



SIPHONS ABLÄUFE



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HL Siphons

6. Washing devices

6



HL Traps for washing devices – Products – Overview

Siphons



Product	HL400	HL404.1	HL4000.0/1/.2	HL405	HL405E	HL405ECO
Description	Standard concealed washing device trap	Concealed washing device trap with ventpipe	Washing device siphon corpus with single or double cartridge	Concealed washing device trap with water supply set	Concealed washing device trap with water supply set and power socket	Concealed washing device trap with water supply set
Function	For siphoning of washing machines, dishwashers a.s.o. with integrated backwater valve	For siphoning of washing machines, dishwashers a.s.o. with integrated backwater valve and ventpipe; for connections, which are more away than 4m from the downpipe	Washing device siphon with removable siphon cartridge, either for single or double connection (e.g. washing machine + clothes dryer)	For siphoning of washing machines, dishwashers a.s.o. with integrated cold water supply	For siphoning of washing machines, dishwashers a.s.o. with integrated cold water supply and power socket	For siphoning of washing machines, dishwashers a.s.o. with prepared cold water supply for a tap of your choice

Basic information about design and installation

In principle all washing devices should be connected by it's on trap to the sewage pipe. HL supplies a wide range of different traps and combination possibilities.

▲ Siphoning

Different to the normal siphoning of washbasins or sinks, one uses for washing devices concealed traps. This has a lot of advantages: saves space, nice design and minimizes the sound of flowing water.

▲ Maintenance and cleaning

All HL concealed washing device traps have a cleaning eye. HL4000-series: The siphon cartridge may be removed for cleaning or maintenance reasons. Easy function control with a transparent backside. Easy access to the downpipe for cleaning reasons.

▲ Waterproofness

By using O-rings between trap and hose connector, the highest watertightness is guaranteed, even when the nut is not yet fixed. Very important, as the outflowing water causes vibrations, which could release the connection.

▲ Installation

Please take care of installing the trap vertically. The red lot cover avoids the cleaning eye of getting dirty during construction. Should the trap be installed too much inside the wall, it is possible, to elongate the thread by a fitting spare-part. HL4000-series: By installing only the corpus HL4000.0 during the construction phase, the enduser can complete the siphon either with a single or a double cartridge (HL4000.1 or HL4000.2)

▲ With long access pipes it could be, that the water in the trap is sucked out, caused by too little air ventilation. This could be avoided from the beginning by using traps with integrated ventpipes. Beside of that HL supplies a lot of different combinations with additional power supply or cold water feed, for convenience and design reasons.

▲ Double connections

With HL4000-series it is possible for the house owner, to choose between a single or a double connection or to upgrade from single to double (e.g. washing machine + clothes dryer), when the corpus HL4000.0 is installed at first. The

double siphon cartridge has two hydraulically independent siphon chambers, which cares for highest safety. Backflow balls prevent the overflow from one device to the other.

Relevant standards/directives
EN 12056 Gravity drainage systems for buildings and estates
DIN 19541 Siphons for special purposes
DIN 1988 Technical rules for cold water installation

HL Traps for washing devices – Products – Overview

Siphons



HL406	HL406.2	HL406E	HL410	HL440
Concealed washing device trap with water supply set	Concealed washing device trap with water supply set	Concealed washing device trap with power socket	Washing device trap	Concealed washing device trap with mechanical valve
For siphoning of washing machines, dishwashers a.s.o. with integrated cold water supply, hose connector with backwater valve and ventpipe	For siphoning of washing machines, dishwashers a.s.o. with integrated cold water supply, 2 hose connectors with backwater valve and ventpipe	For siphoning of washing machines, dishwashers a.s.o. with integrated cold water supply, hose connector with backwater valve, ventpipe and power socket	For siphoning of washing machines, dishwashers a.s.o., installation on the wall	For siphoning of washing machines, dishwashers a.s.o., little depth

Accessories



Product	HL2, HL2.2	HL2.1	HL19	HL19.2	HL420	HL421
Description	Washing device double hose connector with backwater valve	Washing device hose connector with backwater valve and ventpipe	Angled hose connector	Angled hose connector	Elongation for the thread	Elongation for the thread
Function	For connecting two washing machines or a washing machine and dryer to one trap. Should only be used as a problem solver.	Avoids, that the tube of the washing machine is sucked out	Connection between trap and the tube of the washing device	Connection between trap and the thin tube 8 - 13 mm	Elongation of the thread	Elongation of the thread, only usable, if the original thread was not yet cut!

HL Traps for washing devices – Installation instruction HL4000



1. Define position and fix the corpus



2. Connect to the pipe



3. Cut the protection cover alongside the wall



4. Choose between single (HL4000.1) or double (HL4000.2) siphon cartridge



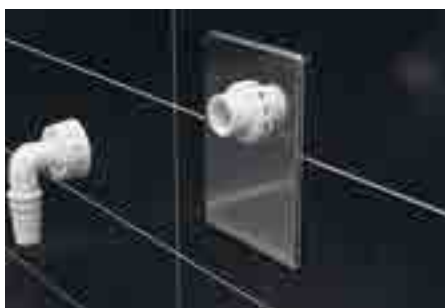
5. Insert cartridge and fix by screwing



6. Mark 3cm, measured from the wall (tile)



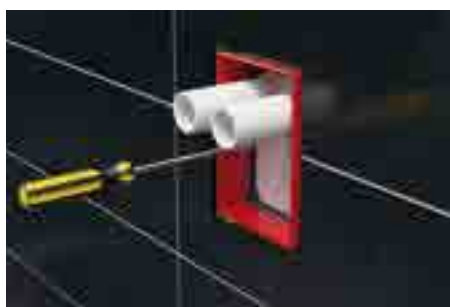
7. Cut at the mark



8. Set the cover and fix by thread ring, screw the hose nozzle.



9. Connect to the washing device



10. When installing a second washing device (or dryer), replace the single cartridge to a double.



11. Install cover, thread ring and hose nozzle.



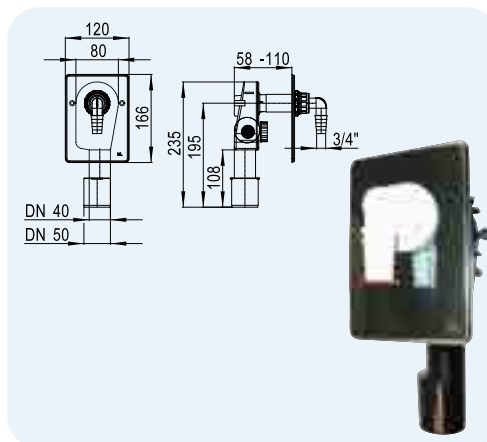
12. Connect clothes dryer.

HL Traps for washing devices – Products – Data

HL400 Concealed washing device trap

Data

Capacity	0,38 l/s
Material	PE/Stainless steel
Connection dimension	1"
Outlet dimension	DN40/50
Standard	DIN 19541
Height of seal water	50 mm
Recommended for	Concealed siphoning of washing devices
Additional information	with stainless steel cover, cuttable red spacer, cleaning eye and back-water valve

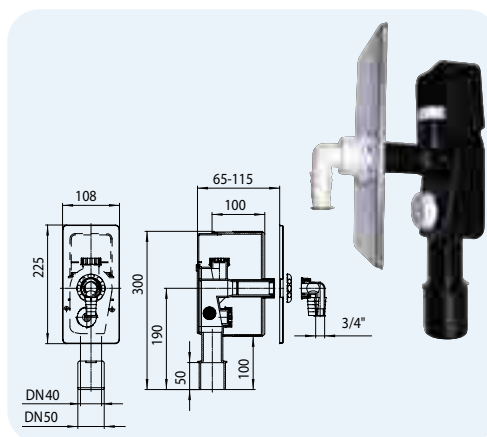


HL-No.	Dimension	Weight	EAN	Piece/package
400	DN40/50	280 g	+504008	10

HL404 Concealed washing device trap with option for connecting a ventpipe

Data

Capacity	0,38 l/s
Material	PE/Stainless steel
Connection dimension	1"
Outlet dimension	DN40/50
Standard	DIN 19541
Height of seal water	50 mm
Recommended for	Siphoning of washing devices, with option of ventpipe
Additional information	with chrome-plated cover, cuttable red spacer, cleaning eye and back-water valve

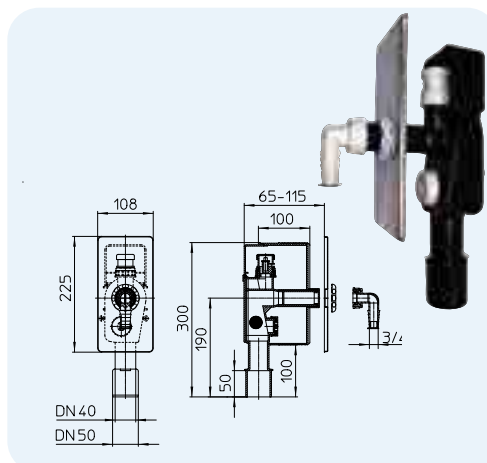


HL-No.	Dimension	Weight	EAN	Piece/package
404	DN40/50	484 g	+504046	5

HL404.1 Concealed washing device trap with integrated ventpipe

Data

Capacity	0,38 l/s
Material	PE/Stainless steel
Connection dimension	1"
Outlet dimension	DN40/50
Standard	DIN 19541
Height of seal water	50 mm
Recommended for	Siphoning of washing devices, with integrated ventpipe
Additional information	with chrome-plated cover, cuttable red spacer, cleaning eye and back-water valve

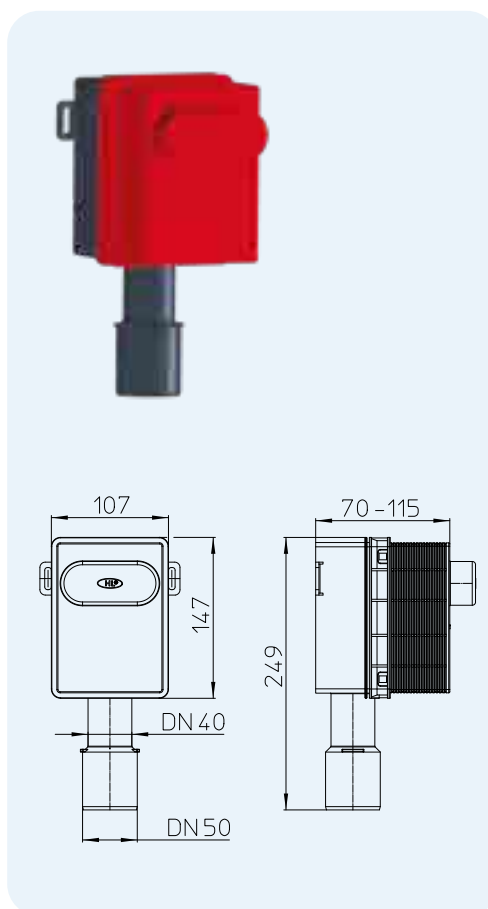


HL-No.	Dimension	Weight	EAN	Piece/package
404.1	DN40/50	504 g	+504145	5

HL4000.0 Washing device siphon - corpus

Data

Capacity	see HL4000.1 or HL4000.2
Material	PP
Outlet	DN40/50
Standard	DIN 19541
Recommended for	HL4000.1 for 1 washing device HL4000.2 for 2 washing devices
Additional information	After removing the cartridge there is a free access to the waste pipe Also see installation movie (www.hl.at)



HL4000.0

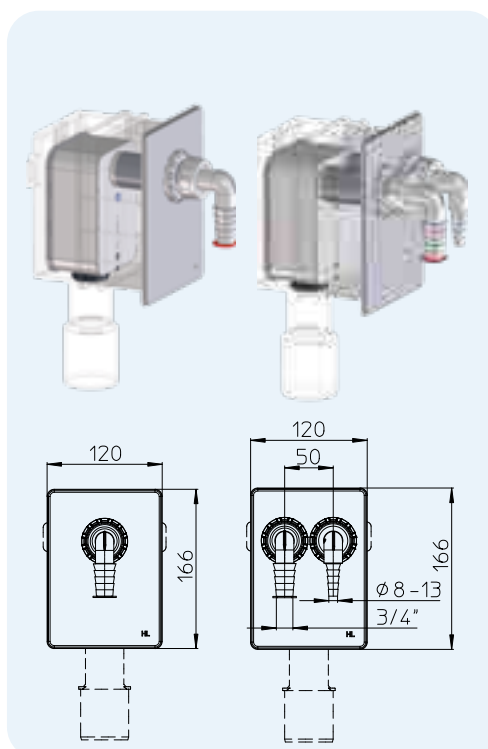


HL-No.	Dimension	Weight	EAN	Piece/package
4000.0	DN40/50	244 g	+041619	10

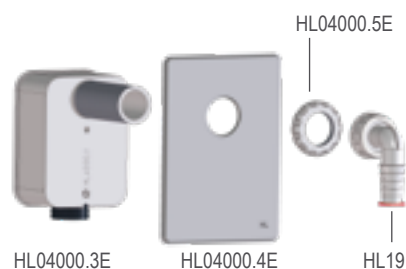
HL4000.1 „Single-Upgrade-kit“ for washing device siphon HL4000.0 corpus HL4000.2 „Double-Upgrade-kit“ for HL4000.0 corpus (e.g. washing machine and clothes dryer)

Data

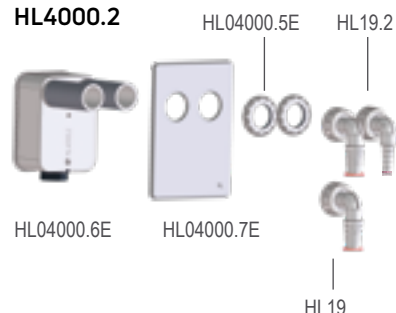
Capacity	HL4000.0 + HL4000.1: 0,5l/s HL4000.0 + HL4000.2: each 0,5l/s
Material	PP
Connection	HL4000.1: HL19 HL4000.2: 2x HL19 + 1x HL19.2
Standard	DIN 19541
Water trap	50 mm
Recommended for	Single cartridge for 1 washing machine Double cartridge for 1 washing machine + 1 clothed dryer
Additional information	with transparent backside for quick function control with integrated backflow balls Please also see installation movie (www.hl.at)



HL4000.1



HL4000.2



HL-No.	Dimension	Weight	EAN	Piece/package
4000.1	-	265 g	+041633	1
4000.2	-	350 g	+041640	1

Data

The top part of the image shows two photographs of the torch. The left photograph shows the torch from a side profile, highlighting its blue body and black handle. The right photograph shows the torch from a front-facing perspective, with a blue flame visible at the nozzle.

The bottom part of the image contains a technical drawing of the torch, showing two views: a side view and a front view. The side view on the left indicates a length of 75-120 mm, a diameter of Ø 86 mm, and a 3/4" connection. The front view on the right shows a width of 190 mm, a central opening of 80 mm, and a height of 110 mm. It also shows a 190 mm dimension for the handle and a 165 mm dimension for the base. The drawing is labeled with DN40 and DN50.



HL405E Concealed washing device trap with integrated cold water supply and power socket

Data

Technical drawing of a 3/4 inch ball valve. The drawing includes a 3D perspective view at the top and two 2D cross-sectional views below. The 2D views show the internal ball mechanism and the valve body. Dimensions are provided in millimeters (mm) and inches (inch).

Key dimensions and specifications:

- Valve size: 3/4" (indicated on the left side of the 2D view)
- Overall length: 75 - 120 mm
- Ball diameter: Ø 86 mm
- Body diameter: 105 mm
- Stem diameter: 50 mm
- Stem length: 40 mm
- Flange diameter: 192 mm
- Flange thickness: 105 mm
- Flange bolt circle diameter: 190 mm
- Flange bolt diameter: 80 mm
- Flange bolt spacing: 100 mm
- Flange bolt length: 105 mm
- Flange bolt type: DN40, DN50

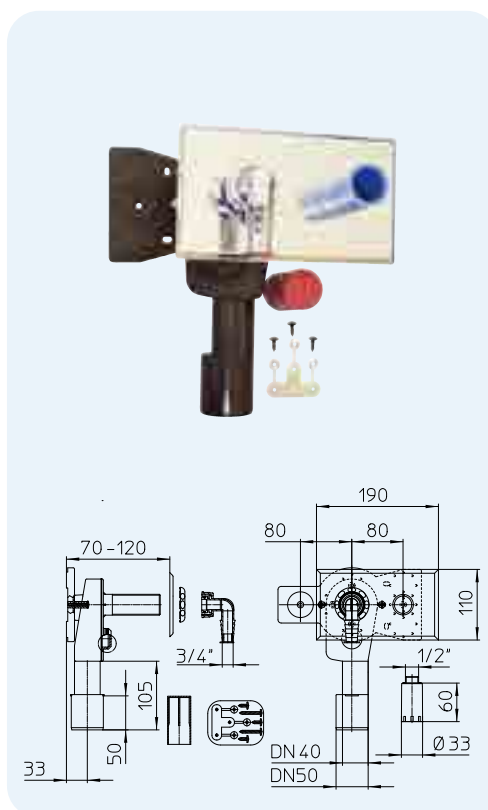


HL-No.	Dimension	Weight	EAN	Piece/package
405E	DN40/50	1000 g	+504091	1

HL405ECO Concealed washing device trap, prepared for individual cold water supply

Data

Capacity	0,38 l/s
Material	PE/Stainless steel
Connection dimension	1"
Outlet dimension	DN40/50
Standard	DIN 19541, DIN 1988
Height of seal water	50 mm
Recommended for	Siphoning of washing devices, prepared for cold water supply
Additional information	with chrome-plated cover, cuttable red spacer and backing plate



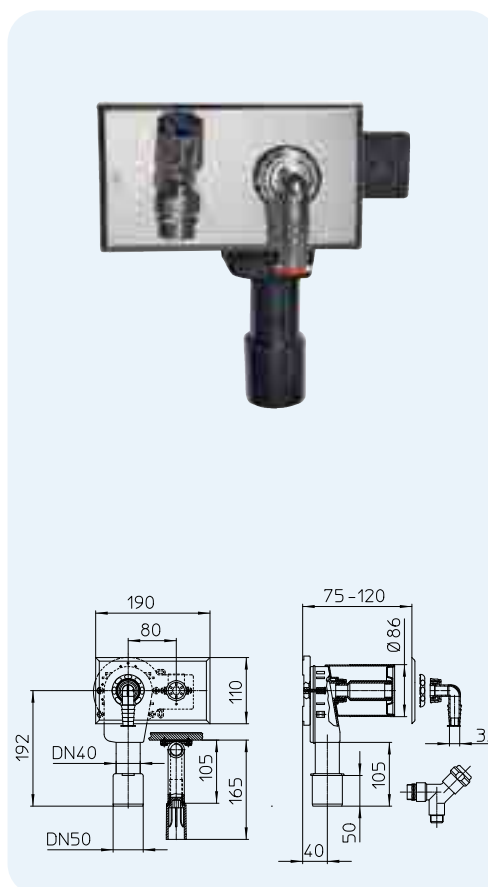
HL-No.	Dimension	Weight	EAN	Piece/package
405ECO	DN40/50	443 g	+015672	5



HL406 Concealed washing device trap with integrated cold water supply and on/off valve

Data

Capacity	0,38 l/s
Material	PE/Stainless steel/MS
Connection dimension	1" / 3/4"
Outlet dimension	DN40/50
Standard	DIN 19541, DIN 1988
Height of seal water	50 mm
Recommended for	Siphoning of washing devices, connection of cold water line
Additional information	with chrome-plated cover, cuttable red spacer, 1/2" MS on/off valve, backing plate and hose connector



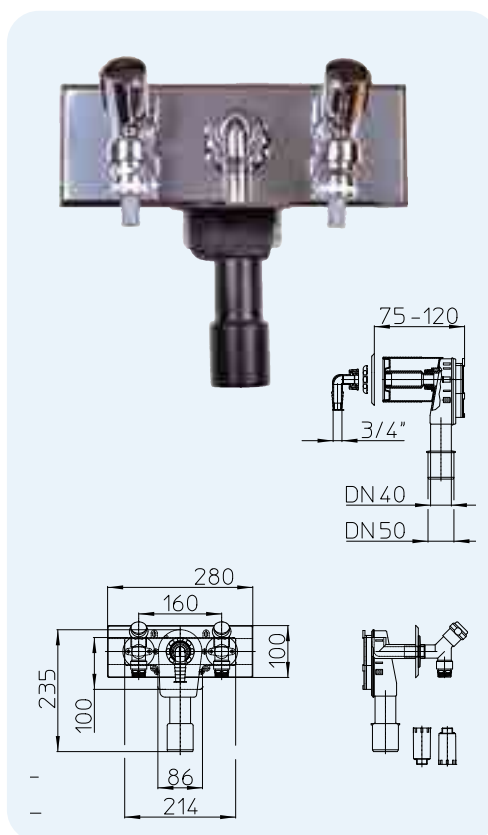
HL-No.	Dimension	Weight	EAN	Piece/package
406	DN40/50	1075 g	+504060	1



HL406.2 Concealed washing device trap with double water supply and double on/off valve

Data

Capacity	0,38 l/s
Material	PE/Stainless steel/MS
Connection dimension	1" / 2 x 3/4"
Outlet dimension	DN40/50
Standard	DIN 19541, DIN 1988
Height of seal water	50 mm
Recommended for	Siphoning of washing devices, connection of cold and warm water, e.g. at energy saving washing machines
Additional information	with chrome-plated cover, cuttable red spacer, 2 x 1/2" MS valve, backing plate and hose connector

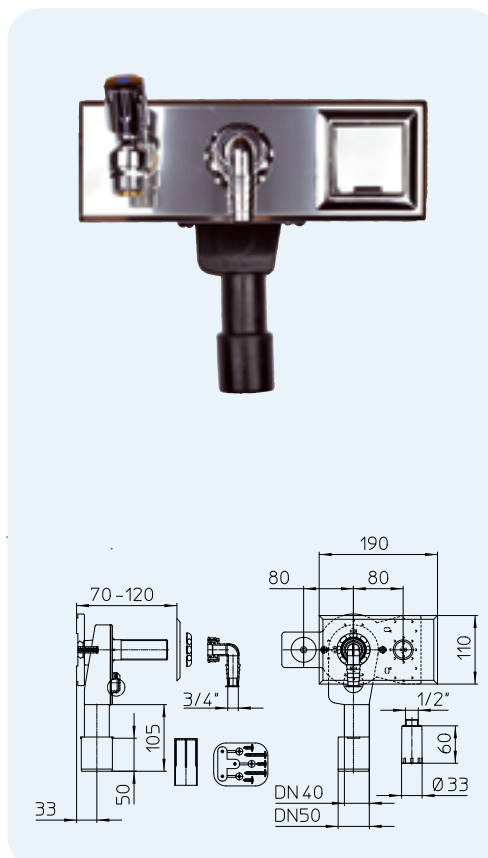


HL-No.	Dimension	Weight	EAN	Piece/package
406.2	DN40/50	1931 g	+008247	1

HL406E Concealed washing device trap with water supply, on/off valve and power supply

Data

Capacity	0,38 l/s
Material	PE/Stainless steel/MS
Connection dimension	1" / 3/4"
Outlet dimension	DN40/50
Standard	DIN 19541, DIN 1988
Height of seal water	50 mm
Recommended for	Siphoning of washing devices, connection of cold water line and power supply
Additional information	with chrome-plated cover, cuttable red spacer, 2 x 1/2" MS valve, backing plate and hose connector

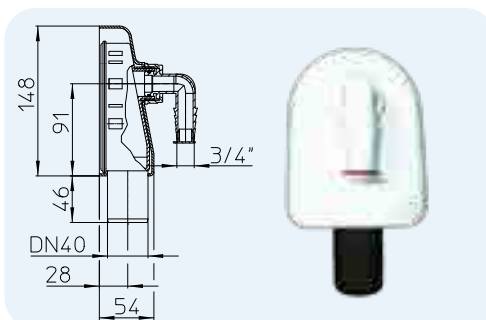


HL-No.	Dimension	Weight	EAN	Piece/package
406E	DN40/50	1310 g	+504077	1

HL410 Washing device trap

Data

Capacity	0,38 l/s
Material	PE
Connection dim.	1"
Outlet dimension	DN40
Standard	DIN 19541
Height of seal water	50 mm
Recommended for	Siphoning of washing devices, installed on the wall
Additional information	with white cover plate and fixing set



HL-No.	Dimension	Weight
410	DN40	440 g

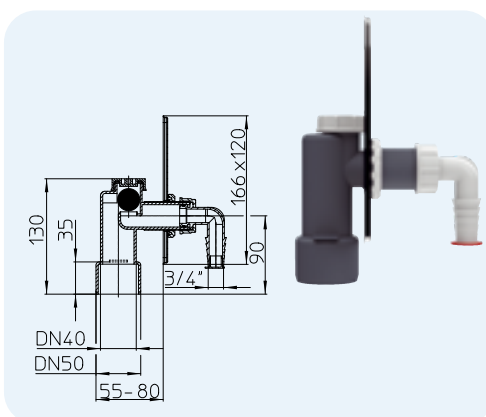


HL19	HL0410.1E	Piece/package
		5

HL440 Concealed washing device trap with mechanical valve

Data

Capacity	0,33 l/s
Material	PP
Connection dimension	1"
Outlet dimension	DN40/50
Standard	DIN 19541
Height of seal water	mechanical ball-trap
Recommended for	Siphoning of washing devices, little depth
Additional information	with chrome-plated cover



HL-No.	Dimension	Weight
440	DN40/50	200 g



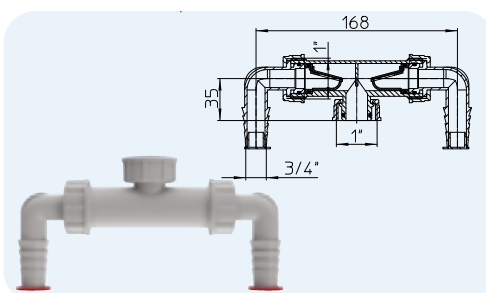
HL0440.1E	HL19	HL04000.5E	HL0400.6E	HL0440.2E	Piece/package
					20

HL Traps for washing devices – Products – Accessories

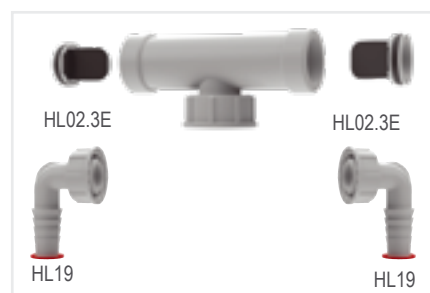
HL2 Double hose connector with backwater valve

Data

Capacity	1 connector 0,28 l/s 2 connectors each 0,23 l/s
Material	PP
Connection dimension	2 x 3/4"
Outlet dimension	1"
Recommended for	Problem-solver
Additional information	with integrated backwater valves



HL-No.	Dimension	Weight
2	1" x 3/4"	85 g

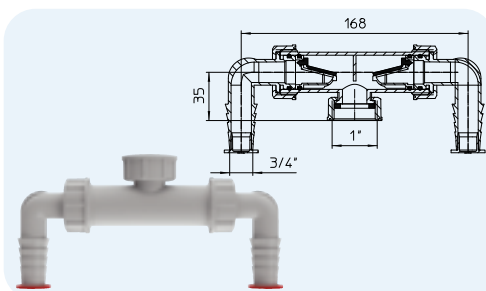


HL02.3E	HL19	HL02.3E	HL19

HL2.0 Double hose connector with backwater valve, with flat gasket

Data

Capacity	1 connector 0,28 l/s 2 connectors each 0,23 l/s
Material	PP
Connection dimension	2 x 3/4"
Outlet dimension	1" with flat gasket
Recommended for	Problem-solver
Additional information	with integrated backwater valves



HL-No.	Dimension	Weight
2.0	1" x 3/4"	80 g



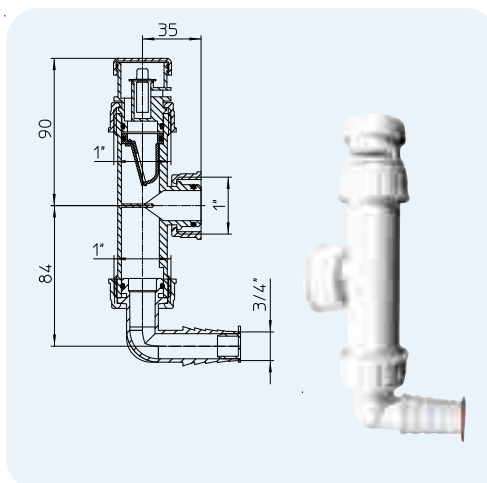
HL02.3E	HL19	HL01000D	HL02.3E	HL19

EAN	Piece/package
+530021	1

HL2.1 Hose connector with backwater valve and ventpipe

Data

Capacity	0,28 l/s
Material	PP
Connection dimension	3/4"
Outlet dimension	1"
Recommended for	Prevents the trap from being sucked out
Additional information	with integrated backwater valve and ventpipe

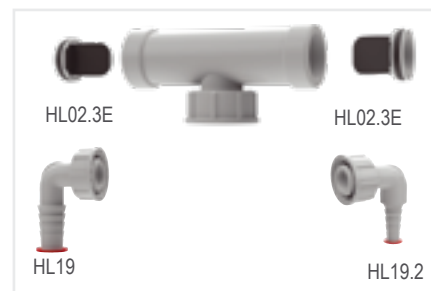
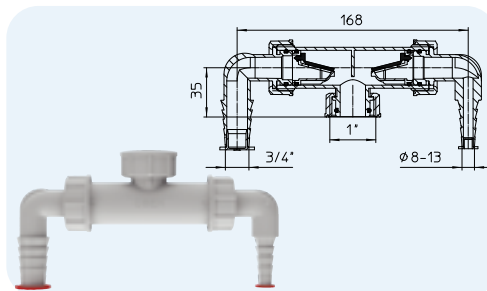


HL-No.	Dimension	Weight	EAN	Piece/package
2.1	1" x 3/4"	65 g	+5320213	1

HL2.2 Double hose connector with backwater valve

Data

Capacity	0,14 l/s
Material	PP
Connection dimension	1 x 3/4"
Outlet dimension	1" x Ø 8-13mm
Recommended for	Problem-solver
Additional information	with integrated backwater valves

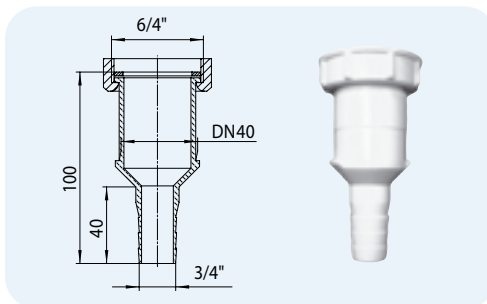


HL-No.	Dimension	Weight	EAN	Piece/package
2.2	1 x 3/4" & 1 x Ø 8-13mm	85 g	+002283	10

HL17 General connector

Data

Material	PP
Connection dimension	3/4"
Outlet dimension	6/4"/DN40
Recommended for	Junction from tube to plug or screw connection

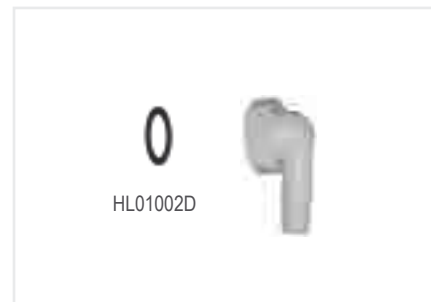
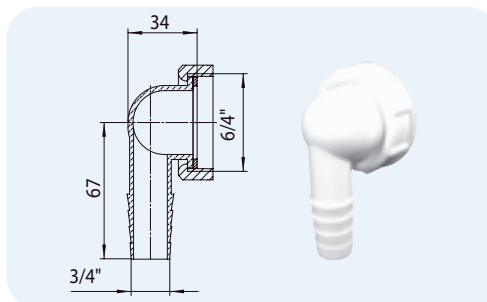


HL-No.	Dimension	Weight	EAN	Piece/package
17	6/4" x DN40 x 3/4"	35 g	+500178	1

HL18 General hose connector

Data

Material	PP
Connection dimension	3/4"
Outlet dimension	6/4"
Recommended for	Junction from tube to screw connection

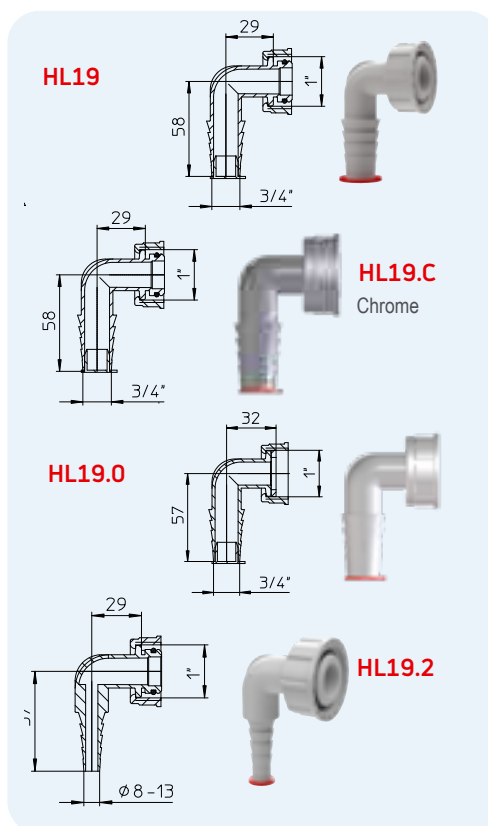


HL-No.	Dimension	Weight	EAN	Piece/package
18	6/4" x 3/4"	25 g	+500185	1

HL19... Hose connector

Data

Material	PP
Connection dimension	HL19, HL19.0, HL19.C: 3/4" HL19.2: Ø 8 – 13 mm
Outlet dimension	1"
Recommended for	Connection of tubes of washing devices
Additional information	Gasket = O-ring, except HL19.0

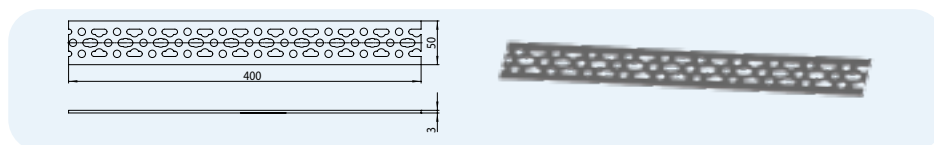


HL-No.	Dimension	Weight	EAN	Piece/package
19	1" x 3/4"	18 g	+100194	10
19.C	1" x 3/4"	18 g	+190041	1
19.0	1" x 3/4"	18 g	+112197	1
19.2	1" x 8 – 13 mm	15 g	+001927	1

HL405B Backing plate

Data

Material	Galvanized steel
Recommended for	fits to HL44, HL405(E)(ECO) and HL406(E)(.2)

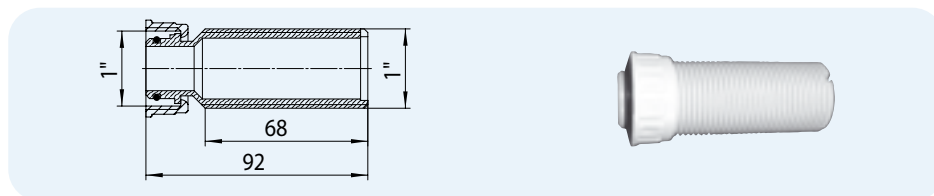


HL-No.	Dimension	Weight	EAN	Piece/package
405B	50 x 400 mm	965 g	+504084	1

HL420 Extension for the thread

Data

Material	PP
Connection dimension	1"
Outlet dimension	1"
Recommended for	Elongation of the thread for all HL washing device traps

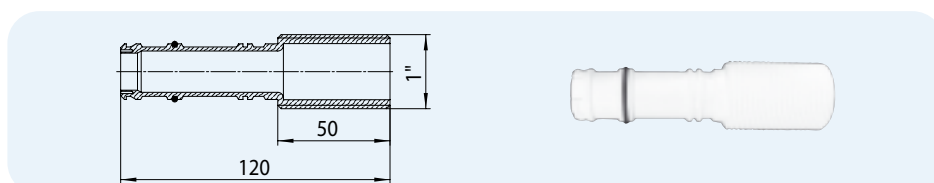


HL-No.	Dimension	Weight	EAN	Piece/package
420	1"	20 g	+504206	1

HL421 Pushfit extension for the thread

Data

Material	PP
Connection dimension	1"
Recommended for	Stepless junction for the thread for all HL washing device traps, except HL406, HL406.2, HL406E, HL410, HL440



HL-No.	Dimension	Weight	EAN	Piece/package
421	1"	25 g	+421008	1