

Products and Accessories

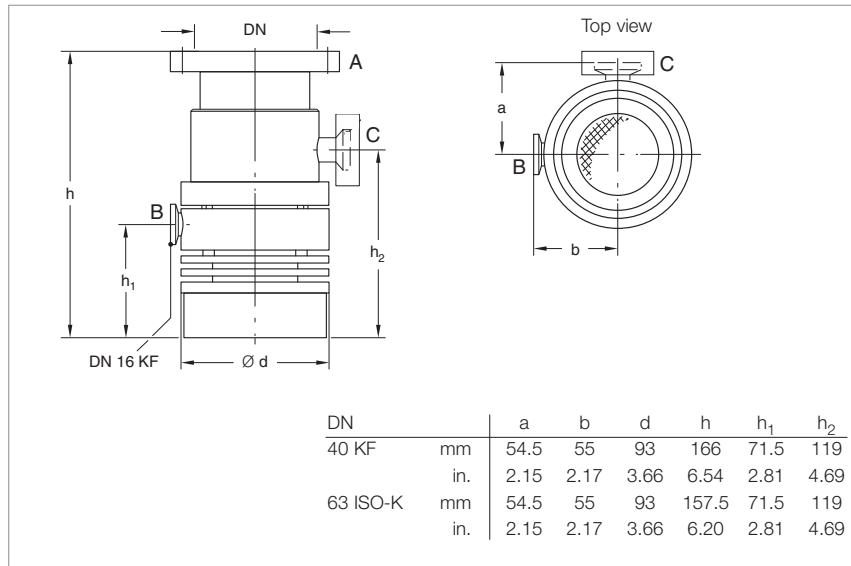
Mechanical Rotor Suspension without Compound-Stage

TURBOVAC 50



Typical Applications

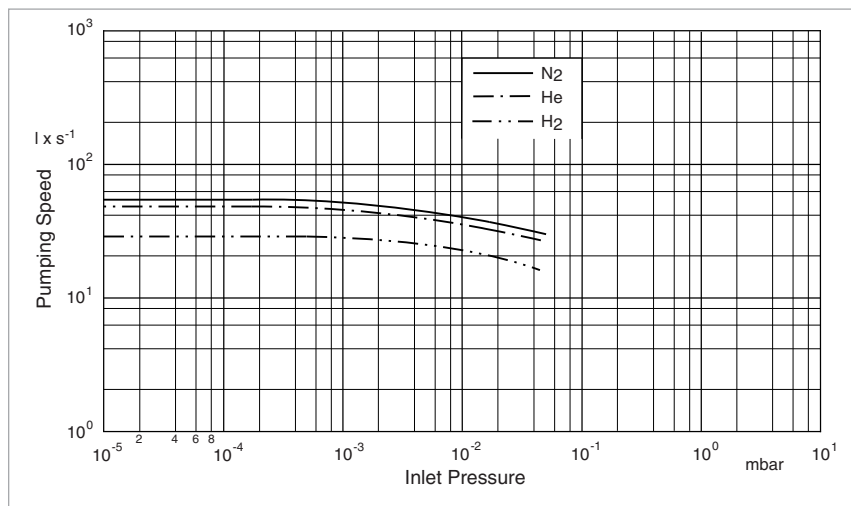
- Leak detectors
- Mass spectrometers
- Electron beam microscopy
- TV tube manufacturing
- Load locks and transfer chambers
- High vacuum chambers



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

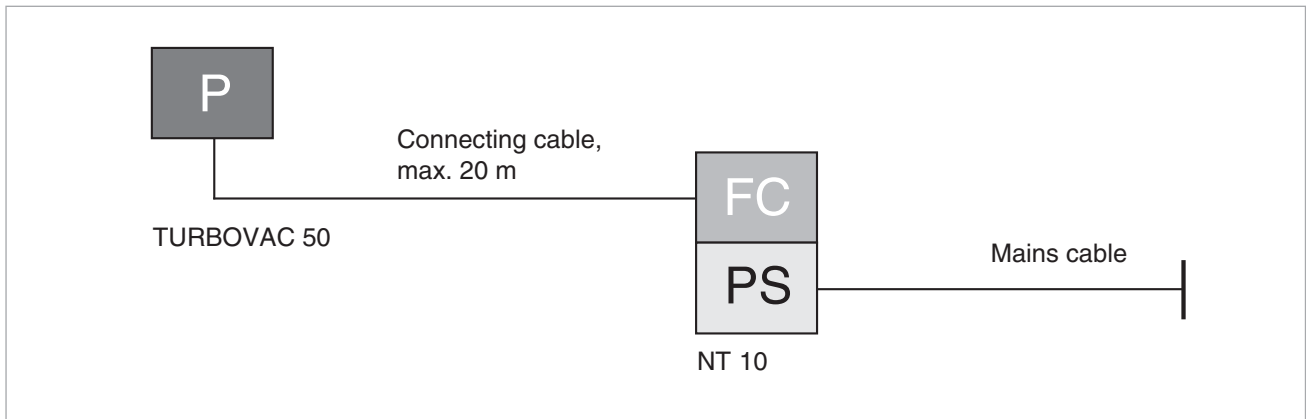
Technical Data**TURBOTRONIK NT 10**

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)

Ordering Information

TURBOVAC 50

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 115 V AC 100 V AC	854 05 854 06 800152V0015
Water cooling kit (hose nozzles \varnothing 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	