



DESCRIPTION

The **DSL35 G** model is a **gravimetric screw feeder**. It is the most universal solution to the problem of feeding both well-flowing, fine-grained loose materials and difficult-flowing, with tendency for rat-holing and bridging. The device is capable to dose in a continuous or batch mode.

The device consists of a **main trough, hopper, and precise scale**. Material flow is generated by feeding tool – screw. Depending on the product characteristics, it is a screw with center rod or a spiral. The product weight loss is constantly measured during operation. Thanks to this operation, it is possible to control the feed rate (screw's rotational velocity) using the PID regulator. The flow of material is supported by horizontal **agitator** powered by a separate electric motor that operates with constant rotational velocity.

Elements that come into contact with material are made of 1.4301 (AISI304) or 1.4404 (AISI316L) stainless steel, while other elements are powder-painted. Internal surfaces and welds may be additionally ground for customers from food and pharmaceutical industries.



FEEDING TOOLS

Full screw - with center rod

Spiral screw - without center rod

Φ(ext. diameter x torque)

- Φ18x9 [mm]
- Φ18x18 [mm]
- Φ25x12,5 [mm]
- Φ25x25 [mm]
- Φ35x17,5 [mm]
- Φ35x35 [mm]



HOPPERS

At least one hopper wall is vertical what facilitates material flow.

Total hopper volume:

- 30 [l]
- 40 [l]
- 65 [l]

manual refill - swing top cover with handle or bag unloading chamber

automatic refill - refill and ventilation inlets



OPTIONS

- Hygienic execution - continuous welds inside and outside of the construction, internal ground surfaces and welds (Ra<0,8μm)
- Vertical outlet pipe
- Shut-off valve for batch dosing material stream
- Execution for Ex-zones
- Hopper with round cross-section with additional vertical agitator (for difficult-flowing and viscous materials)



CONTROL SYSTEMS

For systems feeding in **continuous mode**:

- FLEX

For systems feeding in **batch mode**:

- 1020
- SGM800
- FLEX 2100/FLEX

Control system is located directly on the feeder's construction or separately.



FEED RATES

Turndown ratio:
min: max = **1:10**

Feed error:
±0,5% of set value

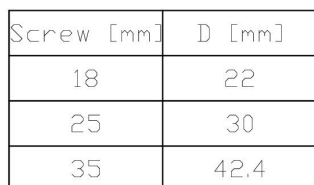
Minimum feed rate: 0,5 [l/h] (full screw 18x9 [mm], 10 [rpm])

Maximum feed rate: 450 [l/h] (spiral screw 35x35 [mm], 250 [rpm])



MOTOR

- **3x400 [V]** SEW AC motor with gear-box, IP65 protection class
- Optionally possible to deliver a **3x500 [V]** AC motor or aseptic.
- The feeding tool's motor is controlled by a **frequency inverter**.





DESCRIPTION

The **DSL75 G** model is a **gravimetric screw feeder**. It is the most universal solution to the problem of feeding both well-flowing, fine-grained loose materials and difficult-flowing, with tendency for rat-holing and bridging. The device is capable to dose in a continuous or batch mode.

The device consists of a **main trough, hopper, and precise scale**. Material flow is generated by feeding tool – screw. Depending on the product characteristics, it is a screw with center rod or a spiral. The product weight loss is constantly measured during operation. Thanks to this operation, it is possible to control the feed rate (screw's rotational velocity) using the PID regulator. The flow of material is supported by horizontal **agitator** powered by a separate electric motor that operates with constant rotational velocity.

Elements that come into contact with material are made of 1.4301 (AISI304) or 1.4404 (AISI316L) stainless steel, while other elements are powder-painted. Internal surfaces and welds may be additionally ground for customers from food and pharmaceutical industries.



FEEDING TOOLS

Full screw - with center rod
Spiral screw - without center rod

Φ(ext. diameter x torque)

- Φ35x17,5 [mm]
- Φ35x35 [mm]
- Φ44x22 [mm]
- Φ44x44 [mm]
- Φ57x28,5 [mm]
- Φ57x57 [mm]
- Φ74x37 [mm]
- Φ74x74 [mm]



HOPPERS

At least one hopper wall is vertical what facilitates material flow.

Total hopper volume:

- 100 [l]
- 200 [l]
- 300 [l]

manual refill - swing top cover with handle or bag unloading chamber

automatic refill - refill and ventilation inlets



OPTIONS

- Hygienic execution - continuous welds inside and outside of the construction, internal surfaces and welds ground (Ra<0,8μm)
- Vertical outlet pipe
- Shut-off valve for batch dosing material stream
- Execution for Ex-zones
- Hopper with round cross-section with additional vertical agitator (for difficult-flowing and viscous materials)
- Sack discharging chamber with possibility of connecting a dust removal system (for the 300 [l] hopper)



CONTROL SYSTEMS

For systems feeding in **continuous mode**:

- FLEX

For systems feeding in **batch mode**:

- 1020
- SGM800
- FLEX 2100/FLEX

Control system is located directly on the feeder's construction or separately.



FEED RATES

Turndown ratio:
 min: max = **1:10**

Feed error:
 ±0,5% of set value

Minimum feed rate: 7 [l/h] (full screw 35x17,5 [mm], 10 [rpm])

Maximum feed rate: 5000 [l/h] (spiral screw 74x374 [mm], 250 [rpm])

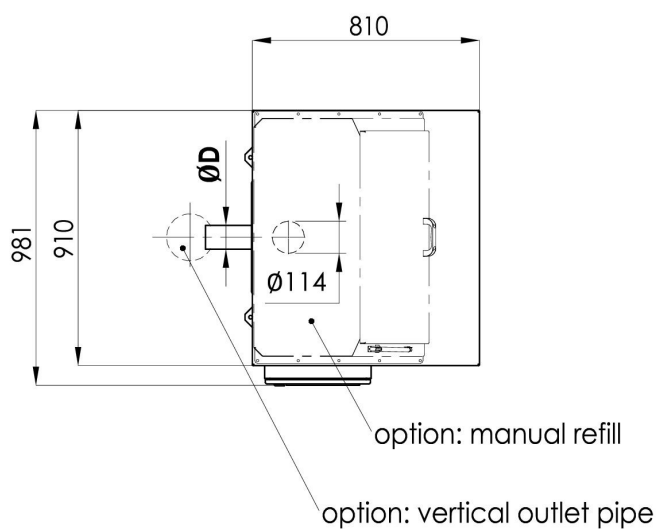
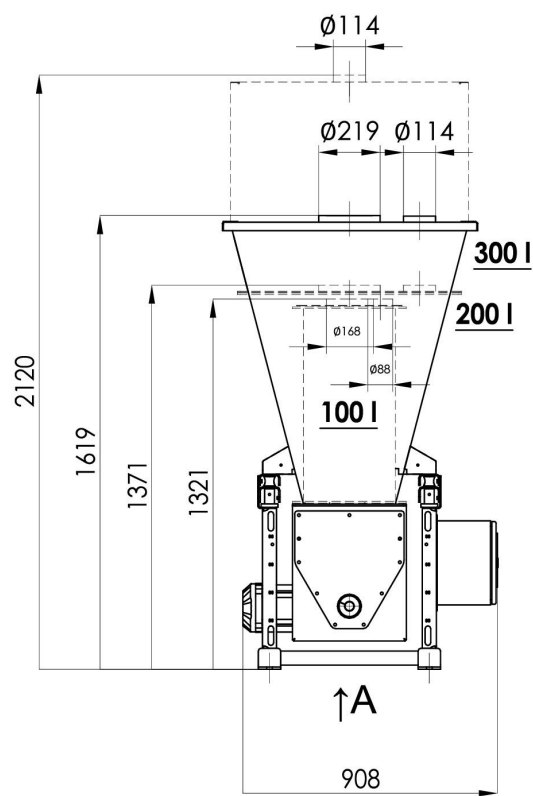
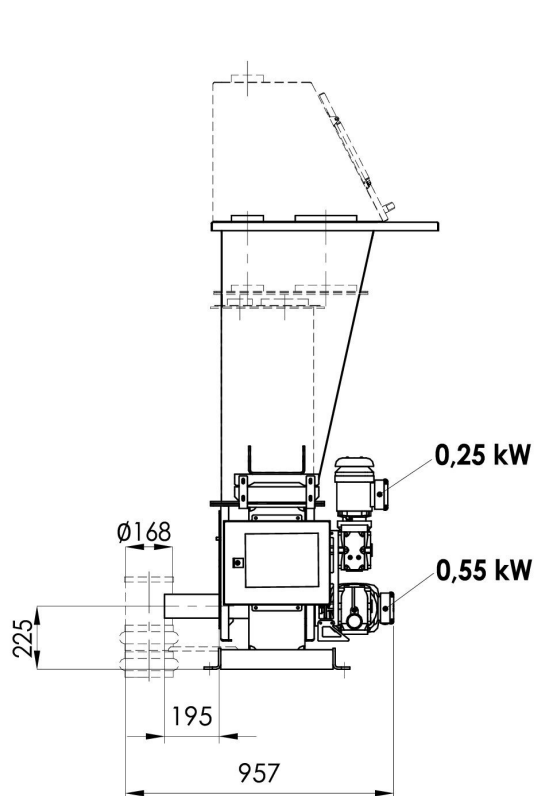


MOTOR

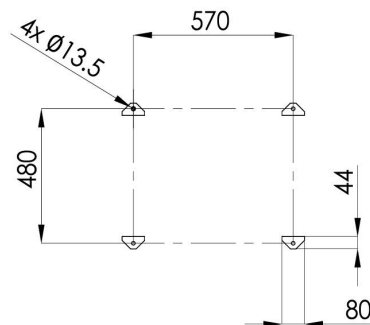
- **3x400 [V]** SEW AC motor with gearbox, IP65 protection class
- Optionally possible to deliver a **3x500 [V]** AC motor or aseptic.
- The feeding tool's motor is controlled by a **frequency inverter**.



DIMENSIONS



A



Screw [mm]	D [mm]
35	42.4
44	50
57	63.5
74	85



DESCRIPTION

The **DSL150 G** model is a **gravimetric screw feeder**. It is the most universal solution to the problem of feeding both well-flowing, fine-grained loose materials and difficult-flowing, with tendency for rat-holing and bridging. The device is capable to dose in a continuous or batch mode.

The device consists of a **main trough, hopper, and precise scale**. Material flow is generated by feeding tool – screw. Depending on the product characteristics, it is a screw with center rod or a spiral. The product weight loss is constantly measured during operation. Thanks to this operation, it is possible to control the feed rate (screw's rotational velocity) using the PID regulator. The flow of material is supported by horizontal **agitator** powered by a separate electric motor that operates with constant rotational velocity.

Elements that come into contact with material are made of 1.4301 (AISI304) or 1.4404 (AISI316L) stainless steel, while other elements are powder-painted. Internal surfaces and welds may be additionally ground for customers from food and pharmaceutical industries.



FEEDING TOOLS

Full screw - with center rod
Spiral screw - without center rod

Φ(ext. diameter x torque)

- Φ74x37 [mm]
- Φ74x74 [mm]
- Φ89x44,5 [mm]
- Φ89x89 [mm]
- Φ127x63,5 [mm]
- Φ127x127 [mm]
- Φ150x75 [mm]
- Φ150x150 [mm]



HOPPERS

The geometry of the hoppers facilitates material flow.

Total hopper volume:

- 400 [l], diameter Φ850 [mm]
- 600 [l] diameter Φ850 [mm]
- 1200 [l] diameter Φ1200 [mm]
- 1800 [l] diameter Φ1200 [mm]
- 2400 [l] diameter Φ1200 [mm]



OPTIONS

- Hygienic execution - continuous welds inside and outside of the construction, internal ground surfaces and welds (Ra<0,8μm)
- Vertical outlet pipe
- Shut-off valve for batch (feed) dosing material stream
- Execution for Ex-zones
- Additional (vertical) agitator



CONTROL SYSTEMS

For systems feeding in **continuous mode**:

- FLEX

For systems feeding in **batch mode**:

- 1020
- SGM800
- FLEX 2100/FLEX

Control system is located directly on the feeder's construction or separately.

Control cabinet location: right or left



FEED RATES

Turndown ratio:
min:max = **1:10**

Feed error:
±0,5% of set value

Minimum feed rate: 70 [l/h] (full screw 74x37 [mm], 10 [rpm])

Maximum feed rate: 30 000 [l/h] (spiral 150x150 [mm], 200 [rpm])



MOTOR

- **3x400 [V]** SEW AC motor with gear-box, IP65 protection class
- Optionally possible to deliver a **3x500 [V]** AC motor or aseptic.
- The feeding tool's motor is controlled by a **frequency inverter**.



DIMENSIONS

