

# CSS-F

## Discharge units

Productivity.  
Robustness.  
Usability.



### BUSS Single Screw Discharge CSS-F – Precise pressure build-up and reliable product discharge

The CSS-F reliably builds up the pressure required for **filtration and pelletizing** and ensures constant conditions thanks to its **adjustable temperature zones** and **temperature-controlled screw**. Together with integrated **degassing**, which reliably removes gases and volatile components, the CSS-F thus ensures high compound quality. For service purposes, the CSS-F can be easily disconnected and cleaned thanks to its **detachable flange connection and roll-out system**.

With its robust design, high-quality materials, and maintenance-friendly construction, the CSS-F offers high availability with minimal effort. Thanks to adaptable interfaces, it can be seamlessly integrated into **BUSS** as well as **other compounding lines**. The CSS-F series covers a throughput range of approx. **50 to 7,000 kg/h**, making it suitable for a wide range of applications.

#### Product features & customer benefits

- ✓ Secure pressure build-up for filtration and pelletizing thanks to **single-screw discharge unit with direct flange coupling**
- ✓ Consistent product quality thanks to **controllable temperature zones and temperature-controlled screw**
- ✓ Higher material purity thanks to **integrated degassing for gases and volatile components**
- ✓ Process reliability without component damage even when processing powders thanks to **robust single-screw principle**
- ✓ Longer residence time and higher effective volume for **stable material flow even with challenging formulations**
- ✓ Easier cleaning and shorter downtimes thanks to **roll-out system and fully accessible screw**
- ✓ High availability and low operating costs thanks to **maintenance-friendly, virtually maintenance-free design**

#### Advantages over gear melt pumps

- ✓ Safe processing even of powdery materials without risk of gearwheel damage thanks to **robust screw technology**
- ✓ Higher product quality thanks to **integrated degassing**, whereas gear melt pumps do not allow degassing
- ✓ Quick cleaning thanks to **screw accessibility** instead of complete disassembly of pumps
- ✓ Lower maintenance costs thanks to **low-wear screw solution** compared to bearing and gear wheel wear



**BUSS**

excellence in compounding

# COMPEO Single Screw Flanged CSS-F

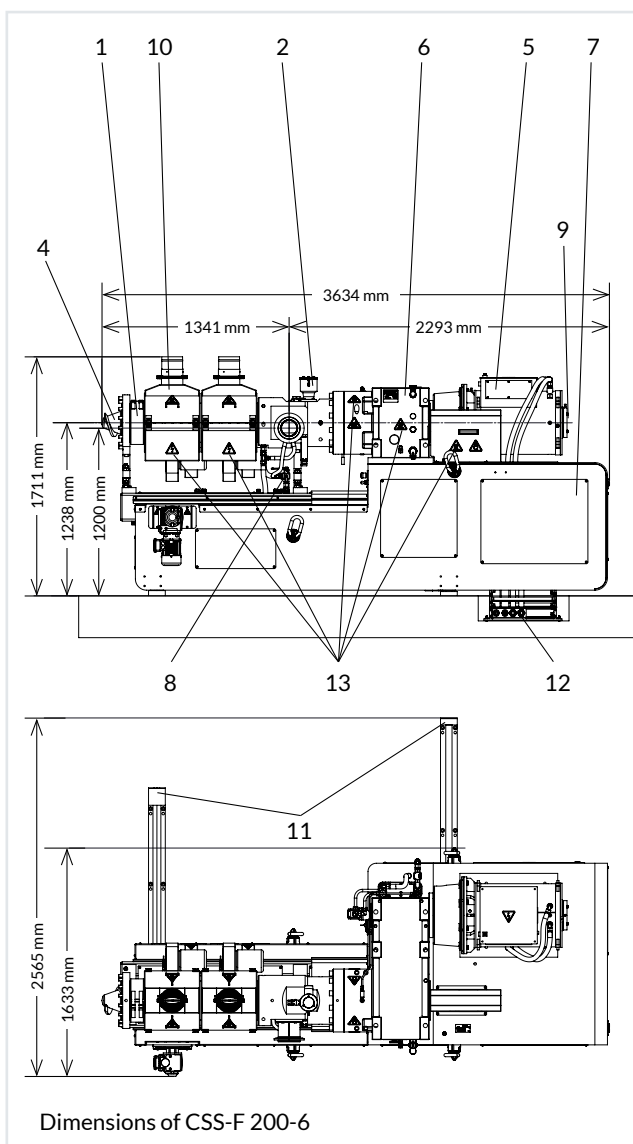
## Stand-alone features

- ✓ Flexible integration into **BUSS** and other compounding lines through **adaptable interfaces**
- ✓ Energy-efficient operation with precise control thanks to **variable-frequency drive (VFD)**
- ✓ Safe and fast coupling via well-designed **guided mobility mechanism**

## Dimensions & Components

### Components

- 1 Barrel
- 2 Degassing
- 3 Vacuum line (not shown)
- 4 Screw
- 5 Drive unit
- 6 Gearbox
- 7 Base frame
- 8 Temperature fluid lines
- 9 Shaft heating/cooling
- 10 Heating and cooling combination
- 11 CSS roll-out unit
- 12 Barrel roll-out carriage
- 13 Protective installation



## Overview of CSS-F sizes & technical data

	COMPEO LAB	COMPEO 55	COMPEO 88	COMPEO 110	COMPEO 137	COMPEO 176
Types	CSS-F 70-6	CSS-F 110-6	CSS-F 160-6	CSS-F 200-6	CSS-F 250-6	CSS-F 300-6
Power	5,5 kW	15 kW	45 kW	75 kW 90 kW	160 kW	280 kW 500 kW
Speed	70 rpm	55 rpm	60 rpm	50 rpm 65 rpm	55 rpm	55 rpm 95 rpm
Screw Diameter (rounded to size)	70 mm	110 mm	160 mm	200 mm	250 mm	300 mm