

D66 Matheson Gas Line Regulators

Model 3420 Series

Single Stage High Purity Brass
In-Line Regulator



Design Features

- Brass Barstock construction
- Equipped with an outlet diaphragm valve
- Metal to metal seals throughout
- Bonnet threaded for panel mounting as standard
- Body pre-drilled for back mounting

The Model 3420 Series regulators have been designed for line service to provide a means of dropping the pressure of house gas systems to a lower working pressure. The matched low inlet pressure and control valve design ensure stable pressure and flow from house systems. These regulators provide high purity control for laboratory use.

The Model 3420 Series regulators are recommended for use in applications where a house gas or distribution system pressure needs to be reduced to a lower working pressure. Typically these applications include use of the regulators for station pressure controls, carrier gas controls, blanketing operations and other high purity critical laboratory situations. The Model 3420 Series is compatible with gases that are non-corrosive in nature and gases that are compatible with the materials in the process stream.

Materials of Construction

Body: B16 Brass Barstock
Bonnet: Nickel Plated Brass
Diaphragms: 316 Stainless Steel
Seats: PFA PTFE
Seals: Metal to Metal

Specifications

Maximum Inlet Pressure: 500 psig (3,450 kPa)
Maximum Flow Rate: Model 3421: 180 CFH (80 LPM)
(At 500 psig, N₂): Model 3423: 850 CFH (375 LPM)
Flow Coefficient (Cv):* 0.15
Operating Temperature: -40 to 165°F (-40 to 74°C)
Porting: 1/4" NPT female
Porting Configuration: 1 high, 3 low

Model No	Delivery Pressure Range.	Delivery Pressure Gauge
3421	2-30 psig	30" vac-0-60 psig
3423	4-100 psig	30" vac-0-200 psig
3425	10-250 psig	30" vac-0-400 psig

Note: These regulators cannot be supplied with CGA connections

Model 3450 Series

Single Stage High Purity Stainless Steel
In-Line Regulator



Design Features

- 316 Stainless Steel construction
- Equipped with an outlet diaphragm valve
- Metal to metal seals throughout
- Bonnet threaded for panel mounting as standard
- Body pre-drilled for back mounting

The Model 3450 Series has been improved to meet the demands of our customers. The Model 3450 Series has been upgraded to a higher purity, longer lived product design. These regulators have been designed for line service to provide a means of dropping the pressure of house gas systems to a lower working pressure. The large diaphragm surface area provides excellent pressure control. These regulators can also be used for Dichlorosilane control for laboratory use.

The Model 3450 Series regulators are recommended for use in applications to reduce a house gas or distribution system pressure to a lower working pressure. Typically these applications include use of the regulators for station pressure controls, some semi-conductor processes, blanketing operations and other high purity critical situations. The Model 3450 Series is compatible with gases that are non-corrosive or semi-corrosive in nature and gases that are compatible with the materials in the process stream.

Materials of Construction

Body: 316 Stainless Steel
Bonnet: Nickel Plated Brass
Diaphragms: 316 Stainless Steel
Seats: PFA PTFE
Seals: Metal to Metal

Specifications

Maximum Inlet Pressure: 500 psig (3,450 kPa)
Maximum Flow Rate: Model 3452: 300 CFH (130 LPM)
(At 500 psig, N₂): Model 3454: 730 CFH (320 LPM)
Flow Coefficient (Cv):* 0.50
Operating Temperature: -40 to 165°F (-40 to 74°C)
Porting: 1/4" NPT female
Porting Configuration: 1 high, 2 low

Model No	Delivery Pressure Range.	Delivery Pressure Gauge
3452	2-30 psig	30" vac-0-60 psig
3454	4-100 psig	30" vac-0-200 psig
3452-678**	2-30 psig	30" vac-0-60 psig

**For Dichlorosilane only

Note: These regulators cannot be supplied with CGA connections