

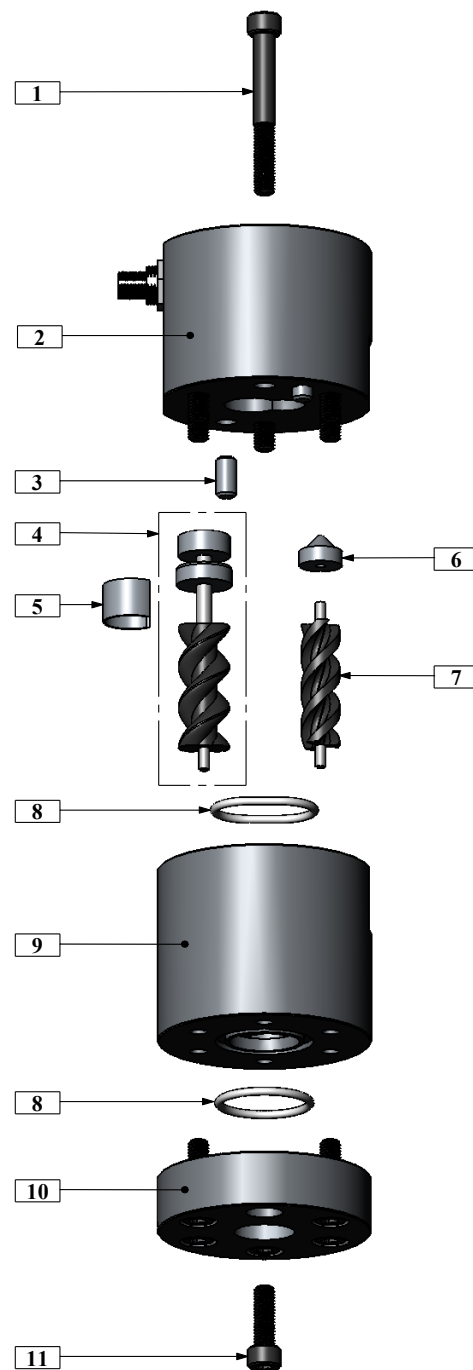
Maintenance Guide for SRZ-40 High Resolution Series Flow Meters

Cleaning, inspecting or repairing SRZ-40 High Resolution Series flow meter is easily accomplished by following the procedures below. Read through the entire procedure prior to disassembling the meter.

1. Loosen the M8 Bolts [1] using a 6mm hex key. Remove the bolts, but keep the 2 opposing bolts near the Locating Pins [3] engaged by a few threads to avoid stress on the shafts and the locating pins during housing separation. **Please note the orientation of the Outlet Housing [2] and Middle Housing [9] with respect to each other so that the meter is reassembled the same way.**
2. Lay the meter horizontally on its side. Holding the Outlet Housing [2] gently tap on the 2 bolts with a hammer. Alternating between the 2 bolts will **separate the housings evenly** as to not put excessive stress on the internal components. Once the housings have started to separate, remove the 2 bolts and carefully pull the housings apart straight and evenly until you have cleared the Male and Female Gears. Taking your time during this process will ensure the internal components are not inadvertently damaged. **Do NOT use chisels, screwdrivers to split and pry apart the housings. This can cause damage to the meter bodies and meter internal parts.**
3. Remove the M8 Bolts [11]. There are no Locating pins keeping the Inlet Housing [10] in place, so the housing will separate once the bolts are removed. If the housing does not come off, follow steps 2 & 3 to separate the Inlet Housing [10] from the Middle Housing [9].
4. Remove the O-Rings [8].
5. After separation, remove, clean and inspect the Male Gear Assembly [4], the Female Gear Assembly [7], the Spacer Sleeve [5], the Sleeve Bearing Assembly [6] and the housings, [2], [9], & [11].

Important: Do not submerge Outlet Housing [2] when cleaning or otherwise. Damage may occur and thus void any warranty.

6. After cleaning all parts completely, replace the O-Rings [8]. PTFE o-rings should **always** be replaced with new o-rings.
7. Partially reinsert the Male Gear Assembly [4] & Spacer Sleeve [5] into the Outlet Housing [2].
8. Next insert the Sleeve Bearing Assembly [6] into the housing.
9. Insert the Male Gear Assembly and Spacer Sleeve the remaining distance into the housing.
10. Insert the Female Gear Assembly [7] straight so the shaft slides into the Sleeve Bearing. Rotate the Male Gear Assembly if necessary so the two gears mesh properly.
11. Slide the Middle Housing [9] over the gears. During reassembly keep the meter housings as parallel as possible. Make sure the housings are orientated the same way they were prior to disassembly. Do not force the housing over the gears.
12. Replace the Bolts [1]. Torque the bolts to 41Nm (approx. 30 ft/lbs). Do not force the meter housings together. Do NOT use a hammer or other such device. Over tightening will not cause damage to the meter, but may fatigue the bolts and/or restrict the operation if internal surfaces are not completely clean.
13. Replace the Inlet Housing [10] and Bolts [11]. Torque the bolts to 41Nm (approx. 30 ft/lbs).
14. **IMPORTANT: Do not try to remove the individual components for either the Male or Female gear assemblies [4] & [7]. This includes the shafts on both and the bearings on the Male. They are not meant to come apart and disassembly will void any warranty. It is not necessary to remove the Locating Pins [3] or electrical connector located on the Outlet Housing [2].**



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Part - Qty. per meter [Drawing Ref. #]	SRZ-40ST.HR.T-B1 / SRZ-40-STAT-B1 (NPT(F) Ports)	SRZ-40ST.HR.T-B2 / SRT-40-STAT-B2 (BSPP(F) Ports)
Outlet Housing - 1 [2]	Not Field Replaceable	
Middle Housing - 1 [9]	Not Field Replaceable	
Inlet Housing - 1 [10]	Not Field Replaceable	
Male Gear Assembly - 1 [4]	Not Field Replaceable	
Female Gear Assembly - 1 [7]	BG30055 GR-40F Female SRZ-40 Gear	
Spacer Sleeve - 1 [5]	BZ24050 BS-40 Spacer Sleeve	
Sleeve Bearing Assembly - 1 [6]	BZ24043 BFO-40 Sleeve Bearing	
Locating Pins - 2 [3]	BZ25140 LP-40 SRZ-40 Locating Pin	
PTFE O-Rings - 2 [8]	BO80040 COT-SRZ-40	
Housing Screws - 6 [1]	BZ25100 M865-SRZ-40-Screw	
Housing Screws - 6 [11]	BZ25095 M825-SRZ-40-Screw	

Table Format:

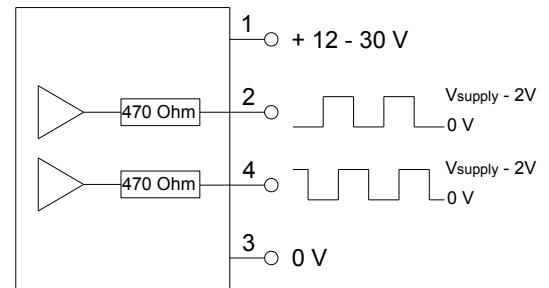
BO80040	←
COT-SRZ-40	←

 AW Part #
AW Part Description

Electrical Data

Supply Voltage: 12 up to 30VDC

Outputs: Sourcing outputs (push-pull), 20mA max.
Squarewave, 50% duty cycle, $V_{out} = V_{supply} - 2V$,
Signals A and B are 90° phase shifted



Electrical Connection: flange plug type 713 (M12x1)
1 = +UB 12 up to 30 VDC
2 = Output signal A
3 = 0 V
4 = Output signal B
5 = n.c.

Ingress protection: IP 67, when rated mating connector is attached.

