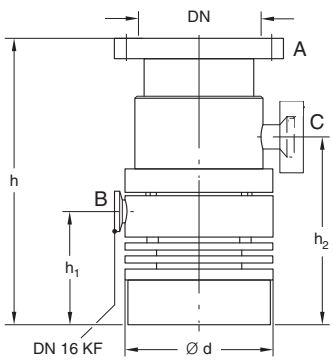
Products and Accessories

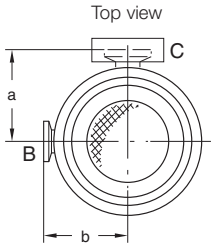
Mechanical Rotor Suspension without Compound-Stufe

TURBOVAC 50

Typical Applications

- Leak detectors
- Mass spectrometers
- Electron beam microscopy
- TV tube manufacturing
- Load locks and transfer chambers
- High vacuum chambers



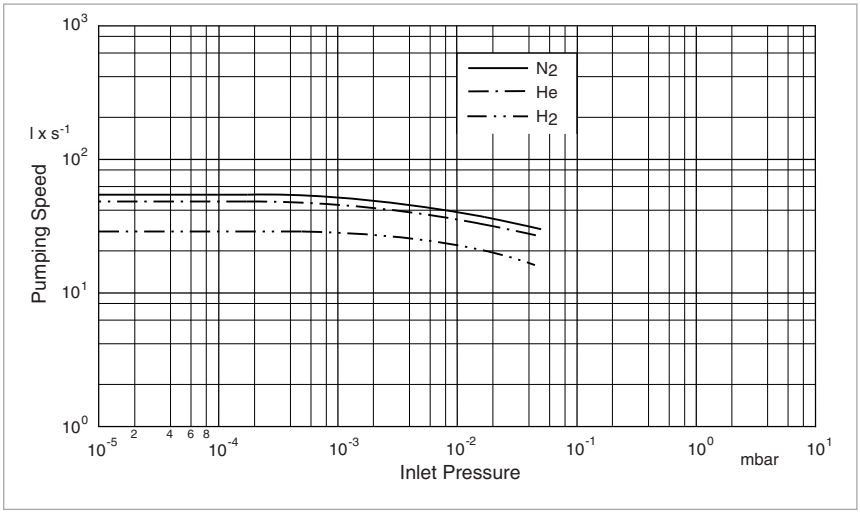


DN		a	b	d	h	h_1	h_2
40 KF	mm	54.5	55	93	166	71.5	119
	in.	2.15	2.17	3.66	6.54	2.81	4.69
63 ISO-K	mm	54.5	55	93	157.5	71.5	119
	in.	2.15	2.17	3.66	6.20	2.81	4.69

Dimensional drawing for the TURBOVAC 50

Technical Features

- Small footprint
- Installation in any orientation
- Cooling by convection is sufficient for most applications
- Air and water cooling can be added easily
- Oil-free pump for generating clean high and ultrahigh vacuum conditions



Pumping speed as a function of the inlet pressure (TURBOVAC 50 with flange DN 63 ISO-K)

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 50

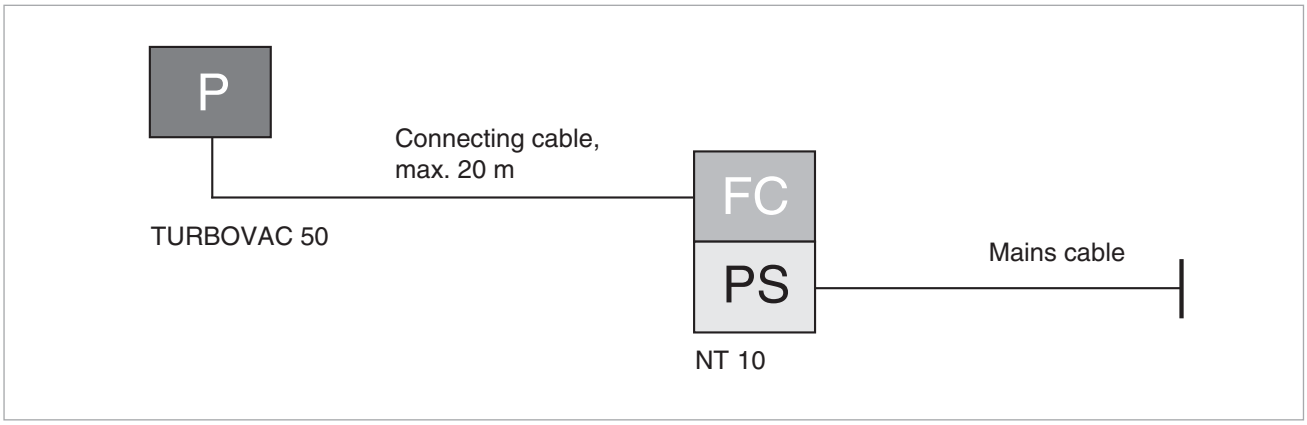
Inlet flange	DN	O-ring sealed 40 KF	O-ring sealed 63 ISO-K
Pump housing		Aluminum	Aluminum
Pumping speed at 10^{-3} mbar (0.75×10^{-3} Torr)			
N_2	l x s^{-1}	33	55
He	l x s^{-1}	36	48
H_2	l x s^{-1}	28	30
Max. gas throughput [1] at 10^{-2} mbar (0.75×10^{-2} Torr)			
N_2	mbar x l x s^{-1}	0.30	0,40
He	mbar x l x s^{-1}	0.25	0.35
H_2	mbar x l x s^{-1}	0.20	0.25
Max. compression when idle			
N_2		2×10^6	2×10^6
Ultimate pressure	mbar (Torr)	$< 5 \times 10^{-8}$ ($< 3.75 \times 10^{-8}$)	$< 5 \times 10^{-8}$ ($< 3.75 \times 10^{-8}$)
Max. foreline pressure for N_2	mbar (Torr)	1×10^{-1} ($< 0.75 \times 10^{-1}$)	1×10^{-1} ($< 0.75 \times 10^{-1}$)
Recommended forevacuum pump		TRIVAC D 2,5 E	TRIVAC D 2,5 E
Run-up time to 95% of nominal speed	min	2	2
Weight, approx.	kg (lbs)	2 (4.4)	(4.4)
Max. power consumption	VA	45	45

[1] For continuous operation when water-cooled

Technical Data — TURBOTRONIK NT 10

Mains connection, 50 - 60 Hz	V	100-120/200-240
Max. output voltage	V	3 x 150
Overload current limit	A	0,22
Permissible ambient temperature	°C (°F)	0 to +40 (+32 to +104)
Dimensions (W x H x D)	mm (in.)	106 x 128 x 233 (4.17 x 5.04 x 9.17)
Weight, approx.	kg (lbs)	1.5 (3.3)

TURBOVAC 50 without Compound Stage P	Part No.	
DN 40 KF, convection DN 63 ISO-K, convection	**854 00** **854 01**	
Mandatory Accessories FC PS		
Electronic frequency converter NT 10 with EURO plug, 180-240 V with US plug, 90-140 V	**859 00** **859 01**	
Connecting cable converter – TURBOVAC 1.0 m (3.5 ft) 3.0 m (10.5 ft) 5.0 m (17.5 ft) 10.0 m (35.0 ft) 20.0 m (70.0 ft)	 **200 11 609** **121 08** **121 09** **161 10** **800150V2000**	
Forevacuum pump TRIVAC D 2,5 E 220-240 V, 50 Hz; 230 V, 60 Hz; earthed plug, EURO version 110-120 V, 200-240 V50/60 Hz; without plug, world version 110-120 V, 50/60 Hz; NEMA plug, US version 100 V, 50/60 Hz; NEMA plug, Japan version For further types, see our Full Line Catalog	 **140 000** **140 001** **140 002** **140 003**	



Ordering Information

TURBOVAC 50

Accessories, optional	Part No.
Air cooling unit	
230 V AC	854 05
115 V AC	854 06
100 V AC	800152V0015
Water cooling kit (hose nozzles ⌀10 mm (0.4 in.)	800135V0003
Vibration absorber	
DN 63 ISO-K	800131V0063
Solenoid venting valve, normally closed	
24 V DC, DN 16 KF	800120V0011
Power failure venting valve, normally open	
24 V DC, DN 16 KF	800120V0021
Included in the Delivery of the Pump P	
Inlet screen, centering ring with FPM sealing ring, outer ring	ISO-K
Inlet screen, centering ring with FPM O-ring, Spannring	KF
Centering ring with O-ring, Clamping ring	Foreline Flange
Included in the Delivery of the Frequency Converter FC PS	
Mains cable	