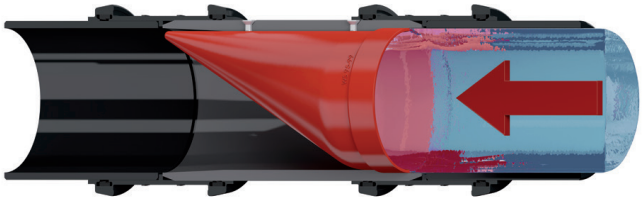
WASTOP®



WASTOP® INLINE CHECK VALVE

We all know someone who has been affected by it. We see it, feel it and experience it. Climate change and rising sea levels are affecting us all. Through the innovation of WaStop Inline Check Valve, we at Wapro have prevented thousands of floods worldwide.

In order to protect against flooding, we have engineered the WaStop inline check valve to ensure the lowest possible opening pressure whilst maintaining the best possible seal against backflow. This, combined with the lowest headloss available, gives the most efficient flow conditions, ensuring the fastest evacuation of water. An essential quality of check valves used to protect people and property. WaStop protects.

ADVANTAGES OF WASTOP®

- Easy installation saving on construction & installation costs
- Superior construction materials
- Lowest headloss amongst inline check valves
- Low life cycle cost
- No moving parts - virtually maintenance-free
- Many dimensions 75-2000mm std & non-standard pipes
- Stops liquids, gases, odours, insects and small animals
- Stops backflow effectively even in low flow events

APPLICATIONS - WASTE WATER, SURFACE WATER, TIDAL AREAS

We at Wapro know that any solution for flood prevention or odour control needs to function. Simply, effectively. That's why, when we invented the WaStop inline check valve in 2000, we had one thought in mind. Instant automatic protection. Working on differential pressure the WaStop functions autonomously, without human interaction, without electricity, without constant maintenance. It just works.

To invent the best inline check valve on the market our engineers went one step further. We also thought about the different parts of the process and who would be affected by the design of the valve. With function top of mind our engineers developed a valve that works in stormwater, sewer, odour applications, as well as ensuring to cover the range of sizes of existing pipes to enable retro-fitting with ease. We cover all sizes of pipes, all shapes, from 75mm-2000mm. As standard. Off the shelf in most cases, for fast delivery. We keep stock to ensure the contractor and end user can keep time and costs to a minimum.

WASTOP®

BENEFITS OF SUPERIOR CONSTRUCTION

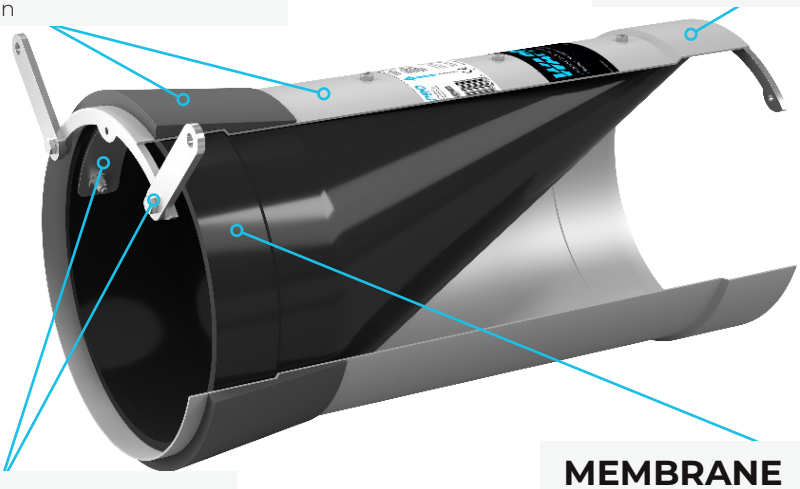
WaStop® is designed to provide asset and property owners' peace of mind. Simply the most reliable, high quality inline check valve on the market.

HOUSING & SEAL

- Thin stainless housing
- Perfect function regardless of the existing pipe quality
- Peace of mind knowing the seal is 100% tight
- Low life-cycle cost
- Lower energy costs
- Quick, easy installation

DOUBLE COLLARS

- Fast deliveries
- Easy installation for inlet or outlet installation
- Reduces costs by having one product for multiple installations situations
- Helps you meet your budget



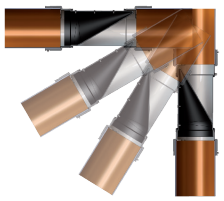
FIXATION MATERIAL

- Long life expectancy and low life-cycle cost with high quality materials
- Peace of mind - engineered product that exceeds expectations

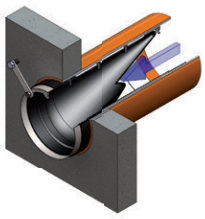
MEMBRANE

- Protection even in low flow events
- Pulsating flow reducing sedimentation up and downstream
- Extremely low headloss
- Low maintenance costs
- Memory membrane - doesn't sag

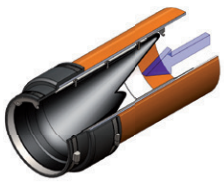
THE VERSATILITY OF WASTOP®



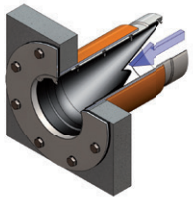
INLINE INSTALLATION



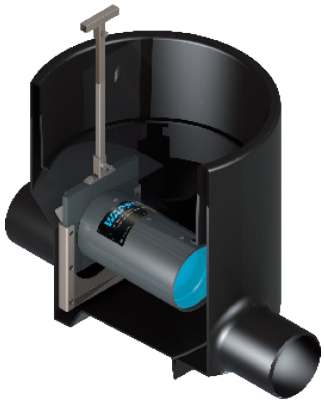
CHAMBER INSTALLATION



OUTLET INSTALLATION



FLANGE INSTALLATION



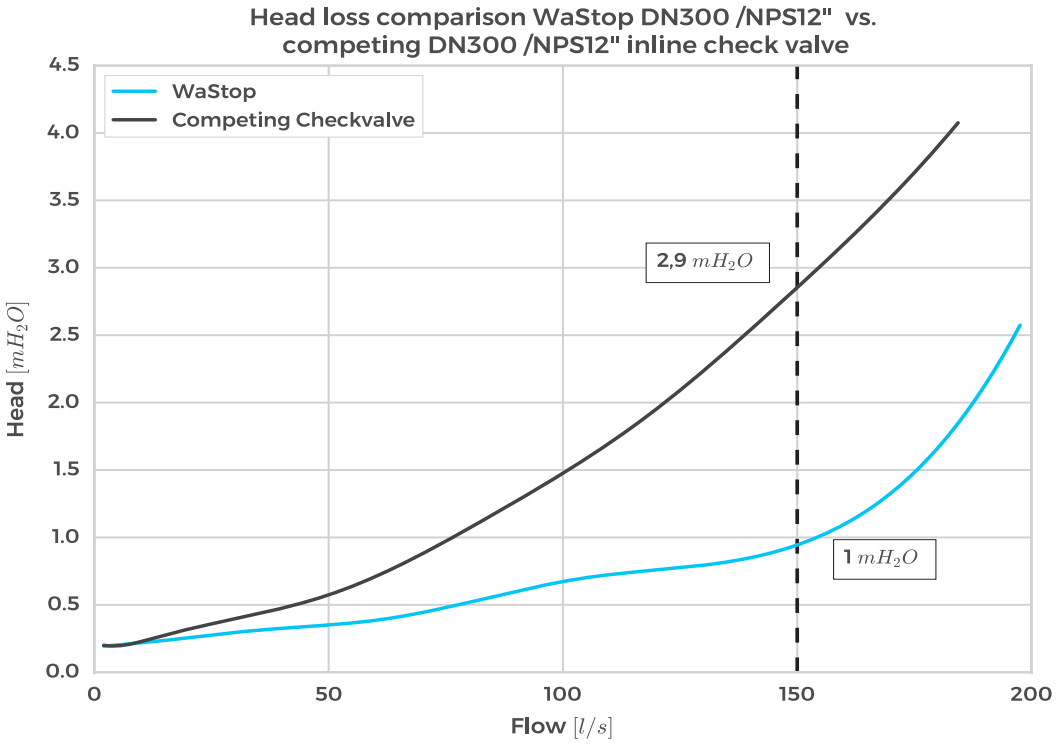
WASTOP® PRE-INSTALLED IN AN ACCESS CHAMBER

The WaStop Access Chamber provides you with peace of mind. Once installed the WaStop Access chamber provides complete protection against backflow in the sewer or combined sewer network. One ingenious product protects your basement or property from flooding caused by an overload or surcharge in the sewer system.

- Easy access from ground level
- Easy to inspect - simply lift manhole cover and pull up the WaStop module
- Delivered complete - inspection chamber and check valve in one

LOW HEAD LOSS IS ESSENTIAL

Comparing head loss data is difficult as the test procedure is rarely presented and there are multiple ways of altering data. However, the test results shown below were conducted in the same facility with the same reference points and are therefore comparable. The test result shows that the **WaStop has 65% lower head loss** than a competing inline check valve at flow 150l/s. Both valves were tested in the same open air scenario.

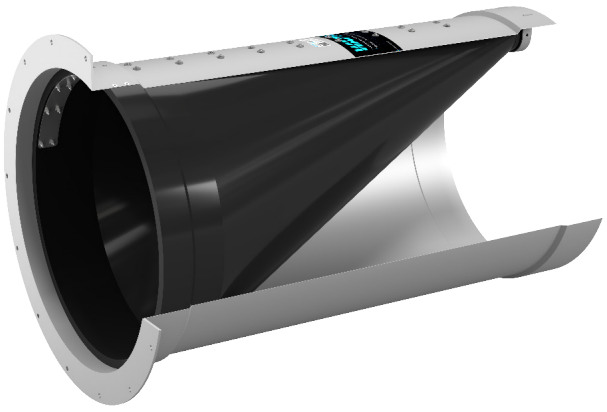


THE WIDEST RANGE OF SIZES TO SUIT ALL PIPES

We at Wapro know that there is a wide range of pipes available on the market, and that these pipes aren't always perfect. To ensure the valve we provide you with fits perfectly and protects 100% we've engineered the guess work out of it.

Keeping in line with our customer promise of commons sense and simplicity, we have developed a standard range of WaStop from DN75-2000mm. On top of this we have a Superior Fit Seal to ensure there is no leakage between the existing pipe and the WaStop inline check valve. We designed this seal to not only create the perfect fit, but also to ensure quick easy installation. Time is money.

All sizes are available in short versions or with flanges and can be customized to suit your needs. All WaStop standard valves are reversible for inlet or outlet installation and are able to be used vertically as well as horizontally.



WASTOP® STANDARD RANGE DIMENSIONS

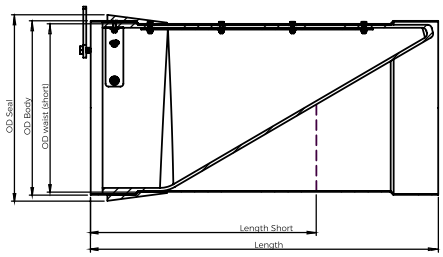
Long life-cycle is part of our DNA. It's part of our values. With this in mind we use the right materials for the right application. Stainless steel AISI 304 (EN1.4301) and AISI 316L (EN1.4404), and PVC/PE, along with a membrane material suited to the application.

WASTOP® STANDARD - 304/316 STAINLESS STEEL

Model*	DN	Length	Length (Short)**	OD seal	OD body	OD waist (OD Short)	Opening pressure Stan-dard***	Closing pressure Standard	Installation pipe*		Weight
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mmH²O]	[mmH²O]	Min	Max	[kgs]
WS97	100	210	160	108	96	92	190	70	98	107	0,7
WS101	100	215	165	112	100	96	209	73	101	111	0,8
WS116	125	235	157	127	115	110	270	85	117	126	0,9
WS146	150	300	200	316	144,5	138,5	230	81	146	159	2,6
WS183	200	385	270	201	181	173	290	100	182	200	4
WS193	200	395	275	211	190,5	182,5	245	120	193	209	4
WS215	200	450	300	235	215	207	190	114	216	233	4,5
WS230	200	450	300	250	230	222	200	120	232	248	6
WS240	250	495	350	260	240	232	192	110	242	258	7
WS265	250	495	350	285	265	256	180	120	267	283	10
WS283	300	600	400	303	283	275	217	110	286	300	16
WS290	300	600	400	310	290	280	220	160	293	308	17
WS340	350	700	500	352	340	328	325	195	343	349	18
WS370	370	730	500	394	370	358	255	160	374	390	19
WS390	400	750	500	414	390	378	335	208	393	411	24
WS440	450	840	560	467	443	431	220	145	446	464	28
WS490	500	900	600	514	490	474	270	180	493	511	29
WS515	500	1000	650	539	515	499	265	165	518	536	38
WS590	600	1200	800	603	587	567	355	245	590	600	48
WS690	700	1300	870	711	687	667	250	155	695	708	63
WS750	750	1400	950	770	750	726	345	225	755	765	75
WS790	800	1500	1000	810	790	766	340	230	795	805	88
WS885	900	1700	-	915	885	855	410	270	890	910	116
WS985	1000	1800	-	1015	985	-	405	265	990	1010	141
WS1040	1050	2000	-	-	1040	-	350	220	1048	-	221
WS1185	1200	2250	-	-	1185	-	440	285	1190	-	290
WS1385	1400	2600	-	-	1385	-	540	345	1380	-	440
WS1485	1500	2800	-	-	1485	-	630	385	1490	-	642
WS1585	1600	3000	-	-	1585	-	510	315	1590	-	70
WS1785	1800	3100	-	-	1785	-	655	420	1790	-	920
WS1980	2000	3400	-	-	1980	-	745	480	1980	-	1300

*We have a standard set of sizes which can be customized, easily, to suit any application. Flanges on inlet, outlet or somewhere in between are all easily available. Quickly. **Customized extra short valves are available. *** Open air. Standard membrane. Lower and higher opening pressures available.

WASTOP® STANDARD - STAINLESS



WASTOP® STANDARD - PVC/PE

Model	DN	Length	OD body	Opening Pressure Standard	Closing Pressure Standard	Weight
	[mm]	[mm]	[mm]	[mmH²O]	[mmH²O]	[kgs]
WS75PVC	75	125	75	250	105	0,3
WS110PVC	110	210	110	215	78	0,7
WS125PVC	125	240	125	243	83	0,9
WS160PVC	160	310	160	265	85	2,0
WS200PVC	200	400	200	238	109	3,7
WS250PE	250	480	250	190	100	6,3
WS250PE-I	250	480	250	190	100	6,3
WS315PE	315	600	315	210	120	11
WS315PE-I	315	600	315	210	120	11

WASTOP® STANDARD - PVC/PE