

# Models SSD, SSE

## General Purpose, Single-Stage Regulators

General purpose single-stage regulators are designed for use in noncorrosive gas service. They are recommended for general laboratory use where inlet pressure does not vary greatly (such as liquefied gases) and where high purity is not a consideration.

### Standard Features

- Filter in Seat Assembly traps foreign matter, extends regulator life and reduces maintenance.
- Neoprene Diaphragm permits accurate delivery pressure settings.
- Outlet metering valve provides flow control.

### Optional Features

- Relief Valve protects regulator components from the effects of overpressurization.

### Specifications

Maximum Inlet Pressure:

SSD: 3000 psig  
SSE: 300 psig

Inlet Pressure Gauge (dual scale):

SSD: 0–4000 psig/0–275 bar  
SSE: 0–400 psig/0–27 bar

Delivery Pressure Range: See Tables

Delivery Pressure Gauge: See Tables

Gauge Size: 2" Dial

Operating Temperature Range:

Regulators with Flowmeters:  
32°F to 165°F

Regulators without Flowmeters:  
-40°F to 165°F

Flow Coefficient:

Regulator: Cv = 0.18  
Outlet Valve: Cv = 0.4

Inlet Connection:

SSD: CGA 296, 320, 326, 346, 350,  
540, 580, 590 or 660 as ordered  
SSE: CGA 300, 510 or 660 as ordered

### Optional Equipment

Equipment	Part No.
Relief Valves:	
for SSD-15, SSE-15	RV5572-25i
for SSD-50, SSE-50, SSD-600 Series and SSE-600 Series	RV5572-90i
for SSD-125 and SSE-125	RV5572-140i
for SSD-250 and SSE-250	RV5572-300i

Outlet Connection:

1/4" NPT male (on outlet valve)  
1/8" NPT female (on flowmeter)

Optional Relief Valve Vent Connection:

1/4" NPT male

Supply Pressure Effect: 1.0 psi per 100 psi

Approximate Weight: 4 lbs

### Materials of Construction

Body: Brass Bar Stock

Outlet Valve and Gauges: Brass

Bonnet: Painted Zinc

Other Metal Parts Exposed to Gas:

Brass and Stainless Steel

Seat and Seals: Teflon®

Diaphragm: Neoprene

Flowmeter: See Series 50 Flowmeter,  
Model FM4350 (page 112)



SSD Regulator



SSD Regulator with Flowmeter

Table I, Regulators with Metering Valves

Part No. Model SSD	Part No. Model SSE	Delivery Pressure		
		Range (psig)	Gauge (dual scale) (psig)	(bar)
SSD-15-(CGA)	SSE-15-(CGA)	2–15	0–30	0–2
SSD-50-(CGA)	SSE-50-(CGA)	4–50	0–100	0–7
SSD-125-(CGA)	SSE-125-(CGA)	10–125	0–150	0–10
SSD-250-(CGA)	SSE-250-(CGA)	20–250	0–400	0–27

Table II, Regulators with Flowmeters

All regulators with flowmeters have a delivery pressure range of 4–50 psig and are equipped with 0–100 psig pressure gauge on the delivery side.

Part No. Model SSD	Part No. Model SSE	Flowmeter Range, Air at 70°F and 14.7 psia
SSD-600-(CGA)	SSE-600-(CGA)	8–50 sccm
SSD-601-(CGA)	SSE-601-(CGA)	5–85 sccm
SSD-602-(CGA)	SSE-602-(CGA)	40–440 sccm
SSD-603-(CGA)	SSE-603-(CGA)	100–950 sccm
SSD-604-(CGA)	SSE-604-(CGA)	0.2–1.8 slpm
SSD-605-(CGA)	SSE-605-(CGA)	0.4–3.6 slpm
SSD-606-(CGA)	SSE-606-(CGA)	0.5–7.0 slpm
SSD-607-(CGA)	SSE-607-(CGA)	1–13 slpm
SSD-608-(CGA)	SSE-608-(CGA)	6–24 slpm
SSD-609-(CGA)	SSE-609-(CGA)	4–44 slpm

Where “(CGA)” is indicated in Tables I and II, insert appropriate Compressed Gas Association connection number to complete the part number. Example: SSD-15-580 or SSD-600-580. Order by complete number.