

# GNY SHELTER FIXED PANTOGRAPH

## MODEL: GNY-PG3-4-100



Shelter Fixed Pantograph is an Aviation Refueling equipment. The one end of the pantograph is fixed to the wall and the other end is movable, but not towable. The fueling operation can be done with ease, economically, maintenance-free and with the high flow rate.

Shelter Fixed Pantograph Assembly all metal consists of main hard pipe of four sections, plus one connecting end and fueling-end section with 10 ft. Fueling hose and fueling nozzle with total seven Swivel joint including light-weight non-lubricated swivel joints.

Shelter Fixed Pantograph included with Long Radius Elbows, Flanges, SPR Inlet, Support Structure Chanel, Vent, Grounding Cable Reels, Swivel Casters and bolts with nylon locknuts.

- GNY Pantograph Swivel joint, Non-Lubricated, FULL BORE, with total four hardened bearings (two ball and two rollers), four Viton® seals of main seal, O-ring, two built-in O-rings seals adjoining flanges, with three years performance warrantee, considering warrantee seal is NOT broken. Electrically Conductive without external bridges.
- GNY Pantograph Non-lubricated Swivel joint is specially designed to refuel Aviation fuel.
- The overall electrical resistance between the flanged end and the pressure fueling nozzle is not exceed 1 kilo ohm. Grounding straps across swivel joints are not included.
- Design to fuel at 500 GPM (size: 3") at nozzle-ends with 55 psi. set-up
- The GNY Fueling Pantographs are approved for all fuel servicing operations by US Air Force AFSSEA team. Approved is included in technical order T.O. 00-25-172, ground servicing of Aircraft and static grounding/bonding. Technical specifications as per article UFGS-33 52 43.12 (August 2018).

### Technical Specifications:

Piping Sections	3" Diameter (≈80 mm), Total length: 100 ft. (30 meter)
Flow Rates	Up to 500 GPM
Working Pressure	Up to 150 PSI
Swivel Joints (Non-lubricated and Maintenance free)	4" x 150 lbs. built-in flange-ends. Unit weight 35 lbs. (D2000-4-PGSJ) 4" with special TTMA flanged ends. Unit weight 18 lbs. (D2000-4-PGSJ-T) 3" X 150 lbs. built-in flange-ends. Unit weight 22 lbs. (D2000-3-PGSJ) 3" with special TTMA flanged ends. Unit weight 11 lbs. (D2000-3-PGSJ-T)
Wheels/Casters	Torsion Spring Balancing and Gas Spring Balancing System is available

## Materials: (Model: GNY-PG3-4-100)

Pipe, Elbows and Flanges	Stainless Steel 304L
Sealing	Viton® (Fluorocarbon)
Supporting Structure	Aluminum
Swivel Joint	Stainless Steel 316L
Elbows	Stainless Steel 304L
Nuts and Bolts	Stainless Steel Self Locking

## Testing and other information:

- All welding by qualified welders.
- Hydro-static test: A complete unit will be Hydro tested at 200 psi or as required.
- Quality Control Certificate from QA/QC inspector witnessing, factory assembled and sealed GNY Swivel joints with Hydro-stated at 200 psi. Quality certificates with performance guarantee are provided.
- Shelter Fixed Pantograph included with 3" NPT-Female Connection to Fueling Hose.
- Shelter Fixed Pantograph included with military standard Refueling Nozzle with Hose End Regulator, Single point Refueling, Dry Break Quick Disconnect and Strainer unit.
- 3" Model: GNY-PG3-4-100 (shown in pictures) and 4" Model: GNY-PG4-4-100 are available.
- All units are supplied fully assembled, ready to use.
- In the stored position, the Pantograph is folded up and drawn in to save space. Arresting Hooks and Ropes are used for Pantograph pipe sections in the stored position.
- Approx. Gross Weight: 1000 LBS. (800 LBS. Unit Weight)
- Variations to the standard design as per requirements are available.
- **Project Completed- FB1743:** Shelter fixed Pantograph Assy. with fueling Hose-end section, fix installation: client: Tinker Air Force Base, OK, USA. Descriptions: Qty. 1) 3" x 4 section of 25 feet each, total 100 feet open-length plus 10 feet of fueling hose end on 8" Caster assembly....year 2018.

