

NOTE TO SPECIFIER; This specification pertains to the protocol station bracket, brass or stainless steel construction, for high pressure gas cylinder.

## 1. DESCRIPTION

### A. Protocol Station

1. The protocol station shall be connected to one gas cylinder.
2. The protocol station shall be composed of one (1) flexible hose, one (1) mounting block, one mounting panel and nametag.
  - Flexible Hose
    - The 36"-long flexible hoses shall be suitable for high purity applications and compatible for the intended gas service.
    - The wetted lining of the hose shall be either stainless steel or Teflon as indicated in the drawings.
    - The inlet connection shall be meet CGA standards for the intended gas and shall be equipped with an internal check valve in the nipple.
  - Mounting Block
    - Brass mounting block shall be made out of ASTM B16 brass barstock whereas the stainless-steel block shall be made out of Type 316/L barstock. The material of construction for the protocol station is indicated in the project drawings.
  - Mounting Panel
    - The mounting panel shall be made from 10-Ga thick steel plate.
    - The mounting panel shall be epoxy coated. The color shall be light grey (RAL 7035).
  - Nametag
    - The nametag shall be Lexan laminate protective cover over a white Vinyl printing background.
    - The nametag shall contain pressure set points, gas service

and the safety diamond of the gas service.

3. There shall be a long hex nipple at the outlet of the mounting block to which a pressure reducing regulator will be connected.

#### B. Optional Alarm Box

1. The optional alarm box shall indicate the status of the gas cylinder:
  - i. A green LED shall signal adequate pressure.
  - ii. A red LED shall signal a depleted gas cylinder.
  - iii. A relay shall be actuated each time the red LED is actuated.
  - iv. A buzzer shall be actuated as soon the red LED appears. A silence push button shall kill the buzzer
2. Pressure Switch
  - i. The pressure switch located behind the mounting panel shall monitor the gas cylinder pressure at all times.
  - ii. The electrical rating of the pressure switch shall correspond to the gas service. Hydrogen and other flammable gases protocol stations shall be mounted with NEMA 7 rate pressure switches.
  - iii. Trigger points of the pressure switch are provided in the project drawings.
3. Cable
  - i. The cable linking the protocol station to the alarm box shall be 4-ft long minimum.

#### C. Pressure Reducing Regulator

1. The pressure reducing regulator connected to the protocol station is specified in another specification section.

## 2. PRODUCT

#### A. Acceptable Manufacturer

1. PSB Series as manufactured by BeaconMedaes.