

FIRST STAGE PANEL BOARD, type APR 40, WITH AUTOMATIC SWITCH-OVER SYSTEM

THE FIRST STAGE PANEL BOARD APR 40 WITH AUTOMATIC SWITCH – OVER SYSTEM for central stations in cylinders is conceived and manufactured according with MDD 93/42 EEC and subsequent amendments and harmonized standards ISO EN 7396-1, EN 10524-2, EN 737-3 as well as according with HTM 02-01.



The panel boards are realized with a varnished stainless steel frame integrating:

- . High pressure shut-off valves, double rod type , in order to facilitate opening and closing operations.
- . Pressure gauge with down – stream alarm contact set at 20/30 bar according with the supplied medical gas and signaling of empty manifold with a red LED
- . High load pressure reducers realized with hot printed brass body
- . All manometers are equipped with a safety glass
- . All high pressure reducers are equipped with a PTFE membrane
- . Safety valves directly mounted on the reducers
- . Low pressure valves realized in nickel plated brass with stainless steel ball
- . System of automatic flow switch-over by means of a nylon pneumatic variation system
- . Sensor indicating “ working manifold “ by means of a green LED
- . Terminal switch for wiring distance alarm signaling system

The main structure integrates 2 black bakelite handles for easy installation or transport. The switch-over between the two supplying sources is automatically realized by means of a pneumatic switch-over device placed after the two pressure reducers. This situation allows the passage from one source to the other source by means of the pneumatic piston sliding in/out according with the variation of the reducer output pressure.

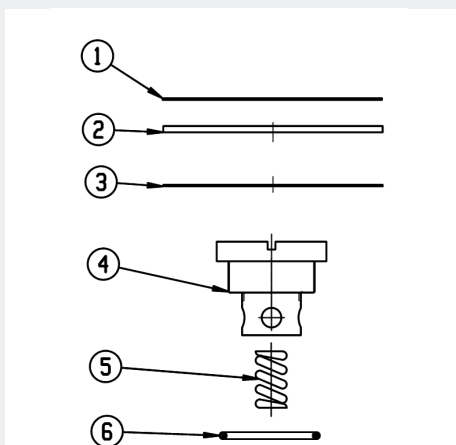
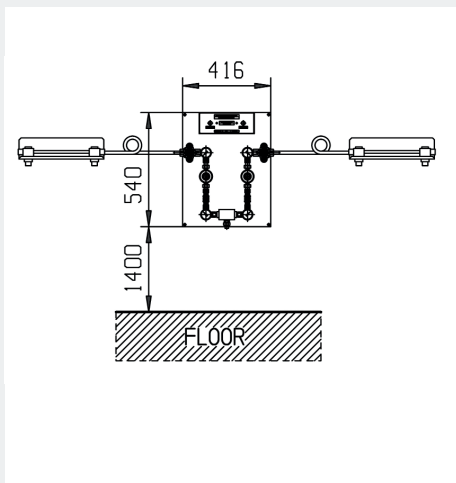


CODE	DESCRIPTION	MAX INLET PRESSURE	OUTLET PRESSURE	LOAD, NORMAL CU.MT/HR
QRI - 0401	FIRST STAGE PANEL BOARD APR 40, OXYGEN	230 bar	8 bar	40
QRI - 0402	FIRST STAGE PANEL BOARD APR 40, AIR	230 bar	8 bar	40
QRI - 0403	FIRST STAGE PANEL BOARD APR 40, NITROUS OXIDE	100 bar	8 bar	40
QRI - 0404	FIRST STAGE PANEL BOARD APR 40, CARBON DIOXIDE	100 bar	8 bar	40
QRI - 0405	FIRST STAGE PANEL BOARD APR 40, NITROGEN	230 bar	8 bar	40
20601095	METAL COVER LAQUERED FOR AUTOMATIC PANEL BOARD 40/100 CU.MT./HR			

The first stage panel board APR 40 can be used as a primary and secondary source or, in case of presence of a main source like cryogenic tank, air production system by compressors, etc), they can be used such as secondary source and reserve.

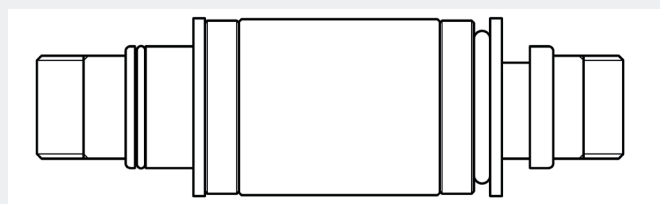
They must be installed in a suitable place in hospitals, nursing homes, clinics, etc, they have the function of supplying distribution networks of medical gases (oxygen, nitrous oxide, Medical Air, Carbon Dioxide, Nitrogen) by reducing the incoming pressure from the cylinders.

Installation guidelines



Main spare parts first stage panel board APR

Reducer Kit O₂ – AIR – N₂ code 20810023
 Reducer Kit CO₂ – N₂O code 20810022
 High pressure contact gauge for 315 bar signals code 26404017
 High pressure contact gauge for 100 bar signals code 26404018
 Low pressure gauge, 16 bar code 26404016
 Pneumatic switch-over device kit code 20602026



DEVICE DESCRIPTION

The first stage central unit consist of :

- A) 1 - PAINTED STEEL WHITE PANEL
- B) 2 - IN LINE HIGH PRESSURE VALVE
- C) 2 - GAUGE SCALE 0-315 BAR
(the gauge is set for sending a signal of empty manifold when the cylinders pressure is less than 20 bar)
- D) 2 - FIRST STAGE brass membrane regulators, 40 cu.mt/hr load each complete with :
 - Inlet filter
 - Safety valve set at 12 bar
- E) 2 - PRESSURE GAUGE SCALE 0-16 BAR to display the supplied pressure
- F) 2 - BALL VALVES to intercept the regulator
- G) 1 - PNEUMATIC SWITCH-OVER DEVICE complete of sensor of operating manifold
- H) 1 - PANEL DISPLAY showing

NA	O ₂ – AC – N ₂ REDUCER KIT COD. 20810023	CO ₂ – N ₂ O REDUCER KIT COD. 20810022
1	OR 2087 VITON	OR 2087 NBR
2	SHUTTER SPRING	SHUTTER SPRING
3	SHUTTER	SHUTTER
4	NBR MEMBRANE	NBR MEMBRANE
5	TEFLON MEMBRANE	TEFLON MEMBRANE
6	CANVAS RUBBER MEMBRANE	CANVAS RUBBER MEMBRANE

