





# **Drinking Systems**

for rearing and heavier poultry

# **Drinking systems – for the correct amount of fresh and clean drinking water**

To achieve the optimum performance from your birds, it is extremely important to provide fresh and clean drinking water. For this, water must be available reliably, free from contamination and within easy reach for the birds.

Big Dutchman satisfies all of these requirements in an ideal way – offering

a wide range of drinking systems for broilers, turkeys, and breeders, as well as pullets and layers.

Our product range includes:

- nipple drinkers with and without drip cup;
- special broiler and turkey drinkers;
- round drinkers for open water supply;
- cable winches:
- water connection unit with medicator. The choice of the right drinking system depends on the type of bird, on the field of use, on the situation in the house and on your individual requirements. Please let our experts advise you.

# Nipple drinkers – hygienic supply of drinking water

In modern poultry production, nipple drinkers have proven to be a reliable and hygienic solution for the supply of water. They can be composed of the following parts:

- pressure regulator with rinsing system and indicator for water column height – side supply for a line length of up to 60 m
- pressure regulator with rinsing system
   central supply for a line length of up to 120 m
- 3 swivelling aeration unit with indicator for water column height
- pressure regulator with automatic rinsing system
- 6 automatic rinsing aeration unit
- 6 slope regulator evens out a 10 to 15 cm incline
- aeration nozzle with valve under normal operation, the valve is open to allow the air to escape

- 6 circular tube with anti-roost wire
- aluminium profile with double antiroost wire
- 10 22 mm nipple tube with SaniStar®
- 1 ... Top Nipple orange with drip cup
- 12 ... Top Nipple with drip cup
- suspension system.



## **DuoFlow**

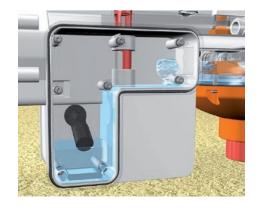
## for actively circulating drinking water

With **DuoFlow**, Big Dutchman offers its customers a new drinking system which uses a pump to circulate the drinking water inside the drinker line. This prevents the water from stagnating inside the line.

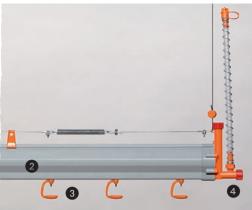
#### **Advantages:**

- constant water temperatures in the drinker line;
- ✓ even concentration of additives along

- the whole length of the drinker line -> no sedimentation;
- no stagnant water in the drinker lineless risk of contamination;
- even water pressure;
- maximum length of drinker line with side supply up to 120 m;
- simple assembly by means of a patented snap-on system.







The main parts of DuoFlow are the pump unit with pressure regulator (1), the self-supporting PVC drinker element with antiroost wire (2), the CombiMaster nipple (3) and the automatic rinsing aeration unit (4). The drinking water circulates in two pipes inside the drinker element. The pump provides the required water flow. A small float switch (5) in the water tank turns the main water pump off if the water level is too low.

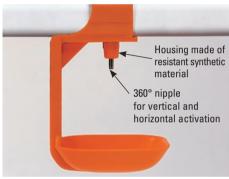
# **Top Nipple, Top Nipple orange and screw nipple** with drip cup

Both Top Nipple and Top Nipple orange are ideally suited for poultry finishing up to a live weight of approx. 5 kg. Both nipples have a passage rate of 80 to 90 ml/min\*,

thus providing sufficient water supply even for heavier poultry. The single-arm drip cup keeps the litter dry without hindering the birds from drinking. Big Dutchman also offers 50 ml and 100 ml screw nipples for use in layer and breeder houses.



Top Nipple



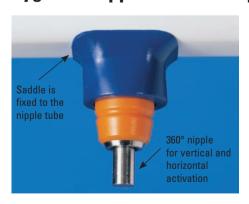
Top Nipple orange



100 ml screw nipple

## SaniStar® 4.5

### hygienic nipple without drip cup



During the development of SaniStar® 4.5 with a passage rate of 50 to 55 ml/min\*, we attached great importance to good hygiene. Summarised, this means:

- reliable valve -> water is dispensed according to demand and without spilling or leaking;
- the saddle is welded onto the square nipple tube -> the inner plug-in and fixation mechanism ensures maximum housing hygiene and does not create
- any crevices for dirt deposits;
- precise valve pin with 4.5 mm diameter and sharp-edged cut -> larger water drops adhere to the pin, allowing the birds to take in water easily;
- utilisation of high-quality materials (stainless steel and special synthetic material) -> long service life.

\* at 20 cm water column

## **Advantages**

- smooth outside surface without corners and edges -> maximum hygiene;
- ✓ 100 % vertical orientation and optimum resetting features -> dry litter;
- easy horizontal and vertical activation of the valve pin -> optimum water intake even for day-old birds;
- vertical activation of the valve pinsuper-proportional increase of
- passage rate, also suitable for larger birds;
- double-sealed surface -> high operational reliability.

#### **Premium Drinker**

### optimum water supply specifically for broilers

The new **PremiumDrinker** was developed specifically for broiler finishing and consists of three main parts:

- larger nipple tube;
- CombiMaster drinking nipple;

✓ special drinking nipple protector.

This well thought-out system ensures that the birds always receive a sufficient amount of water and at the same time reduces wastage by splash water significantly.

Thanks to the use of high-quality materials (special synthetic material and stainless steel), the drinker is very resistant to chemicals. The passage rate amounts to approx. 45 ml/min at a 20 cm water column.

#### 28 mm nipple tube



- greater water passage rate
- only 4 mm of the nipple extend into the nipple tube -> minimum narrowing of the tube diameter

#### **CombiMaster**



reinforced plastic housing with larger thread diameter -> high solidity

#### Drinking nipple protector "RingCup"



- nipple activation from the side is not possible
- very simple assembly: protector is put over the nipple

## **Advantages**

- large lower pin -> big and noticeable water drop;
- nipple cannot be activated from the side -> less splash water;
- drip cup is not attached to the nipple tube any longer -> improved hygiene;
- maximum length of the drinker line 90 m (side supply).



### **Penduval**

# the hygienic drinker especially made for turkey rearing and finishing

With Penduval, our product range offers a drinker specifically designed for turkeys (patent-no. EP 02023938.0-1260). It supplies turkeys of every age (even heavy-weight toms with a live weight of over 20 kg) with sufficient amounts of clean drinking water. The drinker consists of a cup which offers the birds open water, and a nipple with a pendulum.









Penduval for tom finishing

Each time a bird drinks, the bird's head causes the pendulum to move sideways. Due to this movement, the nipple valve opens and water flows into the cup, either along the pendulum or from its inside. At a raised water level, the birds drink directly from the cup without activating the pendulum, thus preventing the cup from overflowing.

A float ball facilitates drinking for day-old birds. At a low water level, the float ball pushes the pendulum sideways so that water can flow into the cup.

# Round drinkers - open water supply for all kinds of poultry

In addition to nipple drinkers, Big Dutchman also offers various round drinkers which are used depending on the bird type and bird weight. These drinkers are

usually installed in a suspended position. The JUMBO-T and JUMBO-98 round drinkers are ideally suited for heavy turkeys from 2 to 25 kg live weight. The

JUMBO-B drinker is suitable for turkeys of up to 12 kg live weight as well as layers and broiler breeders.



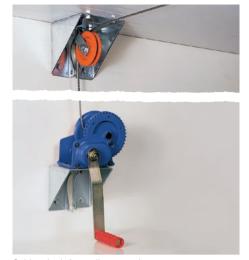
Thanks to the narrow water jet running along its side, the bell remains substantially clear. The water does not splash over the rim and is thus not wasted. This reduces ammonia emissions in the house. Since the ballast body (JUMBO-T and B) is fitted directly to the suspension, there is no load on the valve and the water level can be adjusted precisely.



## **Cable winches – for easy raising of the drinker lines**



Cable winch for ceiling or gable suspension



Cable winch for wall suspension



Electrical cable winch for ceiling suspension

In floor management, it is very important to adjust the height of the drinker lines in relation to the birds' age. For easy and sufficient intake of water without spillages, the animals should have to stretch when drinking.

Suspended feeder and drinker lines can easily be winched under the ceiling. This also significantly facilitates cleaning and moving birds in and out of the house. The required suspension system consists of:

cable winch, pulley and fixing material;

- cable and cable clamp and
- suspension material.

To allow for easy and secure raising of the drinker lines, Big Dutchman offers several cable winches both for manual and electrical operation:

- cable winch for ceiling or gable suspension with a hoisting power of 340 kg;
- cable winch for wall suspension including a crank with a hoisting power of 350, 650 or 900 kg;

electrical cable winch, 0.09 kW, 230/ 400 V, 50/60 Hz for ceiling suspension including a limit stop with a hoisting power of 320/240 kg.

In addition to the described winches, Big Dutchman offers several other electrical winches that allow for the raising of several feeder and drinker lines at the same time.



Use of cable winches for optimum height adjustment of the drinker lines in relation with the birds' age

## Water connection unit and medicator for poultry houses

Today, a complete drinking system comes not only with the actual drinker, but increasingly with a water connection unit. This unit is installed between the main water system and the house water line and can consist of different modules which may be composed according to your requirements. The correct water pressure is adjusted via the pressure regulator.



Water connection unit with medicator, available with nominal widths of  $^{3}/_{4}$ ", 1" and  $1^{1}/_{2}$ "

The **medicator** dispenses the correct amount of vitamins and medicines into the drinking water. The amount to be dispensed can be adjusted precisely as the compounds are admitted to the drinking system proportionally to the actual water consumption. The respective compound and the water are mixed at the homogeniser outlet. Thus, the motor does not come into contact with the medications used —> no blockages occur, longer service life.

Water-soluble medicines are extracted directly from their original packaging.



In the case of pulverized or viscous substances, a mixing tank (60 I) with circulating pump (code no. 30-61-3105) should be employed.

reversible flow filter in the event of a high degree of water contamination

2 valve for separate drawing off of water

 filter with manometer to avoid blockage at the nipples – optionally with

- 3 electronic water meter for connection to a computer – for exact measuring of the water consumption (optional: conventional water meter)
- bypass with three ball valves for connection of a medicator
- 6 medicator to carry out the prophylaxis easily and reliably
- opension of pressure reducer with filter and ball valve – for protection against excessive supply pressure, and simple rinsing

# Advantages of the water connection unit

- compact design -> also suited for very small service rooms;
- easy assembly and easy to extend
   all parts are screwed together,
   no sticking joints;
- all connecting elements are made of PVC -> optimum corrosion protection.

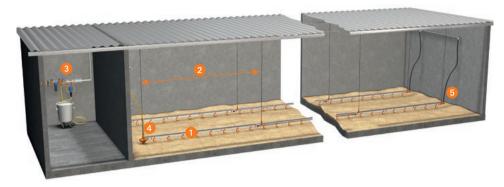
### **Technical data of the medicator**

Туре	1	2
Dosing range %	0.2 - 2.0	1.0 - 5.0
Flow rate I/h	10 - 2500	10 - 2500
Working pressure bar	0.3 - 6.0	0.3 - 6.0
Code no.	30-61-3540	30-61-3545
Code no. (incl. connection set <sup>3</sup> /4")	30-62-3070	30-62-3120
(incl. connection set 1")	30-62-3071	30-62-3121

## **Advantages of the medicator**

- precise dispensing for all flow rates;
- high dosing range;
- high flow rate;
- long service life and high operational safety due to the use of high-quality materials (low sensitivity to a broad spectrum of chemicals when cleaned regularly);
- selective spare part kits for rapid replacement of worn parts.

# **Planning aid**



- drinker line
- maximum distance between suspensions: 300 cm
- water connection unit with medicator
- pressure regulator with rinsing system
- finsing outlet

#### Note:

For broilers, we recommend installing one drinker line for every 2.5 to 3.5 m house width. As a matter of principle, there should always be at least one more drinker line than feed line. For layers and broiler breeders, we recommend installing one drinker line for every 5 to 7 m house width.

#### Top Nipple and Top Nipple orange

Use of max. 300 nipples per pressure regulator Recommended number of birds per nipple\*:

Broilers**	20 - 25
Pullets (up to 1.5 kg)**	10 - 16
Broiler breeders (0-18 weeks)	10
Ducks (up to 3.5 kg)**	8 - 12

#### SaniStar®

Use of max. 450 nipples per pressure regulator Recommended number of birds per nipple\*: Broilers\*\*

#### Screw nipples (50 and 100 ml)

Layers (50 ml nipple)	8 - 10
Broiler breeders (100 ml nipple)	10

#### Turkey drinker Penduval\*\*

Rearing	30-40 birds/cup
Hen finishing	25-30 birds/cup
Tom finishing	approx. 20 birds/cup

#### Note:

Turkey rearing: 2 drinker lines in the poult ring Hen and tom finishing: 1 drinker line per feed

#### CombiMaster

Use of max. 300 nipples per pressure regulator Recommended number of birds per nipple\*: Broilers\*\*

In addition to the drinking systems described, we offer a vast range of fount and cup drinkers. Our experts will be glad to advise you. To achieve dry litter and good results, please follow our assembly, user and operation manuals.

Round drinkers*	JUMB0-T	<b>JUMBO-98</b>	JUMB0-B
Recommended number of birds per round drink	er**		
Turkeys 2 to 25 kg	80 - 120	80 - 100	-
Turkeys 0 to 12 kg	-	-	80 - 100
Broiler breeders and layers	-	-	100 - 150
Broilers	-	-	100 - 150
Day-old chicks***	-	-	300
Code no.	30-03-3170	30-02-3200	30-03-3100
Diameter (mm)	480	305	400
Total height (mm)	650	500	640
Rim height (mm)	70	95	60
Weight without ballast (kg)	1.9	1	1.75
Content of ballast tank (I)	7	-	7
Min. working pressure (bar)	0.2	0.2	0.2
Max. working pressure (bar)	0.5	0.5	0.5
Optimum water level in the rim (mm)	10-20	40-50	10-20

- The number of birds per drinker has to be reduced proportionally for very heavy birds and in a hot climate.
- National or regional regulations may stipulate different bird numbers.
- With spacer ring only.



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