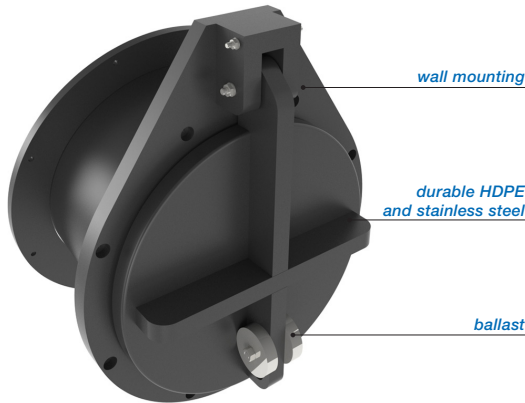


FLAP VALVE - HDPE / SS316L TYPE WALL MOUNTING (A), Ø110 - 400 MM.



The Freedrain® non-return valve is standard mounted at an angle of 10 degrees. The flap valve will mostly installed partly or completely submerged (in tidal situations / surface water / sewage / in case of emergency / flood protection), regulating a water flow in a single direction and preventing any back flow. The flap valve can be applied practically in all kinds of environments with free flow / gravitation. These flap valves are manufactured in our own factory from high quality HDPE, which is lightweight material and has a high chemical resistance. The flap valve will be equipped with SS316L hinge pins and extra ballast weight to prevent the flap valve door from floating. The larger flap valves will be equipped with SS316L reinforcement profiles.

The On-seating tightening shall be effected by means of a special EDPM lip seal to withstand 1 meter water column (long duration - 50 years) above the culvert and 5 meter water column from bottom invert (short duration - 72 hours) without any visible deformation. The flap valves shall be water tight in on-seating situation.

The standard versions are suitable for wall mounting. But the flap valves can be supplied with a spigot end (model S or Model BS) or with flange connections (model F or PF).

Advantages:

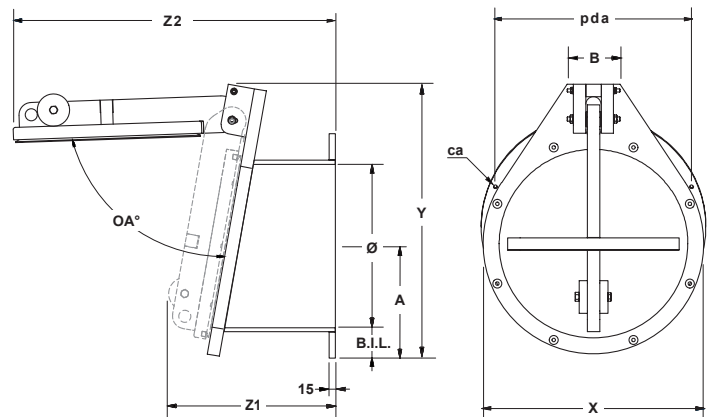
- Made of durable material, HDPE and SS316L.
- Light weight, easy to install.
- Easy to do custom made designs such as square, rectangular or egg shaped.
- Design life of 50 years.
- Maintenance free.
- As from Ø 500 mm the flap valve will be equipped with 2 hinge systems.
- Will act as double hung, by means of special designed sleeve in hinge frame.
- Opening angle is limited, so it can't remain open.
- High UV protection.
- Easy replaceable lip seal.

Other mounting options:

- Wall mounting (model ATK-G).
- Flange connection (model ATK-F or ATK-PF).
- Spigot end for connecting with socket/coupling (model ATK-S) or to be inserted in existing pipe (model ATK-BS).
- Opening moments of the flap valve can be adjusted on request.

Installation:

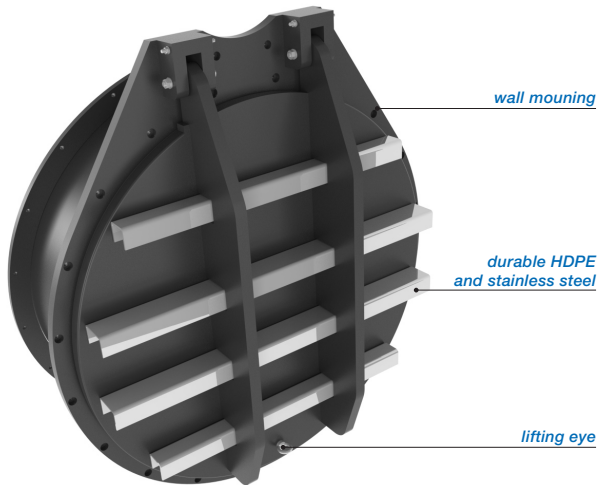
- The flap valve shall be mounted perpendicularly and free of tension to a flat wall. By preference mounting has to be done with stainless steel A4 fixing anchors. As per our installation instructions.



type Freedrain®	Ø mm.	B.I.L. mm.	X mm.	Y mm.	Z1 mm.	Z2 mm.	A mm.	B mm.	openings angle	pda mm.	chemical anchors	approx. weight
670.ATK.0100A	Ø 99	70	250	385	270	± 425	126	130	± 78°	Ø 220	M8x110 (4x)	±5 kg.
670.ATK.0125A	Ø 117	88	300	430	295	± 490	150	130	± 78°	Ø 270	M8x110 (5x)	±5 kg.
670.ATK.0150A	Ø 152	70	300	430	330	± 520	150	130	± 78°	Ø 270	M8x110 (5x)	±6 kg.
670.ATK.0200A	Ø 188	70	340	470	345	± 420	170	130	± 78°	Ø 310	M8x110 (6x)	±7 kg.
670.ATK.0250A	Ø 235	70	390	520	360	± 625	195	130	± 78°	Ø 360	M8x110 (6x)	±9 kg.
670.ATK.0300A	Ø 300	70	440	570	385	± 695	220	130	± 78°	Ø 410	M8x110 (6x)	±11 kg.
670.ATK.0400A	Ø 400	70	540	675	405	± 620	270	130	± 78°	Ø 510	M8x110 (8x)	±17 kg.

Dimensions in millimeters, weights in kilograms. Subject to changes in images, dimensions and description. Placement, installation and use in accordance with our regulations.

FLAP VALVE - HDPE / SS316L TYPE WALL MOUNTING (A), Ø500 - 1000 MM.



The Freedrain® non-return valve is standard mounted at an angle of 10 degrees. The flap valve will mostly installed partly or completely submerged (in tidal situations / surface water / sewage / in case of emergency / flood protection), regulating a water flow in a single direction and preventing any back flow. The flap valve can be applied practically in all kinds of environments with free flow / gravitation. These flap valves are manufactured in our own factory from high quality HDPE, which is lightweight material and has a high chemical resistance. The flap valve will be equipped with SS316L hinge pins and extra ballast weight to prevent the flap valve door from floating. The larger flap valves will be equipped with SS316L reinforcement profiles.

The On-seating tightening shall be effected by means of a special EDPM lip seal to withstand 1 meter water column (long duration - 50 years) above the culvert and 5 meter water column from bottom invert (short duration - 72 hours) without any visible deformation. The flap valves shall be water tight in on-seating situation.

The standard versions are suitable for wall mounting. But the flap valves can be supplied with a spigot end (model S or Model BS) or with flange connections (model F or PF).

Advantages:

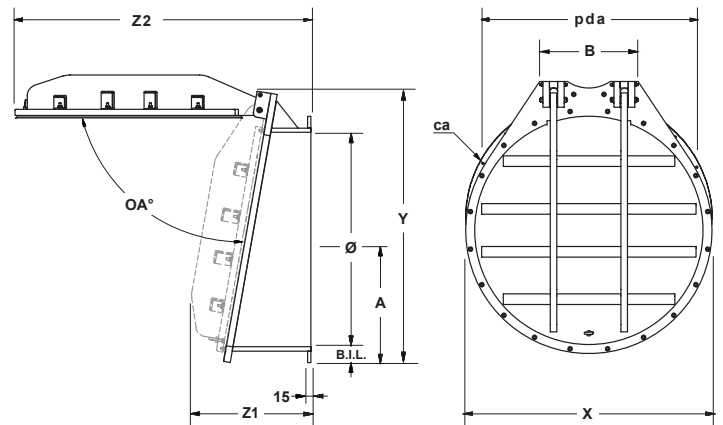
- Made of durable material, HDPE and SS316L.
- Light weight, easy to install.
- Easy to do custom made designs such as square, rectangular or egg shaped.
- Design life of 50 years.
- Maintenance free.
- As from Ø 500 mm the flap valve will be equipped with 2 hinge systems.
- Will act as double hung, by means of special designed sleeve in hinge frame.
- Opening angle is limited, so it can't remain open.
- High UV protection.
- Easy replaceable lip seal.

Other mounting options:

- Wall mounting (model ATK-G).
- Flange connection (model ATK-F or ATK-PF).
- Spigot end for connecting with socket/coupling (model ATK-S) or to be inserted in existing pipe (model ATK-BS).
- Opening moments of the flap valve can be adjusted on request.

Installation:

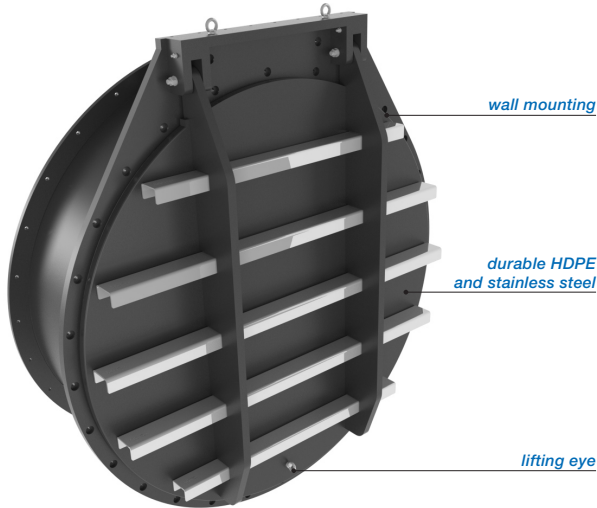
- The flap valve shall be mounted perpendicularly and free of tension to a flat wall. By preference mounting has to be done with stainless steel A4 fixing anchors. As per our installation instructions.



type Freedrain®	Ø mm.	B.I.L. mm.	X mm.	Y mm.	Z1 mm.	Z2 mm.	A mm.	B mm.	opening angle	pda mm.	chemical anchors	approx. weight
670.ATK.0500A	Ø 500	75	650	750	430	± 880	325	378	± 78°	Ø 620	M8x110 (10x)	±25 kg.
670.ATK.0600A	Ø 600	75	750	850	455	± 980	375	378	± 78°	Ø 720	M8x110 (12x)	±32 kg.
670.ATK.0700A	Ø 700	75	850	970	480	± 1085	425	398	± 78°	Ø 820	M8x110 (14x)	±45 kg.
670.ATK.0800A	Ø 800	75	950	1070	500	± 1185	475	418	± 78°	Ø 920	M8x110 (16x)	±55 kg.
670.ATK.0900A	Ø 900	75	1050	1165	530	± 1305	525	438	± 78°	Ø 1020	M8x110 (18x)	±70 kg.
670.ATK.1000A	Ø 1000	75	1150	1270	555	± 1380	575	458	± 78°	Ø 1120	M8x110 (20x)	±86 kg.

Dimensions in millimeters, weights in kilograms. Subject to changes in images, dimensions and description. Placement, installation and use in accordance with our regulations.

FLAP VALVE - HDPE / SS316L TYPE WALL MOUNTING (G), Ø1100 - 2000 MM.



The Freedrain® non-return valve is standard mounted at an angle of 10 degrees. The flap valve will mostly installed partly or completely submerged (in tidal situations / surface water / sewage / in case of emergency / flood protection), regulating a water flow in a single direction and preventing any back flow. The flap valve can be applied practically in all kinds of environments with free flow / gravitation. These flap valves are manufactured in our own factory from high quality HDPE, which is lightweight material and has a high chemical resistance. The flap valve will be equipped with SS316L hinge pins and extra ballast weight to prevent the flap valve door from floating. The larger flap valves will be equipped with SS316L reinforcement profiles.

The On-seating tightening shall be effected by means of a special EDPM lip seal to withstand 1 meter water column (long duration - 50 years) above the culvert and 5 meter water column from bottom invert (short duration - 72 hours) without any visible deformation. The flap valves shall be water tight in on-seating situation.

The standard versions are suitable for wall mounting. But the flap valves can be supplied with a spigot end (model S or Model BS) or with flange connections (model F or PF).

Advantages:

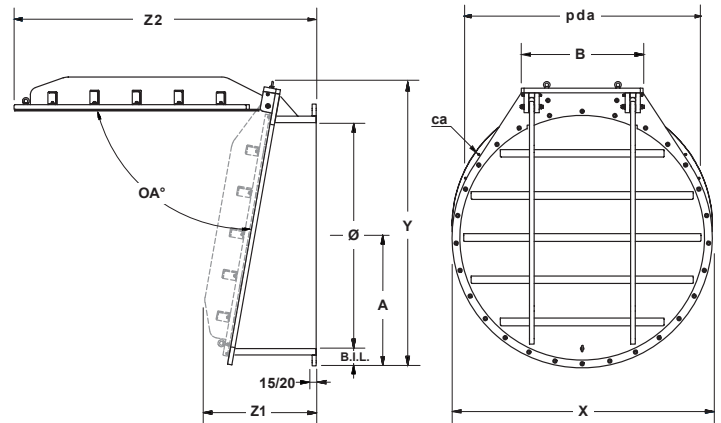
- Made of durable material, HDPE and SS316L.
- Light weight, easy to install.
- Easy to do custom made designs such as square, rectangular or egg shaped.
- Design life of 50 years.
- Maintenance free.
- As from Ø 500 mm the flap valve will be equipped with 2 hinge systems.
- Will act as double hung, by means of special designed sleeve in hinge frame.
- Opening angle is limited, so it can't remain open.
- High UV protection.
- Easy replaceable lip seal.

Other mounting options:

- Wall mounting (model ATK-G).
- Flange connection (model ATK-F or ATK-PF).
- Spigot end for connecting with socket/coupling (model ATK-S) or to be inserted in existing pipe (model ATK-BS).
- Opening moments of the flap valve can be adjusted on request.

Installation:

- The flap valve shall be mounted perpendicularly and free of tension to a flat wall. By preference mounting has to be done with stainless steel A4 fixing anchors. As per our installation instructions.



type Freedrain®	Ø mm.	B.I.L. mm.	X mm.	Y mm.	Z1 mm.	Z2 mm.	A mm.	B mm.	opening angle	pda mm.	chemical anchors	approx. weight
670.ATK.1100A	Ø 1100	100	1300	1480	580	± 1500	650	605	± 80°	1250	M8 x 110 (22x)	±105 kg.
670.ATK.1200A	Ø 1200	100	1400	1550	670	± 1675	700	645	± 80°	1350	M8 x 110 (24x)	±128 kg.
670.ATK.1300A	Ø 1300	100	1500	1650	700	± 1780	750	695	± 80°	1450	M10x130 (24x)	±170 kg.
670.ATK.1400A	Ø 1400	100	1600	1740	700	± 1850	800	745	± 80°	1550	M10x130 (24x)	±185 kg.
670.ATK.1500A	Ø 1500	100	1700	1860	720	± 1965	850	795	± 80°	1650	M10x130 (28x)	±200 kg.
670.ATK.1600A	Ø 1600	100	1800	1980	755	± 2060	900	845	± 80°	1750	M10x130 (28x)	±235 kg.
670.ATK.1800A	Ø 1800	100	2000	2190	860	± 2280	1000	945	± 80°	1950	M10x130 (32x)	±310 kg.
670.ATK.2000A	Ø 2000	100	2200	2380	950	± 2530	1100	1045	± 80°	2150	M10x130 (34x)	±385 kg.

Dimensions in millimeters, weights in kilograms. Subject to changes in images, dimensions and description. Placement, installation and use in accordance with our regulations.