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DuoFlow drinking system for broiler and broiler breeders

There is a new drinking system available for broilers and broiler breeders. It provides water of constant quality to the birds thanks to a permanent circulation of the entire drinking line length.

The Duo-Flow drinker offers following advantages to the user:

- Easy installation by means of a self-supporting plastic profile without additional aluminum supporting rail and an easy assembly of the drinker elements.
- Integrated anti-perch profile
- Constant water quality and temperature on the entire drinking line length
- Constant concentration of drinking water additives inside the drinking line
- Reduced bio film formation

Function



Fig. 1: DuoFlow drinking line

The drinking water circulates in two lines within the drinker elements (fig. 1, pos. 3). In the upper line section the pump conveys the water to the end of the line, in the lower line it flows back to the circulation unit (fig. 1, pos. 1). The pressure regulator (fig. 1, pos. 2) ensures that the water always continues to run corresponding to the consumption of the birds.



Fig. 2: Schematic illustration of the DuoFlow system

Thanks to the work of the pump, the water column of the circulation unit (fig. 2, pos. A) is 8 - 10 cm higher than that of the pressure regulator (fig. 2, pos. B).



Fig. 3: Schematic illustration of the circulation unit

A float switch inside the presettling tank (fig. 3, pos. 1) stops the pump as soon as it is empty (e. g. when the water is turned off). Thus, it prevents the pump from running dry. With lateral supply, the maximum row length is 120 m.

Combimaster 4050

The DuoFlow drinker is equipped with the new Combimaster 4050 drinking nipple. This 360°-drinking nipple offers:



Below you can find the flow rate diagram:



Coding

The coding of the DuoFlow is according to that of the well-established nipple drinking systems. In both cases there is a pressure regulator unit which contains, beside the pressure regulator, also a circulation unit and breather as well as the different drinking elements.

Pressure regulator unit

30-61-5710 - Pressure regulator unit with by-pass and accessories for DuoFlow (< 120 m length)		
Number	Code no.	Description
1	30-61-5701	Breather cpl DuoFlow
1	30-61-5702	Circulating unit DuoFlow
1	30-61-5703	Pressure regulator for circulating unit DuoFlow
1	30-61-5700	Coupling pressure-regulator-circulating unit DuoFlow

30-61-5711 - Pressure regulator unit central with by-pass and accessories f/DuoFlow (< 120 m length)

Anzahl	Code-Nr.	Bezeichnung
2		Breather cpl DuoFlow
1	30-61-5702	Circulating unit DuoFlow
1	30-61-5703	Pressure regulator for circulating unit DuoFlow
1	30-61-5708	Coupling for central water supply DuoFlow
1	30-61-5700	Coupling pressure-regulator-circulating unit DuoFlow

Drinker elements:

The drinker elements already contain the drip cups:

Code-no.	Description
30-61-5707	Waterer nipple 3000-10 Combimaster 4050-00/ with drip cup DuoFlow
30-61-5706	Waterer nipple 3000-12 Combimaster 4050-00/ with drip cup DuoFlow
30-61-5705	Waterer nipple 3000-15 Combimaster 4050-00/ with drip cup DuoFlow
30-61-5704	Waterer nipple 3000-18 Combimaster 4050-00/ with drip cup DuoFlow

Overview of spare parts

Code no.	Description	Picture
30-61-5700	Coupling pressure-regulator-circulating unit DuoFlow	600
30-61-5701	Breather cpl DuoFlow	Provide and the second
30-61-5702	Circulating unit DuoFlow	Carl Marine and
30-61-5703	Pressure regulator for circulating unit DuoFlow	
30-61-5704	Waterer nipple 3000-15 Combimaster 4050-00/ with drip cup DuoFlow	
30-61-5705	Waterer nipple 3000-15 Combimaster 4050-00/ with drip cup DuoFlow	
30-61-5706	Waterer nipple 3000-12 Combimaster 4050-00/ with drip cup DuoFlow	232
30-61-5707	Waterer nipple 3000-10 Combimaster 4050-00/ with drip cup DuoFlow	
30-00-3570	Nipple CombiMaster 45/35-360 orange L4050-02	
30-00-3584	Drip cup 1-arm pluggable orange for Combimasterr	C
30-61-5708	Coupling for central water supply DuoFlow	

The DuoFlow drinker has been available since January 2013.

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Check your knowledge...

	1. What does the float switch inside the presettling tank ensure?
А	It switches off the circulating pump as soon as the presettling tank is empty.
В	It regulates the illumination intensity inside the house according to the water consumption of the birds.
С	It regulates the water column height according to the feed consumption.
D	As soon as the presettling tank is empty the float switch makes sure that the water continues running.

	2. The maximum drinking line length with lateral supply is
А	90 m
В	140 m
С	120 m
D	60 m

	3. What is the flow rate of the Combimaster 4050 drinking nipple at lateral actuation and 20 cm water column height?
А	30 ml/min
В	20 ml/min
С	60 ml/min
D	100 ml/min