

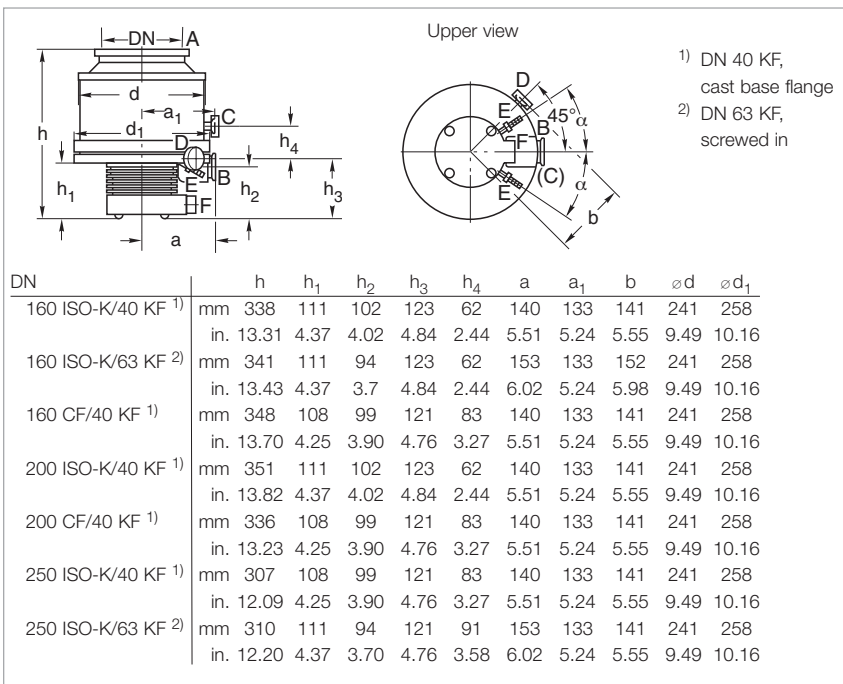
Mechanical Rotor Suspension without Compound-Stage

TURBOVAC 1000 C ClassicLine



Typical Applications

- Research systems



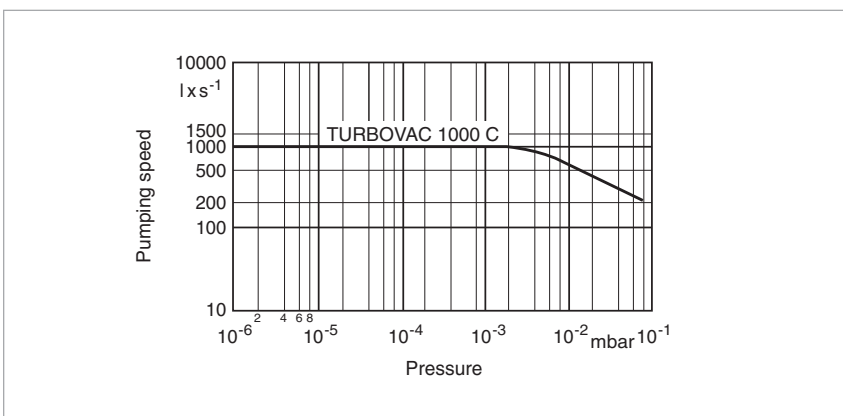
Dimensional drawing for the TURBOVAC 1000 C

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

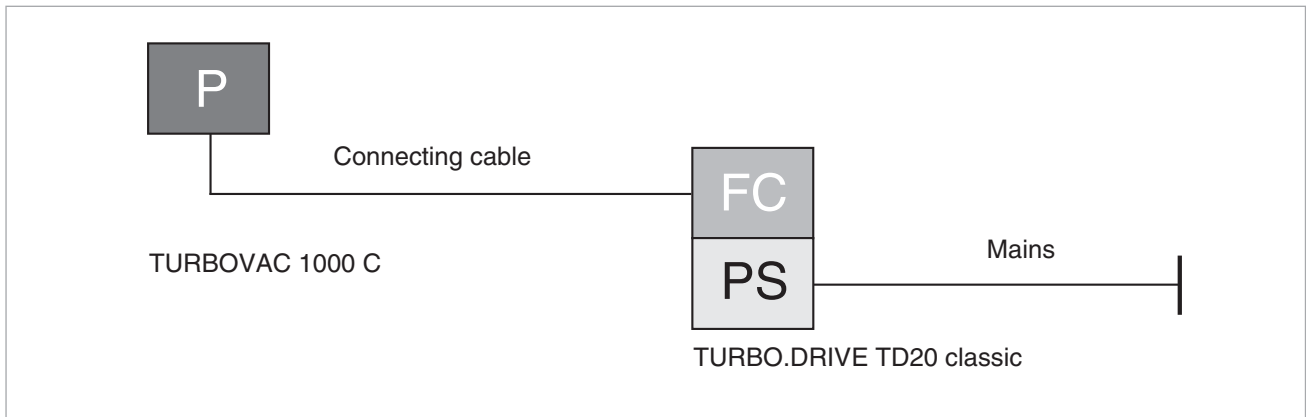
TURBO.DRIVE TD 20 *classic*

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