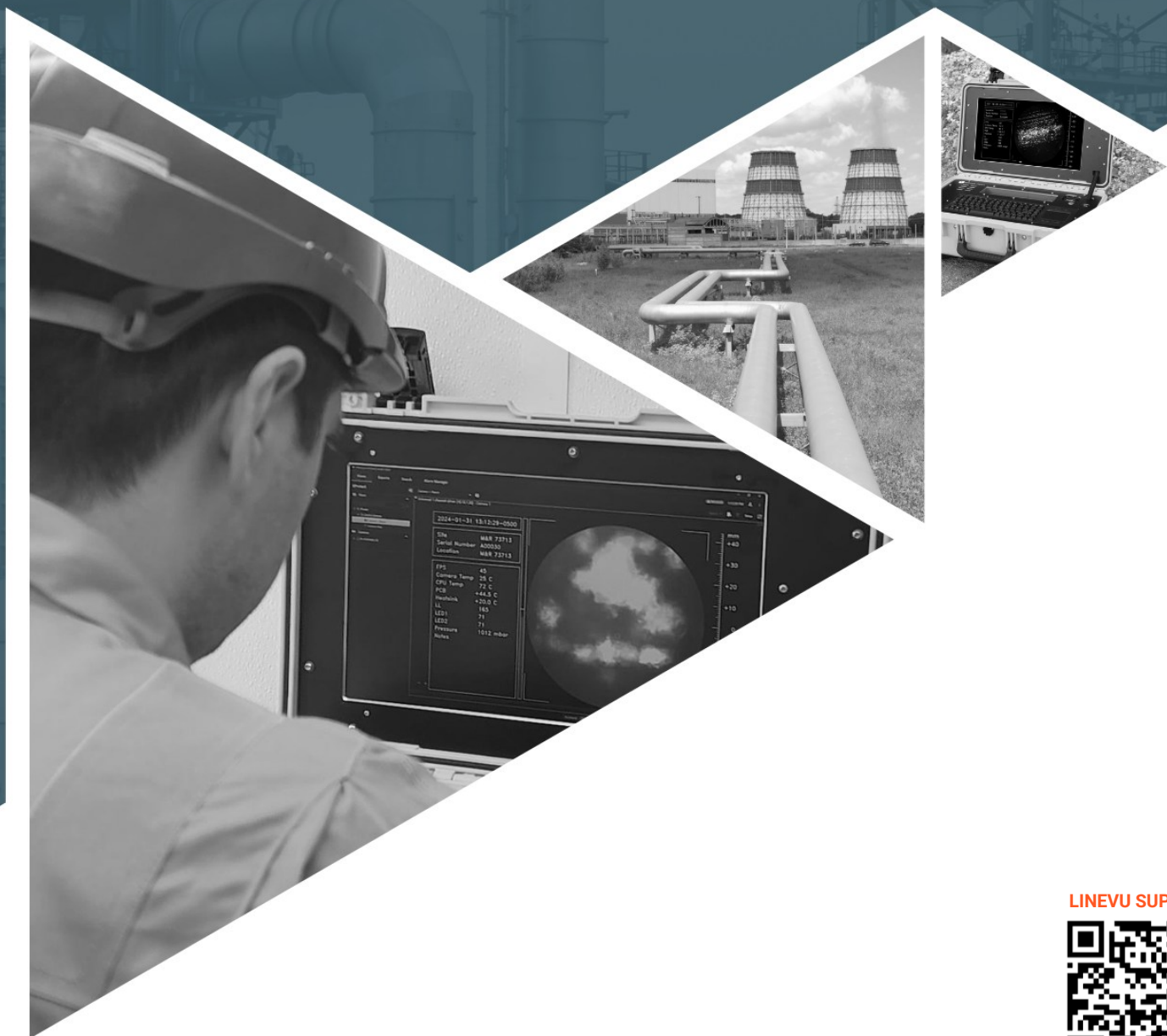




Quickstart Guide LineVu Discovery



LINEVU SUPPORT



support@processvision.com



support.processvision.com

Pre-Installation Checklist

☑ Component Verification

Confirm that all required components, tools, and equipment are accounted for, including those listed under "**Special Tools, Materials, and Equipment.**" (In the full installation manual - [Discovery Installation Guide](#))

📄 Documentation Review

Ensure this quick-start manual has been reviewed to understand all steps and required tools before beginning the installation.

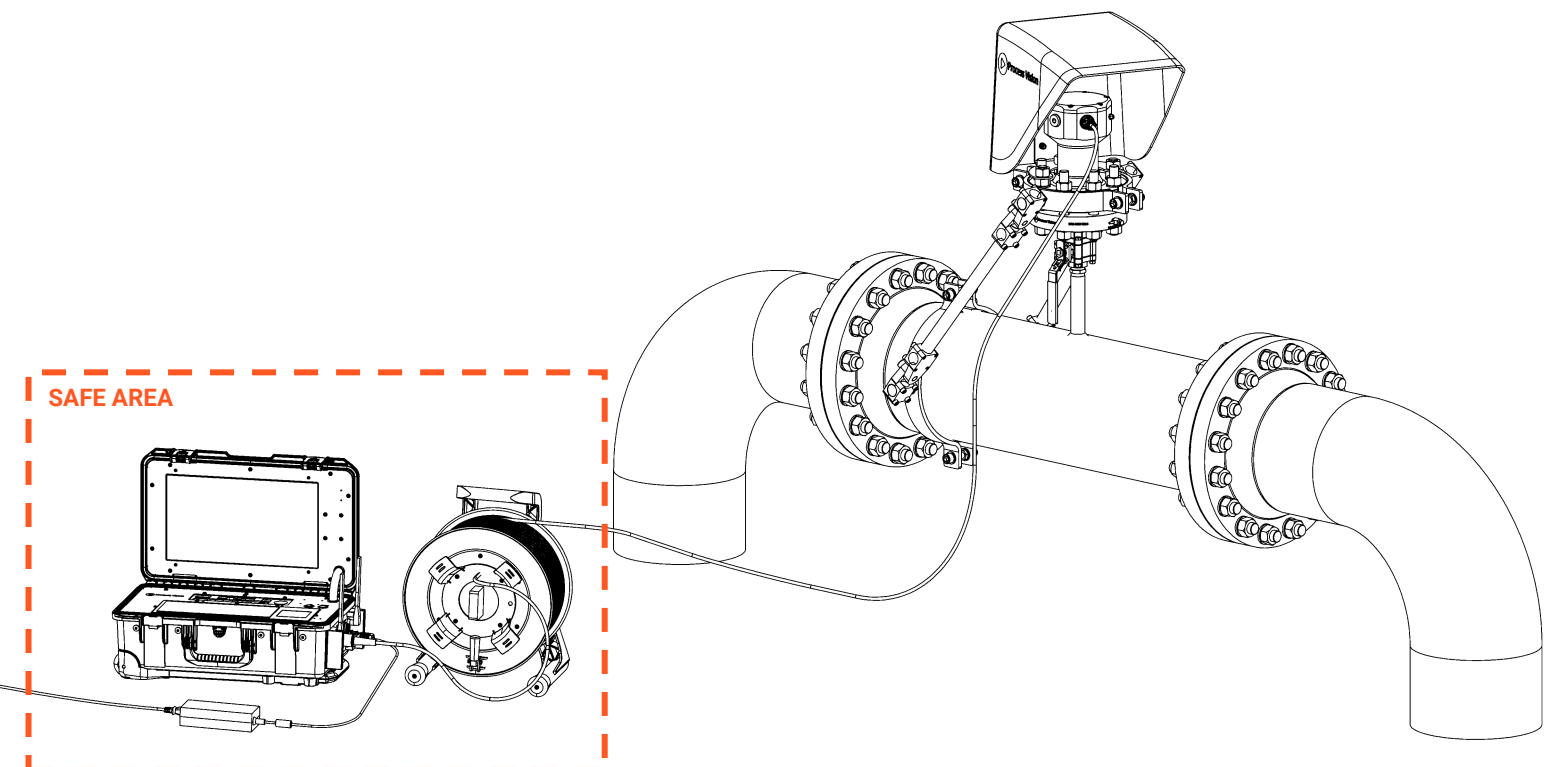
🛡️ Safety Measures

Any safety concerns related to the LineVu product should be communicated to the LineVu support team for guidance.

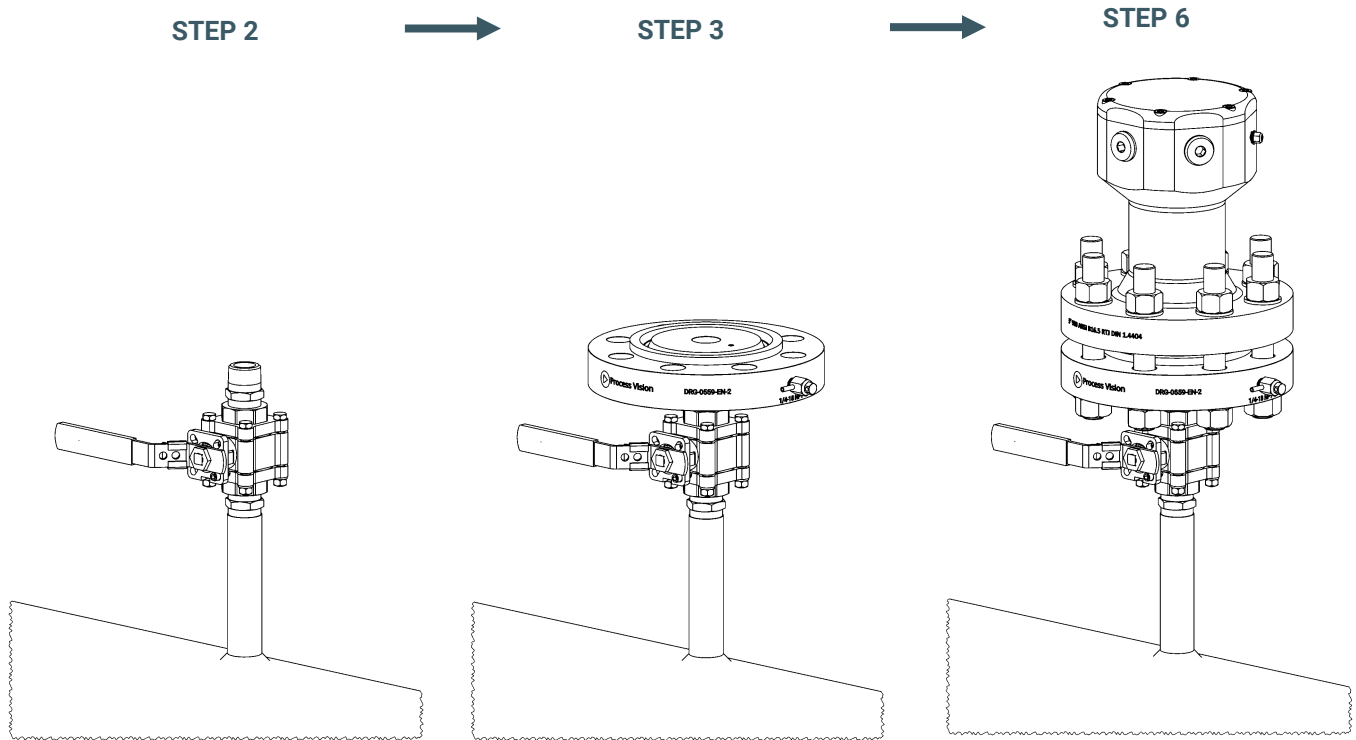
✂️ Equipment Preparation

Ensure a visual inspection of all equipment to confirm no damage occurred during transit. If any damage is found, please notify your Process Vision representative before installation is started.

LET OUR SUPPORT TEAM KNOW IN ADVANCE TO ENSURE HELP IS AVAILABLE DURING INSTALLATION.



Install LineVu to Tapping Point



- STEP 1** Carefully remove the LineVu unit and flange adapter kit from the packaging. Place them on a clean, flat surface near the tapping point, ensuring the lower flange of the unit remains undamaged during handling.

CAUTION: Take care when positioning the LineVu unit, not to scratch exposed mating surfaces

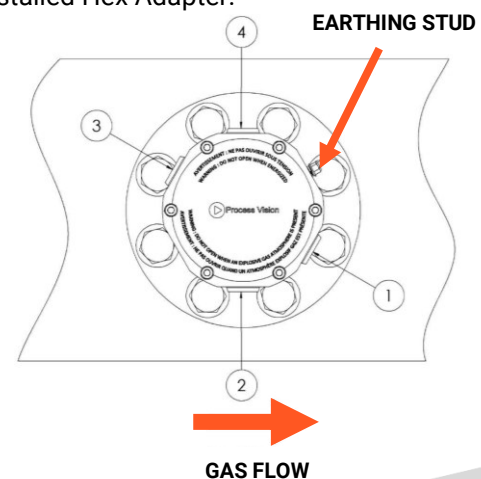
- STEP 2** Apply pipe tape to the threads of the provided blackened 1" NPT Hex Adapter, ensuring the bore remains clear to prevent obstruction of the unit's view. Securely attach the Hex Adapter to the pre-installed valve. If installing a new valve, use the second blackened 1" NPT Hex Adapter before mounting the valve.

- STEP 3** Attach the provided 3" RTJ #900 to 1" NPT flange adapter onto the installed Hex Adapter. Apply pipe tape, then install the provided bleed valve into the cross-drilling of the flange adapter.

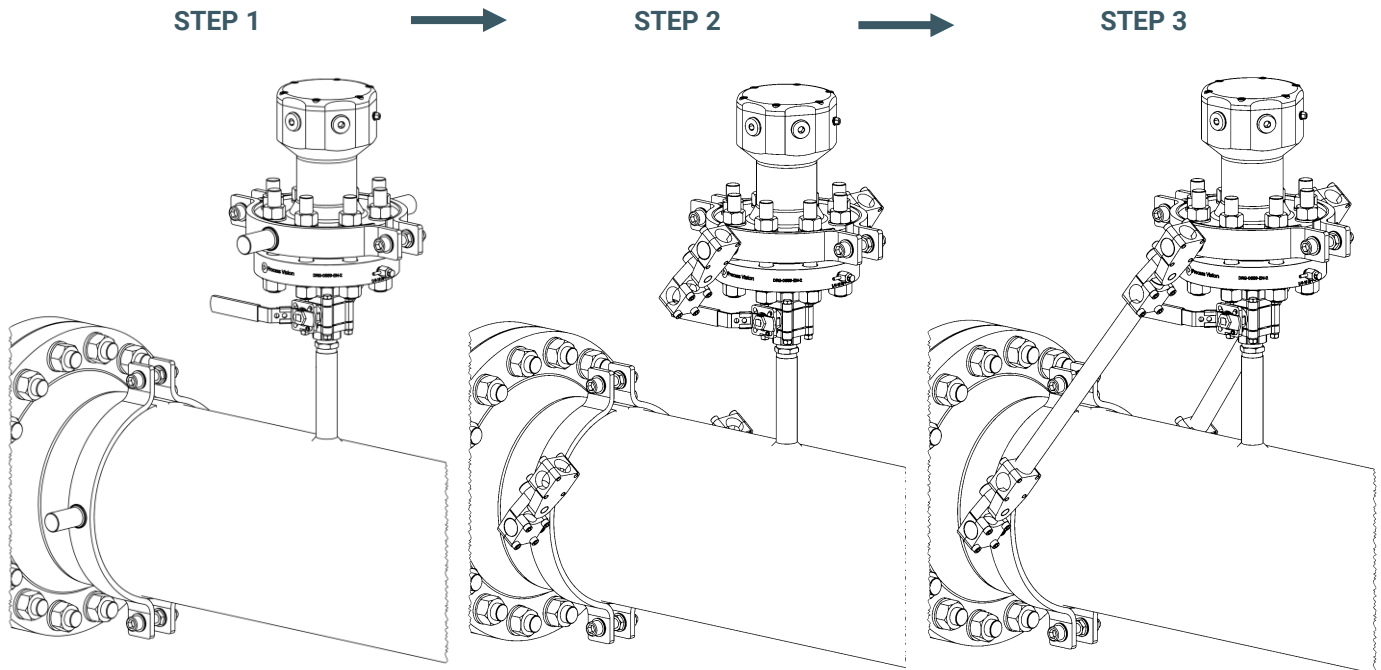
- STEP 4** Place the RTJ gasket onto the flange adapter, ensuring both the groove and gasket are clean and free of debris.

- STEP 5** Carefully turn the LineVu unit onto its side and clean the sapphire window (clear window) thoroughly before installation.

- STEP 6** Mount the LineVu unit onto the flange, aligning the earthing stud in the correct position relative to the gas flow direction. Ensure the excess stud length is positioned on the upper side of the flange to facilitate sunshade installation. Tighten the nuts in a "criss-cross" pattern using three torque passes at 30%, 60%, and 100% of the specified torque value. (refer to ASME PCC-1 for further information)



Install Bracing System



- STEP 1** Use the provided fixings to attach the two pipe clamps to the LineVu flange and the main gas pipeline. Ensure the clamps are oriented as shown in the diagram above. Leave the gas pipeline clamp slightly loose to allow for later adjustments.
- STEP 2** Attach the Uni-Clamps to the previously installed pipe clamps. Ensure they are properly aligned and secure.
- STEP 3** Measure the distance between the two Uni-Clamps to determine the required length for the struts. Cut the provided struts to the measured length, then install and securely tighten all fixings to complete the assembly.

HOW DO I INSTALL THE BRACING ?

SCAN FOR THE BRACING
INSTALLATION INSTRUCTIONS

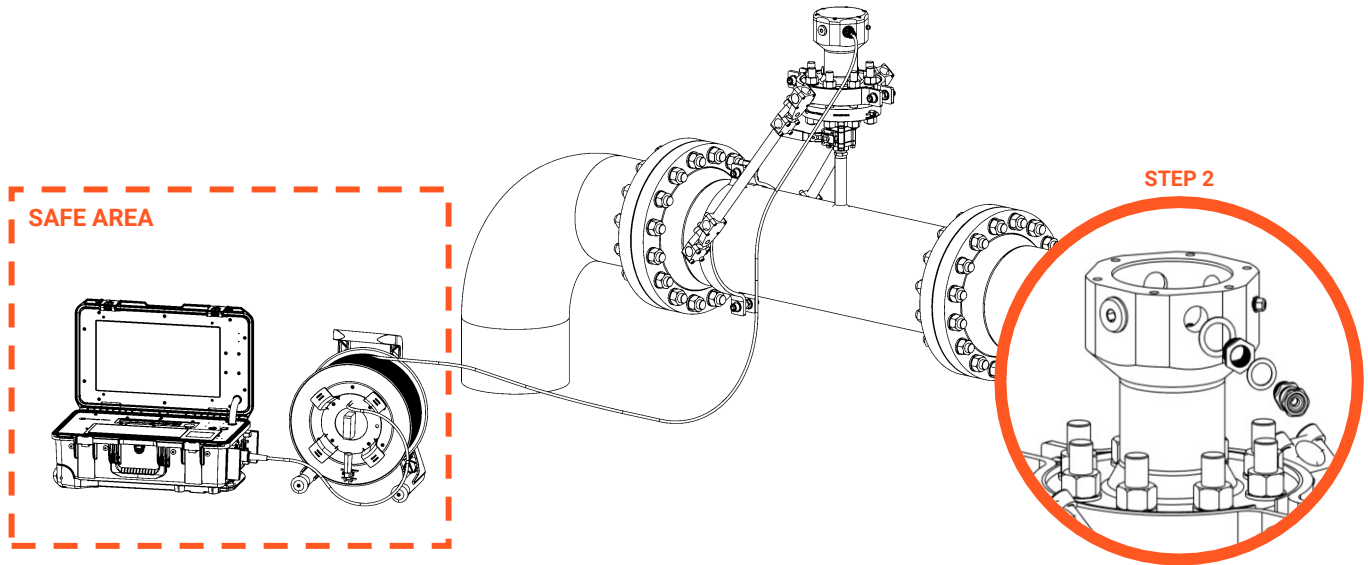
IS THERE AN ORDER TO
INSTALLING THE BRACING KIT ?



WHAT TORQUE IS REQUIRED ?

Consult the [AVT Reliability Easy-Brace® installation instructions](#) for further details.

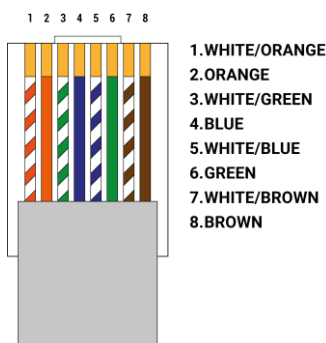
Connect LineVu to Discovery Unit



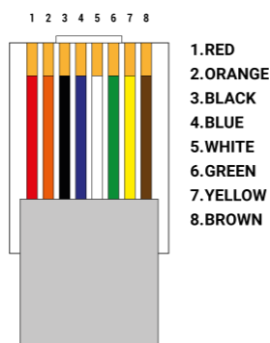
- STEP 1** Route the Ethernet cable from the safe area to the LineVu unit. Leave some extra cable to create strain relief loops, ensuring flexibility and reducing tension on the cable and secure with cable ties.
- STEP 2** Remove the lid from the LineVu unit. Select an appropriate gland entry and remove the pre-installed blanking plug. If a sunshade is fitted, consider its position when choosing the gland entry. Assemble the following components into the exposed gland entry in this order: M25 fiber washer, M25 to M20 adapter, M20 fiber washer, and gland. Ensure all components are securely fitted.

CAUTION: Removing the LineVu lid will expose the Ex-d flame path – TAKE EXTREME CARE TO NOT DAMAGE

- STEP 3** Feed the un-terminated Ethernet cable through the fitted gland, leaving some excess cable to simplify the termination process for the RJ-45 connector.
- STEP 4** Terminate the Ethernet cable using the provided S/FTP CAT6A connector. Refer to the pinout diagrams below and the provided tutorial **QR code** for detailed guidance.
- STEP 5** Perform an end-to-end test of the Ethernet cable to verify connectivity before connecting it to the LineVu unit. Once confirmed, secure the gland by tightening it around the Ethernet cable.
- STEP 6** Attach an earthing cable to the M6 earthing stud on the side of the camera can, securing it with a nut and washer to ensure proper grounding. Proper earthing is mandatory.
- STEP 7** Connect the shorter end of the Ethernet cable reel to the Discovery Unit.



T-568B STANDARD

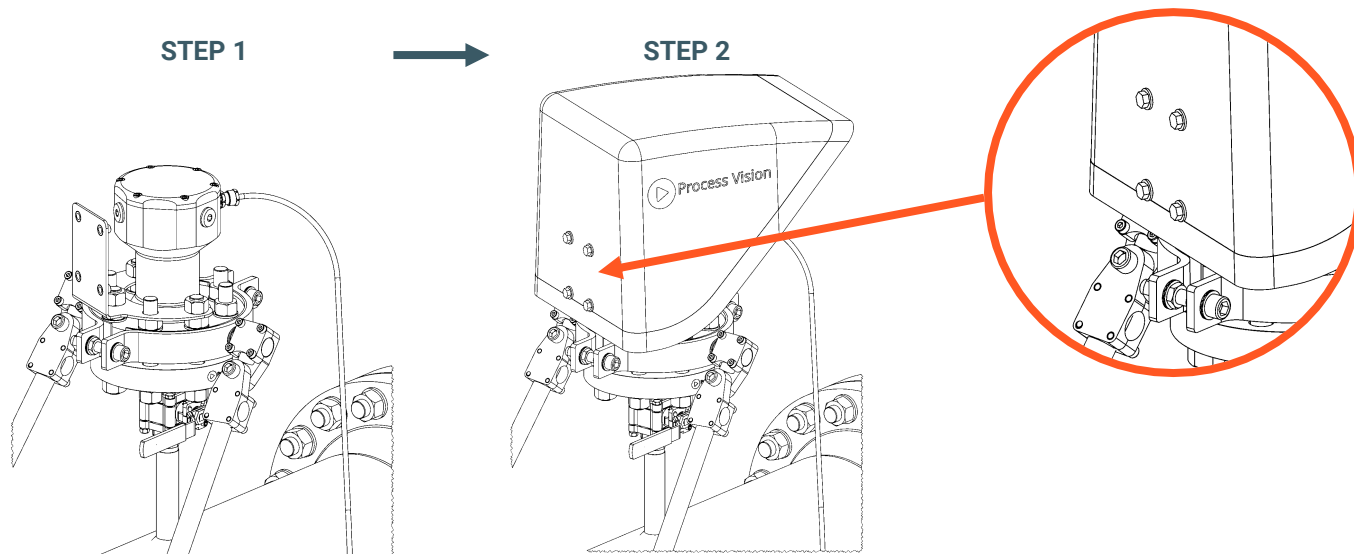


**PROCESS VISION
ETHERNET CABLE REEL**

SCAN TO WATCH TUTORIAL



Install Sunshade

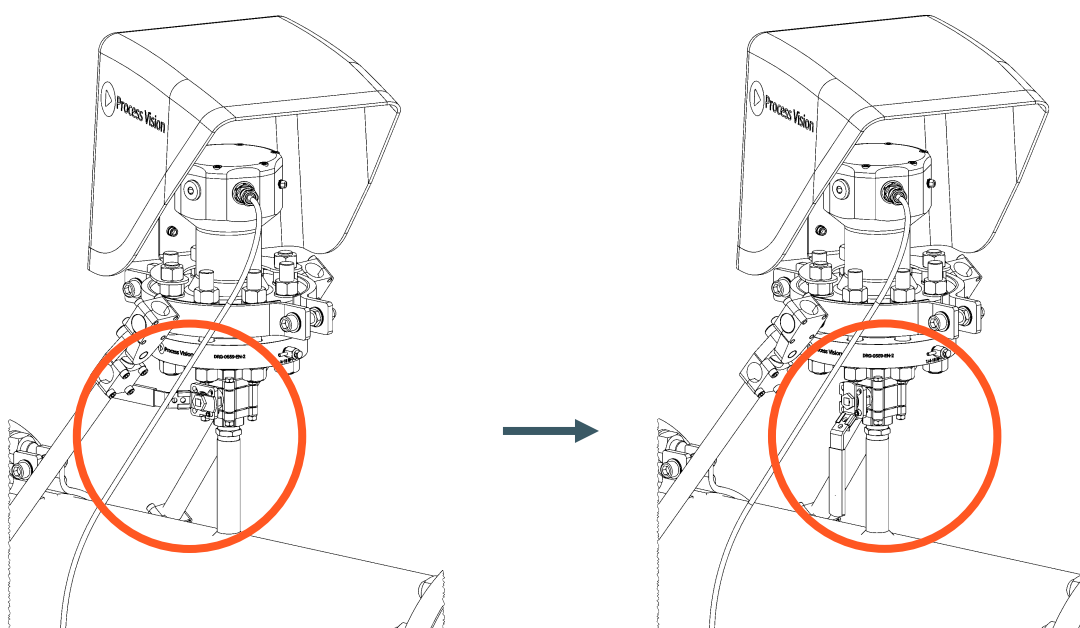


STEP 1 Attach the sunshade bracket to the LineVu assembly, selecting an orientation that provides shade throughout the day. Position the bracket carefully to avoid interference with the installed gland. Secure it firmly using the additional nuts provided.

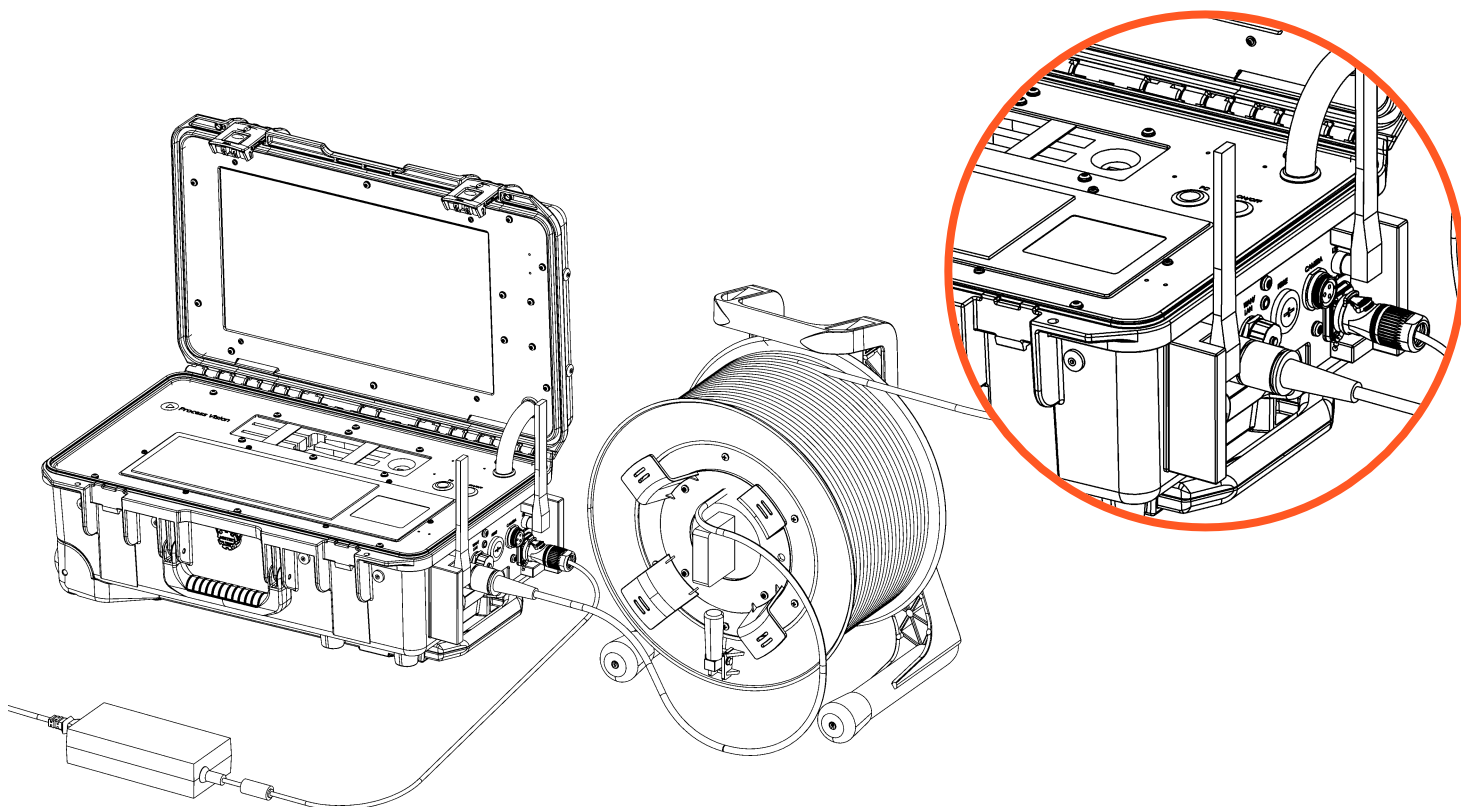
STEP 2 Align the sunshade with the bracket and attach it using the provided bolts. Tighten the bolts to ensure the sunshade is securely mounted.

Opening the Valve

CAUTION: Open the valve slowly to allow pressure to equalize and prevent contamination from spraying onto the camera window.



System Power-Up & Initialization



- STEP 1** Attach the antennas securely to the Discovery Unit. Connect the Discovery Power Supply to the designated port on the Discovery Unit.
- STEP 2** Press the ON/OFF button to turn on the Discovery Unit.
- STEP 3** Wait for the Discovery Unit to boot up and notify the Process Vision Support Engineer to begin commissioning.

US Pat No.
US10969344B2
US10041880B2
US10634865B2

Support and Assistance

Connect with our support team through [Support Portal \(support.processvision.com\)](https://support.processvision.com)
or, alternatively email us support@processvision.com

LINEVU SUPPORT





Live video stream from inside your natural gas pipeline

LineVu is a patented camera system that **detects contamination** in high-pressure gas systems.

Game changing technology.