

VBC-D/S 1000 - 1250

The vertical scraper centrifuges of the type VBC-D/S work discontinuously, the solids are discharged vertically downwards.

The application range includes primarily production applications in the demanding pharmaceutical industry.

The cover or the cover together with the housing can be completely opened for inspection of the process area and the internals. The swivel open housing facilitates and improves inspection considerably.

The three-phase asynchronous motor is designed as direct drive (attached directly to the basket shaft) and is water cooled. This design saves having to mount an external motor as well as a belt drive for speed transmission.



Design features

- Robust design according to the latest GMP guidelines
- Optimally designed functional devices for efficient and reliable process cycles with low vibrations
- Drive motor as direct drive at the basket shaft
- Optional clean room design using membrane connection
- Scraper unit over the entire basket height or optionally with vertical movement (depending on product properties)
- Systems for effective residual heel removal
- CIP system, process area optionally floodable
- Compact dimensions
- Suitable for Zone 1 (according to RL 94/9/EG)

VBC	1000/500	1000/630	1250/630	1250/800	
Basket diameter	1'000	1'000	1'250	1'250	[mm]
Basket opening	700	700	875	875	[mm]
Basket height	500	630	630	800	[mm]
Filter surface	1.57	1.97	2.47	3.14	[m ²]
Useful volume (100%)	200	252	394	500	[dm ³]
Max. load (100%, ρ 1'250 kg/m ³)	250	315	493	626	[kg]
Max. rotor speed	1'200	1'200	950	950	[min ⁻¹]
Max. G force	805	805	631	631	[g]
Centrifuge weight (without load)	2'600	2'700	3'450	3'600	[kg]
Basket weight (1.4404)	385	425	630	695	[kg]
Motor power for main drive	15.0	15.0	18.5	18.5	[kW]
Motor power for feed and wash disk ¹	3.0				[kW]

Basic equipment

Vibration dampers. Hydraulic unit with electrically or pneumatically actuated valves. Robust bearing (temperature monitored). Drive with frequency controlled three-phase asynchronous motor as direct drive. Welded swivel open housing, hydraulically actuated. Basket. Scraper unit over entire basket height. Lateral feed pipe. Lateral wash pipe.

Optional equipment

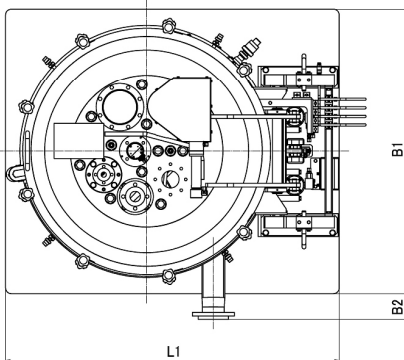
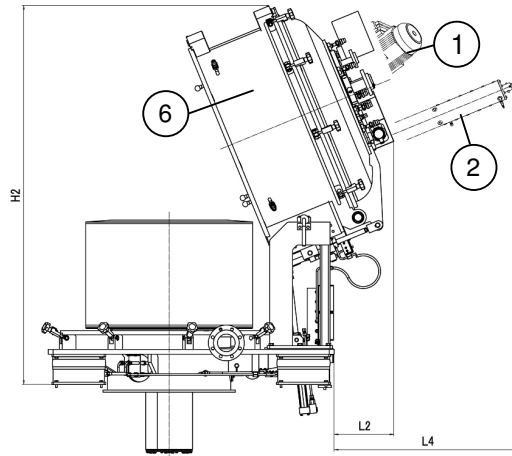
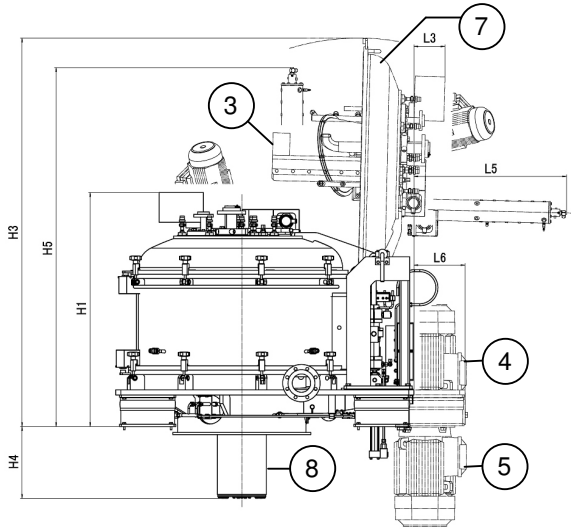
Bearing control (vibrations). Drive with frequency controlled three-phase asynchronous motor positioned above or below the base plate. Swivel open cover and housing, hydraulically actuated. Scraper unit with vertical movement. Residual heel removal Resomat (from outside) 1 or 3 rows, 1 or more chambers. Residual heel removal Blossomat (from inside, only with scraper unit with vertical movement). Fill level control. Discharge cone. Filtrate outlet with compensator and/or sight glass. Inclined feed and wash disk with feed and wash pipe. CIP (welded or flanged). Inertisation system InertoSafe[®] (Basic, ATEX or SIL 2). Oxygen analysers. Pressure relief valve and siphon. Manually or pneumatically actuated valves. Lifting device (basket).

Automation

See separate data sheets

¹ Option

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- 1 Inclined feed and wash disk (Option)
- 2 Scraper unit with vertical movement (Option)
- 3 Scraper unit over entire basket height (Standard)
- 4 Motor on outside, positioned above base plate (Option)
- 5 Motor on outside, positioned below base plate (Option)
- 6 Swivel open housing (Standard)
- 7 Swivel open cover (Option)
- 8 Motor as direct drive (Standard)

VBC	1000/500	1000/630	1250/630	1250/800	
L1	1'750	1'750	2'150	2'150	[mm]
L2	365	365	450	450	[mm]
L3 (excess length fill level control)	185	185	200	200	[mm]
L4 (scraper unit with vertical movement)	1'125	1'125	1'400	1'400	[mm]
L5 (scraper unit with vertical movement)	900	900	1'250	1'250	[mm]
L6 (excess length motor on outside)	300	300	300	300	[mm]
B1	1'500	1'500	1'740	1'740	[mm]
B2 (excess length outlet)	135	135	135	135	[mm]
H1	1'250	1'380	1'450	1'620	[mm]
H2	2'200	2'330	2'750	2'920	[mm]
H3	2'155	2'285	2'690	2'860	[mm]
H4 (direct drive)	425	425	425	425	[mm]
H5 (scraper unit with vertical movement)	1'985	2'115	2'520	2'690	[mm]
Design pressure	300 ²				[mbarg]
Operating pressure	4 - 20				[mbarg]
Gas tightness	40 mbarg according to DIN 24400				[mbarg]
Product temperature range	0 - 80				[°C]
Max. allowable bearing temperature	95				[°C]
Ambient temperature	0 - 40 ³				[°C]

² Other pressure ranges upon request
³ Other temperature ranges upon request