

Flow Products

What Does Victor Have to Offer?

Victor® has a full line of flow products for virtually any application. Whether it is welding, industrial or laboratory use, Victor has a flow meter, flow gauge or surge limiting regulator for your needs.

Victor offers a range of products for the delivery of shielding gas in the arc welding process or any application where gas flow rates, versus delivery pressure, are the primary consideration. These products are available for pure or mixed gases and for working with either high pressure cylinders or low pressure "piped shop" environments.

REGULATORS



OFFERING INCLUDES:

- Regulators with flow meter
- Flow Meters
- Flow Gauge Regulators
- Single or Two Stage designs
- Surge limiting regulator

ESS3-FG

Flow Gauge

DESIGN/CONSTRUCTION

- Forged brass body
- Zinc-Aluminum housing cap
- High impact ABS gauge guard
- 1.5" (40 mm) gauges - brass
- Stem type seat mechanism
- 2" (50.8 mm) diaphragm - fabric reinforced neoprene
- External self reseating relief valve. Not designed to protect downstream equipment
- Sintered inlet filter - nickel plated bronze
- SLAM™ impact absorbing safety knob
- Meets or exceeds CGA E-4, UL 252 and ASTM G-175 Promoted Ignition Test

DIMENSIONS

6.6" W x 4.4" H x 3.6" D
(167.6 mm x 111.8 mm x 91.4 mm)

WEIGHT

3.5 lb (1.59 kg)

PERFORMANCE

- Maximum inlet - 3000 psig
- Flow Range - 0-40 CFH (0 - 19 L/min.)



Gas Service	Part No.	Model No.	Flow Range (SCFH)
Argon	0781-5120	ESS3-FG-580	0-40
Carbon Dioxide	0781-5119	ESS3-FG-320	0-40

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



BLACK Argon
GRAY Carbon Dioxide

SR 310, SR 311, & SR 312

Flow Meter

DESIGN/CONSTRUCTION

- Designed for CO₂ application (non-siphoned tube cylinders)
- High flow CO₂ 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 (CO₂) or Nitrous Oxide (N₂O). 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 ₂ Heater	2 lb 0.9kg
5370-7142	Electric N ₂ O Heater	2 lb 0.9kg



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

REGULATORS

Part No.	Model No.	Flow Range (SCFH)	Inlet Fitting	Outlet Fitting	Replacement Flow Tube	Inlet Pressure (psig)
UNITS WITH SINGLE GAS CALIBRATION						
1000-0264	FM 200	30-100 CO ₂	1/4" NPT(M)	5/8"-18 RH(F)	1015-0066	80
UNITS WITH 2 GAS CALIBRATIONS						
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
UNITS WITH 3 GAS CALIBRATIONS						
1000-0258	FM 370	5-40 CO ₂ , 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 ₂ , 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 ₂ , 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 ₂)	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 ₂) 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 CO₂
- Flow capacity (See below)



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,	0781-1245	S2570	5-50, 5-40, 20-140	034	1015-0057	3
Argon/Carbon Dioxide Mix, Helium (Max Inlet – 200 psig)						
Inert	0781-3880	HSR 1470-680	50-140-40	680	1015-0057	AR-HE-CO ₂

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

HRF 1400

Light Duty

DESIGN/CONSTRUCTION

- Regulator / Flow meter
- Single stage piston design
- Argon, Argon/CO₂ mix & CO₂ models
- 25 psig or 80 psig pre-set pressure
- Up to 50 CFH for Argon and up to 38 CFH for CO₂ delivery
- Available in CGA 320 & 580 inlet connections
- Optional MIG kit available with 10' (3.1 m) hose



WEIGHT

2.0 lb (0.91 kg)

PERFORMANCE

Maximum inlet pressure: 3000 psig

Outlet pressure: preset HRF 1425 – 25 psig HRF 1480 – 80 psig

Part No.	Model No.
0781-2723	HRF 1425-580
0387-0240	HRF 1425-580 CS
0781-2743	HRF 1425-580 (With 10' (3.1 m) hose)
0781-2725	HRF 1480-320
0781-2745	HRF 1480-320 (With 10' (3.1 m) hose)
0781-2724	HRF 1480-580
0781-2744	HRF 1480-580 (With 10' (3.1 m) hose)

Outlet Connection: 5/8"-18 RH(F)
CS = Clamshell Package

Meco High Pressure

DESIGN/CONSTRUCTION

- Single-stage design
- Heavy-duty applications such as oil/gas industry
- Stainless steel diaphragm
- Positive pressure yoke type regulator
- Multi-seat 4 way seat block



WEIGHT

4 lb 9 oz (2.2 kg)

PERFORMANCE

- Maximum inlet pressure – 5500 psig
- Available as a preset model or with adjusting T-screw

Part Number	Description	Adjusting Mechanism	Pressure	Inlet
5641-8461	P Regulator 125 psi	Cap nut	125	1/4 -18 NPT
5641-8464	P Regulator 150 psi	T screw	150	1/4 -18 NPT
5641-8465	P Regulator 150 psi	Cap nut	150	1/4 -18 NPT
5641-8470	P Regulator 225 psi	T screw	225	1/4 -18 NPT
5641-8468	P Regulator 225 psi	T screw	225	1/4 -18 NPT

TPR 250 Purging Regulator

Light Duty

DESIGN/CONSTRUCTION

- Single stage design
- Forged brass body & housing cap
- 2" (50.8 mm) gauges
- Stem type seat mechanism
- Neoprene diaphragm



DIMENSIONS

6.38" W x 5.13" H x 4.25" D
(162.1 mm x 130.3 mm x 108.0 mm)

WEIGHT

2 lb 15 oz (1.33 kg)

PERFORMANCE

Maximum inlet pressure: 3000 psig

Part No.	Model No.	Delivery Pressure (psig)
0781-9133	TPR 250-125-580 CS	5-125
0781-9127	TPR 250-125-320	5-125
0781-9134	TPR 250-200-580 CS	10-250
0781-9135	TPR 250-500-580 CS	10-250

Outlet Connection: 1/4"-37" flare.
CS = Clamshell Package

