

JCS Industries Inc.

Model 420-C Vacuum Regulator



- **Rate Range: 1 to 500 PPD**
- **Shuts off the gas supply in the event of vacuum failure**
- **Durable components**
- **Provides an indication of gas supply status**
- **Does not require an auxiliary pressure reducing valve**
- **Suitable for chlorine, sulfur dioxide or ammonia gas**
- **Unit includes an internal switchover valve**
- **Cylinder or Yoke mounting capability**
- **Low part count construction for low maintenance**

The JCS Industries Model 420-Cylinder Mounted Vacuum Regulator is designed for years of safe and reliable service.

Incorporated into the robust design are machined front and back bodies, internal (Non-latching) switching mechanism, internal pressure relief vent and a non-metallic inlet valve assembly. The Model 420-C Vacuum Regulator can be either direct ton cylinder mounted or installed on multiple cylinder pressure headers.

The JCS Model 420-C operates as a pressure reducing valve to transfer gas under pressure to gas under vacuum within the chemical feed system.

Installed between the cylinder/tank of the chosen gas and the Chemical Feeder Model 4200, the Model 420 will switch from one cylinder/tank to the next one in line as soon as the pressure in the first one reduces to a preset pressure. An internal switchover valve automatically initializes the sequence in the event of gas supply failure; the reduction of the vacuum will isolate the regulator diaphragm cavity from pressurized pipe work.

Technical Specifications Model 420-C

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|---------------------------|---|---|
| Range | ➤ | 1 to 500 Lbs. Per Day |
| Chemical of Use | ➤ | Cl ₂ , SO ₄ , NH ₃ |
| Mounting Assemblies | ➤ | 150 lb. Cylinder or Yoke |
| Internal Switchover Valve | ➤ | Yes |
| Connections | ➤ | Vacuum to injector – 0.5" HDPE Tubing Vent to Outside – 0.375" HDPE Tubing |
| Overall Dimensions | ➤ | 4.625" D x 5.125" W x 5.125" H |
| Weight | ➤ | 6 Lbs. (2.7 kg) including Yoke assembly |

Characteristics

JCS Industries 420-C Vacuum Regulator will regulate the supply of pressurized chlorine, sulfur dioxide or ammonia gas into a vacuum dosing system at a rate of up to 500 PPD.

The regulator consists of a sealed cavity, diaphragm with opposing return spring, gas inlet valve, vacuum outlet, high pressure vent and vacuum status indicator.

In the event of high vacuum caused by gas supply failure, the regulator will seal off the vacuum from the supply.

In the event of vacuum failure, the return spring safely shuts off the gas supply inlet valve. If gas pressure occurs in the vacuum cavity, it will be vented safely to an external atmosphere.