

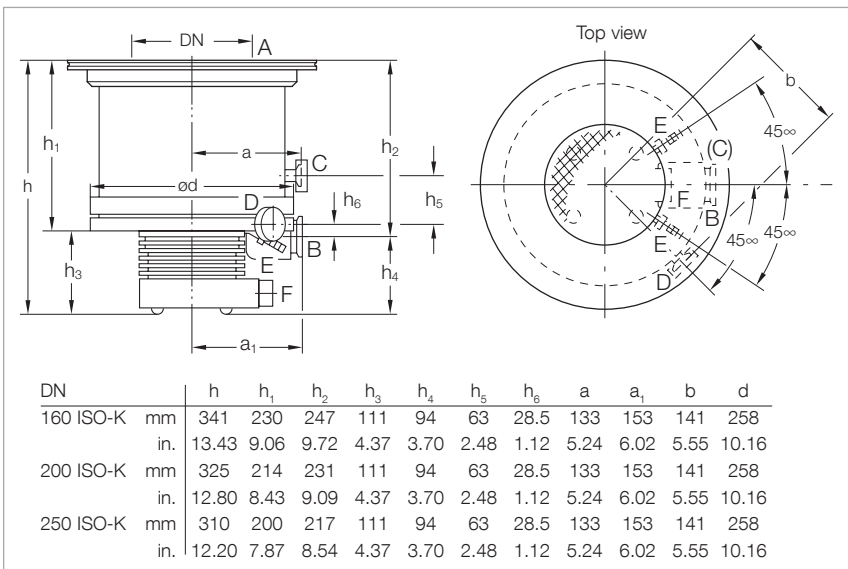
Mechanical Rotor Suspension without Compound Stage

TURBOVAC 1100 C ClassicLine



Typical Applications

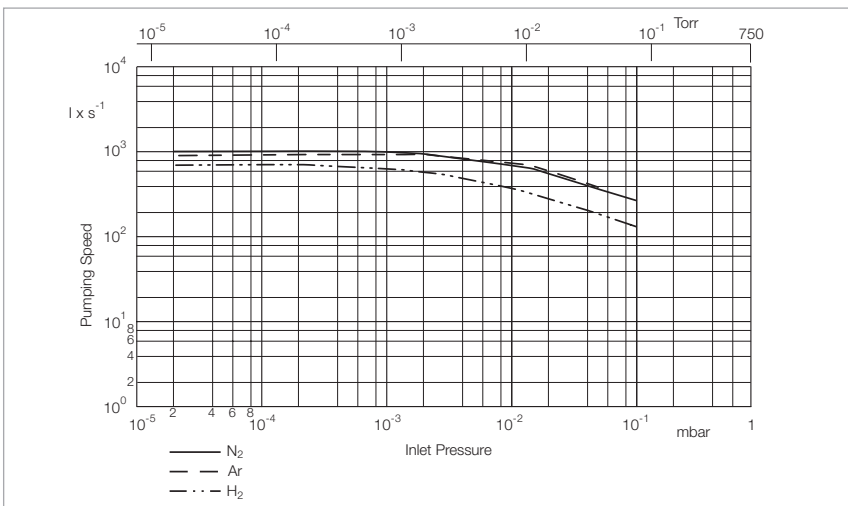
- Data storage
- Flat panel displays
- Optical coating
- Large area coating
- Load locks and transfer chambers



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 ultra-high vacuum conditions
- Seal gas connection
- Venting connection



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

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

Technical Data

TURBOVAC 1100 C

Connection				
Inlet	DN	160 ISO-K	200 ISO-K	250 ISO-K
Outlet	DN	63 ISO-K	63 ISO-K	63 ISO-K
Pumping speed				
N ₂	l x s ⁻¹	710	830	1050
Ar	l x s ⁻¹	660	760	980
He	l x s ⁻¹	650	750	850
H ₂	l x s ⁻¹	520	600	630
Gas throughput				
N ₂	mbar · l x s ⁻¹	6.5	6.5	6.5
Ar	mbar · l x s ⁻¹	6.5	6.5	6.5
He	mbar · l x s ⁻¹	8.0	8.0	8.0
H ₂	mbar · l x s ⁻¹	9.0	9.0	9.0
Compression ratio				
N ₂		> 1 x 10 ⁷	> 1 x 10 ⁷	> 1 x 10 ⁷
Ar		> 1 x 10 ⁷	> 1 x 10 ⁷	> 1 x 10 ⁷
He		3 x 10 ⁴	3 x 10 ⁴	3 x 10 ⁴
H ₂		1 x 10 ³	1 x 10 ³	1 x 10 ³
Ultimate pressure	mbar (Torr)	< 3.0 x 10 ⁻¹⁰ (< 2.3 x 10 ⁻¹⁰)	< 3.0 x 10 ⁻¹⁰ (< 2.3 x 10 ⁻¹⁰)	< 3.0 x 10 ⁻¹⁰ (< 2.3 x 10 ⁻¹⁰)
Max. foreline pressure for N ₂	mbar (Torr)	< 1.0 x 10 ⁻¹ (< 7.5 x 10 ⁻²)	< 1.0 x 10 ⁻¹ (< 7.5 x 10 ⁻²)	< 1.0 x 10 ⁻¹ (< 7.5 x 10 ⁻²)
Recommended forevacuum pump		TRIVAC D 65 B / SCROLLVAC SC 15/30 D	TRIVAC D 65 B / SCROLLVAC SC 15/30 D	TRIVAC D 65 B / SCROLLVAC SC 15/30 D
Nominal rotation speed	min ⁻¹ (rpm)	30 000	30 000	30 000
Run-up time, approx.	min	9	9	9
Max. power consumption	W	400	400	400
Power consumption at ultimate pressure	W	300	300	300
Admissible ambient temperature	°C (°F)	10 to 55 (50 to 131)	10 to 55 (50 to 131)	10 to 55 (50 to 131)
Cooling				
standard		Water	Water	Water
optional		Air	Air	Air
Cooling water connection		10 mm hose nozzle	10 mm hose nozzle	10 mm hose nozzle
Cooling water consumption	l x h ⁻¹	24 to 60	24 to 60	24 to 60
Permissible cooling water pressure	bar	3 to 7	3 to 7	3 to 7
Permissible cooling water temperature	°C (°F)	10 to 30 (50 to 86)	10 to 30 (50 to 86)	10 to 30 (50 to 86)
Weight	kg (lbs)	22 (48)	22 (48)	22 (48)

Technical Data

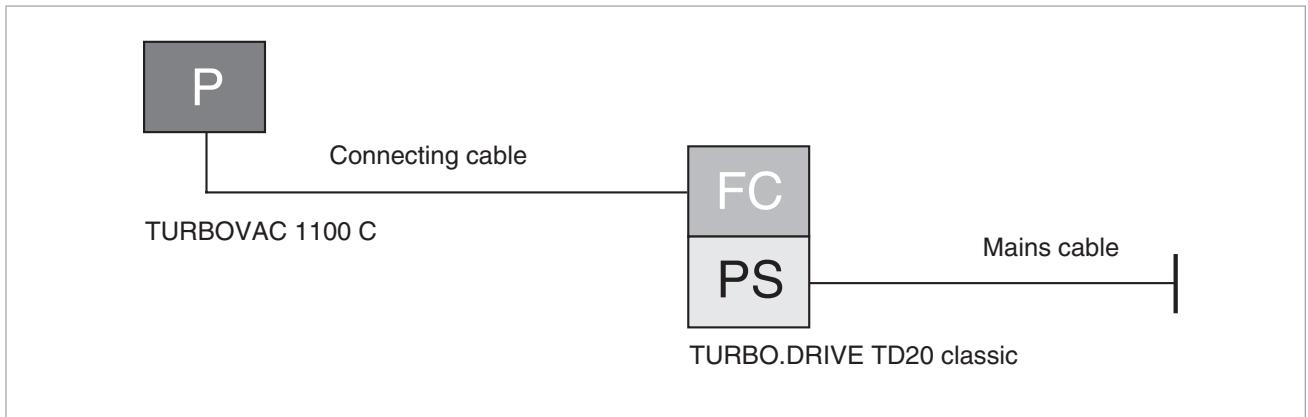
TURBO.DRIVE TD 20 classic

Mains connection	50/60 Hz	100 to 240 V (+15 % / -10 %)
Max. power consumption	W	500
Max. output voltage	V	3 x 47
Max. output current	A	5
Interface		Without, RS 232 C, RS 485 C, Profibus or 25-way terminal strip
Protection rating	IP	20
Admissible ambient temperature	°C (°F)	0 to +45 (+32 to +113)
Dimensions (W x H x D)	mm (in.)	213 x 128 x 315 (8.39 x 5.04 x 12.40)
Weight, approx.	kg (lbs)	4.0 (8.8)

Ordering Information

TURBOVAC 1100 C

TURBOVAC 1100 C without Compound Stage P	Part No.	
DN 160 ISO-K / DN 63 ISO-K, water-cooled DN 200 ISO-K / DN 63 ISO-K, water-cooled DN 250 ISO-K / DN 63 ISO-K, water-cooled	800150V0030 800150V0031 800150V0032	
Mandatory Accessories FC PS		
TURBO.DRIVE TD 20 <small>classic</small> 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 2 m (7.5 ft) US plug 115 V AC	800102V0002 800102V0003 800102V1002 992 76 513	
Forevacuum pump 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 Catalog Parts "Oil Sealed Vacuum Pumps" and "Dry Compressing Vacuum Pumps"		



Ordering Information

TURBOVAC 1100 C

Accessories, optional	Part No.
Vibration absorber DN 160 ISO-K	500 073
Solenoid venting valve, with gas admission filter, normally closed 24 V DC, DN 16 ISO-KF	800120V0011
Power failure venting valve, with gas admission filter, normally open 24 V DC, DN 16 ISO-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 ISO-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" for purge gas and venting valve	800110V0012
Replacement filter	E 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