LOSS-IN-WEIGHT GRAVIMETRIC FEEDERS RBP

POWDERY OR SLIGHTLY GRANULAR MATERIAL

- Accuracy: ± 0,5 %
- Flow range from 12 l/h to 14 m³/h
- Accuracy consistency
- Entirely tight system : no environmental impact
- Low maintenance
- No need for drop tests
- Few wear parts
- Manual or automatic refill

DOSING :
Ground Slag, Anhydrite,
Silicium Fumes, Coke fines,
Plaster, Starch, Filter Dust,
Cement, lime, etc.

RBP

- Horizontal stirrer in lower part that ensures material homogeneity. (Option: vertical stirrer for poor flowing products)
- Bearing at screw outlet for a better centering in the tube (less cantilever).
- Enforced tightness by glands, chicanes, and 4 teflon braids.
- Inspection door in lower part for eventual replacement of horizontal stirrer without dismantling the whole feeder.
- Execution: Steel S235-JRG2, stainless steel 304 and 316

Function:

The feeders work using the principle of controlled Loss-In-Weight.
The hopper with its extraction device (screw) is installed on a weighing system giving continuously to the controller the measure of weight.
The loss of weight by time unit (measuring sampling time) represents the actual proportioning flow rate.

Regulation:
The controller compares the actual measured flow to the setpoint and calculates the drive command signal to be sent to the screw speed controller.

The corrective actions made are saved and reflect the volumetric behaviour of the system.

Refill:
The continuous measure of weight in the hopper allows, according to two configurable thresholds (high and low), to manage the refill system(s) feeding the hopper.

During this refill phase, the screw speed is controlled according to its volumetric efficiency, memorized during the previous controlled emptying phase(s).

Controller:

The flowrate at the feeder discharge point is maintained constant by electronic controller SCM2* at the setpoint value.

Detailed alarm informations are obtained via the display (SDU)

** SCM2: Field or Panel version:*
doc : SCM2-F.260.001-E. or SCM2-P.260.001-E.

SCM2-Panel

SCM2-Field

SDU

Options:

Vertical stirrer
Forced fan P>0,55 kW
Inlet counter flange
Outlet counter flange
Digital load cells
High level probe
Junction box for motor
Support feet
Feeding gate

ATEX Version

Feeding examples:

(~ 10 time of the max flow rate)
Gravitational
Vibrating float,
Fluidized float
Flow control gate,
Archimedean screw,
«Big bag» emptying station, etc.

Dimensions and flow range

RB	P	34-68	100-250
model	gravimetric	Ø screw	hopper capacity

Dimensions / Weight

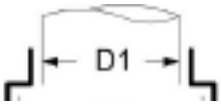
Hopper capacity	Dim. «A» (mm)	Total feeder weight
100 L	706	~ 247kg
150 L	827	~251 kg
250 L	1092	~260 kg

Weight of frame: 57 kg

Inlet bellows

Ø Total feeder weight	D1	D2
Ø 150	156	206
Ø 200*	206	256

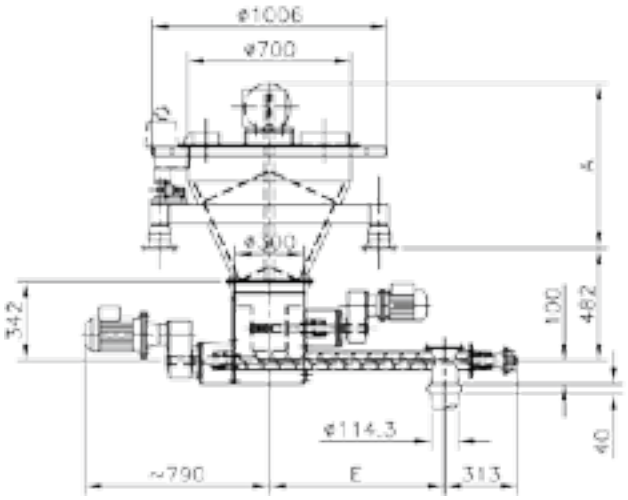
D1: Ø outlet feeding system
D2: Ø inlet weighing hopper RBP
* except with vertical stirrer



Theoretical values of flow rate / Distance inlet / outlet (screw)

Ø screw	Max Flow in dm³ /h	Min Flow in dm³ /h	Screw speed max./min. (rpm)	Dimension «E» (mm)			
Ø 34	500	12	408/10	550	650	-	-
Ø 52	1200	47	256/10	550	650	750	-
Ø 68	3100	120	257/10	-	-	750	850

Flow range: 10 to 100% of nominal. If flow <100 kg/h: SFT loadcells Screw filling ratio: 90%



RB	P	80-150	250-1000
model	gravimetric	Ø screw	hopper capacity

Dimensions / Weight

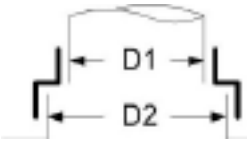
Hopper capa-city	Dim. «A» (mm)	Total feeder weight
250 L	788	~ 385 kg
500 L	1116	~419 kg
750 L	1446	~443 kg
1000 L	1776	~469 kg

Weight of frame: 90 kg

Inlet bellows

Ø Inlet D1 D2	D1	D2
Ø 150	168	206
Ø 200	219	256
Ø 300	324	356

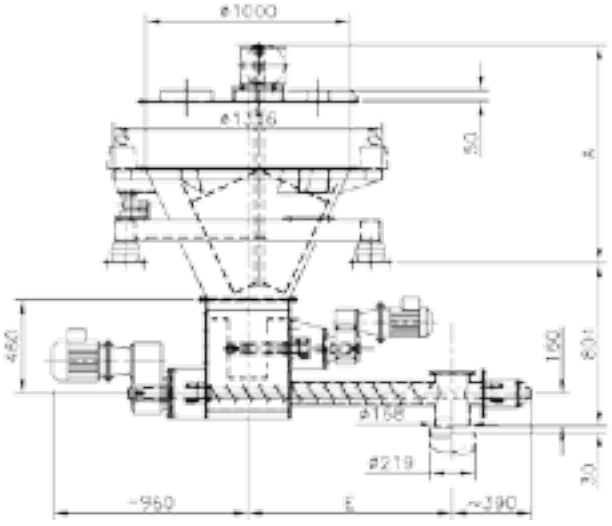
D1: Ø outlet feeding system
D2: Ø inlet weighing hopper RBP



Theoretical values of flow rate / Distance inlet / outlet (screw)

Ø screw	Max Flow in dm³ /h	Min Flow in dm³ /h	Screw speed max./min. (rpm)	Dimension «E» (mm)			
Ø 80	4000	200	197/10	800	1000	-	-
Ø 100	7000	430	163/10	800	1000	1200	-
Ø 125	10000	810	123/10	-	1000	1200	1400
Ø 150	14000	1400	98/10	-	1000	1200	1400

Flow range: 10 to 100% of nominal Screw filling ratio: 90 %



HASLER Group
Headquarter
Zi de l'abbaye
38780 PONT-EVEQUE - France

Tel. +33 (0)4 74 16 11 50
Fax +33 (0)4 74 16 11 55
E-mail: sales.fr@hasler-gp.com

All our addresses on:
www.hasler-int.com