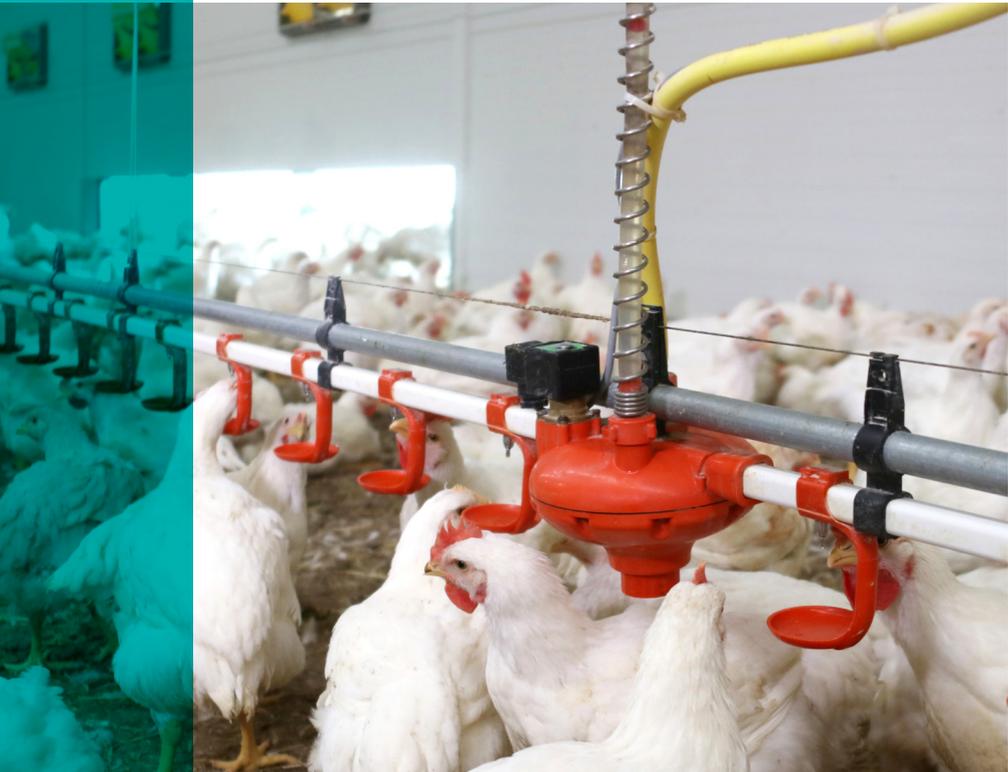




Innovative
drinking
technology

Operator's manual

Impex drinking systems 3.03 meter



English



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1.00 Uses

The drinking systems are suitable for various types of poultry. The following guide indicates which nipple or drip cup is suitable for which birds as well as the advised number of birds per nipple or drip cup. The number of birds per drinker and the choice of nipple may deviate due to housing, climate conditions and/or national or regional regulations.

Cage systems:

The following nipples are to be used **with** drip cup or drip trough:

Article number	Description	Birds/nipple	Water flow/min. at 0.02 bar
		Layers	
01.01.11000	I-Classic 10	6-8	80 ml.
01.01.11050	I-Classic 10-50		50 ml.
01.03.11100	I-Classic 11		70 ml.
04.04.11300	I-Flex 13		70 ml.
02.04.12200	I-Classic 22		80 ml.

Floor systems:

The following nipples are to be used **without** drip cup or drip trough:

Article number	Description	Birds/nipple		Water flow/min. at 0.02 bar
		Broilers	Ducks	
04.02.12500	I-Flex 25	12-15	6-8	35 ml.
04.02.12520	I-Flex 25-2			35 ml.
04.02.12502	I-Flex 25-B			35 ml.
04.04.12600	I-Flex 26			35 ml.
04.04.12620	I-Flex 26-2			35 ml.
04.04.12602	I-Flex 26-B			35 ml.

The following nipples are to be used **with** drip cup or drip trough:

Article number	Description	Birds/nipple				Water flow/min. at 0.02 bar
		Broilers	Rearing	Layers (free range)	Parent stock	
01.01.11000	I-Classic 10			8-10	6-8	80 ml.
01.01.11050	I-Classic 10-50			8-10	6-8	50 ml.
04.04.11200	I-Flex 12	15-16	15-16			50 ml.
03.01.11401	I-Flex 14-HP	15-16	15-16	8-10		80 ml.
03.03.11500	I-Flex 15	15-16	15-16	8-10		80 ml.
03.01.11710	I-Flex 17-LF	15-16	8-10			55 ml.
03.01.11720	I-Flex 17-HF	15-16	8-10	8-10		80 ml.
04.04.11910	I-Flex 19-LF	15-16	8-10			55 ml.
04.04.11920	I-Flex 19-HF	15-16	8-10	8-10		95 ml.
02.04.11200	I-Classic 22			8-10		80 ml.
04.04.12410	I-Flex 24-MP	15-16	15-16	8-10		80 ml.

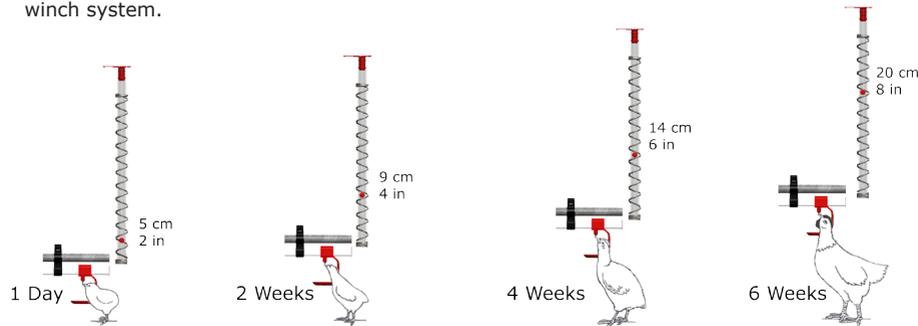


2. How the system works

Drinking systems are designed primarily to supply birds with sufficient clean water. In addition, the closed water system gives optimal hygiene resulting in a better house environment.

Before the water enters the house the pressure is to be reduced to about 1.5-2 bar by a pressure reducer with a combined or separate filter. After the pressure reducer, a water meter is to be mounted as well as a by-pass set in front of the optional medicine proportioner.

The water line in the house is connected to the pressure regulator with flexible tubing. The pressure regulator enables low pressure for optimal functioning of the nipple and drink cups. The pressure is adjustable and can be verified by the water level in the air outlet. The water is available to the birds from nipples or drink cups. The height of the drinking line is adjusted by a winch system.



3. Tips for correct installation

- During the installation of the drinking system, the house should be clean and clean materials should be used to prevent dirt from entering the drinking system.
- A main pressure regulator and a filter to prevent soilage must be fitted to the main water supply.
- When using a main water tank with pressure regulators in the drinking line, the minimal height of the water tank is 3 mtr (10 ft).
- Do not use aggressive cleaners, such as acid or chlorous cleaners.
- The electrical conduction of the water at 25°C has to be lower than 500 µS/cm.
- For optimal nipple functioning, the iron content of the water must be lower than 0.05 mg/l.
- The maximum line length for a start regulator is 23 units ($23 \times 3.03 = 69,69$ mtr).
- For lines longer than 23 units there are two options: either a middle pressure regulator or two lines, each with a begin pressure regulator in the middle of the house. The two lines in the length of each other can be winched with one winch system.
- The total number of drinking lines for broilers is the number of feed lines plus one.
- The maximal interval between the suspension points is 3 mtr. When the drinking line is used as a perching bar, the maximal interval between the suspension points is 2.5 mtr.

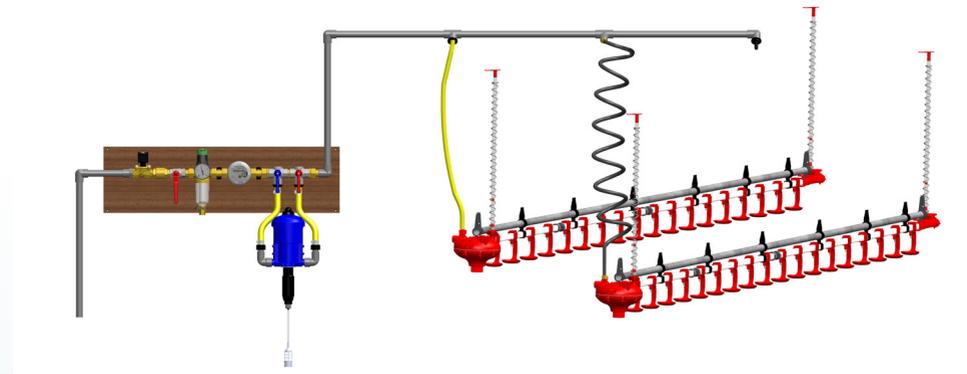
- Make sure that the drinking lines hang level to avoid air bubbles entering the system. If the floor of the house is not level, a slope regulator set is necessary.
- The cups and nipples must hang freely and not touch the litter.
- In case of functional disorders contact the supplier/manufacturer immediately. The warranty becomes invalid in case of improper use or if these instructions are not followed.

4. Assembly / Installation of the system

Prior to the installation of the drinking system this instruction manual should be read carefully. When mounting the drinking system, the step-by-step directions should be followed. The installation of the drinking system should be carried out by skilled personal.

4.01 Assembly of the water supply per house

If a water control unit is used, it should be connected to the main water supply and located in a convenient place in the service room. If a water control unit is NOT used, a pressure reducer, water filter and water meter should be mounted in the main water supply. From the water control unit the water line enters the house the water is tapped to the various drinking lines. To shut off each drinking line individually, a ball valve at each tap point is recommended.



The flexible tubing from these tap points must be long enough to accommodate the raising and lowering of the drinking system. The flexible tubing should be 1/2" thick and should be of good quality to avoid bending. Spiral tubing can also be used if so desired.

4.02 Assembly of the winch system

For a diagram of the winch system (see page 22).

1. The distance between each line is the width of the house divided by the number of drinking lines. The distance between the wall and the outer drinking line is half the width of the house divided by the number of drinking lines.
2. Mount the main pulley (N°19) to the wall approximately 20-40 cm from the ceiling lengthwise where the drinking lines are to be installed.
3. Mount the screw hooks (N°15) and pulleys (N°14) to the ceiling or roof construction. The pulleys should be in line with the main pulley and mounted straight above the drinking lines. The maximum distance between 2 suspension points is 3 mtr.
4. Mount the winch (N°20) and wall support (N°21) to the wall directly under the main pulley at a height at which it can be easily operated.
5. An extra loop is necessary for the first suspension point for winching. To do this an extra pulley should be mounted near the second pulley
6. Thread the 3 mm galvanized steel cable (N°18) through the main pulley (N°19) and wind about 1 meter of cable on the winch.
7. Unroll the steel cable to the end of the house to reach the end pulley.
8. Thread the steel cable through the last pulley and mount a weight temporarily at the end of the cable. This makes mounting simpler. Do not forget to remove this weight before winching.
9. Determine the length of the suspension cord (N°13). The length should be measured from the floor to the upper side of the pulley with an extra 25 cm.
10. Cut as many lengths as there are pulleys per line, less one (the cord for the first pulley is longer). Tip: sear the cord ends with a lighter.
11. Mount all the suspension cords with cable clamps to the steel cable about 10 cm in front of the pulleys (i.e. in the direction of the winch) except by the first hanging point.
12. Thread the first suspension cord through the first pulley and through the remaining second pulley. Fasten this longer cord to the steel cable.

Attention: Make sure that all the suspension cords are hanging on the same side of the steel cable.

4.03 Assembly of the winch system with perch bar

For a diagram of the drinking system parts mentioned below (see page 23).

1. The distance between each line is the width of the house divided by the number of drinking lines. The distance between the wall and the outer drinking line is half the width of the house divided by the number of drinking lines.
2. Mount the pulleys (N°29) to the roof construction. The pulleys should be in line with the main pulley and mounted straight above the drinking lines. The maximum distance between 2 suspension points is 2.5 mtr.
3. Mount the winch (N°30) to the ceiling. The winch can be operated with a crank.
4. An extra pulley is to be mounted at the second suspension point from either side of the winch.

5. Unroll the impregnated steel cable (31) and thread it through the winch so that the cable from the front and back can be winched.
6. Thread the cable through both last suspension points and mount a weight temporarily on both ends of the cable. This makes mounting simpler. Do not forget to remove the weights before winching.
7. Determine the length of the galvanized cable (N°28). The length is from the floor to the upper side of the winch + 30 cm.
8. Cut as many lengths as there are pulleys per line, minus two. The cables for the first pulleys on both sides next to the winch are longer.
9. Mount all the suspension cables with cable clamps (N°25) to the impregnated steel cable about 10 cm. in front of the pulleys (i.e. in the direction of the winch) except both suspension points next to the winch.
10. Thread both steel cables through the first suspension point on both sides of the winch, thread the cable through the first pulley and through the remaining pulley.

Attention: Make sure that the steel cables are mounted to the stabilizing pipe and not through the hanging clamp (see page 23).

4.04 Assembly of the aluminum profiles or stabilizing pipes

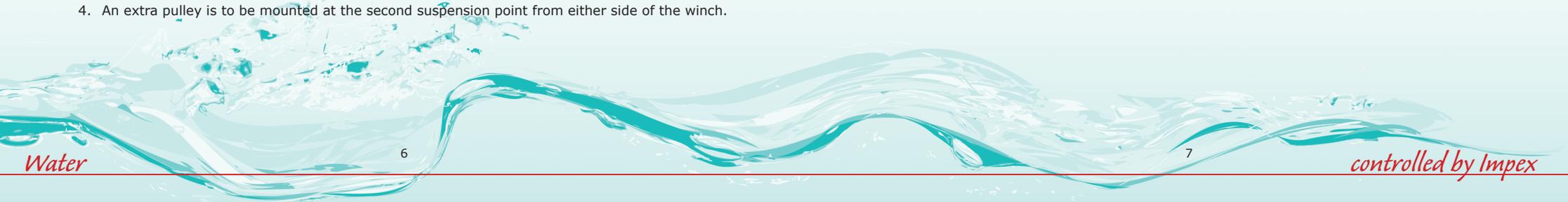
Assembly of the aluminium profiles

1. Lay all the aluminium profiles one after the other under the suspension cords
2. To connect the aluminium profiles a connector is needed. Tap the connector with a hammer into the aluminium profile to the ridge. Repeat this with the remaining connections. Make sure not to damage the profiles; use a piece of wood.
3. Tap the plugs with a hammer into the ends of the aluminium profiles.



Assembly of the stabilizing pipe

Lay all the stabilizing pipes one after the other under the suspension cords. Start at the side of the start pressure regulator. Make sure the thinner part of the stabilizing pipe points away from the regulator. Slide one stabilizing pipe firmly in the other and repeat this with the following pipe lengths.



4.05 Connecting of the I-Flow pressure regulator (N°12.00.01000)

Parts mentioned below see page 19

The pressure regulator is ready for direct use. Dismantling is only permitted by authorized personnel.

Assembly of the pressure regulator to the aluminum profile

Slide the fastening clamp (N°6) on the top of the pressure regulator. Put the aluminum profile in the clamp and close the clamp with the M6x16 screw with nut. Drill a hole in the aluminum profile.

Assembly of the pressure regulator to the stabilizing pipe

Slide the fastening clamp (N°9) on the top of the pressure regulator. Put the stabilization pipe in the clamp and close the clamp with the M6x16 screw with nut.

Assembly of the pressure regulator to the perch bar

Slide the fastening clamp (N°5) on the top of the pressure regulator. Put the perch bar in the clamp and close the clamp with the M6x16 screw with nut.

Assembly of the pressure regulator directly to the system or to another type of fastening clamp

Order the special mounting screws (N°19) for mounting your own type bracket or clamp on the top shell of the I-Flow pressure regulator.

Water connection

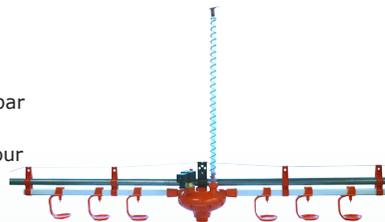
Push the water hose onto the hose connector and secure it with a clip. Screw the air outlet set (N°57) onto the I-Flow pressure regulator.

Technical data

Inlet pressure	: 0,3 - 3 bar
Water pressure with flushing	: Maximum of 2 bar
Adjustable water level	: 0-100 cm
Water flow	: 200-2000 ltr/hour

Adjusting of the water level

The required water level can be adjusted by the red knob (N°34) at the bottom of the pressure regulator. Increasing and decreasing the water level is shown by the + and - sign on the top shell (N°23).



Flushing

Clean and fresh water is vital for poultry. Careful management of the drinking system and proper hygiene in the house are important factors to achieve optimal production results. The maximum desired water pressure with flushing is 2 bar.

Important: Make sure the flushing water at the end of the drinking line can flow freely away. High water pressure can otherwise damage the connecting pieces of the drinking lines.

The integrated flushing ball valve on the pressure regulator has 3 positions: The handle to the left is manual flushing, upward is to regulate the outlet water pressure and automatic flushing and the handle to the right closes the water supply.

Manual flushing

- Turn the flushing valve to the left in flushing position
- The red ball in the breather tube will rise
- After flushing return the flushing valve to the start position (up = regulate) and return the air outlet sets at the end of the drinking lines to the start position back



Automatic flushing

With automatic flushing, a flushing actuator (N° 12.01.20000) is mounted on the built-in solenoid valve, which can be controlled by the I-Control flush computer.

Assembly of the flushing actuator

Remove the cover (N°16) on top of the I-Flow pressure regulator and install the flushing actuator with a torque screwdriver. The tightening torque is 0,4 Nm. Make sure that the pin of the flushing actuator falls into the deepest part of the I-Flow connection.



Assembly of the I-Control flush computer (N°13.00.60000)

Mount the flush computer in the feeding area and connect the 10 relays (24V AC) to the flushing actuator (N°12.01.20000) of the drinking lines. With the 10 relays, there are 10 groups which can be independently flushed. Depending on the water input, maximally 3 drinking lines can be connected per relay.

The I-Control flush computer has 4 automatic flushing options;

1. **Time:** Based on time: use the flushing schedule to flush 4 times per day. Daily setting.
2. **Temp:** Based on temperature: the water lines are flushed when the water temperature is too high or if the temperature of the water in the drinking lines is higher than the set difference between the temperature of the main water supply. For this optional water temperature sensors (N° 13.00.59000) are available (2 per control unit are necessary).
3. **Dirt:** Based on dirt: The I-Control indicates the degree of pollution. When exceeding a preset value, the flushing will start automatically
4. **Mix:** Based on time, temperature, and/or dirt: flushing and temperature schedules are both used.

There are also 2 manual flushing possibilities:

1. Press "Flush" to manually rinse **per line**
2. Press "L-flush" to manually rinse **all lines**

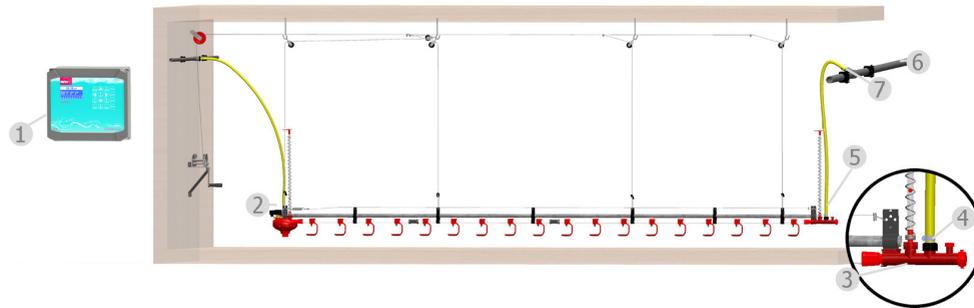
For the connections and making the flushing controller operational see the supplied operator's manual.

Connection of the water meter with the I-Control flush computer

The flush computer has a connection to shut off the water meter during flushing by which the correct water-feed ratio is saved in the main computer. It also has a reading of the amount of water used during flushing.

The drain

- The diameter of the drain pipe is to be at least 50 mm.
- The connection of the hose to the drain pipe has to be at least 1.5 mtr higher than the highest point of the drinking line during flushing.



- The hose connection is to be mounted on the upper side of the drain pipe.
- The installation of the drain/drainage pipe and the fastening of the Primabel tubing 3/4" to the drain/drainage pipe are to be determined at location. The necessary materials are dependent on individual house.

Position	Description	Article number
1	I-Control flush computer	13.00.60000
2	I-Flow flushing actuator	12.01.20000
3	I-Flow end air outlet set	12.00.01500
4	Hose clamp 22 mm x 30 mm	25.02.04030
5	Primabel tubing 3/4" (5m)	60.01.01925
6	Drain pipe minimum 50 mm Ø	
7	Connection between tubing 3/4" and drain pipe	

4.06 Assembly of the nipple tubing

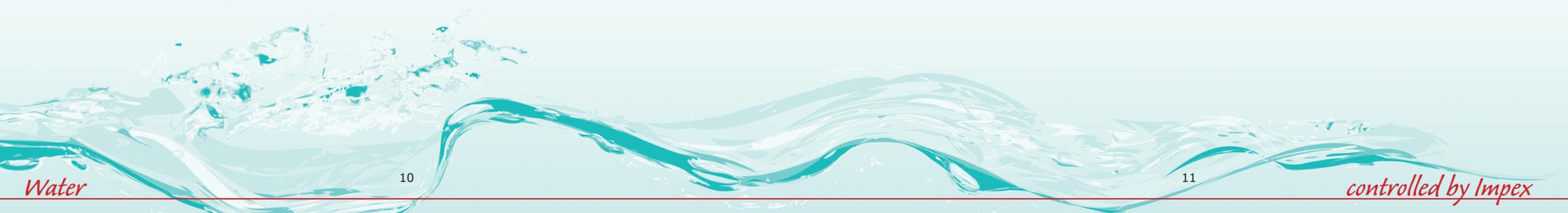
1. When installing a drip cup system, first mount the drip cups to the nipple tubing. Make sure that the top part of the clamp is snapped shut. (figures = model 2012)



2. Assembly of the nipple tubing to the pressure regulator:
 - Apply an acid-free lubricant (vaseline) to the O-rings (N°4)
 - Push the reducer piece (N°1, 2 or 3) into the opening of the pressure regulator
 - When using the pressure regulator at the beginning of the drinking line, shut off 1 of the pressure regulator outlets with the included plug and O-ring (N°24)
 - Push the nipple tubing into the reducer piece of the pressure regulator
3. Lay all the drink nipple tubes one after the other next to the aluminium profile or stabilizing pipes.
4. Attach the 2 hose clamps (N°7) between the ridges of the connection piece (N°6).



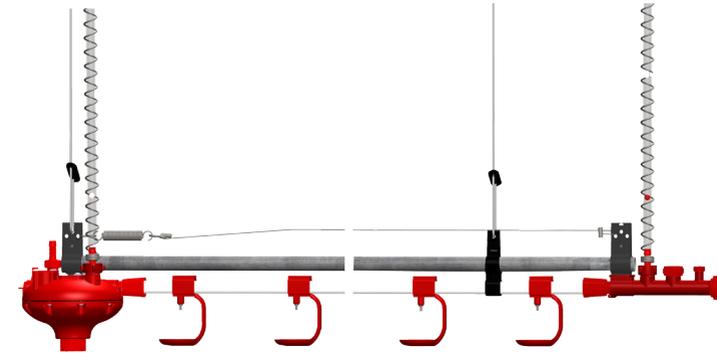
5. Slide the connection piece over the drink nipple tubing ends to the inner ridge and fasten the hose clamps firmly with pliers. Make sure that the hose clamp is closed on the straight part of the tubing and not on a corner to avoid leakage.





4.07 Assembly of the end set to the nipple tubing

1. Cut the nipple tubing at the end of the line. A PVC cutter is recommended to give a clean cut and to avoid particles in the nipple drinker tubing.
2. Put the end air outlet set to the end of the nipple tubing.



6. Click the hanging clamps (N° 25.04.24010/25.04.24011 or N° 25.04.23900) around the nipple tubing with either the aluminium profile or stabilizing pipe at each hanging point. With the optional perch bar, the steel cable is mounted around the stabilizing pipe and not to the hanging clamp.



7. Thread the suspension cord through one hole of the cord slider (N°17), through the hole in the hanging clamp and again through the hole in the cord slider and knot it. Repeat this with all the suspension cords.
With a drinking system with a perch bar, it is important the suspension cable be mounted around stabilizing pipe and not to the hanging clamp (see page 23).
8. Tighten all suspension cords with the cord slider so that the drinking line remains barely on the floor. With a perch bar, mount the cable clamps (N°16).
9. Remove the weight, which was temporarily attached near the last suspension point. Cut the cable behind the last cable clamp.
10. Winch the system to working height and mount the remaining hanging clamps at intervals of approximately 61 cm.

4.08 Assembly of the anti-perch system

Assembly of the anti-perch wire mounting set (N° 15.00.67715) to the I-Flow pressure regulator
Mount the anti-perch wire set according to the illustration below. String the anti-perch wire through the top groove of the hanging clamp. Tighten the spring and fasten the anti-perch wire with the cable clamp. Cut off excess cable.

It is also possible to use the anti-perch wire as shock wire. When a shocker is used, the positive pole should be connected to the anti-perch wire and the negative pole to either the aluminium profile or the stabilizing pipe.



Position	Description	Article number
1	S-hook 3.45 x 9 x 30 mm	15.00.67702
2	Spring	15.00.67701
3	Cable clamp	15.00.67706

4.09 Assembly of double anti-perch wire system

When an electric shocker is not used, a double anti-perch wire can be used to prevent birds from perching on the drinking line. If you choose this system, "hanging clamps double wire" (N° 25.04.24011) are needed for the system with stabilization tube. For the system with alu-profile a support bracket (N° 15.00.67705) for mounting over the hanging clamp is needed.

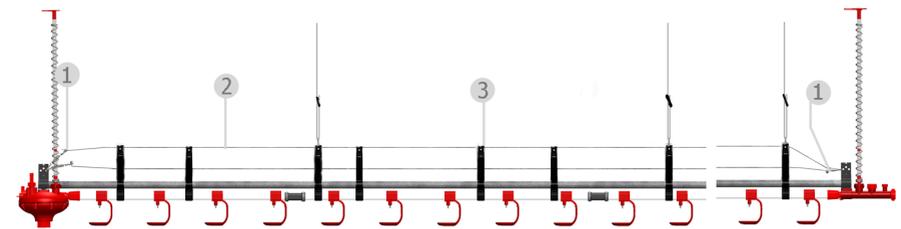


4.09A Assembly of double anti-perch wire stabilization tube

- Install the drinking system in the standard manner
- Hanging clamps at 60 cm intervals; suspension points at 3 mtr intervals
- Connect 2 anti-perch wire mounting sets to the fastening clamp of the I-Flow pressure regulator (see picture above)
- String anti-perch wire through the top and the lower groove of the hanging clamp, connect the wire to the cable clamp and tighten the spring.

4.09B Assembly of double anti-perch wire system aluminium profile

- Install the drinking system in the standard manner
- Hanging clamps at 60 cm intervals; suspension points at 3 mt intervals
- Connect 2 anti-perch wire mounting sets to the fastening clamp of the I-Flow pressure regulator (see picture above)
- Mount the cord with S-hook (N° 60.07.90020) to the hanging clamps
- Mount anti-perch wire in the standard manner
- Remove the S-hook from the hanging clamp and mount the support bracket (N° 15.00.67705) to the hanging clamp. Make sure that the closed side of the support bracket is mounted over the open side of the hanging clamp
- Mount a screw (N° 25.04.23902) and nut (N° 25.04.23903) in the hole where the S-hook was removed
- Mount the S-hook in the support bracket
- Mount 1 extra support bracket between each suspension point. The support brackets are then at 1.50 mt intervals
- Thread the second anti-perch wire through the upper hole of the support bracket



Position	Description	Article number
1	I-Flow anti-perch wire mounting set	15.00.67715
2	Anti-perch wire 1.5 mm	15.00.67800
3	Hanging clamp Ø 26,7 mm x 22 mm double wire	25.04.24011
4	Support bracket double anti-perch wire alu-profile	15.00.67705



5 Making the system operational

5.01 General

After mounting the drinking system, thoroughly flush all the water lines. Touch each nipple during flushing until water comes out. Begin at the end nearest to the pressure regulator and work towards the other end of the drinking line. Allow the water ample time to flush the drinking lines. Check for leakage.

5.02 Before flock arrival

1. Increase the pressure to a water level of approximately 30 cm. with the adjustment knob of the pressure regulator. Check if there is any leakage.
2. Adjust the pressure to a water level of approximately 5 cm. (minimum pressure). This should be checked by the water level in the air outlet tube.
3. Check all the nipples for water supply. The water drop on the nipple activates the birds to drink.
4. Distribute the litter evenly under the drinking lines. Lower the drinking system to the correct height.
5. Make sure that the drinking lines are level with the floor. Check that there are no air bubbles in the lines.

5.03 When using the drinking system

- It is advised to use chick paper under the drinking lines during the first days with day-old chicks.
- The nipple height is very important. Initially, the nipple pin should be at eye level of the chicks. Generally, after 3-4 days the birds should drink with their necks stretched.
- With both the nipple and drip cup systems, the water pressure should be adapted when required (i.e. extremely high temperatures).
- Adjust the height of the drinking system accordingly during the growth period.
- When using medicines and/or vitamins, these should be able to dissolve and remain dissolved in the water

5.04 Maintenance of the drinking system

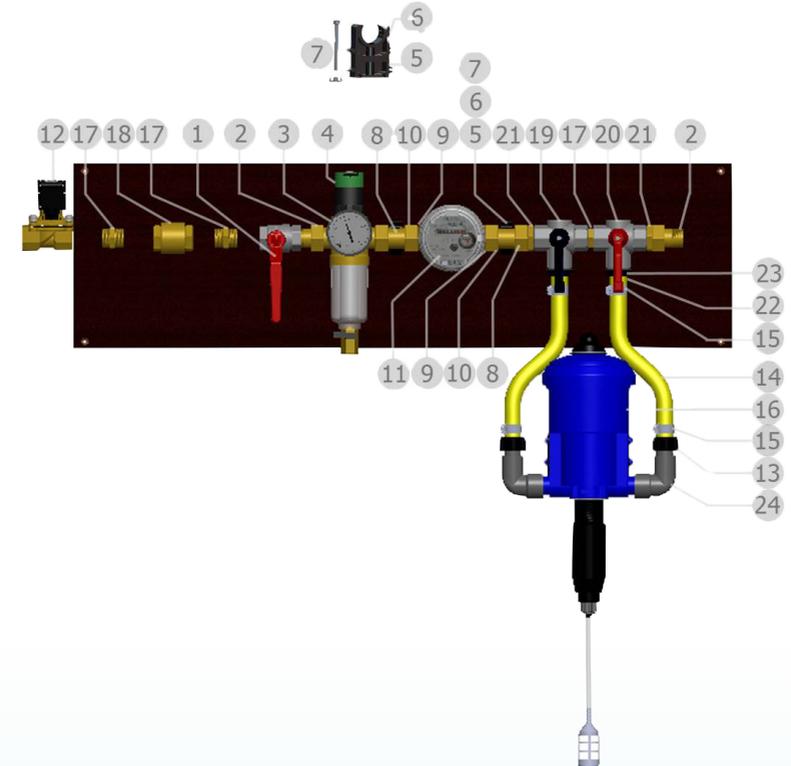
The drinking systems require little maintenance are made of high-quality materials.

Make sure to keep the system clean during and after the growth period. The system should always be flushed after the growth period and after using medicaments. When needed, use disinfection detergent.

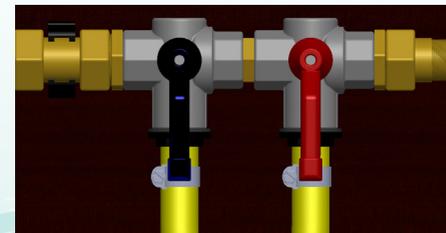
6 Parts lists / Drawings

6.01 Water control unit

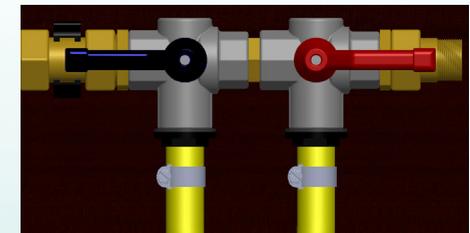
Description	Article number
Water control unit 3/4"	30.00.51001
Water control unit 1"	30.00.51002



Position ball valve **With** Dosatron



Position ball valve **without** Dosatron



Water control unit 3/4" (N°30.00.51001)

Position	Description	Article number
1	Ball valve 3/4"	74.00.63003
2	Coupling 1" x 3/4"	60.03.53632
3	Manometer	73.01.52900
4	Filter combination 3/4"	73.00.53600
5	Fill-in piece 25 mm	60.00.52013
6	Pipe clamp 25 mm	60.00.52003
7A	Bolt M4x50 mm	30.01.00006
7B	Nut M4	30.01.00005
8	Brass coupling 1" female	60.03.53400
9	Brass reduction ring 1" x 3/4"	60.03.19806
10	Fiber seal 1"	60.03.53250
11	Flodis water meter 3/4"	75.00.55710
12*	Solenoid valve 3/4"	74.00.63530
13*	Tube connector 3/4"	60.01.22706
14*	Primabel hose 3/4"	60.01.01925
15*	Hose clamp 20x30 mm	25.02.04030
16*	Dosatron dosage pump	
17	Brass thread nipple 3/4" x 3/4"	60.03.53202
18*	Backflow valve 3/4"	74.00.66303
19	3-way ball valve left (blue / black) 3/4"	74.00.64610
20	3-way ball valve right (red) 3/4"	74.00.64600
21A	Brass thread nipple 1" x 3/4" (blue)	60.03.53201
21B	Brass thread nipple 1" x 3/4" 71mm (black)	60.03.53204
22	Tube connector 3/4"	60.03.22705
23	Rubber washer 3/4"	60.02.33102
24*	Knee 3/4" male/female	60.01.22940

* optional

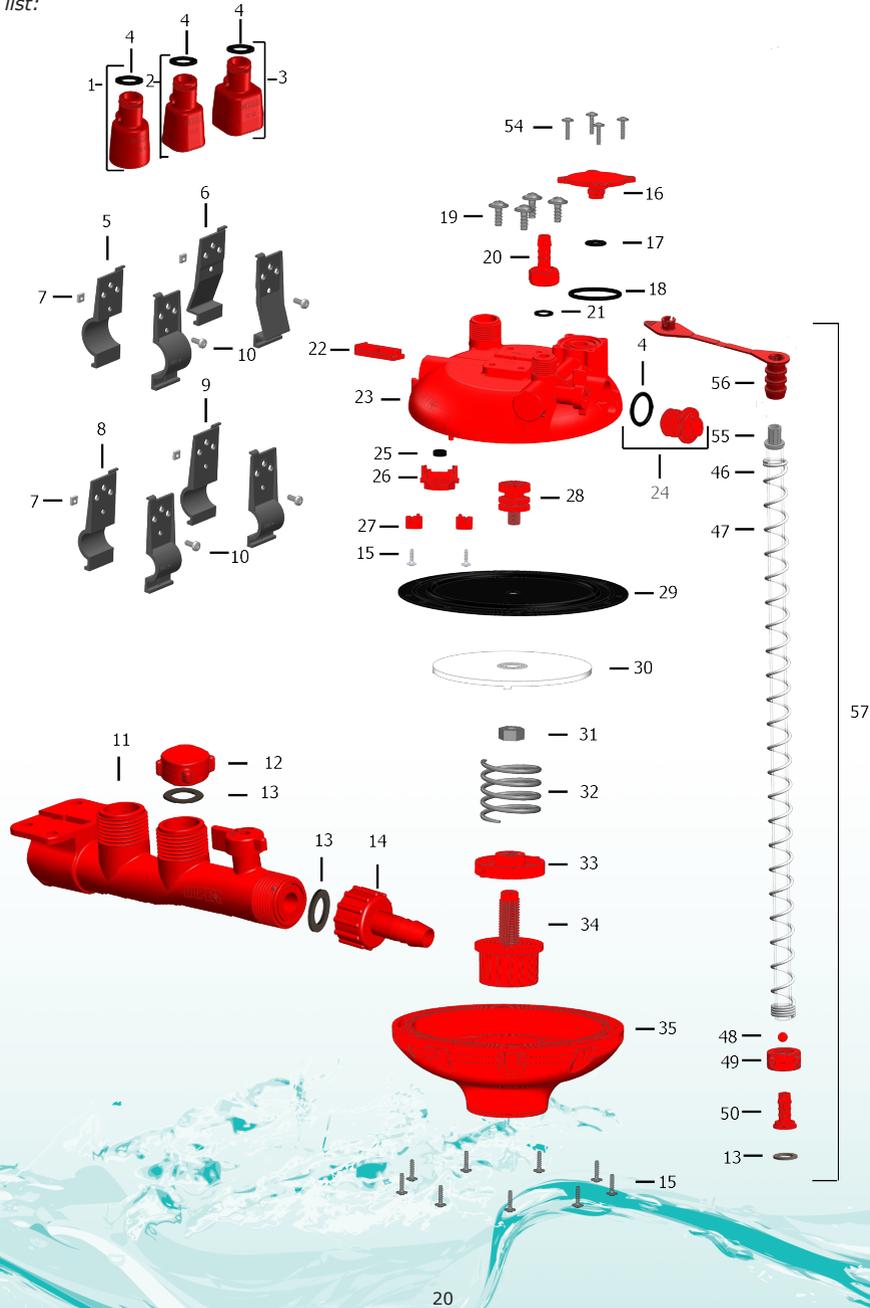
Water control unit 1" (N°30.00.51002)

Position	Description	Article number
1	Ball valve 1"	74.00.63003
2	Coupling 1" x 5/4"	60.03.53633
3	Manometer	73.01.52900
4	Filter combination 1"	73.00.53700
5	Fill-in piece 32 mm	60.00.52014
6	Pipe clamp 32 mm	60.00.52004
7A	Bolt M4x50 mm	30.01.00006
7B	Nut M4	30.01.00005
8	Brass coupling 5/4" female	60.03.53401
9	Brass thread nipple 1"	60.03.53200
10	Fiber seal 5/4"	60.03.53260
11	Flodis water meter 5/4"	75.00.55910
12*	Solenoid valve 1"	74.00.63541
13*	Tube connector 3/4"	60.01.22706
14*	Primabel hose 3/4"	60.01.01925
15*	Hose clamp 20x30mm	25.02.04030
16*	Dosatron dosage pump	
17	Brass thread nipple 1" x 5/4"	60.03.53203
18*	Backflow valve 1"	74.00.66304
19	3-way ball valve left (blue / black) 1"	74.00.64620
20	3-way ball valve right (red) 1"	74.00.64630
21A	Brass thread nipple 1" x 5/4" (blue)	60.03.53203
21B	Brass thread nipple 1" x 5/4" (black)	
22	Tube connector 1" x 3/4"	60.01.22709
23	Rubber washer 1"	60.02.33202
24*	Knee 3/4" male/female	60.01.22940

* optional

**6.02 I-Flow pressure regulator (N°12.00.01000)
and end air outlet set (N°12.00.01500)**

Part list:

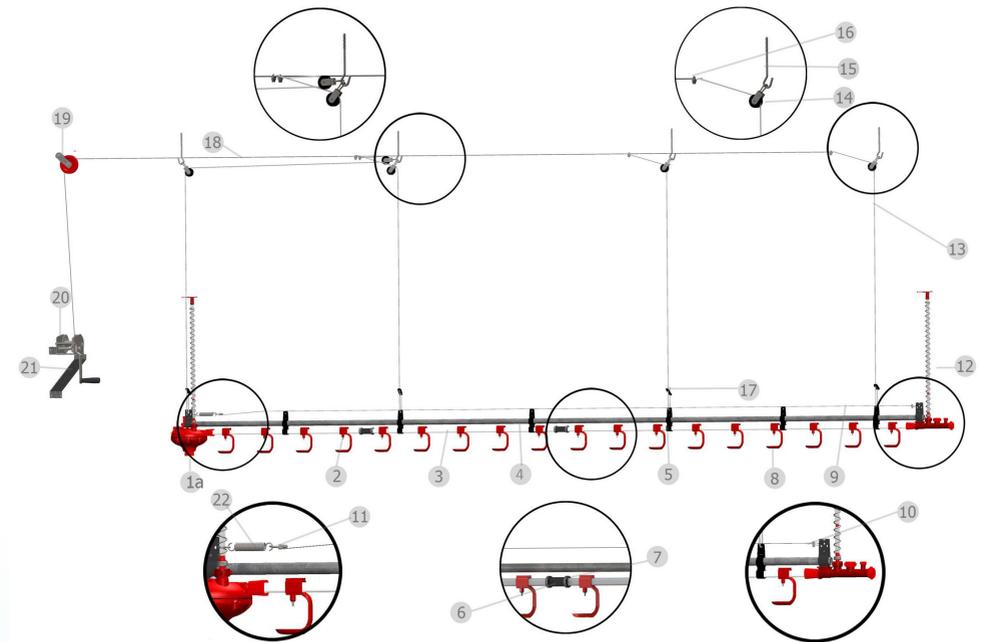


Position	Description	Article number
1	I-Flow reducer round 26.7 mm + O-ring	12.01.10001
2	I-Flow reducer square 22 x 22 mm + O-ring	12.01.10002
3	I-Flow reducer square 28 x 28 mm + O-ring	12.01.10003
4	I-Flow O-ring 16.9 x 2.7	12.01.10004
5	I-Flow fastening clamp 33.7 mm Ø (1 part)	12.01.10005
6	I-Flow fastening clamp Aluminium profile (1 part)	12.01.10006
7	Square nut	12.01.10007
8	I-Flow fastening clamp 25.4 mm Ø (1 part)	12.01.10008
9	I-Flow fastening clamp 26.7 mm Ø (1 part)	12.01.10009
10	Screw, raised head	12.01.10010
11	I-Flow end piece with valve	12.01.10011
12	I-Flow cap 3/4"	12.01.10012
13	I-Flow washer G 3/4"	12.01.00013
14	I-Flow tube connector 3/4" female thread x 3/4" connection	12.01.00014
15	I-Flow screw	12.01.10015
16	I-Flow cover	12.01.10016
17	I-Flow O-ring 9.0 x 2.0 mm	12.01.10017
18	I-Flow O-ring 28.5 x 2.62 mm	12.01.10018
19	I-Flow screw	12.01.10019
20	I-Flow tube connector 1/2"	12.01.10020
21	I-Flow washer 1/2" 11 x 18 x 1.5 mm	12.01.00021
22	I-Flow groove cover	12.01.10022
23	I-Flow top shell	12.01.10023
24	I-Flow plug with o-ring	12.01.10024
25	I-Flow valve washer	12.01.10025
26	I-Flow valve lever	12.01.10026
27	I-Flow valve lever bracket	12.01.10027
28	I-Flow lever operator	12.01.10028
29	I-Flow diaphragm	12.01.10029
30	I-Flow backing plate	12.01.10030
31	I-Flow nut G 18"	12.01.10031
32	I-Flow pressure spring	12.01.10032
33	I-Flow adjustment nut	12.01.10033
34	I-Flow adjustment knob	12.01.10034
35	I-Flow bottom shell	12.01.10035
46	I-Flow breather tube 60 cm	12.01.10046
47	I-Flow breather pressure spring	12.01.10047
48	I-Flow ball 9.55 mm	12.01.10048
49	I-Flow union 3/4"	12.01.10049
50	I-Flow tube	12.01.10050
54	I-Flow screw cover	12.01.10054
55	I-Flow plug breather tube	12.01.10055
56	I-Flow breather tube end cap	12.01.10056
57	I-Flow air outlet set	12.01.10057
Mounting set I-Flow start / middle pressure regulator stabilization tube 26.7 mm		12.00.11002 / 12.00.11052
Mounting set I-Flow start / middle pressure regulator stabilization tube 33.7 mm		12.00.11003 / 12.00.11053
Mounting set I-Flow start pressure regulator - aluminium profile		12.00.11007
Mounting set I-Flow middle pressure regulator - aluminium profile		12.00.11057
Mounting set I-Flow end air outlet set - stabilization tube 26.7 / 33.7 mm		12.00.11502 / 12.00.11503
Mounting set I-Flow end air outlet set - aluminium profile		12.00.11507

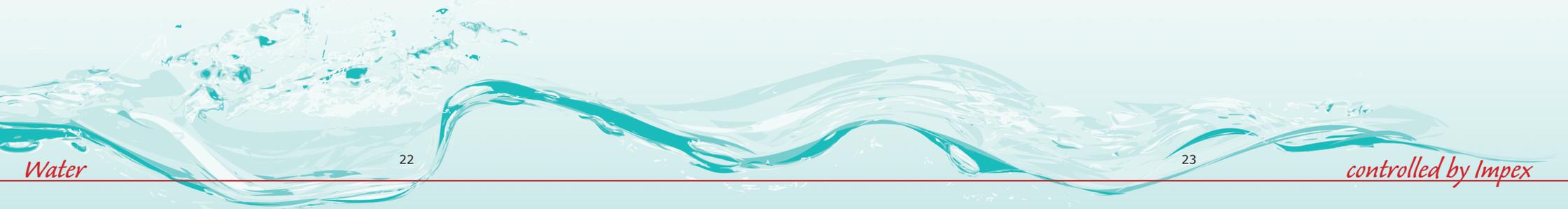
6.03 Drinking system

Position	Description	Article number
1	I-Flow pressure regulator	12.00.01000
2	Nipple drinker	
3	PVC nipple tubing 3.03 m	20.01.30300
4	Stabilizing pipe Ø 26.7 mm 3.03 m	26.04.30300
5	Hanging clamp Ø 26.7 mm	25.04.24010
6	PVC connection piece	25.01.22110
7	Hose clamp	25.02.22101
8	1-arm drip cup	10.00.13903
9	Anti-perch wire 1.5 mm	15.00.67800
10	S-hook for anti-perch wire set	15.00.67702
11	Cable clamp wire set	15.00.67706
12	I-Flow end air outlet set	12.00.01500
13	Nylon cord 4 mm	60.07.90014
14	Aluminum pulley 40 mm	60.06.91501
15	Screw hook 160 mm	60.07.53160
16	Cable clamp 3/16"	60.04.60060
17	Cord slider	60.07.11481
18	Galvanized steel cable 3 mm	60.04.60080
19	Main pulley 90 mm	60.06.53050
20	Hand winch with ratched wheel 3N1	60.05.85000
21	Winch wall support	60.05.85100
22	Spring anti-perch wire set	15.00.67701
24	I-Flow fastening clamp 33.7 mm Ø	12.01.10005
25	Cable clamp ¼" 6 mm	60.04.60062
26	Stabilizing pipe 33.7 mm 3.03 mtr	26.02.30300
27	Hanging clamp 33.7 mm Ø	25.04.24020
28	Galvanized steel cable 4 mm (6 x 7 + 1)	60.04.60081
29	Nylon pulley 45 mm	60.06.53010
30	Power lift ceiling winch H-3500	60.05.83500
31	Steel cable impregnated 8 mm	60.04.60042
33	Crank for ceiling winch	60.05.83101
	Aluminium profile 3.03 mtr	26.03.30300
	Connection piece aluminium profile	26.00.00001
	Hanging clamp aluminium profile	25.04.23900

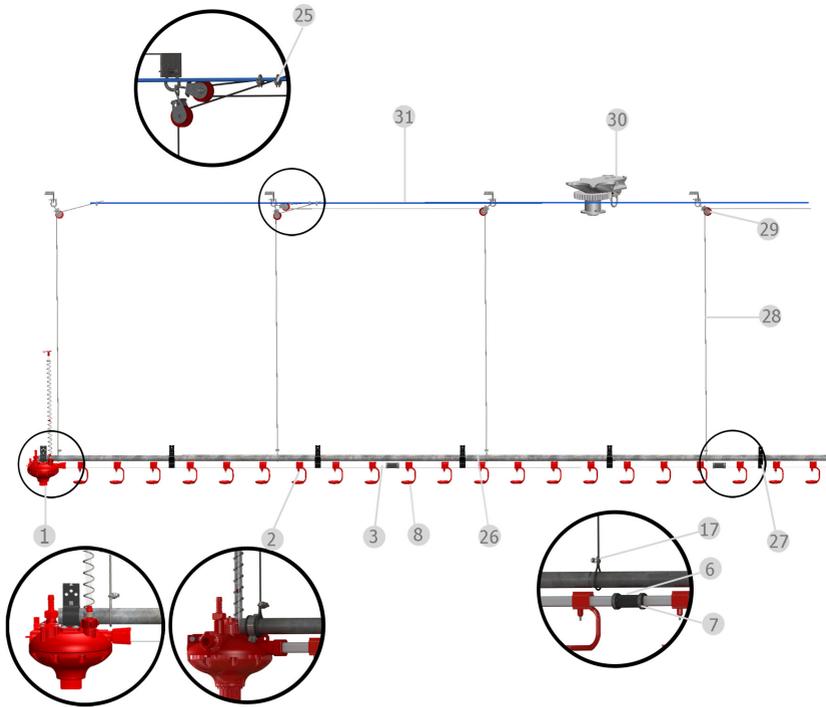
Drawing drinking system



The interval between the suspension points is 3 mtr. When the drinking line is used as a perching bar, the maximal interval between the suspension points is 2.5 mtr.



Drawing drinking system as perching bar



7. Quick operating instructions

During installation:

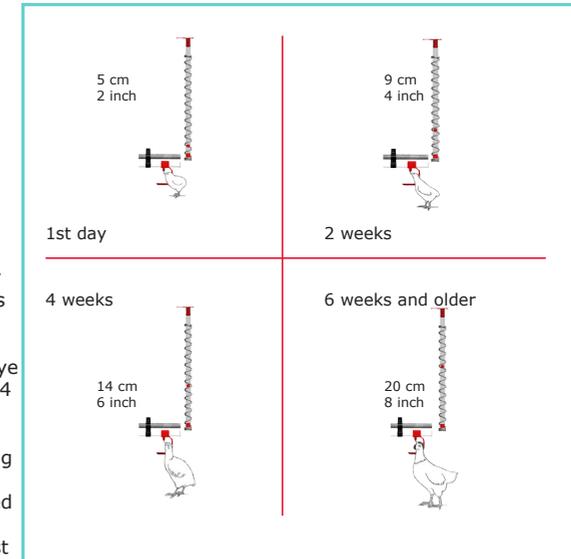
1. During the installation of the drinking system, the house should be clean and clean materials should be used to prevent dirt from entering the drinking system.
2. A main pressure regulator and a filter must be fitted to the main water supply.
3. Do not use aggressive cleaners, such as acid or chlorous cleaners.
4. Make sure that the drinking lines hang level to the floor to avoid air bubbles entering the system.
5. If the floor of the house is not level, a slope regulator set is necessary.
6. After mounting the drinking system, thoroughly flush all the water lines.

Before flock arrival

1. Flush the drinking lines.
2. Check if there is any leakage.
3. Check all the nipples for water supply. The water drop on the nipple activates the birds to drink.
4. Distribute the litter evenly under the drinking lines. Lower the drinking system to the correct height. The cups and nipples must hang freely and not touch the litter.

During flock period

1. It is advised to use chick paper under the drinking lines during the first days with day-old chicks.
2. The nipple height is very important. Initially, the nipple pin should be at eye level of the chicks. Generally, after 3-4 days the birds should drink with their necks stretched. Adjust the height of the drinking system accordingly during the growth period.
3. The water pressure should be adjusted when required (i.e. extremely high temperatures, age of the birds) Adjust the water pressure of the drinking system accordingly during the growth period.
4. When using medicines and/or vitamins, these should be able to dissolve and remain dissolved in the water. Always flush after finishing medicating or using additives.
5. Regularly flushing is advised to maintain healthy and clean drinking water. To achieve this an automatic flushing system is recommended.



Attention:
Settings shown in
illustration are
indicative.

After flock has left

1. Thoroughly clean the system internally and externally. When needed, use disinfection detergent.
2. Touch each nipple during flushing until water comes out. Begin at the end of the line nearest to the pressure regulator and work towards the other end of the drinking line. Give the water enough time to flush the drinking lines.



Innovative
drinking
technology



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