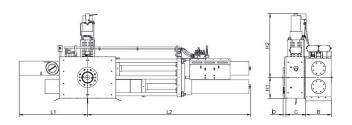
# BKG<sup>®</sup> HiCon<sup>™</sup> V-Type 3G Double Piston Backflush Screen Changer for Continuous Operation with Power Backflush Technology

Normal operation:
Backflushing:
Screen change:
Reservoir filling:

4 screen cavities (100%) in the process 3 screen cavities (75%) in the process, 1 screen cavity (25%) in backflush position 3 screen cavities (75%) in the process, 1 screen cavity (25%) in change position 4 screen cavities (100%) in the process

The BKG<sup>®</sup> HiCon<sup>™</sup> V-Type 3G is suitable for almost all processes and materials. It is used in processes with a high demand for pressure consistency (e.g. strap, film, fiber) as well as in processes with insufficient back pressure for backflushing (e.g. strand pelletizing). It is also suited for processes with a high proportion of contaminates (e.g. recycling). The system enables a continuous operation without any system shutdowns during screen change.





#### **Features**

- Patented highly efficient backflushing through integrated POWER BACKFLUSH technology
- With the patented 4K-75-technology, three screen cavities (75%) remain available for filtration at all times during the process steps "backflush" and "screen change"
- Optimized flow channel geometries (free of dead zones)
- Wear-free metallic sealing system no additional seal required
- Easily integrated into the line controls

### **Benefits**

- All process steps are performed pressure- and volume-constant
- Patented POWER BACKFLUSH technology ensures highest efficiency and operates independently of the extrusion pressure
- Fully automated backflushing and venting procedure reduces operator intervention to a minimum
- Up to 200 backflushing cycles allow for a significant reduction in operating cost
- Four screen cavities provide a large filtration area in a comparably small housing, with only minimal backflushing amounts during the self-cleaning

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Machine Type	Extruder Output	Screen Changer Dimensions						Screen		Weight	
	[kg/h]*	L1	L2	в	с	D	H1	H2	Ø [mm]	[cm <sup>2</sup> ]	[kg]
V-Type 125 - 3G	450-750	689	1681	270	230	60	219	711	125.0	4x122	1230
V-Type 160 - 3G	500-1200	819	1966	310	260	60	259	847	148.3	4x172	1800
V-Type 180 - 3G	650-1400	952	2304	380	320	60	294	933	176.3	4x244	2950
V-Type 200 - 3G	800-1800	1068	2582	410	350	60	329	1038	200.0	4x314	4020
V-Type 250 - 3G	1300-2500	1203	2893	460	390	60	369	1134	230.3	4x415	5850
V-Type 280 - 3G	2000-3000	1349	3202	500	390	60	409	1254	250.0	4x490	7450
V-Type 300 - 3G	3500-5500	1467	4119	580	440	60	454	1371	270.0	4x572	10150
V-Type 320 - 3G	4000-7000	1780	4119	640	440	60	509	1596	320.0	4x804	14050
V-Type 380 - 3G	6000-11000	1854	4219	695	440	60	539	1606	340.0	4x908	16750

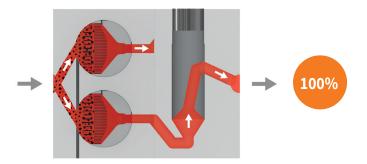
\* The throughput values are only estimates. The actual rates are dependent upon the viscosity of the material, filter mesh, application and the contamination level of the material; therefore, the values may differ depending upon the actual process parameters.

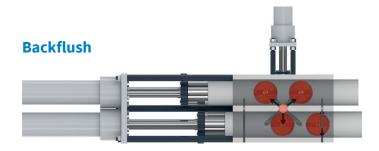
## BKG<sup>®</sup> HiCon<sup>™</sup> V-Type 3G Double Piston Backflush Screen Changer for Continuous Operation with Power Backflush Technology

### **Normal operation**



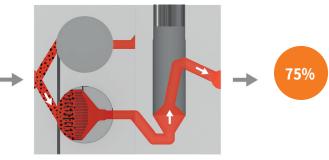
The heated steel housing allows for two screen bearing pistons, positioned transversely to the melt stream, and containing two screen cavities each per piston. The melt flow is subdivided into four flow paths, directed through each of the four screen cavities, and reunited after filtration at the material outlet. The contamination of the melt and the resulting deposits on the screen packs result in an increase in flow resistance.





The backflushing is initiated automatically when an individually defined pressure limit is reached. The displacing piston moves to its end position and thus fills the melt reservoir. The screen pack that needs to be cleaned moves into the cleaning position and the displacing piston flushes the screen cavity free in a fast forward movement with hydraulic assistance. The contaminants on the screen pack peel away and pass through the flushing channel. During backflushing, the relevant screen area is completely separated, so that any influence on the process is inhibited. After the cleaning of the screen, the adjacent screen area of the same piston is cleaned in an identical manner. During each backflushing, three screen cavities (75%) remain in production. 

The screen change takes place when the self-cleaning is completed. The screen piston with the filter element to be cleaned is moved out of the housing, far enough to allow for the screen pack to be removed and replaced with a new filter element. During the screen change, three screen cavities (75%) remain in production. The screen change proceeds for all four screens successively.



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