

HPM-SLG Series Flow Meter Maintenance Guide

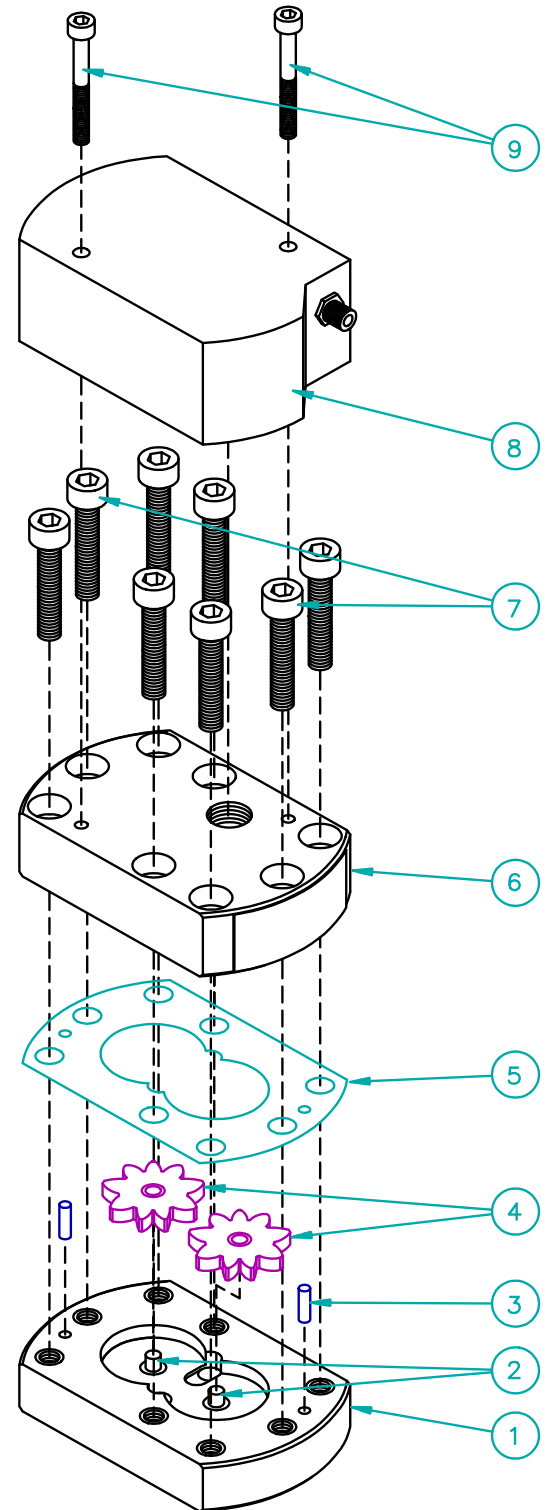
Cleaning, Inspecting or repairing an HPM-SLG gear flow meter is easily accomplished by following the procedures below.

- Remove the FOP-30 pickup sensor (8) from the flowmeter body (6) by removing the hex bolts (9) using a 3 mm key wrench.
- Note the index marks on the flowmeter side opposite the tag. These should indicate either #1 or #1.4305 and are vertically aligned. If these marks are absent, mark the body positions before disassembly.
- Remove the hex bolts (7) with a 5 mm key wrench. Next reinsert 2 opposing bolts (7) by only a few threads and while holding the upper housing firmly, tap the 2 bolts to separate the lower half. The bolts will hold the parts in parallel during separation.

**Do not pry or twist the housings apart.
This may damage the locator pins.**

- After separation, remove gasket (5) carefully. Be careful not to tear it. The gasket may be cleaned with solvent or DI water. Inspect the gasket and replace it if any damage or deterioration has occurred.
- Remove the gears (4). **Make sure to lift the gears straight up off the shafts (2). Do not apply any sideways pressure on the shafts.** Clean the gears and flowmeter with solvent and a small brush. Inspect the gears and shafts. The gears should revolve freely on the shafts.
- After cleaning all parts completely, reinsert the gasket and gears. Check that the gears rotate free and easily. **Make sure that the holes in the gasket line up with the housing holes.** Smooth out any air bubbles.
- Keep the meter sections parallel during reassembly. Both locating pins must be in place (3). Align the index marks on one side.
- Replace hex bolts (7) and tighten to approximately 15 Nm. (This is hand tight). Do not force the housing closed. Do not use a chisel or hammer. Over tightening will not cause damage.
- After reassembly, the gears should spin freely - a brief air blast into the inlet should easily spin the gears. This should be clearly audible even given a moderate background noise level.
- Clean the pickup port and place the FOP-30 flush on the meter.

Lightly tighten the bolts (9) to avoid sensor damage.



Cross Reference Guide for HPM-SLG Spare Parts

- 1 - Lower Housing (303 Stainless Steel)*
Pt. # LH-SLG
- 2 - Tungsten Carbide Shafts. (Not removable - no spare part listed)
- 3 - Tool Steel Locating Pins
Pt. # LP-SLG
- 4 - Stainless Steel Gear with Carbide Insert.
Pt. # GR-15
- 5 - Teflon Gasket - Pt. # COT-SLG
- 6 - Upper Housing (303 Stainless Steel)*
Pt. UH-SLG
- 7 - HEX Socket Cap Screw - 5mm
Pt. # SC-SLG

Optional Accessories are available as follows:

- 8 - Mounting Bracket includes mounting bolts and grounding terminal (303 Stainless Steel)
Pt. # BK-1
- 9 - Tube fitting assembly:
□" OD tube to □" BSP Male- Stainless Steel
Pt. # BSP-SLG (4 part assembly)
- 10 - Washer & O-Ring Assembly
Pt. # WAL-SLG
- 11 - Teflon Spacer - 6mm I.D.
Pt. # TSF-SLG

Items 9, 10 & 11 are available as a combined assembly under Pt # SLG-ALY

* - A special 316TI alloy is available and is designated as:
Part-HPM-15SLG-TI

