

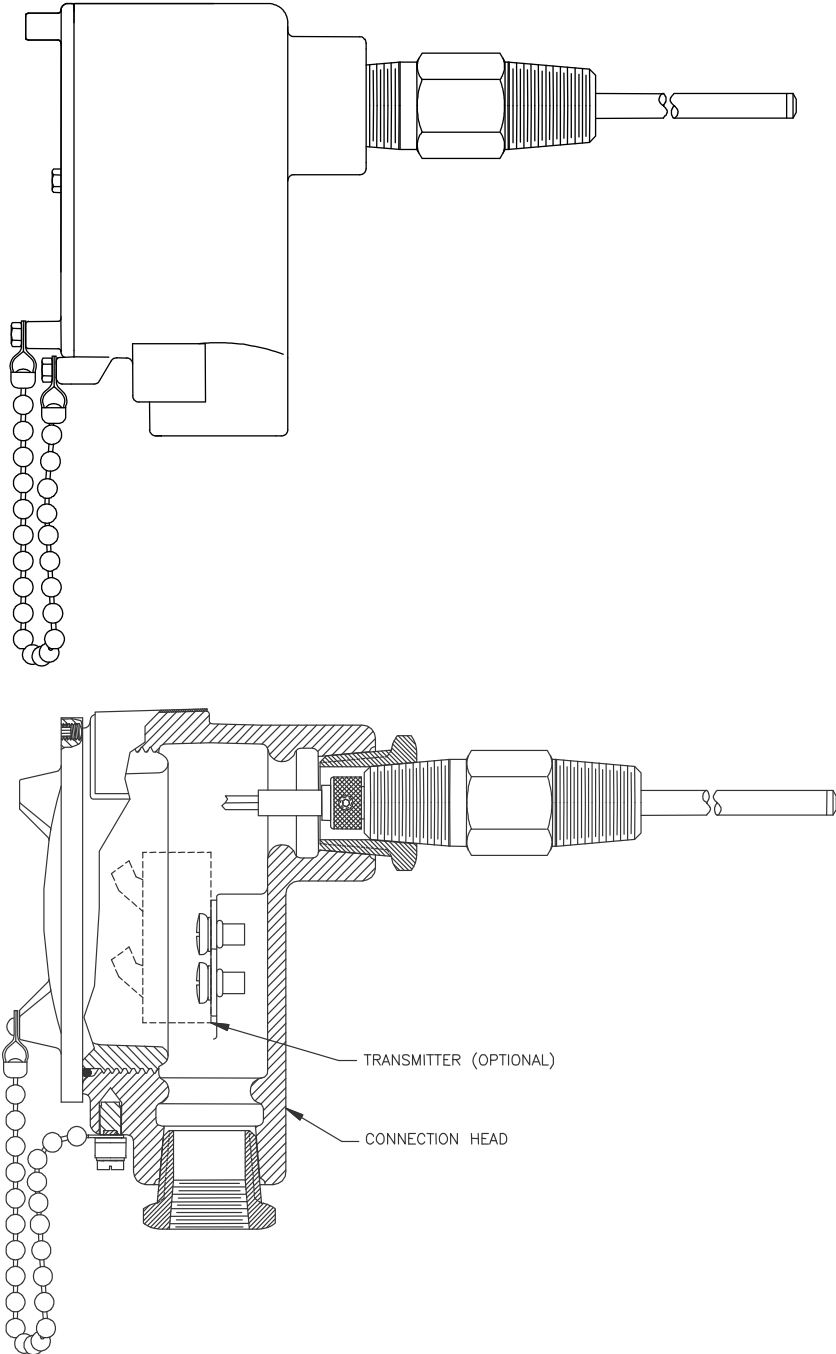
Instructions: FM Approved Explosionproof Thermowell Sensors

Models AS51xx, AS53xx, AS54xx, AS7xx, and Assembly-by-Component

SPI 75-0954 Appendix A (Rev A) (Document #1000866)

1. Assembly Drawing

The explosionproof thermowell assembly is pictured below in side view and cut-away view.



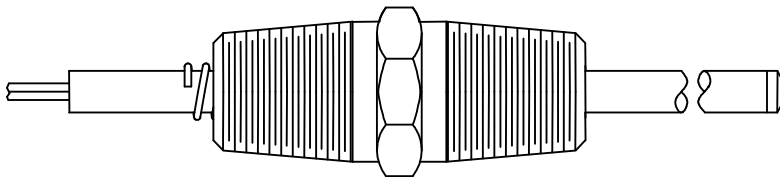
2. Installation Instructions – Non-Sealed Spring-Loaded Assemblies

Thread Sealant

To retain the environment rating of the connection head (Type 3, 4, 4X, IP65 and/or IP66), these assemblies must be screwed into a sealed thermowell and the joint between the spring-loaded holder and the thermowell must use a thread sealant. One to two wraps of Teflon tape are preferred (two wraps maximum), but any sealant that can withstand the temperature can be used. Assemblies that are shipped with thermowells from Minco will have Teflon tape on this joint.

Fixed-Spring Style

The fixed spring-loaded holder is factory installed in the correct position and cannot be removed from, or repositioned on, the probe.

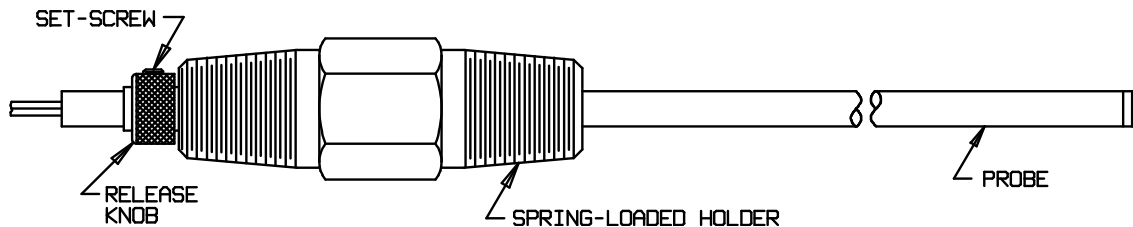


Follow the instructions below to install the fixed spring-loaded holder assembly.

1. Unscrew the connection head from the fitting; this is hand-tight and should not require tools.
2. Slide the probe, tip first, into thermowell and thread the holder into the thermowell.
3. Tighten with an open-end or adjustable wrench.
4. Screw the connection head onto the back of spring-loaded holder and hand-tighten.

Adjustable Set Screw Style

The spring-loaded holder with the adjustable set screw is pictured below.



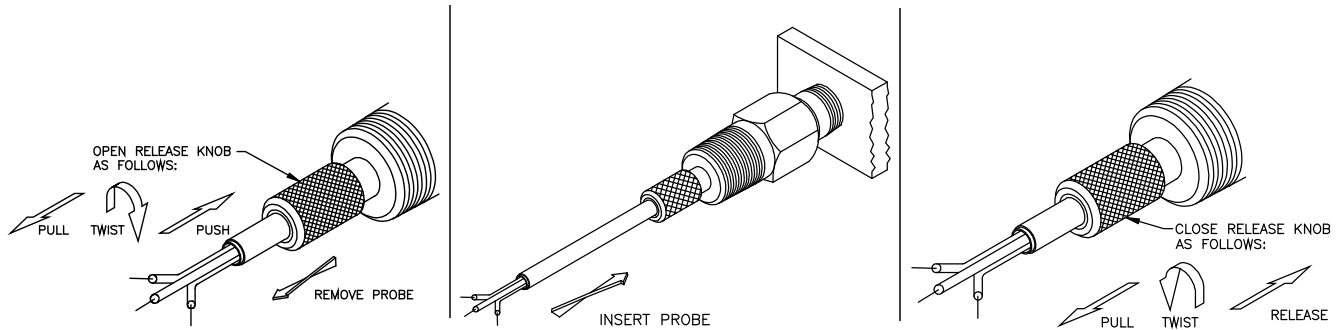
Install the adjustable set screw style of spring-loaded holder assembly by following the instructions below.

1. Unscrew the connection head from the fitting. This is hand-tight and should not require tools.
2. Loosen set screw on spring-loaded holder release knob and remove probe.
3. Thread spring-loaded holder into thermowell and tighten with an open-end or adjustable wrench.
4. Slide probe, tip first, through spring-loaded holder into thermowell until it bottoms out.
5. Pull back release knob approximately 1/2" and tighten set screw to secure probe in place.
6. Screw connection head onto the back of spring-loaded holder and hand-tighten.

3. Installation Instructions – Sealed Spring-Loaded Assemblies

Release Knob Style

The motions for operating the release knob on a spring-loaded holder are pictured below.

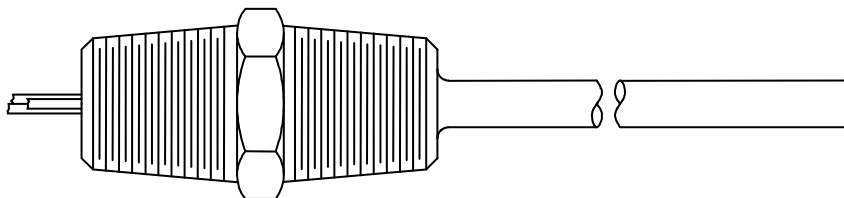


Install release knob style of spring-loaded holder assembly by following the instructions below.

1. Unscrew the connection head from the fitting. This is hand-tight and should not require tools.
2. Grasp release knob, pull it out, and twist approximately 1/2 turn clockwise against the stop. Push in to lock open.
3. Remove the probe from the holder by slowly rotating the probe case clockwise while pulling on the probe case.
CAUTION: Do not pull on probe leadwires.
4. Thread the spring-loaded holder into a matching female thread in the machine housing, block, thermowell, or fitting. Tighten using an open-end or adjustable wrench.
5. Insert the probe, tip end first, through the hole in release knob of spring-loaded holder. Slowly turn the probe case clockwise while pushing the probe through the holder and o-ring seal until it contacts the surface to be sensed.
NOTE: Spring loading is only required when surface or bearing temperature is being monitored. When monitoring liquid or gas temperature, spring-loading is not required, however probe should be inserted 1/4" short of desired depth.
6. Grasp release knob, pull out, twist it approximately 1/2 turn counter-clockwise against the stop and release.
NOTE: If the probe is not bearing against a surface, the knob will move fully inward, (approximately 1/4" when release), and will lock the probe in position.
7. After installation, remove probe or adjust probe depth by operating release knob as in Step 2.
8. Screw the connection head onto the back of the spring-loaded holder and tighten by hand.

Welded Fitting Style

This fitting is factory welded in the correct position and cannot be removed from or repositioned on the probe.



Install the assembly with the welded fitting by following the instructions below.

1. Unscrew the connection head from the fitting. This is hand-tight and should not require tools.
2. Slide the probe, tip first, into position and thread the fitting into the process connections.
3. Tighten using an open-end or adjustable wrench.

