

Vacuum Generation - Turbomolecular Pumps

Turbomolecular Pumps

For generating high and ultra-high vacuum. SST turbomolecular pumps are equipped with an integrated rough vacuum stage. Dry, solid-lubricated hybrid bearings with ceramic balls prevent the vacuum being contaminated by oils, greases or their decomposition products.

Special characteristics

- monobloc rotors with extremely low residual vibrations
- special blade design for a high pumping speed and a high compression ratio, particularly for light gases
- the gap-free rotor structure provides fast degassing on the high vacuum side
- fore-vacuum limiting pressure up to several mbars
- oil free, so no self-generation of light gases from hydrocarbon cracking products
- any operating position
- very quiet running, minimal noise level
- maintenance free under normal operation
- small dimensions, low weight

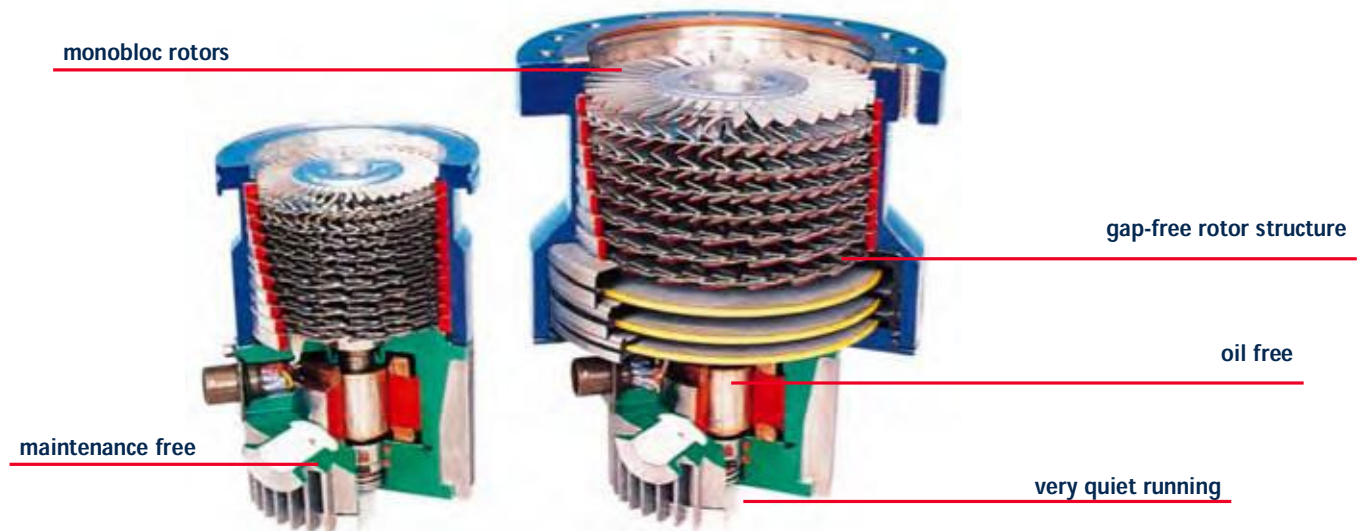
Ranges of application:

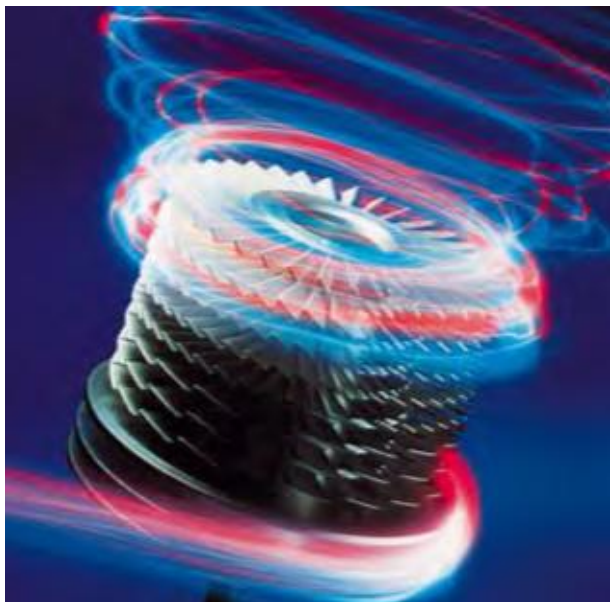
- for the high and ultra high vacuum ranges
- analysis technology
- electron microscopy
- surface analysis
- semiconductor industry with sputtering processes, etching
- research
- leak detection
- production of optical layers

Note:

Ultimate pressure statements and determination of the ultimate pressure according to DIN 28428:

Pressure achieved in the defined measuring dome after 48 hours and 24 hours baking of the measuring arrangement. The high vacuum flange (suction flange) of the turbomolecular pump is metal-sealed, that is it is designed as a ConFlat (CF) flange.





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Turbomolecular Pumps Series SST

SST turbomolecular pumps cover pumping speeds of 80, 300, 500, 700 and 1000 l/s.

All modules, including the turbomolecular pumps, can be delivered separately, and can also be pre-assembled in accordance with the customers requirements.

Special characteristics:

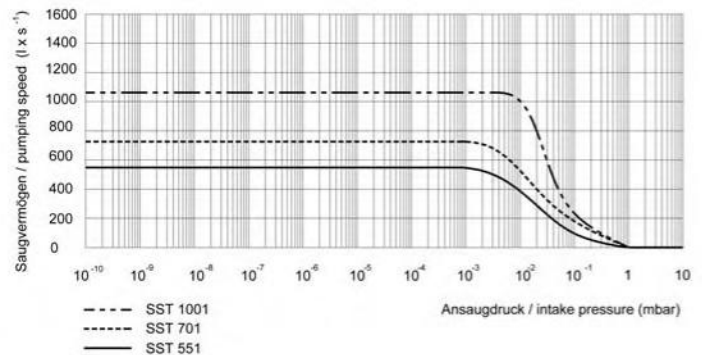
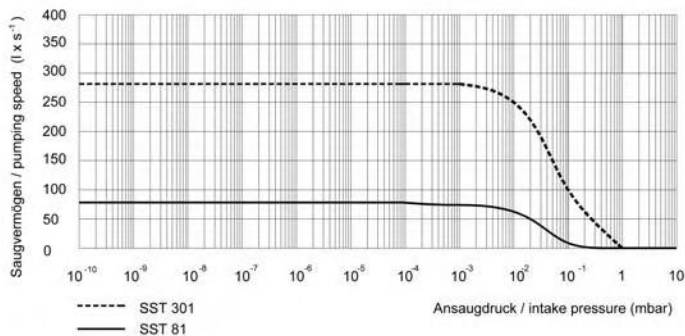
- oil free and therefore produces hydrocarbon free vacuum
- long bearing life, maintenance free operation
- low noise and vibration levels
- high pumping speed and compression ratio
- operates in any orientation
- optional air or water cooling
- compact and light weight

Scope of delivery:

Turbomolecular pump complete ready-to-use with mains connection cable and plug.



NEW



Technical Features

Type	Ult. pressure DIN 28428 mbar	Pumping speed eff N ₂ /He/H ₂ l/s	Dim. (W/H) mm	Weight kg	Connection flanges suction/pressure side	Speed /min	Run up time s	Cooling
SST 81	5x10 ⁻¹⁰	77/65/50	95/145	2.0	DN 63 ISO - K / DN 16 KF	1350	60	air cooling
SST 81 UHV	5x10 ⁻¹⁰	77/65/50	114/145	2.98	DN 63 ISO - K / DN 16 KF	1350	60	air cooling
SST 81/40	5x10 ⁻¹⁰	50/56/50	95/164	2.0	DN 40 KF - K / DN 16 KF	1350	60	air cooling
SST 81/40 UHV	5x10 ⁻¹⁰	50/56/46	95/162	2.98	DN 40 CF / DN 16 KF	1350	60	air cooling
SST 301	5x10 ⁻¹⁰	280/230/210	144/177	4.2	DN 160 ISO - K / DN 16 KF	56000	180	air cooling
SST 301 UHV	5x10 ⁻¹⁰	280/230/210	144/177	4.2	DN 160 ISO - K / DN 16 KF	56000	180	air cooling
SST 301R	5x10 ⁻¹⁰	250/230/210	144/177	4.2	DN 100 ISO - K / DN 16 KF	56000	180	air cooling
SST 301R UHV	5x10 ⁻¹⁰	250/230/210	144/177	4.2	DN 100 CF / DN 16 KF	56000	180	air cooling
SST 551	1x10 ⁻¹⁰	550/600/510	204/256	16.0	DN 160 ISO - K / DN 25 KF	42000	300	air cooling
SST 551 UHV	1x10 ⁻¹⁰	550/600/510	204/256	16.0	DN 160 CF / DN 25 KF	42000	300	air cooling
SST 551R UHV	1x10 ⁻¹⁰	350/600/510	204/256	16.0	DN 100 CF / DN 25 KF	42000	300	air cooling
SST 701	1x10 ⁻¹⁰	690/620/510	204/255	16.0	DN 200 ISO - K / DN 25 KF	42000	300	air cooling
SST 701 UHV	1x10 ⁻¹⁰	690/620/510	204/255	16.0	DN 200 CF / DN 25 KF	42000	300	air cooling
SST 1001	1x10 ⁻¹⁰	1050/900/920	232/209	21.2	DN 250 ISO - K / DN 40 KF	38000	240	air cooling
SST 1001R	1x10 ⁻¹⁰	790/900/920	232/209	21.2	DN 160 ISO - K / DN 40 KF	38000	240	air cooling
SST 1001R UHV	1x10 ⁻¹⁰	950/900/920	232/209	21.2	DN 200 CF / DN 40 KF	38000	240	air cooling



Ordering Information

Type	Mains supply V / frequency mod.	Mandatory accessories Connection cable	PU pcs.	Order-No.
SST 81	24	no	1	400287
SST 81 UHV	24	no	1	400289
SST 81/40	24	no	1	400288
SST 81/40 UHV	24	no	1	400290
SST 301	24	no	1	400276
SST 301 UHV	24	no	1	400276-03
SST 301R	24	no	1	400276-01
SST 301R UHV	24	no	1	400276-02
SST 551	24	no	1	400285
SST 551 UHV	24	no	1	400285-01
SST 551R UHV	24	no	1	400285-02
SST 701	24	no	1	400278
SST 701 UHV	24	no	1	400278-01
SST 1001	24	no	1	400280
SST 1001 UHV	24	no	1	400280-01
SST 1001R UHV	24	no	1	400280-02



Turbomolecular Pumps, Series SST Compact

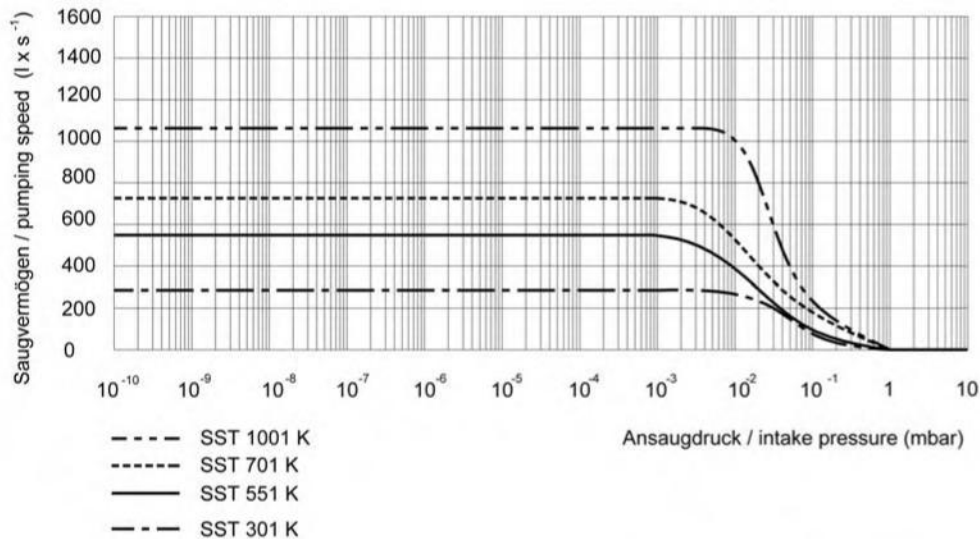
NEW

SST Compact Turbomolecular Pumps are very user friendly with on-board mini-Controllers. They can be put into use quickly and easily with little system assembly required as the controller is pre-configured.

The scope of supply includes the pump with Mini-controller (115/230V, 50/60 Hz) splinter screen, connecting cable and cooling fan. Also included is a CD with the operation software, which permits the communication between the PC and the mini controller.

SST Compact Turbomolecular Pumps are available with pumping speeds of 300, 500, 700 and 1000 l/s.

Scope of delivery:
Turbomolecular pump complete ready-to-use with mains connection cable and plug as well as with control software on CD.



Technical Features

Type	Ult. pressure DIN 28428 mbar	Pumping speed eff N ₂ /He/H ₂ l/s	Dim. (W/H) mm	Weight kg	Connection flanges suction/pressure side	Speed /min	Run up time s	Cooling
SST 301 K	5x10 ⁻¹⁰	280/230/210	144/238	4.5	DN 160 ISO-K / DN 16 KF	56000	180	air cooling
SST 301 UHV K	5x10 ⁻¹⁰	280/230/210	144/238	4.5	DN 160 CF / DN 16 KF	56000	180	air cooling
SST 301R K	5x10 ⁻¹⁰	250/230/210	144/238	4.5	DN 100 ISO-K / DN 16 KF	56000	180	air cooling
SST 301R UHV K	5x10 ⁻¹⁰	250/230/210	144/238	4.5	DN 100 CF / DN 16 KF	56000	180	air cooling
SST 551 K	1x10 ⁻¹⁰	550/600/510	204/326	19.0	DN 160 ISO-K / DN 25 KF	42000	300	air cooling
SST 551 UHV K	1x10 ⁻¹⁰	550/600/510	204/326	19.0	DN 160 CF / DN 25 KF	42000	300	air cooling
SST 551R UHV K	1x10 ⁻¹⁰	350/600/510	204/326	19.0	DN 100 CF / DN 25 KF	42000	300	air cooling
SST 701 K	1x10 ⁻¹⁰	690/620/510	204/325	19.0	DN 200 ISO-K / DN 25 KF	42000	300	air cooling
SST 701 UHV K	1x10 ⁻¹⁰	690/620/510	204/325	19.0	DN 200 CF / DN 25 KF	42000	300	air cooling
SST 1001 K	1x10 ⁻¹⁰	1050/900/920	232/323	26.6	DN 250 ISO-K / DN 40 KF	38000	240	air cooling
SST 1001R K	1x10 ⁻¹⁰	790/900/920	232/323	26.6	DN 250 ISO-K / DN 40 KF	38000	240	air cooling
SST 1001R UHV K	1x10 ⁻¹⁰	950/900/920	232/323	26.6	DN 160 ISO-K / DN 40 KF	38000	240	air cooling



Ordering Information

Type	Mains supply V / frequency modulation	Mandatory accessories Connection cable	PU pcs.	Order-No.
SST 301 K	115/230 / 50/60	no	1	400277
SST 301 UHV K	115/230 / 50/60	no	1	400277-04
SST 301RK	115/230 / 50/60	no	1	400277-05
SST 301R UHV K	115/230 / 50/60	no	1	400277-06
SST 551 K	115/230 / 50/60	no	1	400286
SST 551 UHV K	115/230 / 50/60	no	1	400286-01
SST 551R UHV K	115/230 / 50/60	no	1	400286-02
SST 701 K	115/230 / 50/60	no	1	400279
SST 701 UHV K	115/230 / 50/60	no	1	400279-01
SST 1001 K	115/230 / 50/60	no	1	400281
SST 1001R K	115/230 / 50/60	no	1	400281-01
SST 1001R UHV K	115/230 / 50/60	no	1	400281-02