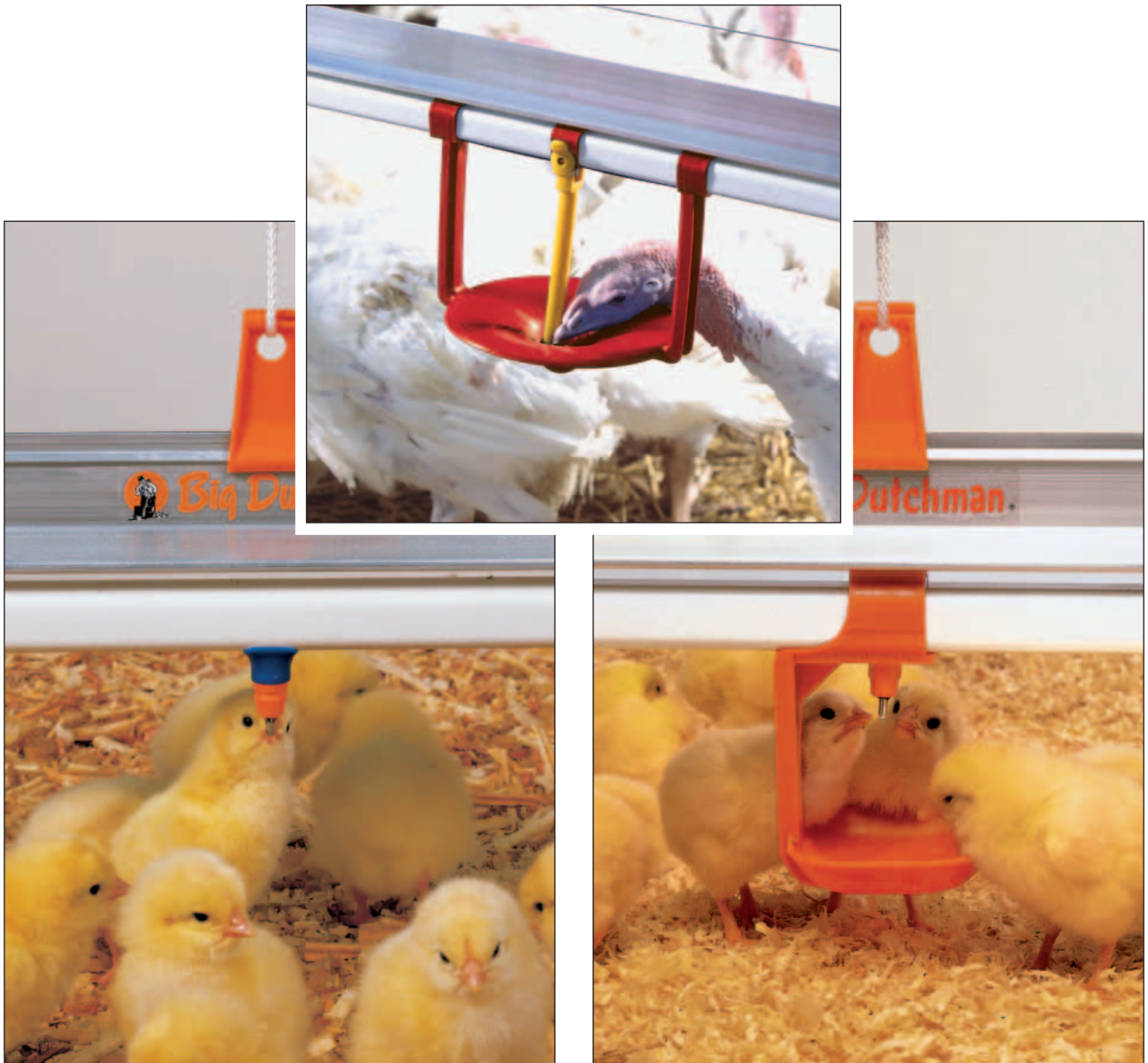




# Big Dutchman®



## **Drinking Systems**

for rearing and heavier poultry

# Drinking systems – for a reliable supply 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. To achieve this, a reliable water supply must be available. It has to be free from contamination and within easy reach of the birds. Big Dutchman satisfies all these requirements in an ideal way – offering a wide range of drinking systems for broilers, turkeys, breeders, as well as pullets and layers.

Our product range includes:

- nipple drinkers with and without drip cup;
- special turkey drinkers;
- round drinkers for open water.

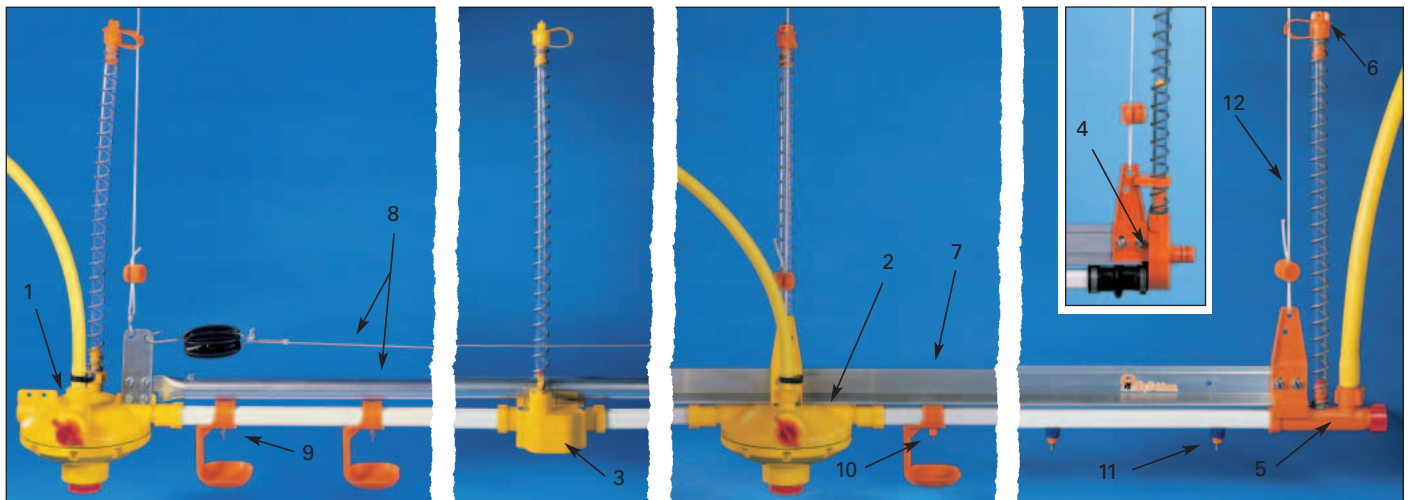
The choice of the right drinking system depends on the type of birds, on the field of use, on the situation in the house and **your** individual requirements. Please let our experts advise you.

## Nipple drinkers – hygienic supply of drinking water

In modern poultry production, nipple drinker systems have proven themselves as ideal systems for a reliable and hygienic supply of drinking water. They can be composed of the following parts:

- pressure control unit with rinsing system – side (1) or central (2) supply, depending on the drinker length;
- slope regulator (3) – evens out 10-15 cm incline;
- swivelling aeration (4) or automatic rinsing aeration

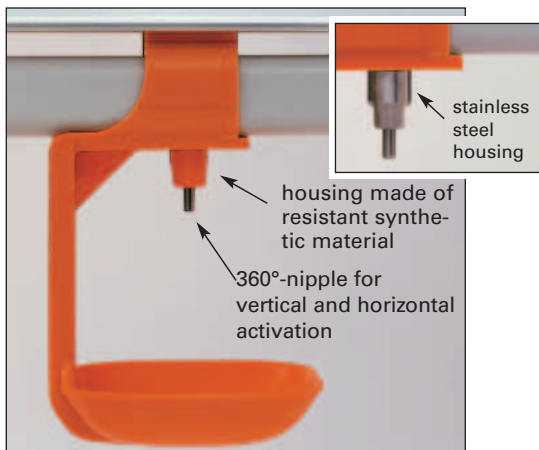
- (5, optional), each with water level indicator;
- aeration nozzle with valve (6) – under normal operation, the valve is open to allow the air to escape;
- aluminium profile (7) or circular tube with anti-roost wire (8);
- nipple tube with the respective nipples – Top Nipple (9), Top Nipple orange (10), and SaniStar® (11);
- suspension system (12).



Pressure control unit, slope regulator, swivelling aeration and automatic rinsing aeration, each with water level indicator

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

Both **Top Nipple** and **Top Nipple orange** are ideally suited for growing poultry up to a live weight of approx. 5 kg.



Top Nipple orange and Top Nipple

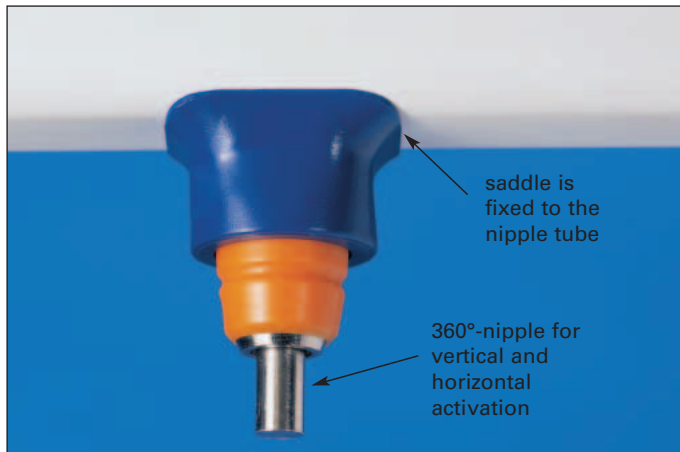


100 ml screw nipple

Both nipples have a passage rate of 80-90 ml/min\*, thus providing sufficient water supply even for heavier poultry. The single-arm drip cup keeps the litter dry without inhibiting the birds from drinking.

For use in layer and breeder houses, Big Dutchman also offers 50 ml and 100 ml screw nipples. These nipples can only be activated vertically.

## SaniStar® 4,5 – hygienic nipple without drip cup



In the development of SaniStar® 4,5 with a passage rate of 50-55 ml/min\*, we have attached great importance to a good hygiene. Summarised that means:

- reliable valve => water is dispensed according to demand and without spilling or leaking;
- the saddle is welded onto the square nipple tube => the plug-in and fixation mechanism guarantees maximum housing hygiene and does not create any crevices for dirt deposits;
- utilisation of high-quality materials (stainless steel and special synthetic material) => long working life.

\* at 20 cm water column

## Advantages of SaniStar® 4,5

- smooth outside surface without corners and edges, no drip cup => **maximum hygiene**;
- easy horizontal and vertical activation of the valve pin => **optimum water intake even for day-old birds**;
- vertical activation => **superproportional increase of passage rate**, also suitable for larger birds;
- precise valve pin with 4.5 mm diameter and sharp-edged cut => larger water drops adhere to the pin **allowing the animals to take-in water more easily**;
- 100 % vertical orientation and optimum resetting features => **dry litter**;
- double-sealed surface => **high operational reliability**.

## Penduval® – the hygienic drinker especially made for turkey rearing and finishing

**Penduval®** (patent no. EP 02023938.0-1260), the drinker for turkeys, is a new addition in our product range. It supplies turkeys of every age (even heavy-weight birds

with over 20 kg lw) with sufficient amounts of clean drinking water. The drinker consists of a cup that offers the birds open water and a nipple with pendulum.



Penduval® for rearing & finishing



Penduval® for tom finishing

Each time a bird drinks, the bird's head causes the pendulum to move sideways. Through the movement, the nipple valve opens and water flows from the inside of the pendulum into the cup. When the bird stops drinking, the pendulum moves back to its original position, at the same time closing the valve, thus stopping the water flow. At a raised water level, the birds drink directly from the cup without activating the pendulum, thus preventing the cup from overflowing. As is important for every drinker, the correct height adjustment of the drinker corresponding to the birds' height is decisive for optimum water consumption.



Low water level



Cup is filled with water

A float ball facilitates drinking for one-day old birds. At a low water level, the float ball pushes the pendulum sideways so that water can flow into the cup. Once there is enough water in the cup, the float ball starts to float on the water surface and the pendulum returns to its original position.

## Round drinkers – open water for all kinds of poultry

Apart from nipple drinkers, Big Dutchman also offers various round drinkers that 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 for layers and broiler breeders.



Thanks to the narrow water jet running along its side, the bell remains substantially clear and the water does not splash over the rim. This reduces ammonia emissions inside 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 winching 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 drinker lines in relation to the birds' age. For easy and sufficient intake of water, without spillages, the animals have to stretch when drinking.

Suspended feeding 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;
- suspension material.

To allow for easy and secure winching of 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 crank with a hoisting power of 350, 650 or 900 kg;

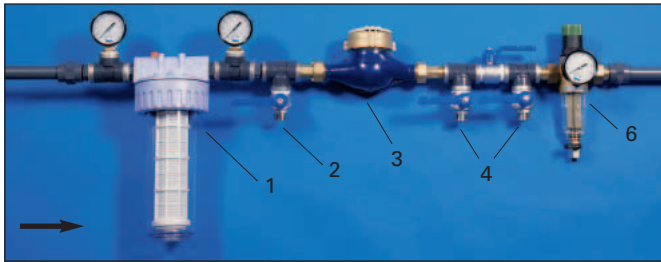
- electrical cable winch, 0.09 kW, 230/400 V, 50/60 Hz for ceiling suspension including limit stop with a hoisting power of 320/240 kg.

Apart from the above described winches, Big Dutchman offers several other electrical winches that allow for winching of several feeder and drinker lines at the same time. Please let our experts advise you.

# Water connection unit for poultry houses

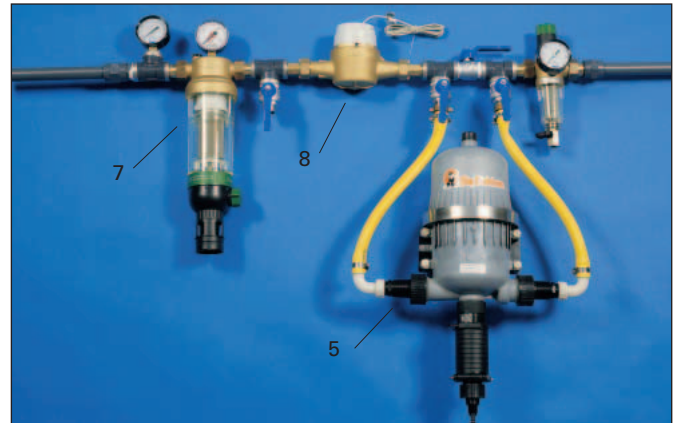
Today, a complete drinking system comes not only with the actual drinker, but increasingly with a water connection unit. This unit is installed between the main water conduit and the house water line

and can consist of different modules that can be put together according to **your** needs. The correct water pressure is adjusted via the pressure control regulator.



Water connection unit, can be delivered with nominal widths of 3/4", 1" and 1 1/2"

- 1 filter with manometer to avoid blockage at the nipples – optional reversible flow filter (7) in the event of a high degree of water contamination;
- 2 ball valve for separate drawing-off of water;
- 3 water meter for measuring water consumption – optional electronic (8), for connection to a computer;
- 4 bypass with 3 ball valves – for connection to a medicator;
- 5 medicator – to carry out the prophylaxis easily and reliably; available in two sizes;
- 6 pressure reducer with filter – for the protection of excessive supply pressure.



Water connection unit with medicator

## Big Dutchman water connection units have the following features:

- compact design => problem-free installation even in 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.

# Medicator – for precise metering of medicines via the drinking water

The medicator is installed in the water circuit and meters the correct amount of vitamins and medicines into the drinking water. The amount to be metered out can be precisely adjusted, as the compounds are admitted to the drinking system in proportion to the actual water consumption. Mixing of the respective compound and water takes place at the homogeniser outlet. Thus the motor does not come into contact with the medication used = no blockages occur, longer service life.

Water-soluble substances are extracted directly out of their original packing. In case of pulverized or viscous materials, a mixing tank with circulating pump (code no. 30-61-3105) should be employed.



Medicator



Mixing tank, 60 l

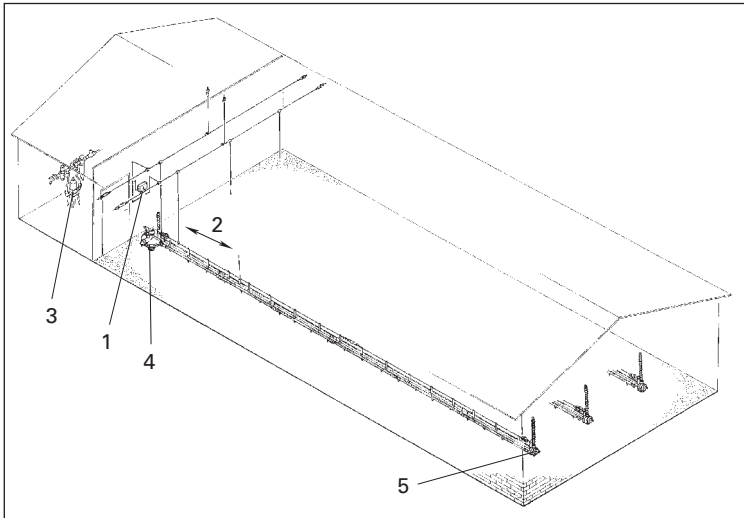
## Advantages

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

## Medicator technical data

Type	1	2
code no.	30-61-3240	30-61-3245
code no.		
- incl. connection set 3/4"	30-62-3001	30-62-3002
- incl. connection set 1"	30-62-3011	30-62-3012
flow rate (l/h)	9 - 3400	9 - 3400
dosing range (%)	0,2 - 2,5	0,2 - 5,0
working pressure (bar)	0,27 - 6,0	0,27 - 6,0

# Planning aid



- 1 electrical anti-roost unit
- 2 maximum distance between suspensions: 300 cm
- 3 water connection unit with medicator
- 4 pressure regulator unit with water level indicator
- 5 swivelling aeration unit with water level indicator

**Note:**

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

For layers and broiler breeders, we recommend installing one drinker line for every 5 to 7 m width of house.

## Top Nipple and Top Nipple orange

use of max. 300 nipples/pressure regulator unit

recommended number of birds per nipple\*:

broilers**	20 - 25 birds/nipple
pullets (up to 1.5 kg)**	10 - 16 birds/nipple
broiler breeders (0-18 Wochen)	10 birds/nipple
ducks (up to 3.5 kg)**	8 - 12 birds/nipple

## SaniStar®

use of max. 450 nipples/pressure regulator unit

recommended number of birds per nipple\*:

broilers**	12 - 15 birds/nipple
------------	----------------------

## Screw nipples (50 and 100 ml)

layers (50 ml nipple)	8 - 10 birds/nipple
broiler breeders (100 ml nipple)	10 birds/nipple

## Turkey drinker Penduval®\*\*

rearing	30-40 birds/cup
finishing	25-30 birds/cup
tom finishing	approx. 20 birds/cup

**Note:**

**Turkey rearing:**

2 drinker lines in the poult ring

**Finishing:**

1 drinker line per feeder line

**Tom finishing:**

1 drinker line per feeder line

*In addition to the drinking systems described, we offer a vast range of reverse and cup drinkers. Please let our experts advise you.*

*To achieve dry litter and good results, please follow our installation, operating and maintenance instructions.*

## Round drinkers\*

recommended number of birds/round drinker**	JUMBO-T	JUMBO-98	JUMBO-B
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 (l)	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/drinker has to be reduced proportionally with heavier birds and in a hot climate

\*\* national or regional regulations may stipulate different bird numbers

\*\*\* with spacer ring only



# Big Dutchman

**Germany**

**Big Dutchman International GmbH**  
 Postfach 1163 · 49360 Vechta · Germany  
 Tel. +49(0)4447-801-0  
 Fax +49(0)4447-801-237  
 E-Mail: big@bigdutchman.de

**Asia**

**Big Dutchman Asia Sdn. Bhd.**  
 Lot 3, Persiaran Sultan Hishamuddin,  
 Kawasan 20, Bandar Sultan Suleiman,  
 42000 Pelabuhan Klang  
 Selangor Darul Ehsan · Malaysia  
 Tel. +60-3-31 76 79 78 · Fax +60-3-31 76 71 12  
 e-mail: bdasia@bda.com.my

**USA**

**Big Dutchman, Inc.**  
 P.O. Box 1017 · Holland, MI 49422-1017 · USA  
 Tel. +1-616-392 59 81  
 Fax +1-616-392 61 88  
 e-mail: bigd@bigdutchmanusa.com

