

### SR 310, SR 311, & SR 312

#### Flow Meter

##### DESIGN/CONSTRUCTION

- Designed for CO<sub>2</sub> application (non-siphoned tube cylinders)
- High flow CO<sub>2</sub> applications (SR 310 100 psig) (SR 311/312 100 SCFH) with adequate supply or source
- Designed for core wire applications
- Machined aluminum body & housing cap
- 2" (50.8 mm) gauge
- Stem type seat mechanism
- 1.75" (44.5 mm) diaphragm - fabric reinforced neoprene
- Self reseating relief valve (not designed to protect downstream equipment)
- Sintered inlet filter - bronze

##### DIMENSIONS

8.38" W x 7.25" H x 2.5" D  
(212.9 mm x 184.2 mm x 63.5 mm)

##### WEIGHT

2 lb 15 oz (1.33 kg)

##### PERFORMANCE

- Maximum inlet – 1500 psig
- Delivery range – 100 SCFH

A regulator equipped with a flow gauge is not accurate when a back pressure in excess of 2 psig exists at the outlet. Back pressure is caused by a restriction in the equipment downstream of the flow gauge. Metering valves, kinked hoses or even very long hoses are restrictions that can cause back pressure. In applications where back pressure in excess of 2 psig can be expected, a regulator equipped with a flow meter should be used.

**WARNING:** High gas withdrawal rates may cause regulator freeze up and will require cylinder manifolding. Consult your gas supplier. See below for Gas Heater.

Gas Service	Part No.	Model No.	Flow Range	CGA Inlet Connection
Carbon Dioxide	0781-0355	SR 310 Adjustable Pressure Gauge	10-200 psig	320
	0781-0353	SR 311 (Preset @ 80 psig) Flow Meter	25-100 SCFH	320
	0781-0354	SR 312 Flow Gauge	0-100 SCFH	320

Outlet Connections: 5/8"-18 RH(F)  
Adapter: 5/8"-18(M) x 1/4" NPT(M) (Part No. 0950-0163)



SR 310



SR 311



SR 312

REGULATORS

#### GAS HEATER

Manufactured for either Carbon Dioxide (CO<sub>2</sub>) or Nitrous Oxide (N<sub>2</sub>O). These heaters operate on 110 Volts at 120 Watts (1 Amp). They are thermostatically controlled at 160°F (+5°) and rated for flows up to 160 SCFH. Rated for standard cylinder pressures up to 3000 psi.

Part No.	Description	Weight
5370-7141	Electric CO <sub>2</sub> Heater	2 lb 0.9kg
5370-7142	Electric N <sub>2</sub> O Heater	2 lb 0.9kg



## SLR 100

### Surge Limiting Regulator

For use with Shielding Gas

#### DESIGN/CONSTRUCTION

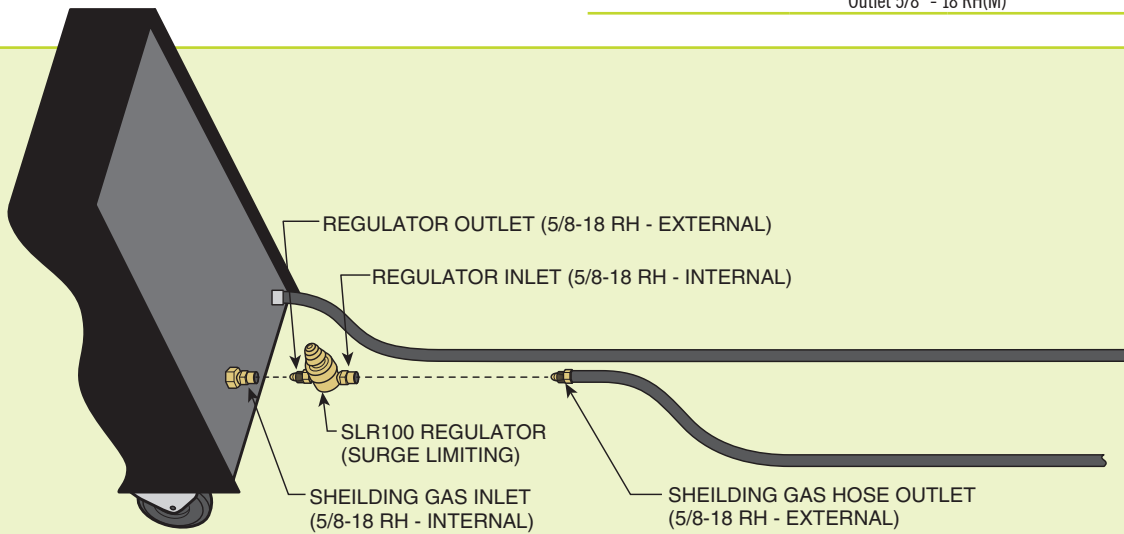
- Reduces gas surge at the application of the torch/gun
- Provides a more consistent flow rate of shielding gas to welding machines
- All brass construction
- Neoprene diaphragm
- 50 micron sintered bronze internal filter

#### PERFORMANCE

- Recommended inlet pressure: 100± 20 psig (200 max)
- Flow: 50 SCFH (preset)
- Connections: CGA 032 RH



Gas Service	Model No.	CGA Inlet Connection	Part No.
Inert	SLR 100	032	0781-1197
Outlet Connections: Inlet 5/8" - 18 RH(F) Outlet 5/8" - 18 RH(M)			

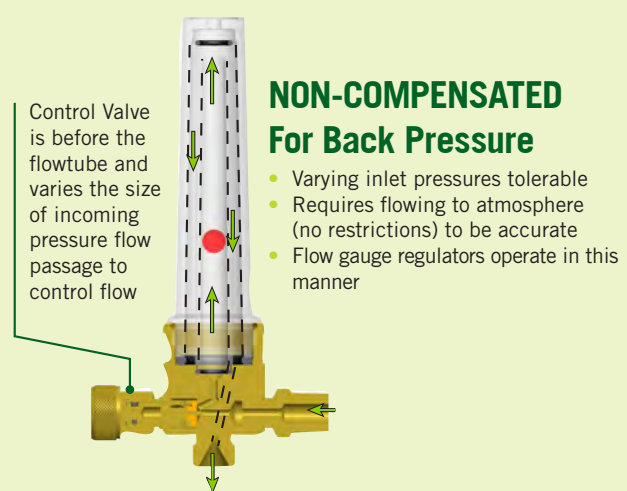
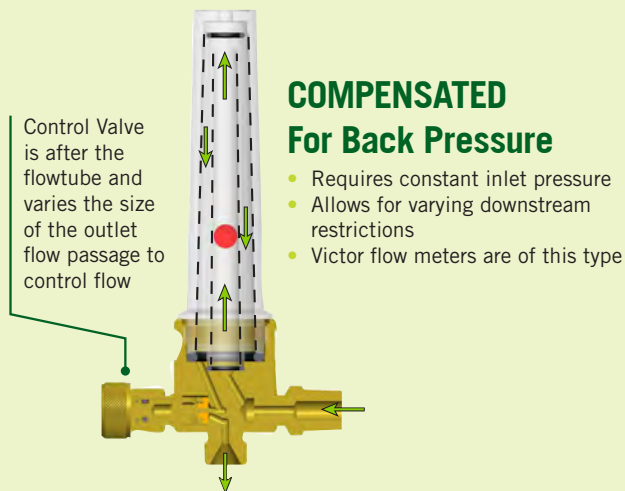


REGULATORS

### What Does Back Pressure Compensation Mean?

When a flow meter is back pressure compensated, it is not affected by any downstream restrictions that result in a pressure buildup. In a device that is not compensated, the back pressure will result in inaccurate readings on the flow tube or gauge.

All Victor FM Series flow meters are back pressure compensated to ensure accurate reading at all times, even if line restrictions are present.



## Flow Meter

### Heavy Duty

#### DESIGN/CONSTRUCTION

- Gas flow measurement in SCFH
- MIG / TIG applications
- Flowtube and outer tube are made of impact resistant lexan for severe applications
- Pressure compensated for low surge requirement
- Cover tube contains overpressure protection

All Victor flow meters are back pressure compensated to ensure accurate readings at all times, even if line restrictions are present. All flow meters are calibrated to operate at 25 psig inlet pressure to minimize surge, except the FM 200 which is calibrated to operate at 80 psig.

**WARNING:** Not designed for cylinder use.  
Do not exceed calibrated inlet pressure.



FM372

Part No.	Model No.	Flow Range (SCFH)	Inlet Fitting	Outlet Fitting	Replacement Flow Tube	Inlet Pressure (psig)
<b>UNITS WITH SINGLE GAS CALIBRATION</b>						
1000-0264	FM 200	30-100 CO <sub>2</sub>	1/4" NPT(M)	5/8"-18 RH(F)	1015-0066	80
<b>UNITS WITH 2 GAS CALIBRATIONS</b>						
1000-0268	FM 150	10-60 Air, 10-60 Nitrogen	1/4" NPT(M)	5/8"-18 RH(F)	1015-0060	25
1000-0255	FM 135	4-18 Argon, 10-50 Helium	9/16"-18 RH(F)	5/8"-18 RH(F)	1015-0063	25
1000-0256	FM 145	4-18 Argon, 10-50 Helium	5/8"-18 RH(M)	5/8"-18 RH(F)	1015-0063	25
1000-0257	FM 155	4-18 Argon, 10-50 Helium	1/4" NPT(M)	5/8"-18 RH(F)	1015-0063	25
1000-0261	FM 137	15-65 Argon, 40-200 Helium	9/16"-18 RH(F)	5/8"-18 RH(F)	1015-0064	25
1000-0262	FM 147	15-70 Argon, 40-200 Helium	5/8"-18 RH(M)	5/8"-18 RH(F)	1015-0064	25
1000-0263	FM 157	15-65 Argon, 40-200 Helium	1/4" NPT(M)	5/8"-18 RH(F)	1015-0064	25
<b>UNITS WITH 3 GAS CALIBRATIONS</b>						
1000-0258	FM 370	5-40 CO <sub>2</sub> , 5-50 Argon, 20-150 Helium	9/16"-18 RH(F)	5/8"-18 RH(F)	1015-0057	25
1000-0259	FM 371	5-40 CO <sub>2</sub> , 5-50 Argon, 20-150 Helium	5/8"-18 RH(M)	5/8"-18 RH(F)	1015-0057	25
1000-0182	FM 372	5-40 CO <sub>2</sub> , 5-50 Argon, 20-150 Helium	1/4" NPT(M)	5/8"-18 RH(F)	1015-0057	25

**To ensure proper gas flow and to prevent tampering to your flowmeter use a Victor Locking Valve (Part No. 0662-0079)**

## HRF 2400

### Medium Duty

#### DESIGN/CONSTRUCTION

- Regulator / flow meter combination in one compact unit
- MIG / TIG applications
- Ideal for all applications where dependability is needed
- Calibrated tube at 25 psig (not on HRF 2480)
- Machined brass body & housing cap
- Back pressure compensated
- Fabric reinforced neoprene diaphragm
- Internal self reseating relief valve – not designed to protect downstream equipment
- Sintered inlet filter – bronze
- Cover tube contains overpressure protection

#### DIMENSIONS

5.63" W x 8.25" H x 3" D  
(143.0 mm x 209.6 mm x 76.2 mm)

#### WEIGHT

2 lb 8 oz (1.13 kg)

#### PERFORMANCE

- Maximum inlet – 3000 psig
- Outlet pressure – preset
- HRF 2425 – 25 psig
- HRF 2480 – 80 psig

**WARNING:** High gas withdrawal rates on carbon dioxide may require cylinder manifolding. Consult your gas supplier.



Gas Service	Part No.	Model No.	Flow Range (SCFH)	Specify CGA Inlet Connection	Replacement Flow Tube
Argon, Argon/Carbon Dioxide Mix, Helium	0781-2731	HRF 2425 Preset @ 25 psig	10-50 (Argon), 20-150 (Helium)	580	1015-0057
Carbon Dioxide, Carbon Dioxide Mix	0781-2727	HRF 2480 Preset @ 80 psig	10-38 (CO <sub>2</sub> )	320	1015-0058
	0781-2728	HRF 2480 Preset @ 80 psig	7.5-37.5 (Argon)	320, 580	

Outlet Connections: 5/8"-18 RH(F), CGA 032

## DFM 150

### Medium Duty

#### DESIGN/CONSTRUCTION

- Designed to monitor two separate processes or gas flows
- Ideal for applications where shielding gas and back purge requirements are needed
- Designed to offer convenience for the maintenance and fabrication industries
- Brass body
- Teflon seat mechanism
- Sintered inlet filter – bronze
- Music wire – spring
- Piston – brass
- Cover tube – lexan

#### DIMENSIONS

5.5" W x 6.5" H x 5" D  
(139.7 mm x 165.1 mm x 127.0 mm)

#### WEIGHT

2 lb 9 oz (1.16 kg)

#### PERFORMANCE

- Maximum inlet – 3000 psig DFM 150
- 75 psig DFM 150S
- Outlet pressure – 25 psig (preset) Flow Capacity (See below)
- Flow meter shows actual flow



Gas Service	Part No.	Model No.	Flow Range (SCFH)	CGA Inlet Connection	Max Inlet (psig)	HP Gauge	Replacement Flow Tube
Argon, Helium	0781-1153	DFM 150-580	5-50 (Argon), 20-150 (Helium)	580	3000	0-4000	1015-0057
Argon, Argon / Carbon Dioxide Mix, Helium Low Pressure	0781-1206	DFM 150S	5-50 (Argon) 5-40 (Argon/CO <sub>2</sub> ) 20-150 (Helium)	1/4" NPT (F)	75	0-100	1015-0057

Outlet Connection: 5/8"-18 RH(F), CGA 032  
Preset Pressure: 25 psig

## HSR & HVTS

### Medium Duty

#### DESIGN/CONSTRUCTION

- Single or two stage design
- Compact in size
- Accurate regulator for gas flow
- MIG / TIG applications
- Two stage version provides extremely accurate flow rates as cylinder pressure declines
- Low surge rates – 25 psi preset

### HSR Models (Single Stage)

#### DIMENSIONS

7" W x 6.25" H x 4.25" D (177.8 mm x 158.8 mm x 108.0 mm)

#### WEIGHT

3 lb 3 oz (1.45 kg)

### HVTS Models (Two Stage)

#### DIMENSIONS

7" W x 5.5" H x 6.5" D (177.8 mm x 139.7 mm x 165.1 mm)

#### WEIGHT

4 lb 10 oz (2.10 kg)

#### DESIGN/CONSTRUCTION

- Forged brass body and housing cap
- 2" (50.8 mm) high pressure gauge
- Stem type seat mechanism
- Fabric reinforced neoprene diaphragm
- External self reseating relief valve (not designed to protect downstream equipment)
- Sintered inlet filter – bronze

#### PERFORMANCE

- Maximum inlet – 3000 psig
- Outlet pressure – 25 psig (preset), 80 psig on CO<sub>2</sub>
- Flow capacity (See below)



HSR Series



HVTS Series

**WARNING:** High gas withdrawal rates on carbon dioxide may require cylinder manifolding. Consult your gas supplier.

Gas Service	Part No.	Model No.	Flow Range (SCFH)	Specify CGA Inlet Connection	Replacement Flow Tube	Gas Calibrations
Nitrogen/Air	0781-3819	*HSR 2530	10-60	580	1015-0070	2
	0781-3867	*HSR 2535	4-18 / 10-50	580	-	2
Argon/Helium	0781-3775	*HVTS 2535	4-18 / 10-50	580	-	2
	0781-3871	*HSR 2537	15-65 / 40-200	580	1015-0064	2
	0781-3772	*HVTS 2537	15-65 / 40-200	580	1015-0064	2
Argon,	0781-3873	*HSR 2570	5-50	580	1015-0057	3
Argon/Carbon Dioxide Mix,	0781-3869	*HSR 2570	5-40	580	1015-0057	3
Helium	0781-3774	*HVTS 2570	20-150	580	1015-0057	3
Hydrogen	0781-3825	HSR 2533	5-40	350	1015-0070	2
Argon, Argon/Carbon Dioxide Mix, Helium (Max Inlet – 200 psig)	0781-1245	S2570	5-50, 5-40, 20-140	034	1015-0057	3
Inert	0781-3880	HSR 1470-680	50-140-40	680	1015-0057	AR-HE-CO <sub>2</sub>

\*Outlet Connections: 5/8"-18 RH(F)