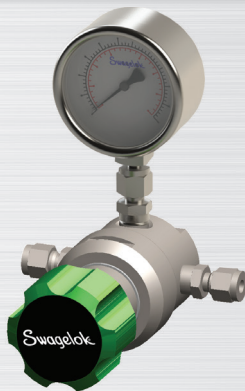


# Regulator Assemblies

Configurations for gas bottle or inline service utilising K-Series pressure reducing regulators.



Single Stage Gas Bottle Regulator Assembly (GBS)



Inline Regulator Assembly (INL)



Dual Stage Gas Bottle Regulator Assembly (GBD)

## KPR Regulator Features

- Convoluted, non-perforated diaphragm
- Metal-to-metal diaphragm seal
- Low internal volume
- Two-piece cap design provides linear load on the diaphragm seal
- High flow, dual-gauge type filter positively retained in inlet port

## KCY Regulator Features

- Convoluted, non-perforated diaphragm
- Metal-to-metal diaphragm seal
- Excellent set-point stability
- Minimise supply-pressure effect
- High-flow, dual-gauge type filter positively retained in inlet port

## Technical Data

### Pressure Control Ranges

- Single stage gas bottle: 0-250 psig (0-17.2 bar) and 0-500 psig (0-34.5 bar)
- Inline: 0-50 psig (0-3.45 bar), 0-100 psig (0-6.9 bar) and 0-250 psig (0-17.2 bar)
- Dual stage gas bottle: 0-25 psig (0-1.7 bar), 0-100 psig (0-6.9 bar), 0-250 psig (0-17.2 bar) and 0-500 psig (0-34.5 bar)

### Flow Coefficient ( $C_v$ )

- Single stage gas bottle: 0.06
- Inline: 0.06
- Dual stage gas bottle: 0.06

### Process Connection Ports

- 1/4 in. female NPT inlet or outlet
- Metric / Imperial Swagelok inlet or outlet
- BS 341 bottle connections
- 1/4 in. Swagelok needle valve outlet

### Maximum Inlet Pressure

- Single stage gas bottle: 4,351 psig (300 bar)
- Inline: 1,000 psig (69 bar)
- Dual stage gas bottle: 4,351 psig (300 bar)

### Pressure Gauges

- Swagelok B model pressure gauges may be selected to measure inlet and/or outlet pressure.
- Maximum gauge pressures are appropriate for the maximum inlet pressure and/or control pressure selected.

### Maximum Operating Temperature

- 80°C (176°F)



## Ordering Information

Build a Swagelok Regulator Assembly ordering number by combining the designators as shown below.

**SCOTS - GB250 - 4NP - G G R - 1S4**

### Assembly Location

Swagelok Scotland, Teesside & Ireland

### Regulator Assembly Type

Choose a designator from the table below

### Inlet Connection

All Models

**4NP** = 1/4 in. female NPT  
**400** = 1/4 in. Swagelok  
**600** = 3/8 in. Swagelok  
**810** = 1/2 in. Swagelok  
**6MO** = 6mm Swagelok  
**10M** = 10mm Swagelok  
**12M** = 12mm Swagelok

### Inlet Gauge

Gas Bottle  
**G** = Inlet Gauge  
**X** = No Gauge  
 Inline\*  
**X** = N/A

### Outlet Connection

**4NP** = 1/4 in. female NPT  
**400** = 1/4 in. Swagelok  
**600** = 3/8 in. Swagelok  
**810** = 1/2 in. Swagelok  
**6MO** = 6mm Swagelok  
**10M** = 10mm Swagelok  
**12M** = 12mm Swagelok  
**1S4** = 1/4 in. Swagelok needle valve

### Relief Valve

**R** = Relief Valve\*\*  
**X** = No Relief  
 \*\* only available for single stage gas bottle regulators

Gas Bottle  
 Regulator  
 ONLY

**BS3** = BS341 # 3 Inert Gases  
**BS4** = BS341 # 4 Flammable Gases  
**BS8** = BS341 # 8 CO2 Gas  
**DN6** = DIN # 6 Inert Gases  
**B30** = NEVOC BS341 # 30 Inert Gases  
**B31** = NEVOC BS341 # 31 Air  
**B32** = NEVOC BS341 # 32 Oxidising Gases  
**B38** = NEVOC BS341 # 38 Flammable Gases

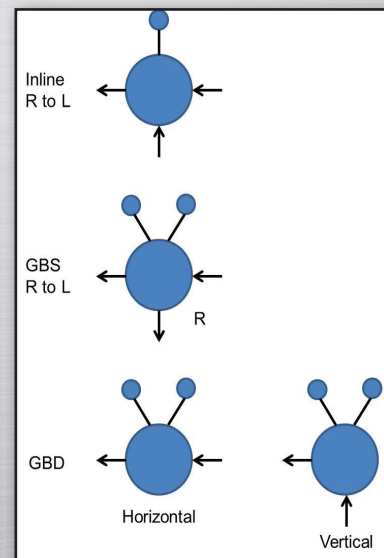
### Outlet Gauge

Gas Bottle  
**G** = Outlet Gauge  
**X** = No Gauge  
 Inline. Left-to-Right\*  
**G** = Outlet Gauge  
**P** = 1/4 in. Plug  
 Inline. Right-to-Left\*  
**X** = N/A

\*Select a flow direction from the diagram below

### Regulator Assembly Type

Designator	Control Range		Maximum Inlet Pressure		Flow Coefficient (Cv)
	psig	bar	psig	bar	
Single Stage Gas Bottle Regulator					
GBS250	250	17.2	4351	300	0.06
GBS500	500	34.5	4351	300	0.06
Inline Regulator					
INL050	50	3.45	500	34.5	0.06
INL100	100	6.9	1000	69	0.06
INL250	250	17.2	500	34.5	0.06
Dual Stage Gas Bottle Regulator					
GBD025	25	1.7	4351	300	0.06
GBD100	100	6.9	4351	300	0.06
GBD250	250	17.2	4351	300	0.06
GBD500	500	34.5	4351	300	0.06



Swagelok Regulator Assemblies may be ordered with additional options and configurations. Contact Swagelok Scotland, Teesside & Ireland for further information.

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