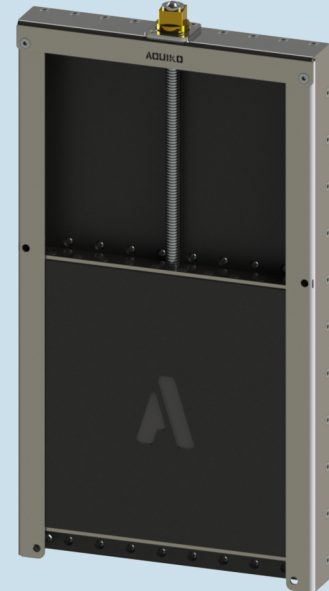


PRODUCT FEATURES

- ✓ 6MwC pressure rating as standard*
- ✓ Quality materials
- ✓ Long service life
- ✓ Compact, adaptable design
- ✓ Leak-tight assurance
- ✓ Easy integration
- ✓ Complete fixing kit included

Built for reliability. Designed for every project.



PRODUCT INFORMATION

Engineered for Performance. Built to Last.

The AQUIKO Standard Penstock range is precision-engineered and manufactured in the UK using high-grade 316 stainless steel and robust HDPE. Designed for a service life of up to 50 years, these penstocks deliver long-term reliability in diverse water flow control applications.

Key Features

Durable Construction

- Made from marine-grade 316 stainless steel, offering superior resistance to corrosion, pitting, and crevice damage—ideal for harsh, high-moisture environments.

Leak-Tight Performance

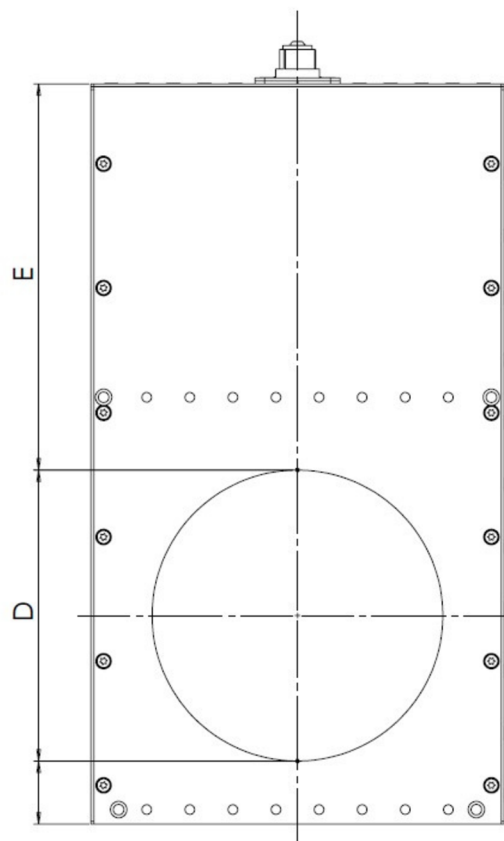
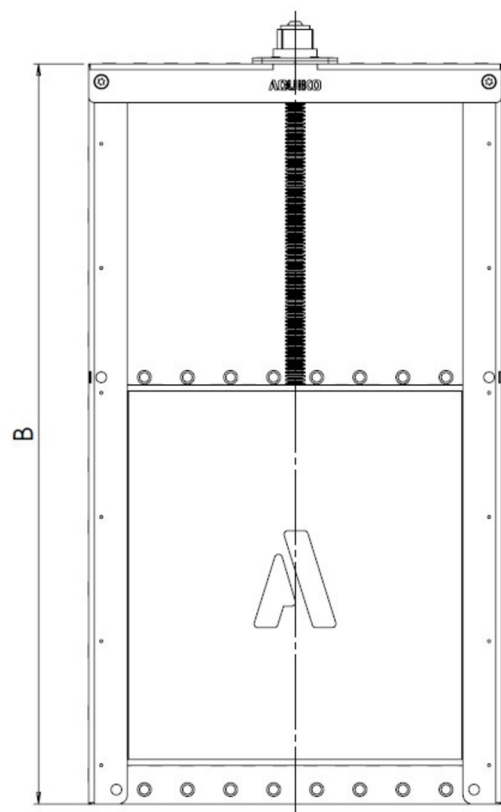
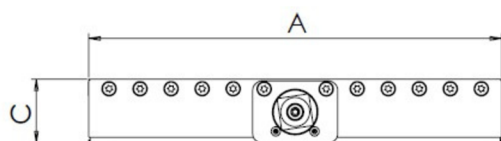
- Complies with BS7775 leakage standards, ensuring enhanced sealing and peace of mind.

Compact & Versatile Design

- Space-efficient frame allows for easy installation in confined areas. Fully compatible with AQUIKO's ancillary products for seamless system integration.

Wide Size Range

- Available in sizes from 100mm to 1,000mm, meeting a broad spectrum of project requirements.



Diameter	A	B	C	D	E	Torque up (Nm)	Torque up (max.)	Torque down (Nm)	Torque down (max.)	Turns	Pressure (MwC)			Weight (KG.)
											On Seating	Off Seating	Off Seating (without Stiffeners)	
100	226	363	66	100	198	1	30	1	30	33	6	6	-	7
150	276	463	66	150	248	2	30	1	30	45	6	6	-	10
200	326	563	66	200	298	2	30	2	30	58	6	6	-	13
250	376	663	66	250	348	3	30	3	30	70	6	6	-	16
300	426	763	66	300	398	4	30	3	30	83	6	6	-	19
400	526	963	66	400	498	6	30	5	30	108	4	4	-	28
500	626	1197	72	500	632	8	30	7	30	133	3	3	-	40
600	726	1401	82	600	736	11	30	10	30	158	3	3	-	58
700	838	1556	128	700	796	19	28	17	25	183	6	6	6	68
800	954	1756	133	800	896	19	28	17	21	208	6	6	5.5	95
900	1078	1956	138	900	996	18	27	15	17	233	6	6	5	115
1000	1178	2156	153	1000	1096	14	21	10	13	258	6	6	4.5	140

Ancillaries

AQUIKO offers a full range of ancillaries to ensure you have everything you need for your project.

Handwheel



T-Key



S-Crank



Pedestal



Pedestal



Actuator



Ease Operation with the Torque Booster

The Torque Booster is a 7:1 planetary gearbox, reducing the torque on the spindle seven fold. It allows our full range of penstocks to be operated by either a brushless battery drill, the very smallest actuator or even by hand against the penstock full head of water. For Installation the Torque Booster is either fitted into one of the AQUIKO pedestals or mounted using a specially designed wall bracket.

Operation & Maintenance

Operation

NOTE: Do not over-tighten or force the manual winder- if resistance higher than the typical resistance required to operate the penstock is encountered, this indicates an obstruction or blockage, and to increase the force on the winder may damage the equipment.

The penstock is to be turned clockwise to close (lower) it and anticlockwise to open (raise) it, using a T Key, via the spindle extension if used.

Cleaning and Maintenance

The penstock is designed to require minimal maintenance, however some greasing is required. Frequency of greasing is dependent on it's duty, however to prevent seizure the spindle should have a thin layer of water resistant grease at all times.

It is therefore initially advised to inspect the penstock six monthly, and to apply a suitable water resistant grease evenly to the spindle (e.g. Multipurpose, LI2- check suitability for use in water).

NB: Each application requires site specific assessment relating to frequency of maintenance. The range, also requires occasional visual inspection, to check for damage, obstruction etc. In certain environments, it may also require cleaning to prevent build up that could cause obstruction.

To clean the equipment, use clean water and a stiff brush. Cleaning and Maintenance is not included in the purchase.

Installation Guide

The below set of guidelines should be followed in the manner it is written.

Clean and check the mounting surface:

- a. For sealing, this should be within a 2-3mm tolerance per metre and any pockets or lumps needs to be resolved, prior to installation
- b. The surface should be vertical
- c. Clean and, where possible, dry the surface to remove dirt and grease
- d. Check all dimensions to ensure correct fit, prior to installation.

Prepare the APS-LW for Installation:

- a. Position the APS-LW in place over the outfall, with the inverts of the outfall and APS-LW backplate aligned
- b. Ensure the APS-LW is level and vertical and secure to prevent movement
- c. Mark the mounting holes on the wall
- d. Drill all fixing holes on the wall.
- e. Clean out holes to remove dust and moisture.
- f. Install plugs into the holes above and below the pipe/opening.
- g. Clean the surface of the APS-LW back plate to remove dirt, grease and water
- h. Apply sealant in a continuous 5mm bead around the opening and around the fixing holes (take care not to smear this when moving the APS-LW into position)

Note: When attaching to the wall, we recommend starting with the top corner fixings, and installing these bolts.

- i. Re-position the APS-LW as before, and install the top corner anchors as per the resin manufacturer's instruction (enclosed with fixing kit)
- j. Continue to install the remaining side frame anchors in the wall
- k. To ensure a good seal, check that no resin has exited the fixing hole; remove any resin that would prevent the frame sitting flat to the wall- there is a countersink on the back of the frame to help reduce this, however large amounts will cause leakage.
- l. Once cured, secure the APS-LW to the wall using a washer, spring washer and nut on each bolt
- m. Screw the countersunk screws into the holes above and below the opening, ensuring these are flush with the back-frame. NOTE: If these are proud, or significantly recessed, this can damage the seal.
- n. Tighten all fixings evenly, to the recommended torque.
- o. Check operation.