

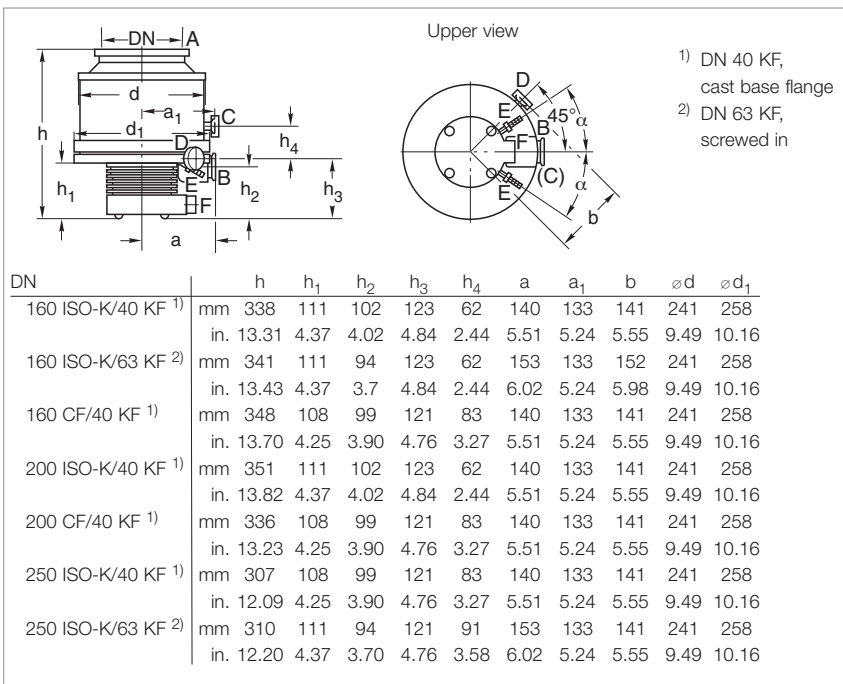
Mechanical Rotor Suspension without Compound-Stage

TURBOVAC 1000 C ClassicLine



Typical Applications

- Research systems



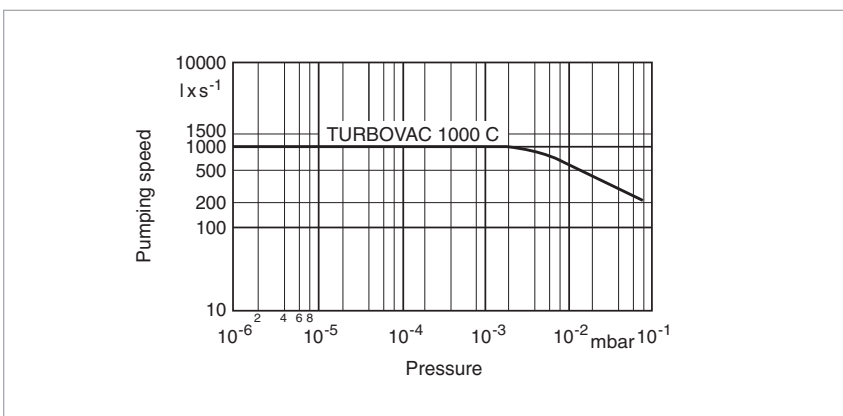
Dimensional drawing for the TURBOVAC 1000 C

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
- Seal gas connection
- Venting connection

Advantages to the User

- Installation in any orientation
- Highly reliable due to hybrid ceramic ball bearings
- Standard model: water cooling
- Purge gas facility



Pumping speed for air as a function of intake pressure (TURBOVAC 1000 C with DN 250 flange)

Technical Data

TURBOVAC 1000 C

| Inlet flange | DN | 160 ISO-K • 160 CF | 200 ISO-K • 200 CF | 250 ISO-K |
|---|----------------------------|---|---|---|
| Pumping speed | | | | |
| N ₂ | l x s ⁻¹ | 850 | 1100 | 1150 |
| He | l x s ⁻¹ | 880 | 975 | 1000 |
| H ₂ | l x s ⁻¹ | 900 | 970 | 1000 |
| Max. gas throughput | | | | |
| N ₂ | mbar x l x s ⁻¹ | 6.5 | 6.5 | 6.5 |
| Compression ratio | | | | |
| N ₂ | | > 10 ⁹ | > 10 ⁹ | > 10 ⁹ |
| He | | 5 x 10 ⁴ | 5 x 10 ⁴ | 5 x 10 ⁴ |
| H ₂ | | 2 x 10 ³ | 2 x 10 ³ | 2 x 10 ³ |
| Ultimate pressure | | | | |
| | mbar (Torr) | < 10 ⁻¹⁰ (< 10 ⁻¹⁰) | < 10 ⁻¹⁰ (< 10 ⁻¹⁰) | < 10 ⁻¹⁰ (< 10 ⁻¹⁰) |
| Operating speed | | | | |
| | min ⁻¹ | 36 000 | 36 000 | 36 000 |
| Run-up time | | | | |
| at 95% of nominal speed, approx. | min | 9 | 9 | 9 |
| Max. continuous inlet pressure ¹⁾ mbar (Torr) | | | | |
| | | 1 x 10 ⁻² (0.75 x 10 ⁻²) | 1 x 10 ⁻² (0.75 x 10 ⁻²) | 1 x 10 ⁻² (0.75 x 10 ⁻²) |
| Installation orientation | | | | |
| | | any | any | any |
| Cooling | | | | |
| | | Water (air) | Water (air) | Water (air) |
| Weight, approx. | | | | |
| | kg (lbs) | 25 (55.1) | 25 (55.1) | 25 (55.1) |
| Recommended forevacuum pump | | | | |
| for standard operation | TRIVAC | D 25 B / D 40 B | D 25 B / D 40 B | D 25 B / D 40 B |
| for purge gas operation | TRIVAC | D 40 B / D 65 B | D 40 B / D 65 B | D 40 B / D 65 B |

¹⁾ Water-cooled



Technical Data

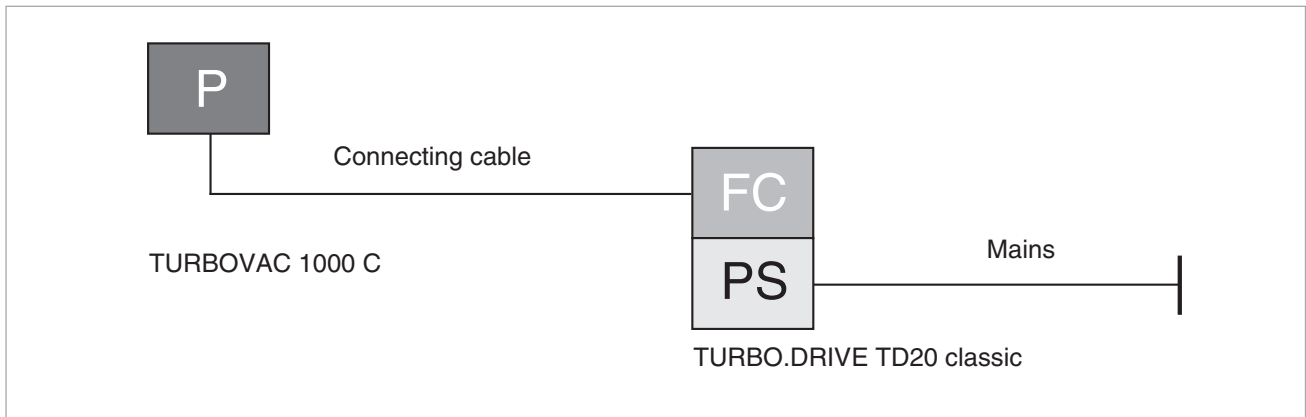
TURBO.DRIVE TD 20 *classic*

| | | |
|--|-------------|--|
| 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 (in.) | 213 x 128 x 315 (1/2 19", 3 HU) 8.39 x 5.04 x 12.40 (1/2 19", 3 HU) |
| Weight, approx. | kg (lbs) | 4 (8.8) |

Ordering Information

TURBOVAC 1000 C

| TURBOVAC 1000 C without Compound Stage | P | Part No. | |
|---|---|--|---|
| DN 160 ISO-K / DN 40 KF, water-cooled DN 160 ISO-K / DN 63 ISO-K, water-cooled DN 160 CF / DN 40 KF, water-cooled DN 200 ISO-K / DN 40 KF, water-cooled DN 200 CF / DN 40 KF, water-cooled DN 250 ISO-K / DN 40 KF, water-cooled DN 250 ISO-K / DN 63 ISO-K, water-cooled | | 855 35 855 38 854 91 153 00 117 64 855 36 855 39 |  |
| Mandatory Accessories | | FC | PS |
| TURBO.DRIVE TD 20 <i>classic</i> without interface with RS 232 C interface with RS 485 C interface with Profibus with 25 pol I/O | | 800075V0001 800075V0002 800075V0004 800075V0003 800075V0005 |  |
| Connecting cable TURBOVAC - frequency converter 3 m (10.5 ft) 5 m (17.5 ft) 10 m (35.0 ft) 20 m (70.0 ft) 50 m (175.0 ft) 60 m (210.0 ft) 80 m (280.0 ft) 140 m (490.0 ft) | | 857 65 857 66 857 67 857 68 800152V0008 800152V0007 800152V0080 800152V0140 | |
| Mains cable 3 m (10.5 ft) EURO plug UK plug US plug 5-15 P (220 V AC) 2 m (7.5 ft) US plug 115 V AC | | 800102V0002 800102V0003 800102V1002 992 76 513 | |
| Forevacuum pump TRIVAC D 25 B 1 phase motor; 230 V, 50 Hz 1 phase motor; 230 V, 50/60 Hz 3 phase motor; 230/400 V, 50 Hz / 250/440 V, 60 Hz | | 112 75 113 35 112 76 | |
| TRIVAC D 40 B 3 phase motor; 230/400 V, 50 Hz / 250/440 V, 60 Hz 3 phase motor; 200/346 V, 50 Hz / 208/360 V, 60 Hz | | 112 86 113 47 | |
| TRIVAC D 65 B 3 phase motor; 230/400 V, 50 Hz / 250/440 V, 60 Hz 3 phase motor; 230/346 V, 50 Hz / 208/360 V, 60 Hz | | 112 96 113 57 | |
| SCROLLVAC SC 30 D 1 phase motor; 200-230 V, 50/60 Hz 1 phase motor; 100-115 V, 50/60 Hz 3 phase motor; 380-415 V, 50 Hz / 200-230 V, 460 V, 60 Hz | | 133 002 133 102 133 004 | |
| For further types, see our Full Line Catalog | | | |



Ordering Information

TURBOVAC 1000 C

| Accessories, optional | Part No. |
|---|---|
| Air cooling unit 230 V AC 115 V AC 100 V AC | 855 41 170 016 800152V0017 |
| Flange heater DN 160 CF, 230 V, 50 Hz DN 100 CF, 115 V, 60 Hz | 854 37 854 38 |
| Vibration absorber DN 160 ISO-K DN 160 CF | 500 073 500 072 |
| Solenoid venting valve, with gas admission filter, normally closed 24 V DC, DN 16 KF | 800120V0011 |
| Power failure venting valve, with gas admission filter, normally open 24 V DC, DN 16 KF | 800120V0021 |
| Purge gas and venting valve Gas flow at 1 bar 0.6 mbar x l x s ⁻¹ (36 sccm), Pump connection DN 10 KF / gas connection G 1/4" 230 V AC 100-115 V AC 24 V DC | 800152V0040 800152V0043 800152V0012 |
| Gas filter to G 1/4-in. for purge gas and venting valve | 800110V0012 |
| Replacement filter | 200 18 515 |
| Included in the Delivery of the Pump | P |
| Inlet screen, centering ring with FPM sealing ring, outer ring | ISO-K |
| Inlet screen | CF |
| Centering ring with O-ring, clamping ring | Foreline Flange |
| Pivoted threaded fittings to replace the included hose nipples | Water Cooling |