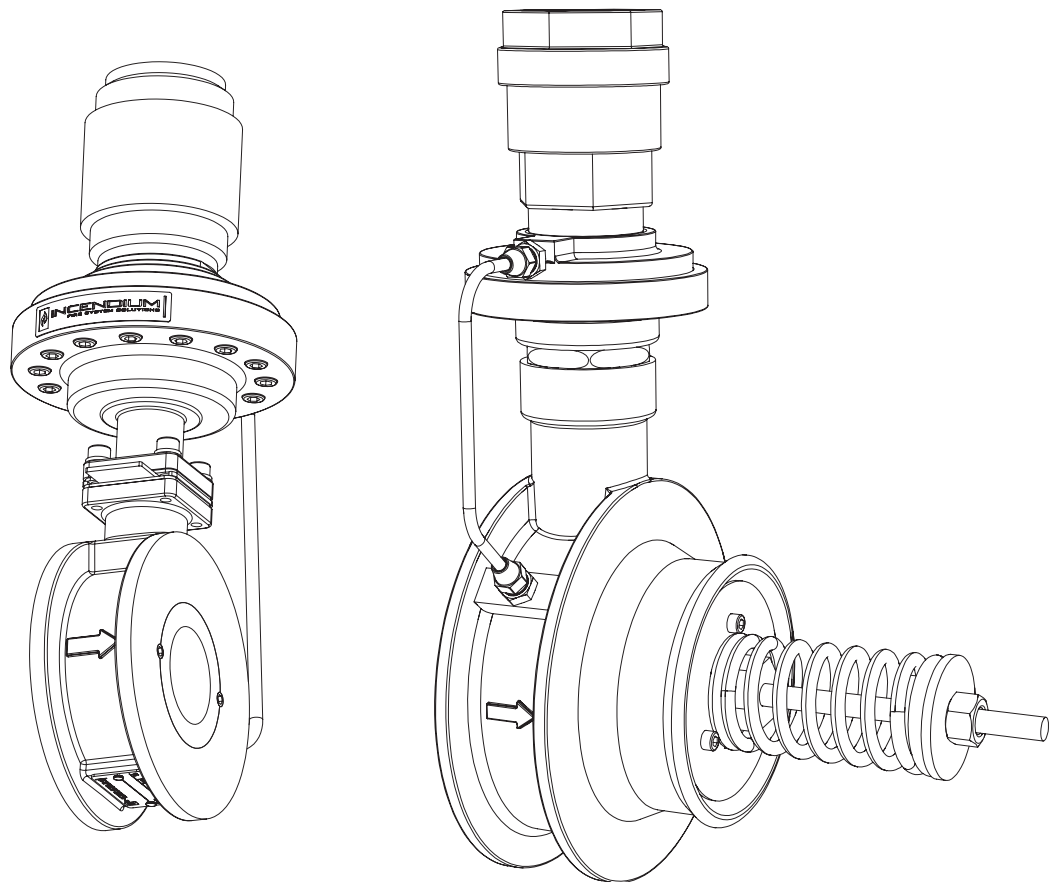




IPP, IPPW

OPERATION AND MAINTENANCE



Technical changes reserved without notice



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1. GENERAL DESCRIPTION

The balanced pressure proportioners IPP and IPPW induces foam concentrate into the water feed line. The proportioner is installed wafer type (between flanges) in the feed water line and by thread to the foam concentrate pipe. Foam concentrate is supplied to the proportioner by a foam concentrate pump. The proportioner will automatically induce the correct amount of foam into the water line very accurately in a wide range of flows and pressures when the water and foam pumps are activated.

The balance valve will know the difference in pressure between the foam concentrate and the water and give the right mixing also if the pressure is changing during operation. The foam concentrate pressure must be at least one bar higher than the water pressure upstream of the proportioner.

1.1 Liability Warning

The IPP/IPPW must be operated in compliance with this document as well as with applicable standards, in addition to the standards of other authorities having jurisdiction. Failure to do so may impair the proper operation or integrity of this device.

The owner is responsible for maintaining his fire protection unit or system and devices in proper operating conditions. The manufacturer or reseller should be contacted relative to any questions.

This manual must be read and understood by all personnel involved in operation, calibration and maintenance of this product and shall be kept in an accessible place for review. Take note that the appearance of the proportioner(s) in this manual can differ from the delivered product. The function is however the same and thus, this manual must be followed with every step.

The unit should not under any circumstance be operated outside pressure range as indicated in this manual. Operation of this device without understanding this manual can be dangerous.

1.2 Warranty

Seller warrants for a period of one year from date of shipment (warranty period) that products furnished hereunder will be free from defects in material and workmanship.

This warranty is invalid if the device is, or has been:

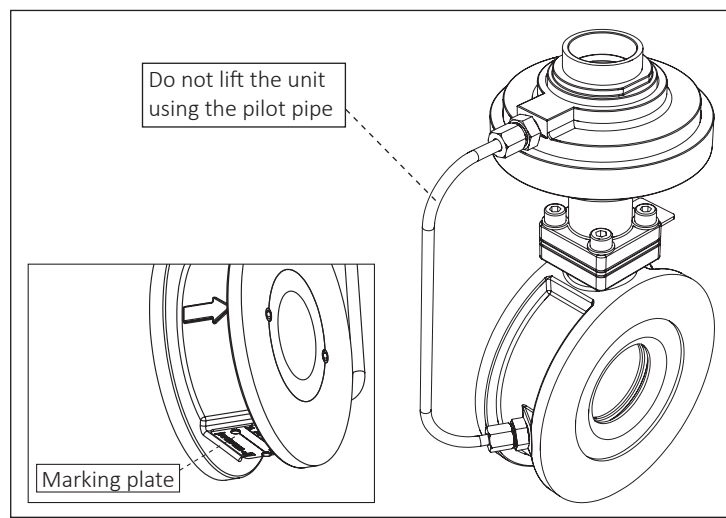
- Misused or neglected
- If there have been accidents to the equipment
- Altered in any way
- Instructions in this manual has not been followed



2. INSTALLATION

2.1 Safety

- The installation must be carried out by qualified personnel. The directions given in the installation instruction must be followed.
- Make sure that the IPP/IPPW is safely secured when installing and running the system.
- Use only lifting gear and equipment that are well suited for the purpose.
- Do not lift the proportioner in the thin pipe between the body and the balance valve.



2.2 Inspection

- Inspect the IPP/IPPW equipment for damage that might have occurred during transport.
- Inspect that induction ratio, foam type, marking and signs of the equipment are corresponding to material specification and order confirmation.
- Inspect that the IPP/IPPW have the same size as the water pipe.

2.3 Installation

- Use provided installation instruction for the supplied unit.
- Install the unit in the flow direction. Use the molded and/or sticker arrow to locate the water and foam directions. Connect the proportioner between the flanges using suitable gaskets on each side the proportioner.
- Connect the threaded or flanged foam pipe to the proportioner. Use suitable thread sealant or gaskets to do so.
- Do not use too high force on the foam thread/flange, it might open the thread sealing between the proportioner body and the balance valve. Use suitable tools to avoid opening the thread sealing. If the thread sealing is broken there can be a leakage.

3. OPERATION

Using the proportioner is simple. Start the water- and foam concentrates pumps. Open, carefully, first the water shut off valve and then the foam shut-off valve. When the pipes are filled with water, valves fully open and water- and foam flow are within the specified range for the IPP or IPPW the mixing will take place automatically.

Water is passed over the proportioner and foam-concentrate is pumped into the balance valve and mixed inside the proportioner. The balance valve will know the difference in pressure between the foam concentrate and the water. The valve will regulate the induction during operation even if the pressure is changing.

- Foam pressure must be at least one bar above the water pressure. It is recommended to install a pressure gauge near the proportioner (up streams) for both foam concentrate and water pipe.
- It is not recommended to use more than five bar over pressure in the foam line compared to the water line. The induction may be higher than expected (and the balance valve might take damage).
- Some foam systems allow for the foam line to be drained, introducing air. In these cases the foam line must be flushed with water after use. This will prevent drying foam from clogging the balance valve.



4. MAINTENANCE AND INSPECTION

IPP/IPPW proportioners normally need no maintenance. The system must be tested with 12 months interval to ensure correct mixing rate is obtained. Inspect the proportioner for physical damage and/or leakage. Make sure all screws and bolts are tightened.

5. TROUBLESHOOTING

- Check that all valves in the system are in stand-by mode and ready to be activated.
- Check that the proportioner is operating within the specified flow-/pressure range.
- Check water inlet pressure and make sure that the foam concentrate inlet pressure is min. 1 bar higher and max. 5 bar higher than the given water pressure.
- Check that the membrane in the balancing valve is intact.
- Check the balancing valve for foreign objects or old dried foam concentrate. Rinse with water and remove any residue.

6. REPAIR

Only personnel with good knowledge and experience of the products may carry out repairs. Please contact Incendium for advice.

7. OTHER DOCUMENTATION

Datasheet IPP
Datasheet IPPW
Installation instruction IPP II-0018-IPPW-EN
Installation instruction IPPW II-0017-IPPW-EN
Spare parts list on inquiry. Please contact Incendium AB.