

#### **INSTALLATION INSTRUCTIONS**

sūsa ProLine M22 M/F Port Adapter, 90° Part # 22-M22-90-NPT18

Please read these instructions completely before beginning installation.

KIT CONTENTS		
QTY.	DESCRIPTION	
1	sūsa M22 male-female port adapter: 90°, full swivel, 1/8"-27 NPT port, #8 ground	
1	O-ring: Viton	
1	Screw: #8-32 x 1/4" Panhead Phillips with Sems washer	
1	Pipe plug: 1/8"-27 NPT tapered thread	

#### **IMPORTANT**

- The male ProLine fitting (M22x1.5 thread) utilizes a captured O-ring for sealing. It must seal against a flat-face sealing surface.
- The female ProLine port (M22x1.5 thread) must be used with a captured O-ring adapter fitting for proper sealing.
- The 1/8"-27 NPT tapered threaded port requires thread sealant for proper thread lubrication & sealing.

For a wide range of compatible fittings, visit: www.setrabusa.com

### **OPERATION SUMMARY**

This specialized port adapter fitting is designed to provide sturdy and compact 90° adaptation of ProLine port. Fully-clockable 360° fitting accepts all sizes of AN connections (via sūsa ProLine AN adapter fittings, sold separately). Includes a 1/8"-27 NPT port for optional installation of a sending unit or eletrical accessory switch in place of port plug and and #8 threaded hole suitable for grounding single-pole senders.







#### **INSTALLATION**

#### Part 1: Install NPT port plug or NPT sending unit

**NOTE**: The port plug provided is loosely inserted into the port to prevent loss during shipment and is NOT sealed. Installer will determine the use for the port and either fully install the port plug or install an appropriate sending unit into the port.

- 1. Remove the 1/8"-27 NPT port plug.
- 2. Apply thread sealant to male pipe threads if not pre-applied. If PTFE tape is used it should be wrapped

**Warning**: Installation should only be attempted by those with mechanical skills and experience working on vehicles. Standard safety precautions consistent with the tools and dangers of automotive work should be followed to protect from injury. Specifically, wear protective equipment, take care to stabilize the vehicle on a level surface, engage the parking brake, and allow vehicle to cool before attemption installation; failure to comply can result in injury and/or damage to equipment.

- 1-1/2 to 2 turns in clockwise direction when viewed from the pipe thread end. **CAUTION**: More than two turns of tape may cause distortion or cracking of the port, as well as unwanted insulation versus an accurate switching temperature sending unit reading.
- 3. Screw the port plug or sending unit into the port to the finger tight position.
- 4. Wrench tighten the plug or sending unit to 2-3 turnsfrom-finger-tight (T.F.F.T.).

### Part 2: Install ProLine fitting into port adapter

- Lubricate O-ring and threads (recommended: Setrab Assembly Lubricant, part # 20-042368) on ProLine fitting (sold separately) to avoid aluminum thread galling and O-ring bunch.
- Thread male adapter fitting into port adapter to handtight.
- 7. Using an adjustable back-up wrench to provide a balanced counter force, tighten adapter fitting into port with wrench until metal surfaces meet or to 29.5 lb.-ft. (40 Nm).

### Part 3: Install port adapter into oil cooler port

- 8. Lubricate O-ring and threads on port adapter fitting to avoid aluminum thread galling and O-ring bunch.
- Thread port adapter fitting into oil cooler port to handtight.
- Using a back-up wrench on oil cooler port, tighten adapter fitting into port with wrench until metal surfaces meet or to 29.5 lb.-ft. (40 Nm).

# Part 4: Install optional #8-32 ground screw to ground accessory

Port adapter fitting features #8-32 dry port with pre-installed ground screw to secure ground wire terminal for any single-pole DC electrical accessory, e.g., temperature gauge sending unit, fan thermal switch, etc.).

 If utilizing port adapter fitting to secure ground wire of 12V accessory, install ground wire terminal behind screw and Sems washer.

# Part 5: Install Hose End on AN Adapter Fitting

- 12. Port adapter may be oriented or clocked 360° after installation to ensure most convenient routing of plumbing.
- 13. Install AN hose end to hand tight on AN adapter fitting.
- 14. Using an adjustable back-up wrench on AN adapter fitting, tighten hose end to AN adapter fitting.
- 15. Oil cooler and oil hoses should be mounted and secured in a manner that will minimize transmission of vibration into the oil cooler.

**TIP**: Secure hose as near as possible to port adapter fitting installation with sūsa cushion clamp (or similar), zip-tie, "p-clamp," or similar item to minimize hose stress on port adapter fitting during vehicle operation.

## Accessory parts available:

P/N	DESCRIPTION
22-M22AN04-SE 22-M22AN06-SE 22-M22AN08-SE 22-M22AN10-SE 22-M22AN12-SE 22-M22AN16-SE	Available in sizes –4 AN through –16 AN
see all in catalog and online! setrab <b>usa</b> .com	sūsa ProLine Direct-port Hose Ends Eliminate the need for an AN adapter by threading a hose end directly into any ProLine M22 port. Available in PushLock & ReUsable style hose end, sizes –6, –8, –10, –12 in straight 00°, 45°, 90° angles
TS180 (180°F) TS190 (190°F) TS200 (200°F)	sūsa Thermal Switches Thermal switches can be installed in any 1/8"-27 NPT pipe port to activate a 12V accessory at the prescribed temperature.

for a full range of oil coolers and performance oiling system components please visit:

www.setrab**usa**.com