



First choice when quality counts.™

PRO 5500hc™ Automatic Electrostatic Air Spray Gun

The PRO 5500hc gun was designed to accommodate a special need. When standard electrostatic guns are used with highly conductive solvent-based paints, metallics and some mica-based coatings, they allow excess current flow to ground, resulting in lower tip voltage and decreased electrostatic effect. This results in lower transfer efficiency. With the PRO 5500hc, a specially designed fluid tube solves this problem. This tube improves the fluid resistance path and retains the electrostatic charge.

The PRO 5500hc is an automatic electrostatic air spray gun for use with reciprocators, robotic positioners or fixed mounting. It is adaptable for replacement of virtually any automatic air spray device.

The PRO 5500hc allows fast color changes and fast flushing. It is widely used in automotive base coat application.

This gun is for use with Class I, Group D paint spray materials.



PRO 5500hc – Front



PRO 5500hc – Back

**Dual voltage
automatic gun
for electrostatic
air spray
applications**

Typical Fluids Handled

- metallic and mica-base coatings
- conductive primers
- conductive epoxy and polyurethane topcoats

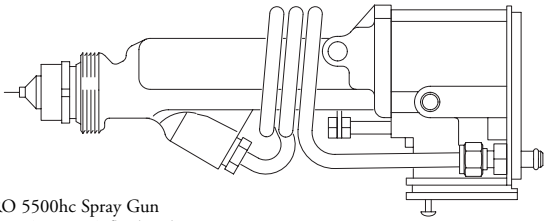
Typical Applications

- automotive assembly
- automotive components
- fabricated metal finishing
- metal furniture
- metal office furniture and cabinets

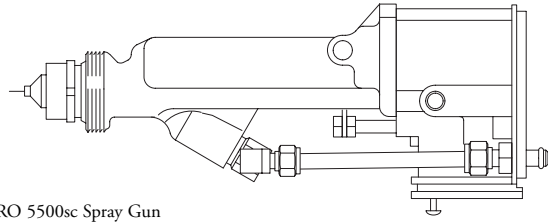
- **Meets the needs of highly conductive and metallic coatings**
- **Maximum fixed voltage 85 kV, selectable cutback voltage range 45-80 kV**
- **Its unique internal power supply makes the gun simple to install**
- **Modular construction for quick and easy servicing**

COMPONENTS

Comparing the PRO 5500hc to a PRO 5500sc



PRO 5500hc Spray Gun
28 in. (711 mm) fluid path



PRO 5500sc Spray Gun
8 in. (203.2 mm) fluid path

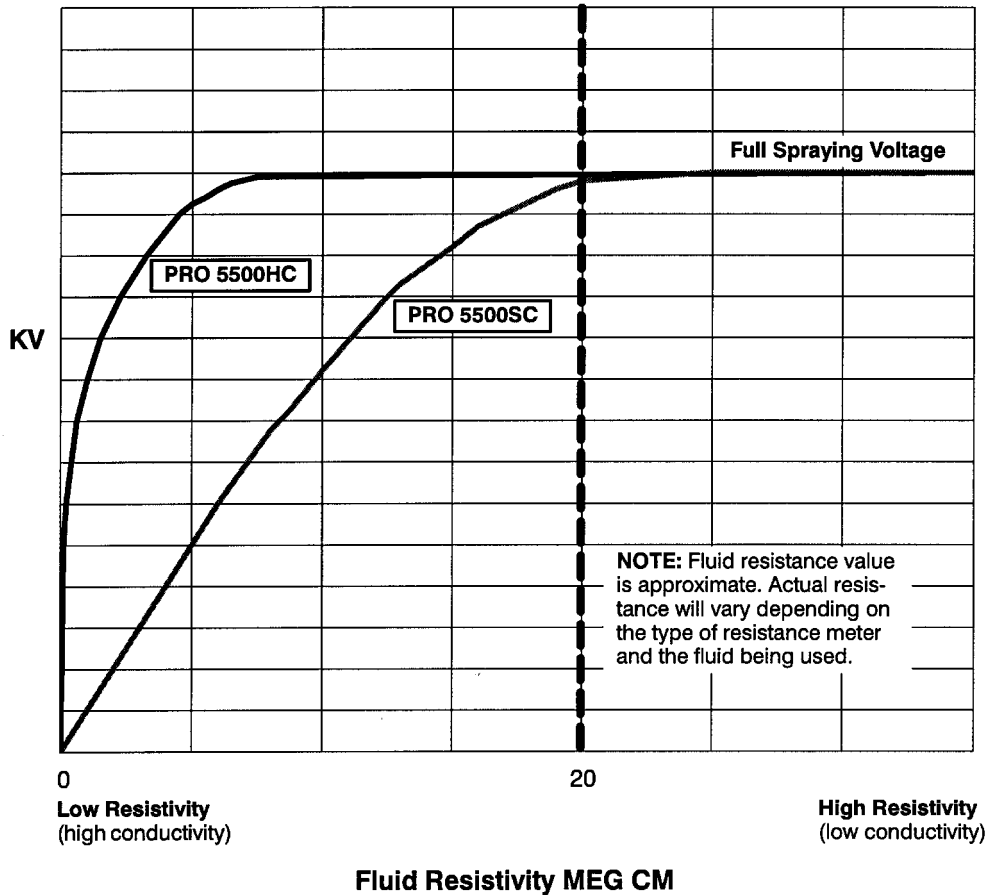
The PRO 5500hc spray gun offers increased electrostatic performance when spraying highly conductivity fluids, metallic, and mica-based paints.

In an electrostatic spray gun, the fluid in the fluid tube becomes a path to ground when the high voltage is turned on. The amount of current drawn through the fluid tube depends on the fluid resistivity and the length of the fluid path to ground.

The PRO 5500sc and PRO 5500hc guns will perform equally well when spraying fluids with high resistivity, as shown in the graph below. Even with the shorter fluid tube

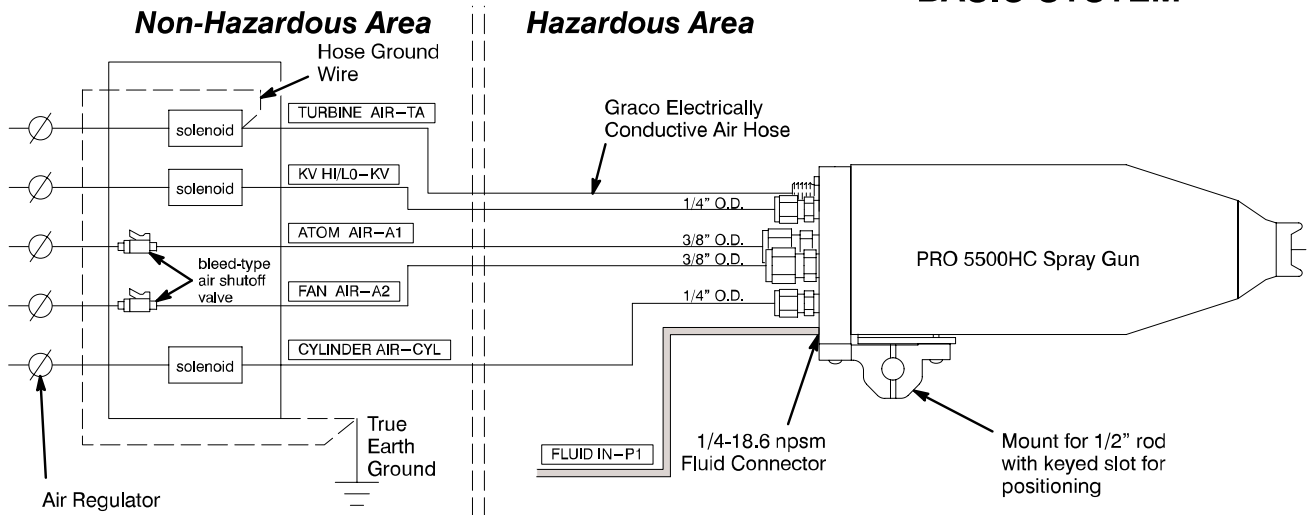
of the PRO 5500sc gun, very little current travels through the fluid, due to its high resistivity, and the spraying voltage is minimally affected. However, when the fluid resistivity decreases to low levels, more current is drawn through the fluid and the spraying voltage of the PRO 5500sc gun is reduced.

The PRO 5500hc gun can support higher voltages when spraying conductive materials because the longer fluid tube increases the total resistance of the fluid column and reduces the current drawn through the fluid.



Typical Installation

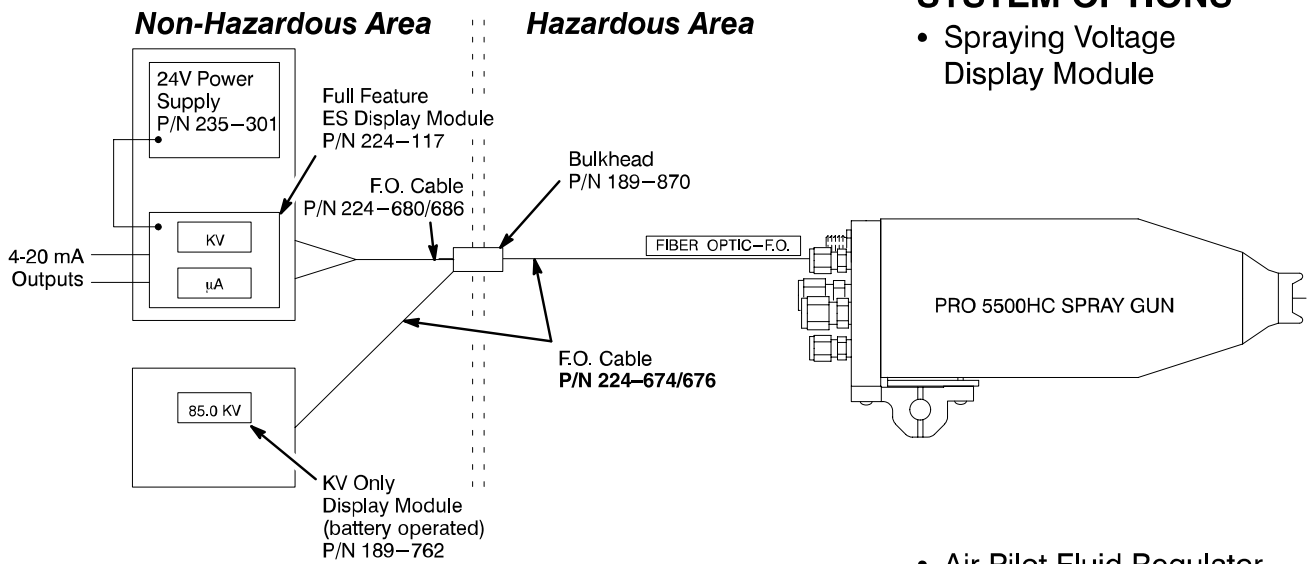
BASIC SYSTEM



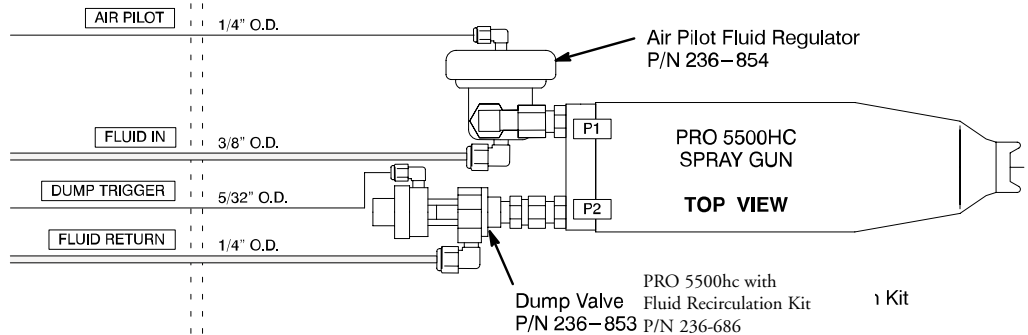
COMPONENTS

SYSTEM OPTIONS

- Spraying Voltage Display Module



- Air Pilot Fluid Regulator
- Dump Valve



Technical Specifications

Maximum fluid pressure 100 psi (0.7 MPa, 7 bar)
Air pressure operating range 0-100 psi (0-0.7 MPa, 0-7 bar)
Fluid inlet 1/4-18 npsm(m)
Maximum voltage 85 kV
Maximum current 120 μA
Air inlets (fittings are included with gun)
Atomizing air 3/8 in. O.D. nylon tube
Fan air 3/8 in. O.D. nylon tube
Cylinder pilot 1/4 in. O.D. nylon tube
Hi-Lo voltage selector 1/4 in. O.D. nylon tube
Length 12-1/4 in. (31.1 cm)
Mounting distance
Mounting rod to nozzle tip 9-1/3 in. (23.6 cm)
Fits mounting rod 1/2 in. (12.7 mm)
Weight (includes gun, manifold and mounting bracket) 3.57 lbs (1.62 kg)
Instruction manuals
Gun 308-442
E/S display module 308-265

Ordering Information

- 236-685 PRO 5500hc Automatic Electrostatic Air Spray Gun**
236-686 PRO 5500hc Automatic Electrostatic Air Spray Gun with Recirculating System
 Includes spray gun, shroud, manifold, mounting bracket and recirculation kit.

Air Hose Available (required for use)

Length	Grey	Red
6 ft. (1.8 m)	223-068	235-068
15 ft. (4.6 m)	223-069	235-069
25 ft. (7.6 m)	223-070	235-070
36 ft. (11 m)	223-071	235-071
50 ft. (15 m)	223-072	235-072
75 ft. (23 m)	223-073	235-073
100 ft. (30.5 m)	223-074	235-074

Grey Hose: Extra flexibility. Modified semi-conductive polyamide core, urethane cover.

Red Hose: Conductive SST wire braid for grounding. Polyurethane tube and cover.

- 185-493 Air Hose Adaptor Nipple**
 This adaptor allows for the connection of multiple air hose as needed for the special grounded PRO air holes. 1/4 npsm (L.H.) x 1/4 npsm.
235-300 Gun Mounting Bracket
 Allows gun to hang with barrel in a downward orientation to prevent material from getting into the air passages.
236-129 Air Inlet Swivel
 Replaces air inlet fitting for swivel action.

Accessories

- 237-300 Conversion Kit**
 For converting a PRO 5500sc spray gun to a high conductivity PRO 5500hc spray gun.
237-302 Conversion Kit
 For converting a PRO 5500sc spray gun to a high conductivity PRO 5500hc gun with fluid recirculation.
Fiber Optic Cable Assembly
 For connection between gun manifold and display module or between bulkhead connector and display module. Other lengths available. See Instruction Manual 308-265.

Part No.	Length
224-682	25 ft. (7.6 m)
224-684	50 ft. (15 m)
224-686	100 ft. (30.5 m)

224-117 E/S Display Module
 Receives fiber optic transmission from the PRO 5500sc gun and displays the output voltage and current. Mounts in a standard 19 in. DIN rack. See Instruction Manual 308-265.
235-301 Power Supply
 Used to supply low voltage D.C. power to 224-117 E/S Display Module. Refer to Instruction Manual 308-265.
189-762 Remote Voltage Display
 Battery-operated meter displays actual spraying voltage. Remote mount outside hazardous area. Connects to gun via fiber optic cable. Refer to Instruction Manual 308-265.
236-917 KV Display Kit
 Includes remote voltage display (189-762) and 25 ft. (7.6 m) fiber optic cable.
236-919 Same as 236-917 with 50 ft. (15 m) fiber optic cable.
236-921 Same as 236-917 with 100 ft. (30.5 m) fiber optic cable.
236-853 Dump Valve
 Mounts directly to manifold for faster flushing and color changes.
236-854 Fluid Regulator
 Air-piloted fluid regulator mounts at manifold for precise fluid control.
Round Pattern Kits Includes fluid tip, diffuser and air cap
222-329 Diameter: 4-6 in. (102-152 mm)
222-330 Diameter: 8-10 in. (203-254 mm)
Air Caps
193-033 Round End. Medium to high production. 15-17 in. (381-432 mm) at 12 in. (305 mm). Fine atomization.
177-036 Tapered End. Medium to high production. 15-17 in. (381-432 mm) at 12 in. (305 mm).
177-039 Tapered End. Medium to high production. 14-16 in. (356-407 mm) at 12 in. (305 mm).
180-739 Round End. Good atomization. High production. 15-17 in. (381-432 mm) at 12 in. (305 mm).
189-888 Gun Cover
239-945 Box of 10 Gun Covers