



# Welker® Automatic Insertion Probe

*Style AIP-1*

## General Description

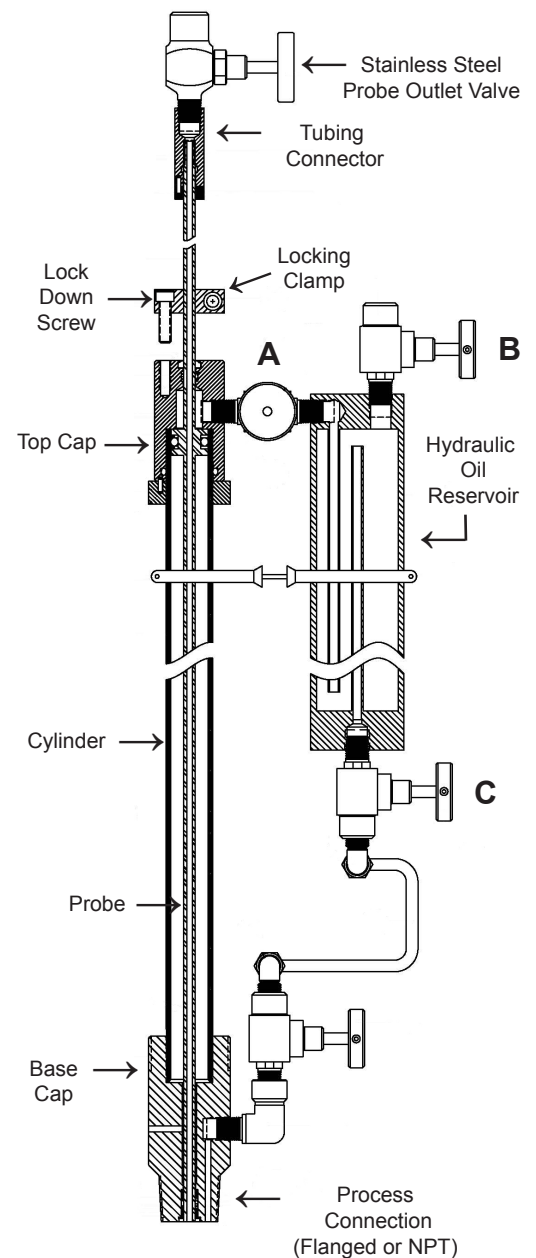
Welker Automatic Insertion Devices have been designed to safely insert a wide variety of permanently integrated or removable analytical instruments into pipe or process lines of all pressures and sizes. This unique design allows insertion and removal of the device from a high-pressure line, through a full open isolation valve, without line shutdown.

The only power that is needed is the pressure in your pipe or process line.

Welker Automatic Insertion Devices are available in a wide variety of permanently integrated or removable models for adaption to virtually any type of pipe or process line inserted device.

## Features

- Allows insertion and retraction into a pipe or process line without having to depressurize the line or blow down to atmosphere.
- Screwed or flanged connections
- Pneumatic or hydraulic operations
- Designs available for pressures up to 10,000 psi
- Quick and easy insertion utilizing line pressure, completely self-contained (remote activation available).
- Can be designed to tie into plant control systems for remote operations
- Can be customized to fit any application



**Welker® ... When Excellence Counts!**

# Welker® Automatic Insertion Probe

## Installation Instruction

Refer to the diagram on the previous page. Connect the probe to a closed pipeline full opening ball or gate valve. Close the valves “A”, “B” and “C”, then open the pipeline ball valve. Open valve “C” to put line pressure on the oil reservoir. Slowly open valve “A” and the probe will descend. When the probe has reached the proper depth, close valve “A” and tighten the locking clamp on the tubing (use the lock down screw to keep the probe in place). Finally, open the ball valve at the top of the probe.

## Withdrawal Instruction

Close the probe valve and disconnect the pump line. Remove the lock down screw and close valve “C”. Bleed all pressure off the oil reservoir with valve “B”. Slowly open valve “A” and the probe will retract.

## Performance Specifications\*

- **Material:**  
316 stainless steel, Viton® and PTFE
- **Standard Working Pressure:**  
1,440 psi (99 bar)
- **Standard Insertion:**  
Adjustable to 18”
- **Temperature:**  
-20°F (-29°C) to +250°F (+121°C)
- **Connections:**  
1” and up — Flanged or NPT

\*Specifications subject to change without notice.  
Drawings/Photos may be shown with optional equipment.

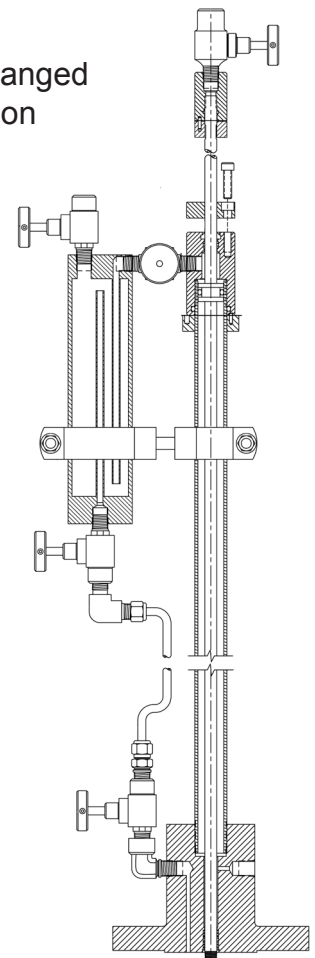
## Options

- Working pressures up to 10,000 psi
- Longer insertion sizes
- Higher temperatures
- Custom applications
- Larger probe shafts

## Typical Applications

- Probes
- Temperature sensors
- Corrosion coupons
- Microphones
- Injection nozzles
- Siphons
- Fiber optic probes

AIP-1 with flanged connection



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