activation	Alarm TMA9705

TECHNICAL DATA	
<b>Gases:</b>	O <sub>2</sub> , Air, N <sub>2</sub> , N <sub>2</sub> O, CO <sub>2</sub> (all medical gases)
<b>Nominal flow:</b>	200 m <sup>3</sup> /h
TECHNICAL DATA - HIGH PRESSURE UNIT MC80	
<b>Inlet nominal pressure:</b>	200 bar (20 000 kPa)
<b>Outlet nominal pressure:</b>	12 bar (setting range 10–16 bar)
<b>Inlet connection:</b>	W21,8x1/14"M
<b>Outlet connection:</b>	G3/4"F
<b>Pressure relieve valve:</b>	17 bar
<b>Pressure relieve valve pipe dimension:</b>	ø 10 mm
<b>Purge valves connection:</b>	W21,8x1/14"M + pipe ø 15 mm
TECHNICAL DATA - STABILIZER MC80	
<b>Inlet maximal pressure:</b>	20 bar (2000 kPa)
<b>Outlet nominal pressure:</b>	4,5 bar (setting range 0,5–6 bar)
<b>Inlet connection:</b>	G3/4"F
<b>Outlet connection:</b>	G3/4"F
<b>Pressure relieve valve:</b>	6,8 bar
<b>Pressure relieve valve pipe dimension:</b>	ø 15 mm
<b>Regulatory status:</b>	Complies with Medical Devices Directive 93/42/EEC Complies with EN ISO 7396-1 (Central Gas Supply Systems) Complies with EN 60601-1-2 (Electromagnetic compatibility) present SIS HB 370 and HTM 02-01

**BASIC DIMENSIONS**



**FLOW CHART: SET MC80 - STABILIZER + MC80 - HP UNIT**

