



First choice when
quality counts.

Senator[®] 13:1 and 17:1 Air-Powered Pumps

**For durability
and power
under tough
working
conditions**

- **More durable than ever before with longer life packing design**
- **Higher pump pressure and flow performance handles a broader range of paints and coatings**
- **Improved serviceability means fewer parts, faster repairs and lower overall maintenance and ownership costs**

These medium pressure Senator pumps are ideal as a central supply for multiple air-assisted airless guns in painting and finishing operations. The 17:1 pressure ratio offers the extra pressure capacity to atomize high-solids paints and coatings.

The reliable and durable Senator air motor has been developed and tested for more than 10 million cycles of operation.

Typical Fluids Handled

- Enamels
- Polyurethane coatings
- Epoxy primers and coatings
- Acid-catalyzed lacquers and varnishes
- Zinc-rich primers
- Waterborne coatings

Typical Applications

- Air-assisted airless spraying of epoxy and polyurethane coatings in metal products manufacturing industries
- Air-assisted airless spraying of lacquers and varnishes in the wood products industries
- Air-assisted airless spraying of polyurethane coatings in the aerospace industry
- Airless spray of corrosion control zinc-rich primers in the steel structures and ship building industries



COMPONENTS

Technical Specifications

Maximum fluid working pressure

Senator 13:1 1300 psi (9.0 MPa, 90 bar)

Senator 17:1 1700 psi (11.7 MPa, 117 bar)

Max. air input pressure 100 psi (0.7 MPa, 7 bar)

Fluid flow at 60 cpm

Senator 13:1 4.8 gpm (18 lpm)

Senator 17:1 3.4 gpm (13 lpm)

Max. operating temperature 180°F (82°C)

Air inlet size 3/4 npsm(f)

Fluid inlet size 2 npt(f)

Fluid outlet size 1 npt(f)

Weight 140 lbs. (64 kg)

Instruction manuals

Senator 13:1, CS model 308-359

Senator 13:1, SST model 308-360

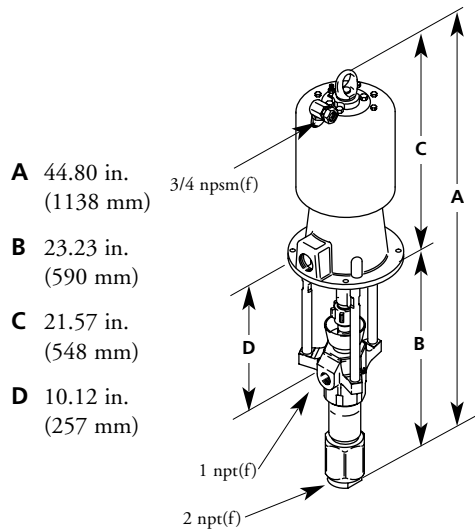
Senator 17:1, CS model 308-353

Senator 17:1, SST model 308-354

Teflon® is a registered trademark of Du Pont.

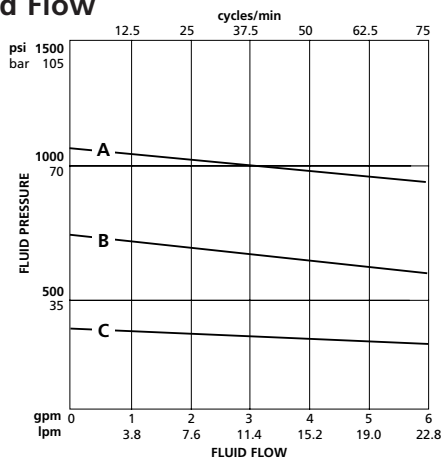
Severe Duty™ is a trademark of Graco Inc.

Dimensions

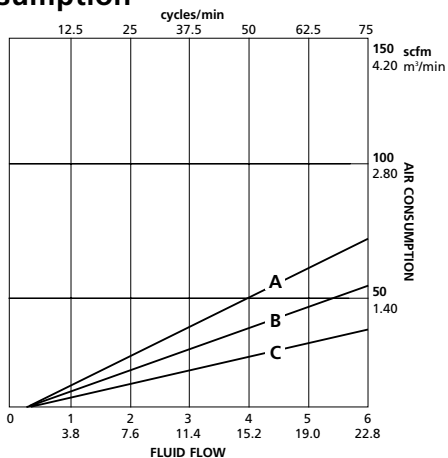


Senator 13:1 Performance

Fluid Flow

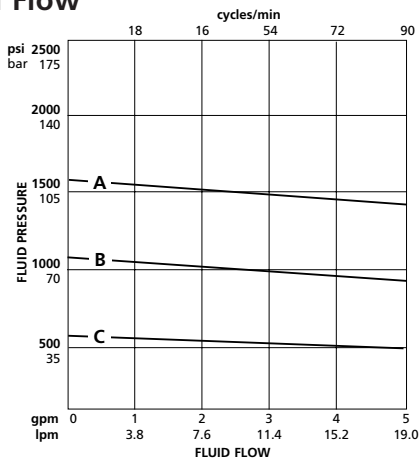


Air Consumption

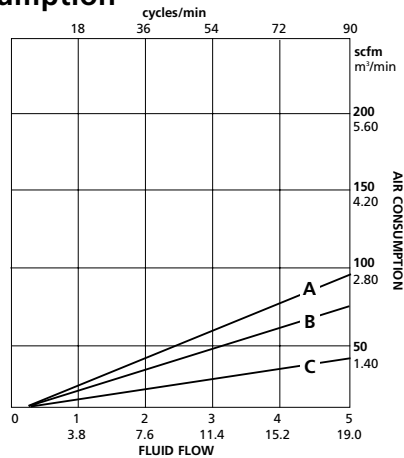


Senator 17:1 Performance

Fluid Flow



Air Consumption



Air Pressures

A = 100 psi (0.7 MPa, 7 bar)

B = 70 psi (0.49 MPa, 4.9 bar)

C = 40 psi (0.28 MPa, 2.8 bar)

Performance tested in No. 10 weight motor oil 65 cp at 68°F (20°C)

Ordering Information for Senator 13:1 and 17:1

Order number includes motor and pump lower assembly

Order Nos.	Senator 13:1		Senator 17:1	
	237-513	237-517	237-279	237-280
Pump Lower				
Part No.	237-510	237-514	236-466	236-470
Construction	CS	SST	CS	SST
Standard Piston Seal Repair Kits:	237-169	237-178	237-163	237-172
Construction	Leather	Leather	Leather	Leather
	237-170	237-179	237-164	237-173
	Teflon	Teflon	Teflon	Teflon
	237-171	237-180	237-165	237-174
	UHMWPE/Leather	UHMWPE/Leather	UHMWPE/Leather	UHMWPE/Leather
	237-712	237-713	237-709	237-710
	UHMWPE/Teflon	UHMWPE/Teflon	UHMWPE/Teflon	UHMWPE/Teflon

Motor

218-122: Repair Kit

SERVICE PARTS INFORMATION

Pump Lower Part Nos.	237-510	237-514	236-466	236-470
Displacement Rod	184-487	184-487	189-316	189-316
Construction	SST	SST	SST	SST
Cylinder	184-540	184-540	189-383	189-383
Construction	SST	SST	SST	SST
Intake Valve (order separate part numbers)				
Intake Ball	108-001	108-001	108-001	108-001
Intake Valve Seat	222-952	236-588	222-952	236-588
Piston Valve (order separate part numbers)				
Piston Ball	100-279	102-972	100-400	101-859
Seat	222-951	222-951	236-587	236-587
Ball Guide	184-513	189-409	189-407	189-408

COMPONENTS

Accessories

220-955 Contractor Gun

With 517 RAC™ IV tip and retainer.
Inlet: 1/4 npsm(m). Outlet: 7/8 in. (22 mm).

205-591 Golden Gun

With flat tip retainer. Inlet: 1/4 npsm(m).
Inlet: 1/4 npsm(m). Outlet: 7/8 in. (22 mm).

Pole Guns

Inlet: 1/4 npsm(m). Outlet: 11/16 in. (27 mm).

205-129 3 ft. (0.9 m)

204-979 6 ft. (1.8 m)

205-130 8 ft. (2.4 m)

220-422 RAC IV SwitchTip Retainer

Inlet: 7/8 in. (22 mm).

221-xxx RAC IV SwitchTips

See your local distributor for tip size selection or reference Silver Plus Data Sheet 305-796.

238-588 Zinc Conversion Kit

Max. working pressure: 3000 psi (20.7 MPa, 207 bar).
For spraying zinc primers. Includes: circulation tee at pump outlet, shutoff valve, drain hose, nylon hose (238-396), whip hose (238-383), hose swivel (189-018) and Silver gun (238-591) with GHD-525 tip and retainer.

238-614 Hose & Gun Kit

Includes grounded nylon paint hose, whip hose, Silver HD RAC gun, and swivel.

236-074 Grounded Fluid Hose

Maximum working pressure: 3300 psi. (22.4 MPa, 224 bar). Length: 1/4 in. x 25 ft. (6 mm x 7.6 m).
Coupled: 1/4 npt(fbe). Swivel end spring guards at both ends.

113-435 Air Line Lubricator

Max. working pressure: 250 psi (1.72 MPa, 17.2 bar).
Provides automatic lubrication for the air motor. Bowl capacity: 16 oz. (0.48 liter). Inlet/outlet: 3/4 npt(f).

Air Controls

Component	Repair Kit
113-434 Filter	238-912
Sight Glass Kit	238-913
Filter Element	238-914
113-494 Regulator	238-915
113-433 Regulator	238-916
113-435 Lubricator	238-918

113-431 Quick Connector

Use to connect 113-xxx filter, regulator, or lubricator.

224-040 Pump Runaway Valve

Max. working pressure: 120 psi (0.83 MPa, 8.3 bar).
Inlet and outlet: 3/4 npt(f). Includes optional 90°, 3/4 npsm swivel outlet fitting.

235-417 Connection Kit

Kit to install lower displacement pump under existing Bulldog air motor. Includes tie rods and other connecting hardware.

Graco Throat Seal Liquid (TSL)

Non-evaporating liquid for wet cup.

206-995 1 quart (0.9 liter)

206-996 1 gallon (3.8 liter)

206-221 Wall Mounting Bracket

205-712 Air Pressure Regulating Kit