G457 HELICOPTER REFUELING NOZZLE

The G457 Helicopter Refueling Nozzle was originally developed by Emco Wheaton for military applications. This nozzle is designed to ensure that fuel cannot be accidentally delivered into the engine air intake during hot refueling. Commercial Helicopter operators will appreciate the significant cost advantages in terms of the reduction in turbine cold starts occurring from the ability to safely refuel with rotors turning.

Features and Benefits:
- Proximity (deadman) lever which automatically shuts off fuel delivery on withdrawal of the nozzle spout from the filler neck;
- High Level Shut off by fuel sensor in spout, also equipped with anti-froth device;
- Manual override for tank filling to absolute maximum capacity;
- Supplied complete with 100 mesh inlet strainer, dust cap, and grounding wire;
- Black anodised finish for all-weather protection;
- Tested for temperatures as low as –30°C;
- Fuel resistant Buna-N splashguard;
- High level shut-off maintained down to flow rate of 37.8 litres/min (10 US gal/min);
- Flow control mechanism is capable of handling pressures up to 110 psi;
- Swivel integrated into nozzle;
- NATO specification

Available Configurations:
- Curved or straight spout (other spout configurations available)
- Female ISO or female NPT inlet
- Varying ground cable lengths available

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EMCO WHEATON has developed a series of repair kits suitable for the field repair of the Hot Refuelling Nozzle for Helicopters. If a nozzle has a leaky seal or ‘O’ Ring, or a part worn, the installation of a complete repair kit in that area of concern will give the user far better value for his money, rather than just replacing one or two parts. The installation of the kit renders a wear zone on the nozzle completely rebuilt, and will consequently give longer service life. These kits are available off the shelf, and come complete with instructions, diagram and everything needed to make the repair. The part number is prominently displayed for easy stock identification.

**FLOW RATE**

![G457 Flow Curve](image)

- **G457 Flow Curve**
  - Nozzle fully opened, control at upstream valve. Results given for nozzle and strainer corrected for Avtur SG=0.8, Kinematic Viscosity=1.8 CB.
  - Flow Rate (U.S. gpm) vs. Pressure Loss (psi)
  - Flow Rate Range: 0 to 100 gpm
  - Pressure Loss Range: 0 to 35 psi