

Mini-Feed Series

Single Phase Hopper Loader
Vacuum conveying of free-flowing granules



Labotek
Power in Plastics

Mini-Feed Series

Introduction

The Mini-Feed is used for automatic conveyance of free-flowing, granule-formed raw material (min. grain size of 3 mm).

The compact design makes the Mini-Feed suitable for mounting on all minor and medium sized production units. Especially where weight and size of the conveyor are of crucial importance.

The Mini-Feed is constructed in stainless steel to ensure a long lifetime and minimize cleaning.

Mini-Feed series offers...

- Compact, functional design, easy to clean
- Conveyance of 15 to 120 kg/h
- Low noise level <69 dB
- Alarm function for material shortage
- All material contact points in stainless steel, AISI 304
- Proportioning valve, optional
- Max. conveyed material temperature up to 80°C
- Up to 3 years warranty, excluding wear parts

Mini-Feed is equipped with a gravimetric filter which with help of vacuum is sucked up below the motor house. The filter falls down and is cleaned when the vacuum disappears. The bottom flap is mounted with a magnet for position marking, is weight-loaded, and is flexibly suspended to the hopper outlet. This implies that adjustments to the bottom flap are not necessary. A compressed air filter cleaning kit is fitted to Mini-Feed 120 BL as standard, however, is optional for Mini-Feed 15-60.

Control unit

The Mini-Feed is operated via a microprocessor control unit, with a flowchart display of operating status and user-friendly control symbols. The Mini-Feed control has 3 basic standard conveying programs.

P1 Standard conveyance

In program P1, the Mini-Feed will perform timed conveying from pick-up point to production machine. Sequence is controlled via built-in level sensor, as soon as material volume in buffer below Mini-Feed has dropped, the bottom flap will close and the Mini-Feed will start a new conveying cycle.

P2 Conveying from Grinder

In program P2, the Mini-Feed will perform timed conveying from the grinder to the production machine. The time interval between conveying cycles is adjustable to ensure that the material level below the grinder is reached. Mini-Feed will



convey a single cycle and return to an interval pause until a new material reservoir has been established.

P3 Conveying with Optional proportioning valve

In program P3, the Mini-Feed will perform timed conveying from grinder and material pick-up point to production machine. The proportioning of two materials allows virgin & regrind materials to be conveyed in proportions, consequently regrind material will be added in % to the virgin material.

Alarms

E1. Excess temperature motor >65°C. The alarm is indicated on display, on the alarm lamp, and the machine will stop.

E2. Error function in motor (brush*, cable connection parts, etc.). The alarm is shown on the display, on the alarm lamp, and the machine will stop.

*) Only Mini-Feed 15-60

Conveying alarm

If the Mini-Feed has performed more conveying cycles without additional material, it will go into conveying alarm.

The alarm lamp flashes and Mini-Feed retains a compulsory pause of 10 minutes after which renewed conveying is attempted.



Technical Data

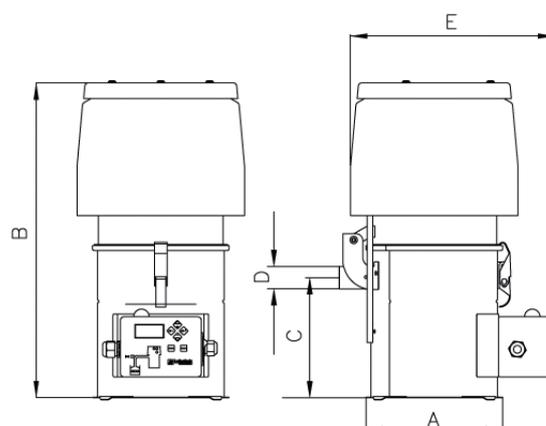
Type	Mini-Feed 15	Mini-Feed 30	Mini-Feed 60	Mini-Feed 120 BL
Supply Voltage	220-240 V 50/60 Hz, 110/115 V 60 Hz			
Power consumption [kW]	1.0	1.0	1.0	1.1
Compressed air connection [Bar]	5-7	5-7	5-7	5-7
Motor power [kW]	0.8	0.8	0.8	1.1
Volume [liters]	1.9	2.9	5.8	5.8
Capacity* [kg/h]	15	30	60	120
Noise level [dBA]	<69	<69	<69	<69
Max. room temperature [°C]	35	35	35	35
Conveying hose, inner Ø [mm] / length [m]	32 / 3	32 / 3	32 / 3	32 / 3
Suction probe, inner Ø [mm] / [pcs]	32 / 1	32 / 1	32 / 1	32 / 1
Supply cable [m]	5	5	5	5
Net weight [kg]	8.4	8.6	9.1	~ 10
Shipping volume [m³]	0.12	0.12	0.12	0.12
Shipping dimensions [mm]	86 x 42 x 32	86 x 42 x 32	86 x 42 x 32	86 x 42 x 32

*) The capacity is dependent on material and conveying distance, both horizontal and vertical. The capacities indicated in the table are obtained by conveying granules with a bulk density of 0.65 kg/l, a granular size of 3-4 mm, and a maximum conveying distance of 5 meters horizontal and 5 meters vertical. The stated capacities are guidelines only, as these will depend on the particular materials.

Dimensions

Dimensions	A	B	C	D	E
Mini-Feed 15	203	451	172	Ø 32	290
Mini-Feed 30	203	492	213	Ø 32	290
Mini-Feed 60	203	588	308	Ø 32	290
Mini-Feed 120 BL	203	588	308	Ø 32	290

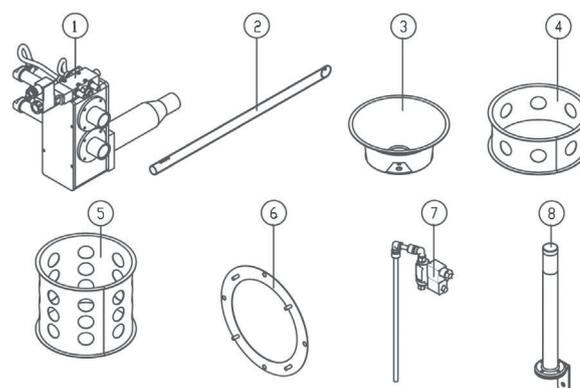
All measurements are in mm.



Options

The Mini-Feed is prepared for a number of options to ensure optimal treatment of the material being processed.

Pos.	Description	LT no.
1	Ratio-Selector, RS2000, incl. suction probe Ø 32 mm and 3 m hose	101250
2	Suction probe, Ø 32 mm, Stainless steel, Telescopic	407031
3	Material hopper Ø 194 / Ø 45, AISI304	205962
4	Transparent buffer, 2 liter	201756
5	Transparent buffer, 4 liter	201919
6	Adaptor flange, Mini-Feed / SVR	220029
7	Compressed air filter cleaning incl. base filter, kit	203950
8	Warning lamp, orange/blinking, with bracket, 5 mtr. cable	207783
	Kit, separate control MF 15-120, 5 m	208090



**3 years
warranty**

Labotek offers 3 years warranty
- excluding Mini-Feed 15-60 & wear parts

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