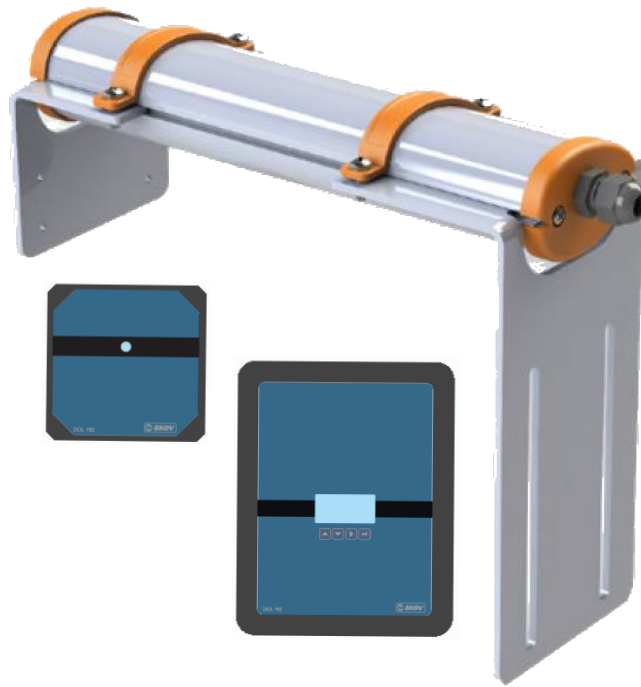


DOL 192 Egg Counter

Technical Info



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1 Product description

The DOL 192 egg counter is intended for automatically counting eggs with an egg diameter of 36-55 mm, on a conveyor belt.

It is designed for touch-free operation, using infrared light. It reduces the risk of eggshell fractures and contamination and ensures an unhampered flow of eggs on the conveyor belt.

DOL 192 egg counter is available in 5 different scan widths (12, 20, 40, 50, and 80 cm) to suit different types of conveyors.

A connection box with and without display is available.

DOL 192 egg counter has an accuracy of at least 99.5% when correctly fitted.

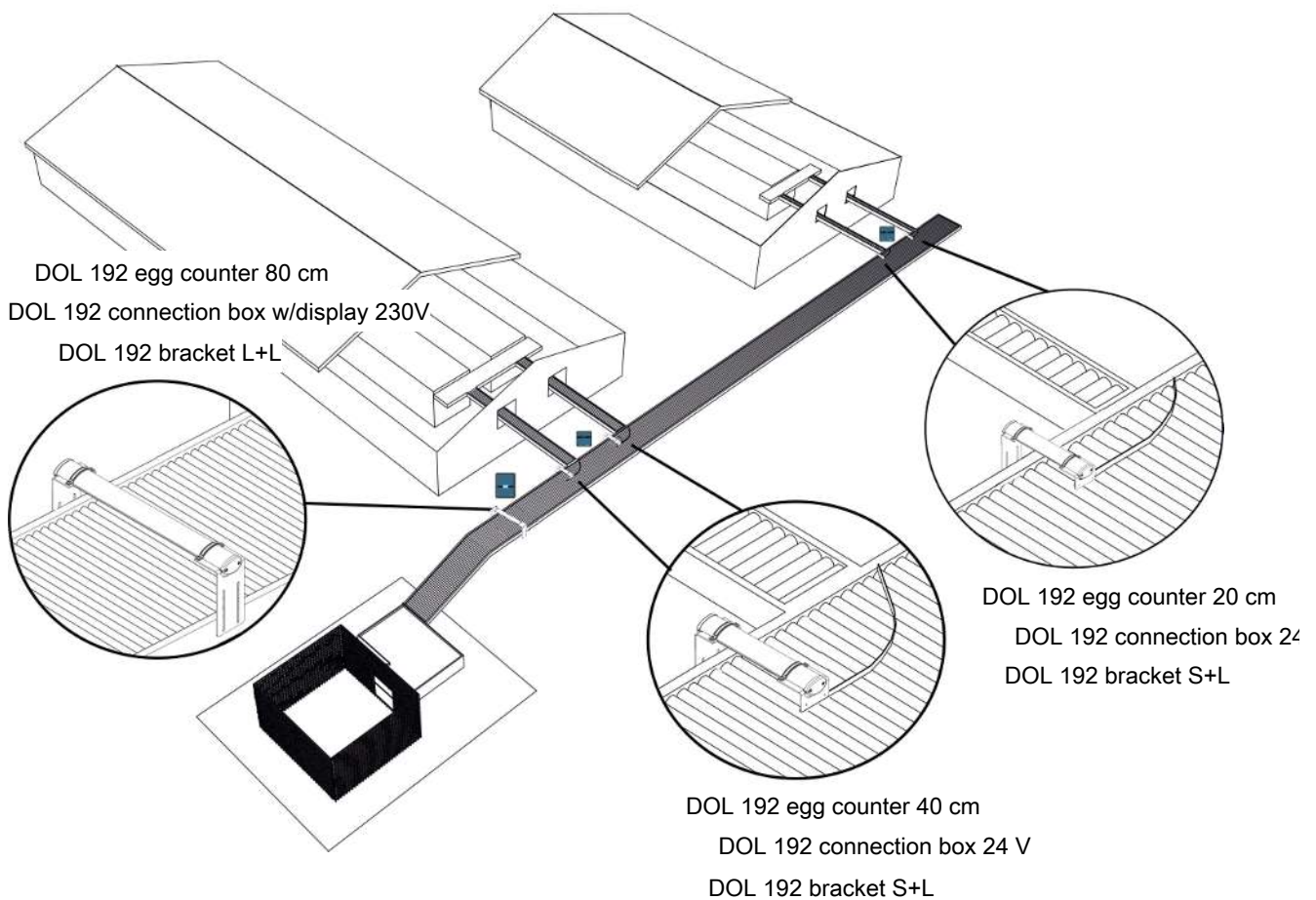
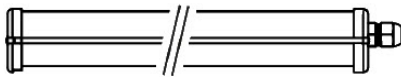


Figure 1: Example of egg counter mounting option.

2 Product survey



130383 DOL 192 egg counter, 12 cm

Scan width 120 mm

130384 DOL 192 egg counter, 20 cm

Scan width 216 mm

130385 DOL 192 egg counter, 40 cm

Scan width 408 mm

130386 DOL 192 egg counter, 50 cm

Scan width 504 mm

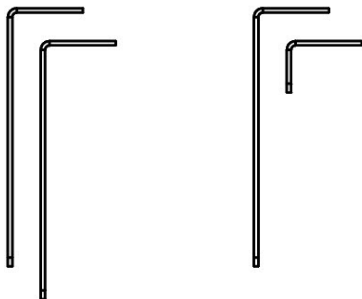
130387 DOL 192 egg counter, 80 cm

Scan width 792 mm

Cable length 2 m

The DOL 192 is suitable for counting eggs on conveyor belts that collect eggs from multiple longitudinal conveyor belts.

Used for counting eggs with an egg diameter of 36-55 mm.



130388 DOL 192 bracket L+L

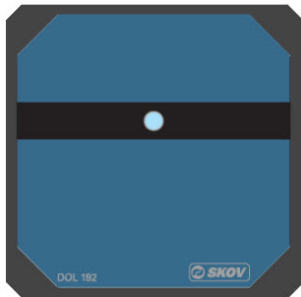
130389 DOL 192 bracket S+L

Brackets with clamps and screws are used for mounting the egg counter.

L+L is used for placement above longitudinal conveyor belts.

S+L is used when egg belt guides are applied on longitudinal conveyor belts.

SKOV A/S does not supply the egg belt guide.

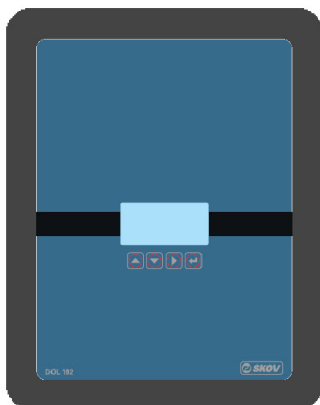


130391 DOL 192 box 24 V f/2 counters

Egg counter connection box that provides data to the production controller.

Up to 2 DOL 192 egg counters can be connected.

Requires external power supply 24 V DC (135752).



130392 DOL 192 box w/display 230 V f/1 counter

Egg counter connection box with a display that provides data to the production controller. The number of eggs can be read locally via the display.

You can connect 1 DOL 192 egg counter.

2.1 Accessories



135752 Power supply 24V, 2.1A in box

Extra power supply.

Voltage 90 – 264 V
Frequency 47-63 Hz
Power 160 VA/ 80 W
Current 0.7 A

Output
Voltage 24 V +/- 10 %
Current 2.1 A



136470 BlueControl extension box 10RL

Extension box with 1 pcs. I/O module, 10RL 8AI 10RL, type 3.

0-10 V input or DOL 12 input or digital input (8)
0-10 V outputs (8)
Relays (10)

Used when more I/O modules are needed than are available in the standard hardware.

The inputs can with a jumper be configured individually for either DOL 12, DI (digital input) for water meters or AI (analog input, 0-10 V).

Includes rubber sleeves and ribbon cable

The controller's standard software/hardware supports 13 I/O modules in total. BlueControl extension box 10RL counts for 1 module



136471 BlueControl extension box 20RL

Extension box with 2 pcs. I/O module, 10RL 8AI 10RL, type 3.

0-10 V input or DOL 12 input or digital input (16)
0-10 V outputs (16)
Relays (20)

Used when more I/O modules are needed than are available in the standard hardware.

The inputs can with a jumper be configured individually for either DOL 12, DI (digital input) for water meters or AI (analog input, 0-10 V).

Includes rubber sleeves and ribbon cable

The controller's standard software/hardware supports 13 I/O modules in total. BlueControl extension box 20RL counts for 2 modules.



- 130183 DOL 100 digital 8I box**
- 130184 DOL 100 digital 16I box**
- 130191 DOL 100 digital 24I box**
- 130192 DOL 100 digital 32I box**

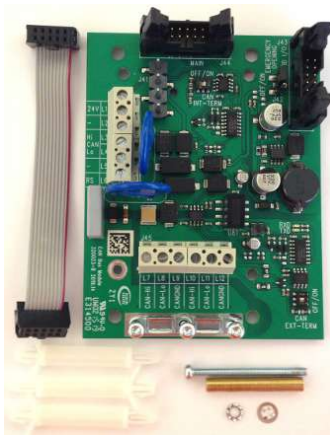
External I/O box for connection of water meter, egg counter, or capacitive sensor.

The DOL 100 converts the signals into digital signals and transmits them to the production controller using CAN bus communication.

The standard software/hardware of the BlueControl series supports 13 I/O modules in total. DOL 100 counts as one module.

0-24 V inputs terminals: 8, 16, 24 or 32.

Is used with the CAN bus module (132245) and a CAN bus cable (130121-130128).



132245 CAN-bus module

Always use the CAN-bus module when using external CAN bus communication.

One for each controller.



- 130121 CAN bus cable 50 m**
- 130125 CAN bus cable 100 m**
- 130126 CAN bus cable 250 m**

For indoor use.

Must be used with external units using CAN bus communication.



- 130123 CAN bus cable UV 50 m**
- 130127 CAN bus cable UV 100 m**
- 130128 CAN bus cable UV 250 m**

For outdoor use.

Must be used with external units using CAN bus communication.

3 Technical data

3.1 DOL 192 egg counter

		DOL 192 12	DOL 192 20	DOL 192 40	DOL 192 50	DOL 192 80
Electrical						
Rated voltage	V DC	24 +/- 20%				
Max. current	RMS A	0.012	0.025	0.053	0.066	0.110
	Peak A	0.05	0.10	0.20	0.25	0.40
Measuring range						
Scan width	mm	120	216	408	504	792
Accuracy	%	99.5				
Egg diameter	mm	36 - 55				
Scan height	mm	From bottom edge of bracket to the top of the egg 30				
Appropriate speed of conveyor belt	m/min	0.3 - 12				
Appropriate conveyor belt		Bar conveyor belt White jute conveyor belt White PVC conveyor belt (with or without holes)				
Environment						
Temperature, operation	°C	0 - 40				
Protection class	IP	54				
Mechanical						
Dimension HxWxD	mm	40x125x60	40x274x60	40x466x60	40x562x60	40x850x60
Weight	g	300	390	610	720	1050
Cable length	m	2				

3.2 DOL 192 box

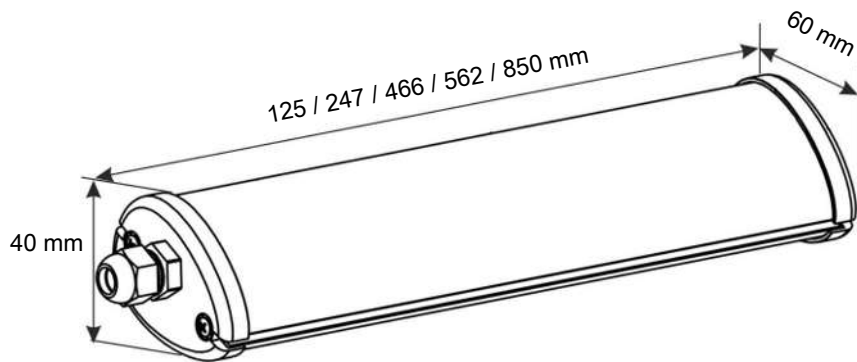
		DOL 192 box 24 V	DOL 192 box w/display
Electrical			
Rated voltage	V DC	24 +/- 20%	
	V AC		100-240
Max. power consumption	A	0.083 + 2 connected egg counter	0.75
Max. power	W	2	30
Standby input			
Standby input level	V DC	24	
Pulse output point			
Open collector transistor			NPN
Egg per pulse	EGGS		1 or 5
Max. pulse per second	Pulse		5
Egg counter			
Max. connected egg counters	pcs	2	1
Environment			
Temperature, operation	°C	0 - 40	
Protection class	IP	54	
Mechanical			
Dimension HxWxD	mm	120x123x55	100x230x310
Weight	g	300	1400

3.3 Maximum number of devices connected to power supply

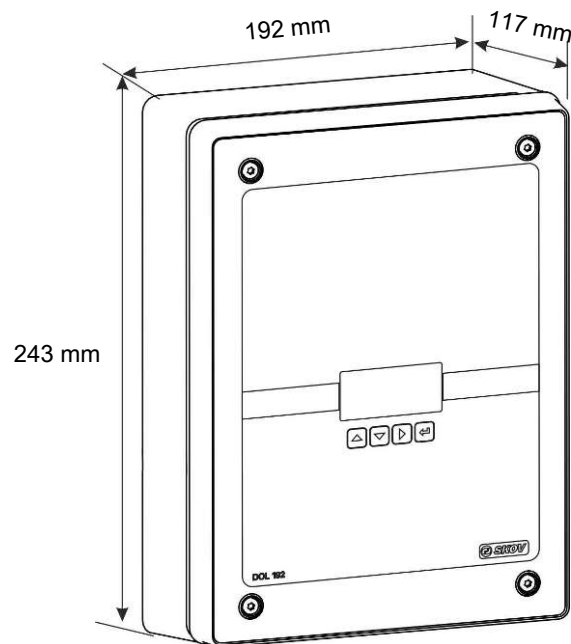
	Power consumption [A]	Max. number of boxes per 2.1A power supply
Power supply 24 V 2.1A in box (135752)		
DOL 192 box 24 V + 2 pcs. DOL 192 12 cm egg counters	0.107	19
DOL 192 box 24 V + 2 pcs. DOL 192 20 cm egg counters	0.133	15
DOL 192 box 24 V + 2 pcs. DOL 192 40 cm egg counters	0.189	11
DOL 192 box 24 V + 2 pcs. DOL 192 50 cm egg counters	0.215	9
DOL 192 box 24 V + 2 pcs. DOL 192 80 cm egg counters	0.303	6

3.4 Dimensioned sketch

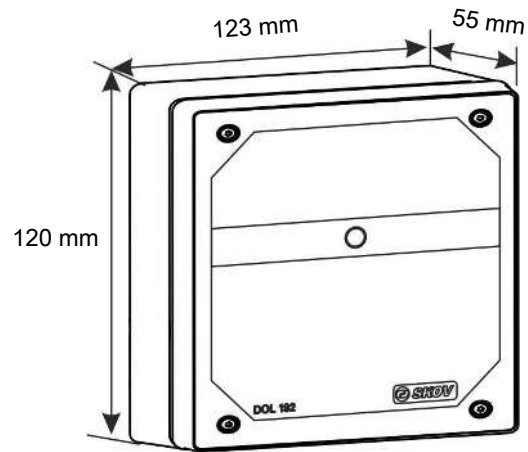
3.4.1 DOL 192 egg counter



3.4.2 DOL 192 box w/display 230 V f/1 egg counter



3.4.3 DOL 192 box 24 V f/2 egg counters



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