



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]
- Ф44x22 [mm]
- Φ44x44 [mm]
- Φ57x28,5 [mm]
- Φ57x57 [mm]
- Φ74x37 [mm]
- Ф74x74 [mm]



## **HOPPERS**

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

Total hopper volume:

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

**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)</li>
- 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 difficultflowing and viscous materials)
- Sack discharging chamber with possibility of connecting a dust removal system (for the 300 [I] 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])

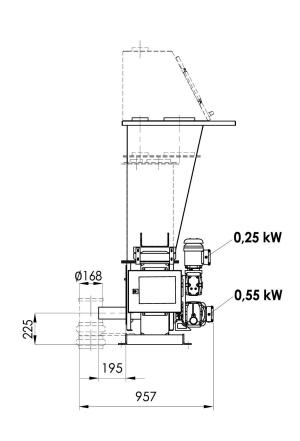
Maximum feed rate: 5000 [l/h] (spiral screw 74x374 [mm], 250 [rpm])

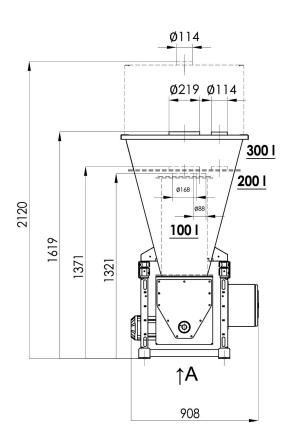


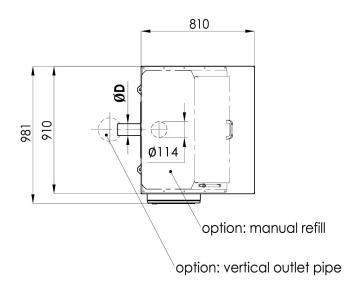
## **MOTOR**

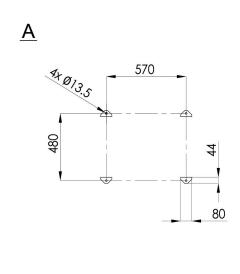
- 3x400 [V] SEW AC motor with gearbox, IP65 protection class
- Optionally possible to deliver a 3x500
  [V] AC motor or aseptic.
- The feeding tool's motor is controlled by a frequency inverter.











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