

Mechanical Rotor Suspension without Compound Stage

TURBOVAC 361, 361 C ClassicLine

UHV TECH SERVICES INC.
(603) 284-6306 uhvts.com

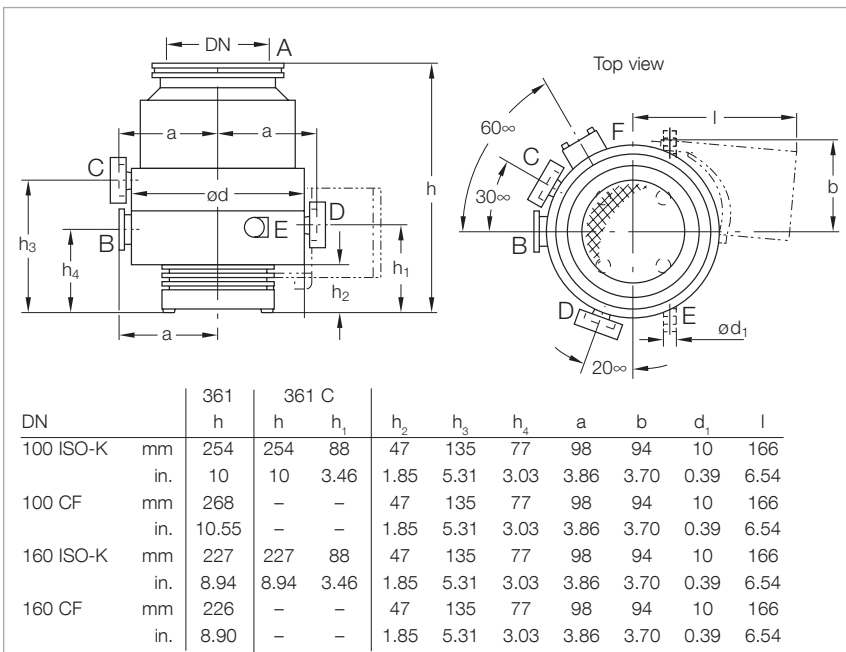


Turbomolecular pumps without a purge gas facility are only suited for pumping of air or inert gases.

They are not suited for pumping of aggressive or reactive gases.

TURBOVAC pumps with a "C" in the type designation are equipped with a purge gas facility.

The purge gas protects the bearing area and the motor of the TURBOVAC.



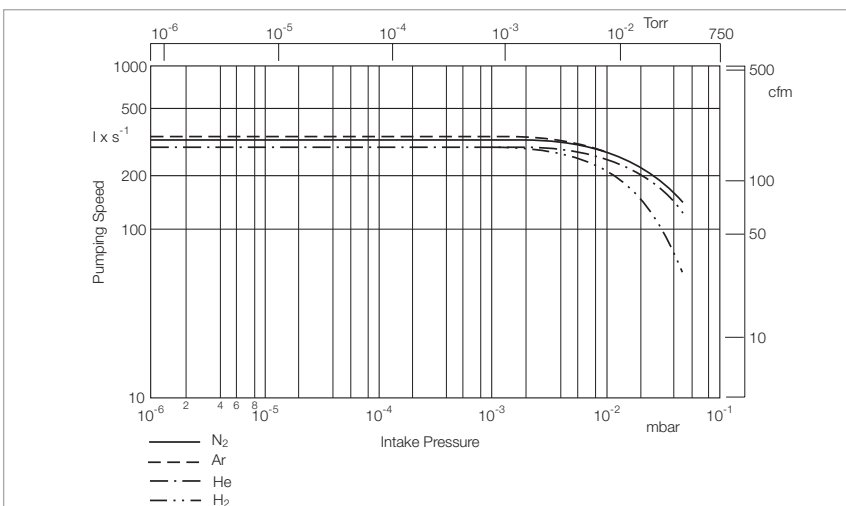
Dimensional drawing for the TURBOVAC 361 and 361 C

Typical Applications

- Leak detectors
- Mass spectrometers
- Data storage
- Optical coating
- R & D
- UHV systems
- Particle accelerators
- Load locks and transfer chambers

Technical Features

- Small footprint
- Installation in any orientation
- Oil-free pump for generating clean high and ultra-high vacuum conditions
- Bearing temperature measurement through the TURBO.DRIVE TD 20 *classic*



Pumping speed as a function of the inlet pressure (TURBOVAC 361 with flange DN 100)

Advantages to the User

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

Technical Data

TURBOVAC 361 (C)

Connection			
Inlet	DN	100 ISO-K • 100 CF	160 ISO-K • 160 CF
Outlet	DN	25 ISO-KF	25 ISO-KF
Pumping speed			
N ₂	l x s ⁻¹	345	400
Ar	l x s ⁻¹	350	410
He	l x s ⁻¹	340	380
H ₂	l x s ⁻¹	340	370
Gas throughput			
N ₂	mbar · l x s ⁻¹	3.0	3.0
Ar	mbar · l x s ⁻¹	2.5	2.5
He	mbar · l x s ⁻¹	3.0	3.0
H ₂	mbar · l x s ⁻¹	2.0	2.0
Compression ratio			
N ₂		1 x 10 ⁹	1 x 10 ⁹
Ar		1 x 10 ⁹	1 x 10 ⁹
He		6 x 10 ⁴	6 x 10 ⁴
H ₂		3 x 10 ³	3 x 10 ³
Ultimate pressure	mbar (Torr)	< 1 x 10 ⁻¹⁰ (< 7.5 x 10 ⁻¹¹)	< 1 x 10 ⁻¹⁰ (< 7.5 x 10 ⁻¹¹)
Max. foreline pressure for N ₂	mbar (Torr)	5 x 10 ⁻¹ (4 x 10 ⁻¹)	5 x 10 ⁻¹ (3.8 x 10 ⁻¹)
Recommended forevacuum pump		from TRIVAC D 16 B to D 25 B	from TRIVAC D 16 B to D 25 B
Nominal rotation speed	min ⁻¹ (rpm)	45 000	45 000
Run-up time, approx.	min	2	2
Max. power consumption	W	300	300
Power consumption at ultimate pressure	W	70	70
Admissible ambient temperature	°C (°F)	10 to 55 (50 to 131)	10 to 55 (50 to 131)
Cooling			
standard		Water	Water
optional		Air	Air
Cooling water connection		10 mm hose nozzle	10 mm hose nozzle
Cooling water consumption	l x h ⁻¹	15 to 35	15 to 35
Permissible cooling water pressure	bar	3 to 7	3 to 7
Permissible cooling water temperature	°C (°F)	10 to 25 (50 to 77)	10 to 25 (50 to 77)
Weight	kg (lbs)	12 (26)	12 (26)



Technical Data

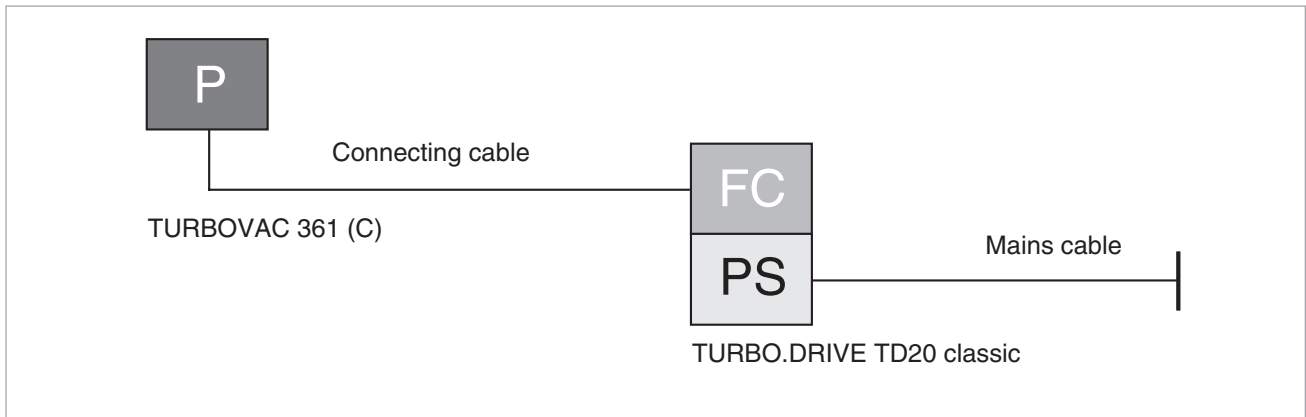
TURBO.DRIVE TD 20 classic

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 361 (C)

TURBOVAC 361 (C) without Compound Stage	P	Part No.	
DN 100 ISO-K, water-cooled DN 100 ISO-K, water-cooled (C version) DN 100 CF, water-cooled DN 100 CF, water-cooled (C version) DN 160 ISO-K, water-cooled DN 160 ISO-K, water-cooled (C version) DN 160 CF, water-cooled		856 70 856 75 856 71 112 09 856 72 856 77 856 73	
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 16 B 1 phase motor; 230 V, 50 Hz 1 phase motor; 230 V, 50/60 Hz 3 phase motor; 200-240 V/380-400 V, 50 Hz / 200-240 V/380-480 V, 60 Hz		112 65 113 25 112 66	
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	
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 361 (C)

Accessories, optional	Part No.
Air cooling unit 230 V AC 100 - 115 V AC	855 31 800152V0016
Flange heater DN 100 CF, 230 V, 50 Hz DN 100 CF, 115 V, 60 Hz DN 160 CF, 230 V, 50 Hz DN 100 CF, 115 V, 60 Hz	854 27 854 28 854 37 854 38
Vibration absorber DN 100 ISO-K DN 100 CF DN 160 ISO-K DN 160 CF	800131V0100 500 071 500 073 500 072
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 0.4 mbar x l x s ⁻¹ (24 sccm), pump connection DN 10 ISO-KF / gas connection G 1/4" 230 V AC 100 - 115 V AC 24 V DC	800152V0014 800152V0042 800152V0013
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