

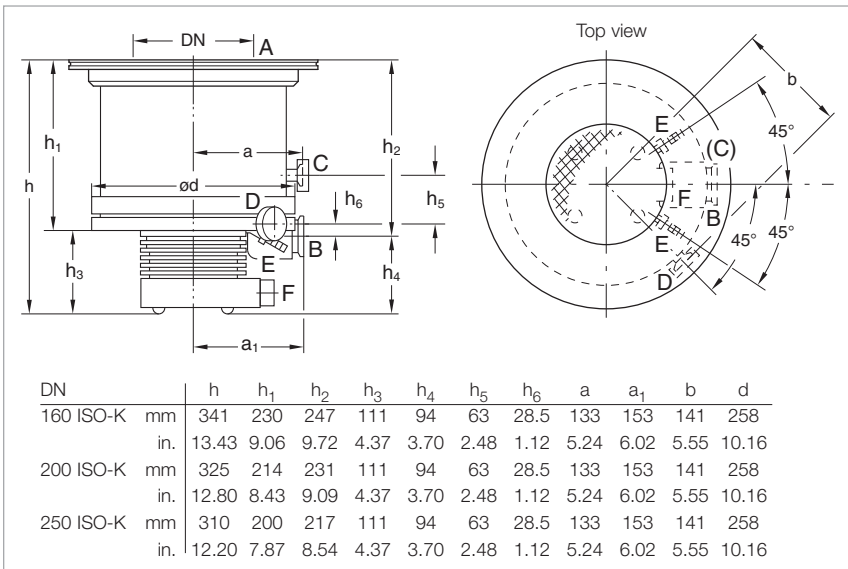
# Mechanical Rotor Suspension without Compound-Stage

## TURBOVAC 1100 C ClassicLine



### Typical Applications

- Data storage
- Flat panel displays
- Optical coating
- Large area coating
- Load locks and transfer chambers



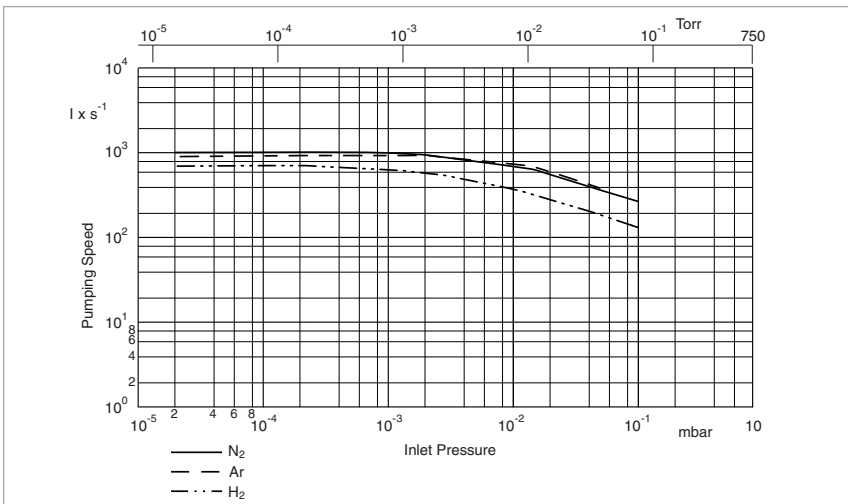
Dimensional drawing for the TURBOVAC 1100 C

### Technical Features

- Robust rotor design
- Installation in any orientation
- Highest pumping speed and highest throughput
- Bearing temperature measurement through the TURBO.DRIVE TD 20 classic
- Oil-free pump for generating clean high and ultrahigh vacuum conditions
- Seal gas connection
- Venting connection

### Advantages to the User

- Space-saving
- Easy to integrate into complex vacuum systems
- High productivity
- Low operating costs
- Highly reliable operation also in processes loaded with particles



Pumping speed as a function of the inlet pressure (TURBOVAC 1100 C with flange DN 250)

## Technical Data

## TURBOVAC 1100 C

| Inlet flange                                    | DN                         | 160 ISO-K  | 200 ISO-K  | 250 ISO-K  |
|---|----------------------------|--|--|--|
| <b>Pumping speed</b>                            |                            |  |  |  |
| N <sub>2</sub>                                  | l x s <sup>-1</sup>        | 710  | 830  | 1050   |
| Ar  | l x s <sup>-1</sup>        | -  | 760  | 980  |
| He  | l x s <sup>-1</sup>        | -  | 750  | 850  |
| H <sub>2</sub>                                  | l x s <sup>-1</sup>        | -  | 600  | 630  |
| <b>Max. gas throughput</b>                      |                            |  |  |  |
| N <sub>2</sub>                                  | mbar x l x s <sup>-1</sup> | 6.5  | 6.5  | 6.5  |
| Ar  | mbar x l x s <sup>-1</sup> | 6.5  | 6.5  | 6.5  |
| <b>Compression ratio</b>                        |                            |  |  |  |
| N <sub>2</sub>                                  |                            | 1 x 10 <sup>5</sup>                                  | 1 x 10 <sup>5</sup>                                  | 1 x 10 <sup>5</sup>                                  |
| Ar  |                            | 1 x 10 <sup>5</sup>                                  | 1 x 10 <sup>5</sup>                                  | 1 x 10 <sup>5</sup>                                  |
| H <sub>2</sub>                                  |                            | 1 x 10 <sup>4</sup>                                  | 1 x 10 <sup>4</sup>                                  | 1 x 10 <sup>4</sup>                                  |
| <b>Ultimate pressure</b>                        |                            |  |  |  |
|   | mbar (Torr)                | < 3 x 10 <sup>-10</sup> (< 2.2 x 10 <sup>-10</sup> ) | < 3 x 10 <sup>-10</sup> (< 2.2 x 10 <sup>-10</sup> ) | < 3 x 10 <sup>-10</sup> (< 2.2 x 10 <sup>-10</sup> ) |
| <b>Max. foreline pressure for N<sub>2</sub></b> |                            |  |  |  |
|   | mbar (Torr)                | 0.1 (0.075)  | 0.1 (0.075)  | 0.1 (0.075)  |
| <b>Recommended forevacuum pump</b>              |                            |  |  |  |
|   |                            | TRIVAC D 65 B /<br>SCROLLVAC SC 15/30 D              | TRIVAC D 65 B /<br>SCROLLVAC SC 15/30 D              | TRIVAC D 65 B /<br>SCROLLVAC SC 15/30 D              |
| <b>Run-up time</b>                              |                            |  |  |  |
| at 95% of nominal speed                         | min                        | 9  | 9  | 9  |
| <b>Purge / vent port</b>                        |                            |  |  |  |
|   | DN                         | 10 KF  | 10 KF  | 10 KF  |
| <b>Cooling water connection</b>                 |                            |  |  |  |
| (hose nozzles)                                  | mm (in.)                   | 10 (0.39)  | 10 (0.39)  | 10 (0.39)  |
| <b>Weight, approx.</b>                          |                            |  |  |  |
|   | kg (lbs)                   | 22 (48)  | 22 (48)  | 22 (48)  |
| <b>Supply voltage</b>                           |                            |  |  |  |
|   | V AC                       | 42   | 42   | 42   |
| <b>Max. power consumption</b>                   |                            |  |  |  |
|   | VA                         | 400  | 400  | 400  |

## Technical Data

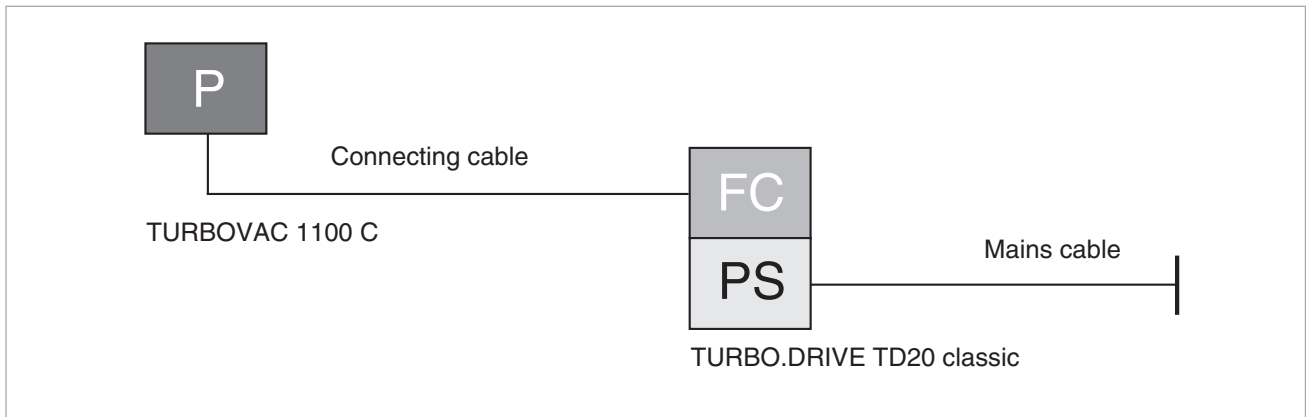
## TURBO.DRIVE TD 20 *classic*

|  |             |  |
|--|-------------|--|
| Mains connection, 50 - 60 Hz; selectable | V           | 100 to 240 (-15 % / +10 %)   |
| Max. output voltage                      | V           | 3 x 47   |
| Overload current limit                   | A           | 5  |
| Permissible ambient temperature          | °C (°F)     | 0 to +45 (+32 to +113)   |
| Protection class                         | IP          | 20   |
| Dimensions (W x H x D)                   | mm<br>(in.) | 213 x 128 x 315 (1/2 19", 3 HU)<br>8.39 x 5.04 x 12.40 (1/2 19", 3 HU) |
| Weight, approx.                          | kg (lbs)    | 4 (8.8)  |

## Ordering Information

## TURBOVAC 1100 C

| TURBOVAC 1100 C<br>without Compound Stage  | P | Part No.   |   |  |
|--|---|--|---|--|
| DN 160 ISO-K / DN 63 ISO-K, water-cooled<br>DN 200 ISO-K / DN 63 ISO-K, water-cooled<br>DN 250 ISO-K / DN 63 ISO-K, water-cooled   |   | <b>800150V0030</b><br><b>800150V0031</b><br><b>800150V0032</b>   |  |  |
| Mandatory Accessories  |   | FC   | PS  |  |
| TURBO.DRIVE TD 20 <i>classic</i><br>without interface<br>with RS 232 C interface<br>with RS 485 C interface<br>with Profibus<br>with 25 pol I/O  |   | <b>800075V0001</b><br><b>800075V0002</b><br><b>800075V0004</b><br><b>800075V0003</b><br><b>800075V0005</b>   |  |  |
| Connecting cable TURBOVAC - frequency converter<br>3 m (10.5 ft)<br>5 m (17.5 ft)<br>10 m (35.0 ft)<br>20 m (70.0 ft)<br>50 m (175.0 ft)<br>60 m (210.0 ft)<br>80 m (280.0 ft)<br>140 m (490.0 ft) |   | <b>857 65</b><br><b>857 66</b><br><b>857 67</b><br><b>857 68</b><br><b>800152V0008</b><br><b>800152V0007</b><br><b>800152V0080</b><br><b>800152V0140</b> |   |  |
| Mains cable<br>3 m (10.5 ft)<br>EURO plug<br>UK plug<br>US plug 5-15 P (220 V AC)<br>2 m (7.5 ft)<br>US plug 115 V AC  |   | <b>800102V0002</b><br><b>800102V0003</b><br><b>800102V1002</b><br><br><b>992 76 513</b>  |   |  |
| Forevacuum pump<br>TRIVAC D 65 B<br>3 phase motor; 230/400 V, 50 Hz / 250/440 V, 60 Hz<br>3 phase motor; 230/346 V, 50 Hz / 208/360 V, 60 Hz   |   | <b>112 96</b><br><b>113 57</b>   |   |  |
| SCROLLVAC SC 30 D<br>1 phase motor; 200-230 V, 50/60 Hz<br>1 phase motor; 100-115 V, 50/60 Hz<br>3 phase motor; 380-415 V, 50 Hz / 200-230 V, 460 V, 60 Hz   |   | <b>133 002</b><br><b>133 102</b><br><b>133 004</b>   |   |  |
| For further types, see our Full Line Catalog   |   |  |   |  |



### Ordering Information

### TURBOVAC 1100 C

| Accessories, optional   | Part No.   |
|---|--|
| Vibration absorber<br>DN 160 ISO-K  | <b>500 073</b>   |
| Solenoid venting valve, with gas admission filter, normally closed<br>24 V DC, DN 16 KF   | <b>800120V0011</b>   |
| Power failure venting valve, with gas admission filter, normally open<br>24 V DC, DN 16 KF  | <b>800120V0021</b>   |
| Purge gas and venting valve<br>Gas flow at 1 bar $0.6 \text{ mbar} \times l \times \text{s}^{-1}$ (36 sccm),<br>Pump connection DN 10 KF / gas connection G 1/4"<br>230 V AC<br>100-115 V AC<br>24 V DC | <b>800152V0040</b><br><b>800152V0043</b><br><b>800152V0012</b> |
| Gas filter to G 1/4-in. for purge gas and venting valve   | <b>800110V0012</b>   |
| Replacement filter  | <b>200 18 515</b>  |
| <b>Included in the Delivery of the Pump</b>   | <b>P</b>   |
| Inlet screen, centering ring with FPM sealing ring, outer ring  | <b>ISO-K</b>   |
| Inlet screen  | <b>CF</b>  |
| Centering ring with O-ring, clamping ring   | <b>Foreline Flange</b>   |
| Pivoted threaded fittings to replace the included hose nipples  | <b>Water Cooling</b>   |