



PCAir Hose Retriever

The most innovative
PCA hose retriever on
the market.



Exclusive Features:

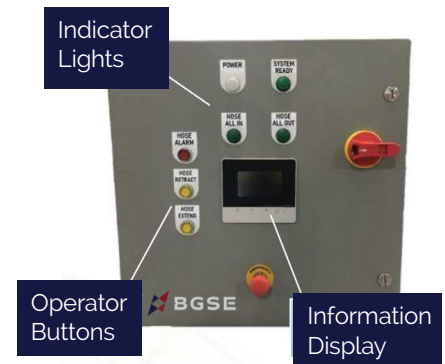
- ▶ Four inverter-driven motors/belts for smooth extraction and retraction without chains, gears, or rotating shafts. Belt pressure is adjustable to maximize performance in every operating set-up and environment.
- ▶ Anodized aluminum tube offers maximum corrosion resistance and an attractive aesthetic look.
- ▶ Control panel (stainless steel, protection degree IP 65), installed at ramp level with a maintenance display screen on the access door.
- ▶ Quick-release connectors to facilitate disconnection of the drive head or electrical sensors.
- ▶ Horizontal sliding drive head to allow rapid replacement of the air delivery hose.
- ▶ Long operating life of the air delivery hose - verified in the field to two years of operation minimum.

Design integrity and field experience has resulted in hundreds of units in service worldwide.

- ▶ Extract only the length needed
- ▶ Easy hose manipulation
- ▶ Reduces low air pressure losses
- ▶ Compact size mounted close to the aircraft connection

Control Panel

The control panel is installed at the ramp level and contains the fixed control devices. The connections to the drive motors and to the limit switches are made with quick-release connectors, which allow rapid disconnection of the electrical drive head. The inverter controls the drive motors' extension and retraction speed of the hose. The functionality and the intervention of the overload protection of the hose collector is managed by a Schneider Electric PLC.



Wireless Control

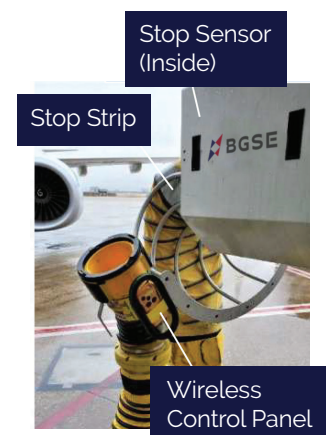
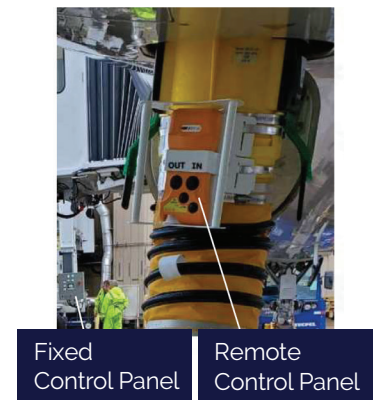
The radio control transmitter, located on the aircraft adapter, contains the extraction and retraction controls of the hose. The receiver is installed outside the electrical panel. The radio control system operates at a civil frequency of 902-928 MHz, and at start-up, a single communication channel in this band is established between the transmitter and receiver to prevent interference during the operation of PCAir Hose Retriever.

Limit Switches

A proximity sensor stops the fully extended hose. A photocell limit switches stop the hose retraction when the reflective strip enters the drive head.

Air Deliver Hose/Aircraft Adapter

The flexible hose is fabric, coated in yellow PVC, with an internal insulating layer. The hose sections are joined at both ends by a zipper and a protective Velcro band. The BGSE COOL JET® hose retriever is equipped with a 69 ft or 92 ft (21 m or 28 m) hose; other lengths are available. The hose is fixed to the retriever on a collar by means of a band clamp.



Technical Specifications

- ▶ Power supply: 3ph / 480V / 60Hz / 6A, or 3 ph 415V / 50Hz / 7A (other options available)
- ▶ Maximum pressure drop at flow rate 330 ppm (150 kg/min): 4.7 in. WG (1,200 Pa)
- ▶ Temperature loss with full extension pipe: 3.6°F (2°C) at 95°F (35°C) 50% UR
- ▶ Control panel: IP 65 in AISI 304 stainless steel
- ▶ PLC Schneider control with door panel display
- ▶ REM Device T3 radio control panel on the aircraft adapter (other options available)
- ▶ Lithium-Ion battery with 1000-hr minimum operating life
- ▶ Extension / retraction speed: Variable up to a maximum of 1.4 ft/s (25 m/min)
- ▶ Belt Drive Motors powered by inverter
- ▶ Inverter overload protection with adjustable tension cut-out
- ▶ Limit switch for full extension and retraction
- ▶ Safety interlocks: PBB movement, PCA ON, panel door open
- ▶ Sound and light movement alert (option)
- ▶ Operating temperature: from -20 to + 60°C
- ▶ Noise below 60 dBA in all directions
- ▶ Machinery Directive 2006/42 /EC, Low Voltage Directive 2006/95 /EC, EMC Compatibility, Electromagnetic Directive 2004/108 /EC, Radio and Telecommunications Directive 99/5 /EC
- ▶ Intertek Field Product Certification
- ▶ Double layer hose of 1100 dtex polyester coated PVC, yellow, 0.08 in. (2 mm, 5 mm optional) of internal insulation, reinforced with galvanized steel spiral, 0.2 in. (5 mm)
 - Tensile strength: 595 lb. / 2 in. (2700 N / 5 cm) per ISO 142/1
 - Thermal conductivity: 0.42 Btu/hr-in-ft²F (0.06 W/m²K) with 0.08 in. (2 mm) insulation
 - Fire retardant characteristics: M2 / B1 / BS / B-s2-d0 / NFPA 70
 - Working pressure: 48 Inch WG 12,000 Pa
 - Test pressure: 80 Inch WG (20,000 Pa)
- ▶ Aircraft adapter: 360° swivel or equivalent
- ▶ Weights:
 - 1,002 lb (454 kg) with 60 ft (18 m) hose
 - 1,235 lb (560 kg) with 95 ft (29 m) hose

