



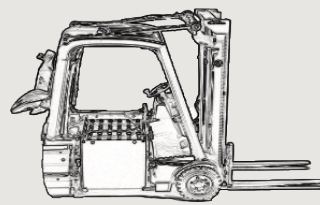
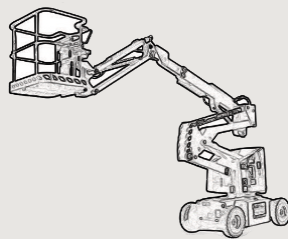
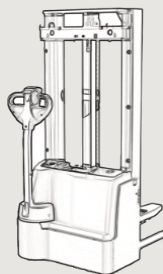
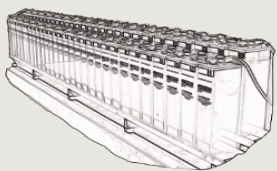
ALL-in-ONE coupler male series



Effective
and
precise



Saves
time and
money



This is our ALL-in ONE Coupler

This design simplifies the installation process, as multiple connections and distributors are no longer required. Unlike other systems, which require hoses to be cut to size, individual connections to be installed and separate filters, flow indicators, T-pieces and couplings to be used, Aquapro's ALL-in-ONE connections simplify the process by combining all these functions in a single component.

This integration minimises the risk of leaks at multiple points, is significantly more cost-effective and enables much faster installation. In addition, the flow indicator is clearly visible from all angles and the large filter can be opened and cleaned from the outside.



More than just a connector: our all-in-one coupler makes the difference.

Many simple connectors from our competitors work in a similar way to our all-in-one coupler – but only we offer you decisive advantages. Connect, distribute, filter, display and connect everything with less effort for you and less waste for the environment.

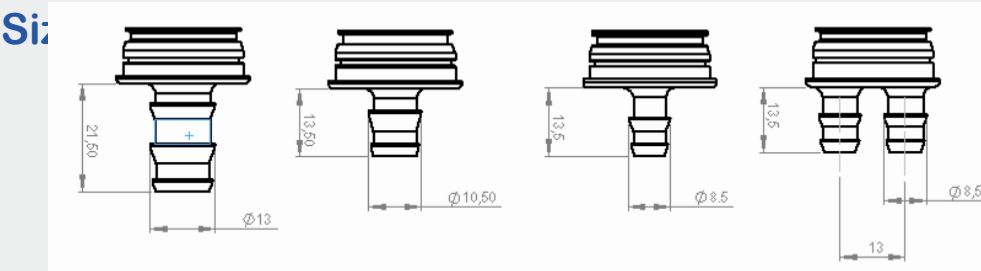
All our couplings are multi-part, with the hose fitting screwed to the housing via the union nut and easy to open. The non-return valve and the filter form a unit that reliably retains particles down to 0.12 mm. This unit is easy to clean or replace completely. Many competitors rely on disposable filter cartridges, which effectively retain dirt but need to be replaced regularly – with the associated costs and effort involved in plastic components. Our innovative design deliberately takes a different approach: reusable, durable and easy to clean. This is not only more economical, but also more sustainable – and a clear contribution to reducing global plastic waste.

A system that is future-oriented – and should serve as a model for the industry.

Facts:

Material.	Transparent, impact-resistant polycarbonate housing		
integrated Filter:	filters out dirt particles larger than 0.12 mm		
Flowindicator:	clearly visible even at minimal flow, with 9 individual balls for display		
Dustcap :	Made from extremely tear-resistant material for high durability and protection		
Fitting:	Optional with 2 outputs, enabling a dual or loop configuration		
Function:	automatic non-return valve		
Flow rate	1x NW10	ca. 3,1 l/min (0,25 bar)	4 l/min (1bar)
	2x NW6 (Dual Port)	ca. 3.2 l/min (0,25 bar)	4.1l/min (1bar)

Pressure resistant up to 6 bar



Si:

Protection of the filling system by filters



Why a filter??
The basis of any minimal tubing system for batteries consists of a filler plug, a T-distributor with tubing and a quick coupling or plug. What is often overlooked is that a filter must be installed after the plug. All filling systems available on the market contain internal valves – and these vary in their sensitivity to contamination. While round particles up to 1 mm in size usually flow through the system without any problems, fibrous or elongated foreign bodies such as hair, wood splinters or plastic chips can cause considerable problems: they settle at the inlets of the T-pieces and block the water flow, or they penetrate the filler plug and block the valve. Both lead to serious consequences: either the cell becomes overfilled – or is no longer filled at all.

The result: costly repairs and dissatisfied customers.

Although many common gravity tanks already have integrated filters upstream of the coupling, there are numerous other types of water supply, such as electric pumps or direct connections (e.g. from full desalination systems), where a filter is not always guaranteed. **Your battery is too valuable to take any risks.**

Therefore, like many other manufacturers, we recommend using an additional filter to protect your battery system reliably and in the long term.

Integrated Flowindicator

Although the drop water tank already has a flow indicator, many users prefer to observe the water flow directly at the coupling. They find this easier and more intuitive than looking at the indicator in the supply line.

The transparent housing fits comfortably in the hand. After inserting it into the coupling, the water flow to the battery is clearly visible: the yellow balls begin to rotate due to the water flow – very quickly at the beginning of the filling process, slowing down towards the end.

Once the battery is completely filled and all plugs are closed, the rotation of the balls continues to decrease until it finally comes to a complete standstill.



System EU Compatible with BFS/Frötek	Article No.	Size	Remarks
	601 106-a	NW 6	Outlet 6 mm
	601 108-a	NW 8	Outlet 8 mm
	601 110-a	NW 10	Outlet 10mm
	601 206-a	2 NW6	2 Outlet. ie 6mm
	601 116-TH	NW 10	Outlet 10mm + thread M16
System BWT Compatible with BWT / USA	611 106-a	NW 6	Outlet 6 mm
	611 108-a	NW 8	Outlet 8 mm
	611 110-a	NW 10	Outlet 10mm
	611 206-a	2 NW6	2 Outlet. ie 6mm
	611 116-TH	NW 10	Outlet 10mm + thread M16

Port - Easy Dual Line / Loop Configuration



Optimal water supply in the irrigation system – efficiency through clever tubing of the battery filling system.

The overall performance of an irrigation system – in particular filling speed and reliability – depends not only on the flow rate of each individual filling plug, but also significantly on how the water is fed to these plugs.

The classic distribution method using 6 mm hose to the plugs, supplemented by a 10 mm supply line and a coupling, is proven and fundamentally functional. We also offer suitable male couplings with a 6-10 mm outlet for this purpose.

However, the dual-port coupler offers a significantly more efficient solution. Since all standard filling plugs have a 6 mm connection as standard, the two outputs of the dual coupler can be connected directly to one filling plug each. These two lines then reliably supply the entire chain of additional plugs – with the same amount of water as a single 10 mm line would deliver.

An additional advantage: the use of dual ports eliminates the need for separate T-piece distributors in the supply line. These do not offer any speed advantage, but increase the risk of leaks.

Exception: For particularly large battery systems (e.g. 80-volt systems), the use of several 10 mm lines and distributors may still be necessary. However, these installations are more complex and involve higher costs.

Recommendation for the end of the line:

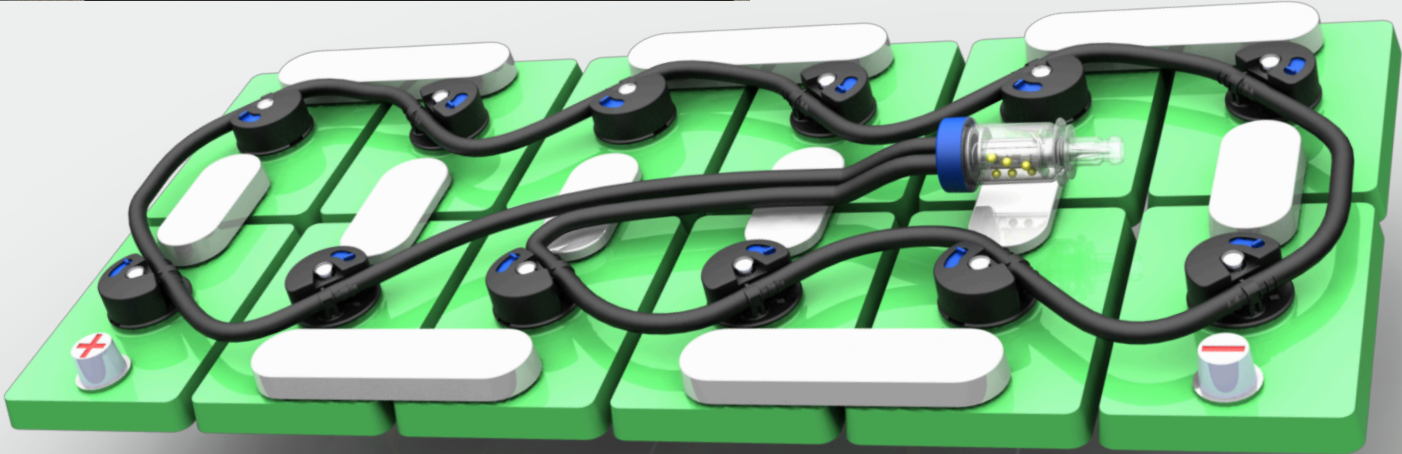
We recommend connecting the two hose lines at the end to form a closed loop instead of sealing them with end caps.

The advantage: even if the line kinks, all cells continue to be reliably supplied with water. When filling the battery, the existing air volume in the hose system is ‘pushed ahead’ by the water. This air is technically unavoidable and cannot be completely eliminated. Without a loop connection, it is only discharged via the last plugs – which slows down the filling process.

With a hose loop, on the other hand, the air is distributed evenly over several plugs, which speeds up the filling process and makes it more efficient.



Dual Port & Loop !



Cost reduction in battery tubing

The following examples show you how you can benefit from our system.

Case study 1.

Installation with **minimal** equipment. Filling system inlet via: Plug/filter/distributor

	Aquapro	Competitor	Comments
Coupling male	4,80 EUR	3,20 EUR	System 12mm, compatibel mit BFS /Frötek
Filter	integrated	4,50 EUR	
T-distributor 6-10-6	integrated	0,28 EUR	
Dustcap	integrated	-----	Not required in this configuration
Flowindicator	integrated	-----	Not required in this configuration
Material :			
0.5 Meter Hose 6 mm			
= 2 x 0.5 Meter	0,20 EUR	0,41 EUR	10 mm Hose diamter= / 0.5 Meter
amount of work:			
cut + attach T-piece	integriert	0,75 EUR	Approx. 55 seconds assembly time, plug in & cut
<u>total</u>	<u>5,00 EUR</u>	<u>9,14EUR</u>	

Case study 2

Installation with **optimal** equipment. Filling system inlet via: Connector/ Dustcap, Distributorr/Filter/ Flowindicator

	Aquapro	Competitor	Anmerkungen
Coupling male	4,80 EUR	3,20 EUR	System 12mm, compatibel with BFS /Frötek
Filter	integrated	4,50 EUR	
T-distributor 6-10-6	integrated	0,28 EUR	
Flowindicator	integrated	4.00 EUR	
Dustcap	integrated	0,75 EUR	
Material :			
0.5 Meter Hose 6 mm			
= 2 x 0.5 Meter	0,20 EUR	0,41 EUR	10 mm hose diameter / 0.5 Meter
Arbeitsaufwand:			
cut + attach T-piece	integriert	0,75 EUR	Approx. 55 seconds assembly time, plug in & cut
<u>Total</u>	<u>5,00 EUR</u>	<u>13,89 EUR</u>	



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