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CAPITAL **ENGINEERING CORPORATION**

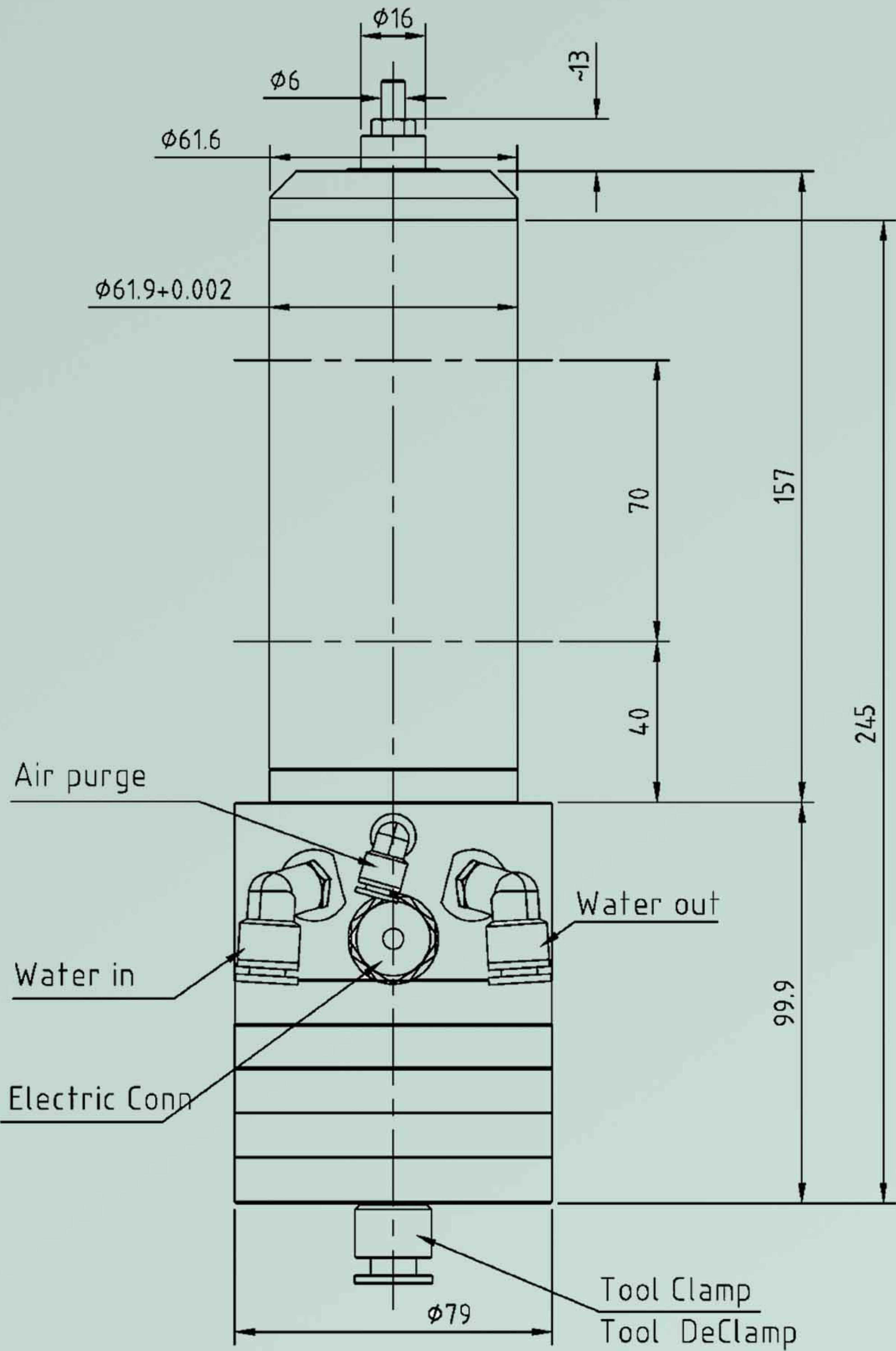
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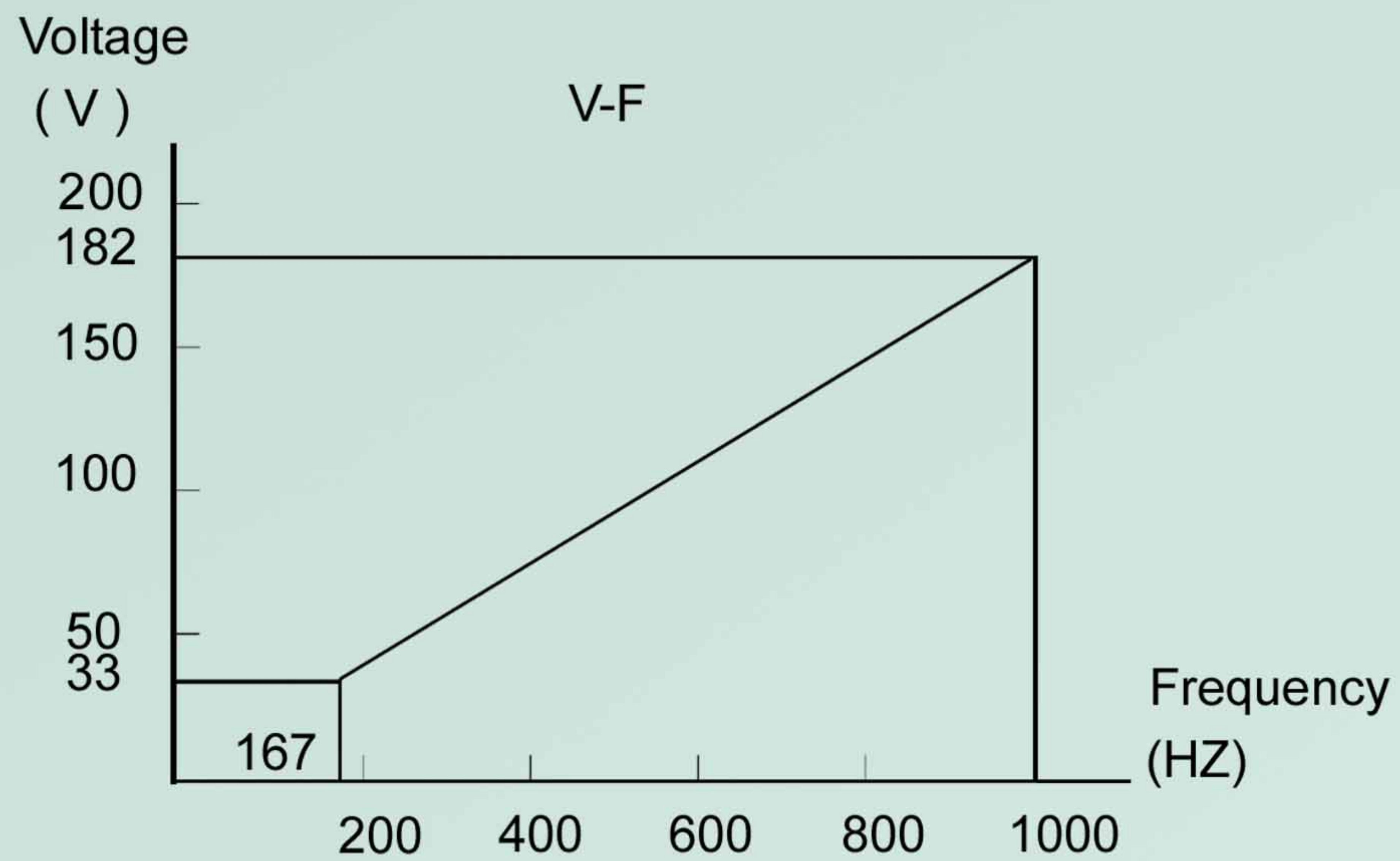
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Model : CEC HF 62, 60 K



Max . Speed	60,000 RPM
Voltage	33-182 V
Frequency	167-1000 Hz
Max . Current	5 A
Max . Power	1.5 K w (optional)
Bearing type	Ball Bearing Ceramic
Static Run out	≤2.0 μm
Dynamic Run out	≤10.0 μm
Vibration	≤1.0 mm/s
Collet Clamping Diameter	φ 3.175 or φ6
Collet torque	≥210 N.cm (φ3.175) ; ≥382 N.cm (φ6)
Insulation Class	1500 V/1min disruptive test
Cooling water temperature	20±2 ° C
Cooling water flow	≥1.2 L /min
Collet type	Removable Collet
Spindle blow dust pressure	≥2.0 kg/cm ²
Spindle blow air flow (1/min)	50
Spindle weight	4.6 kg
Spindle collet-open air pressure	≥5.0 kg/cm ²

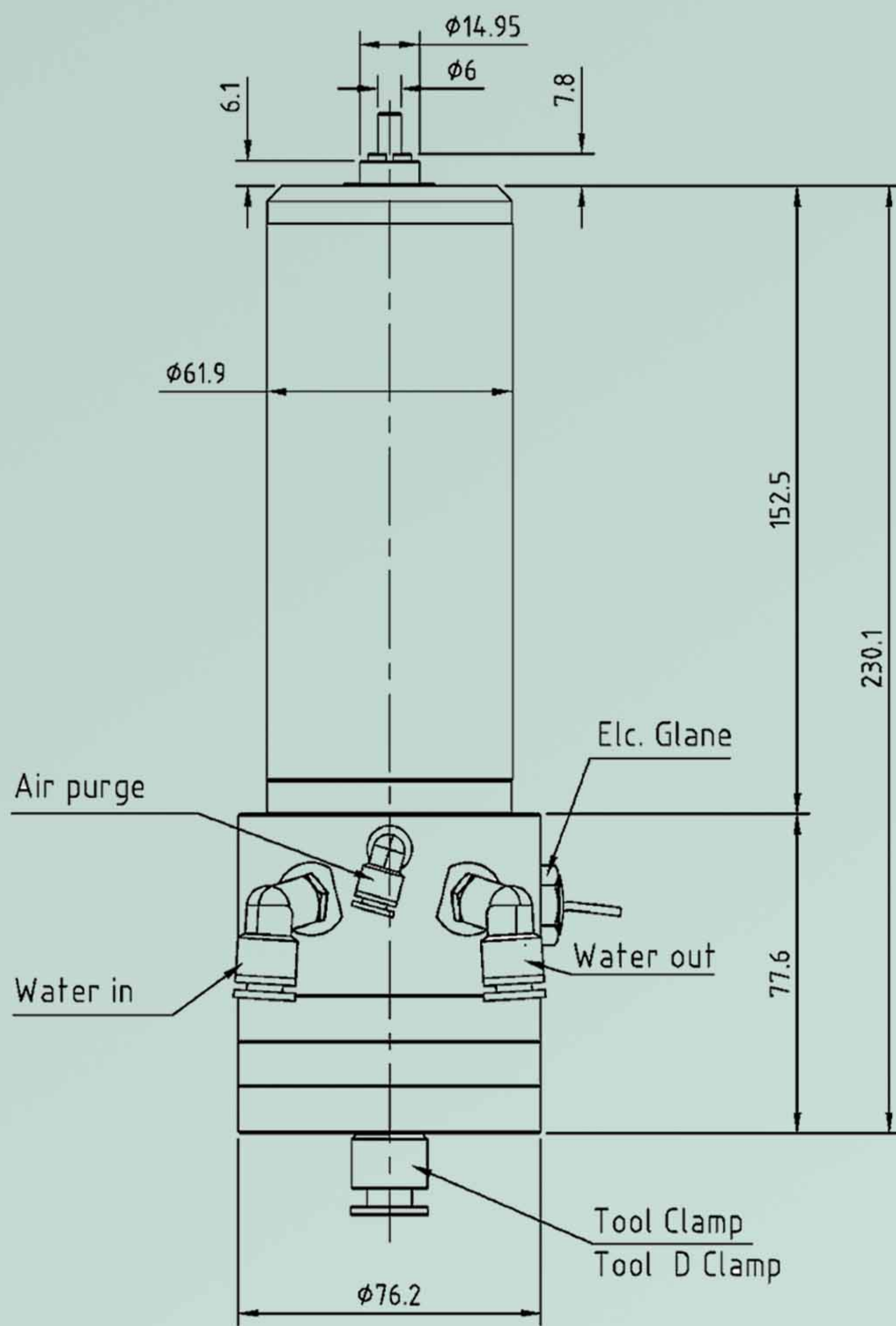
V-F PARAMETER REFERENCE CURVE



Model : CEC HF 62, 100K



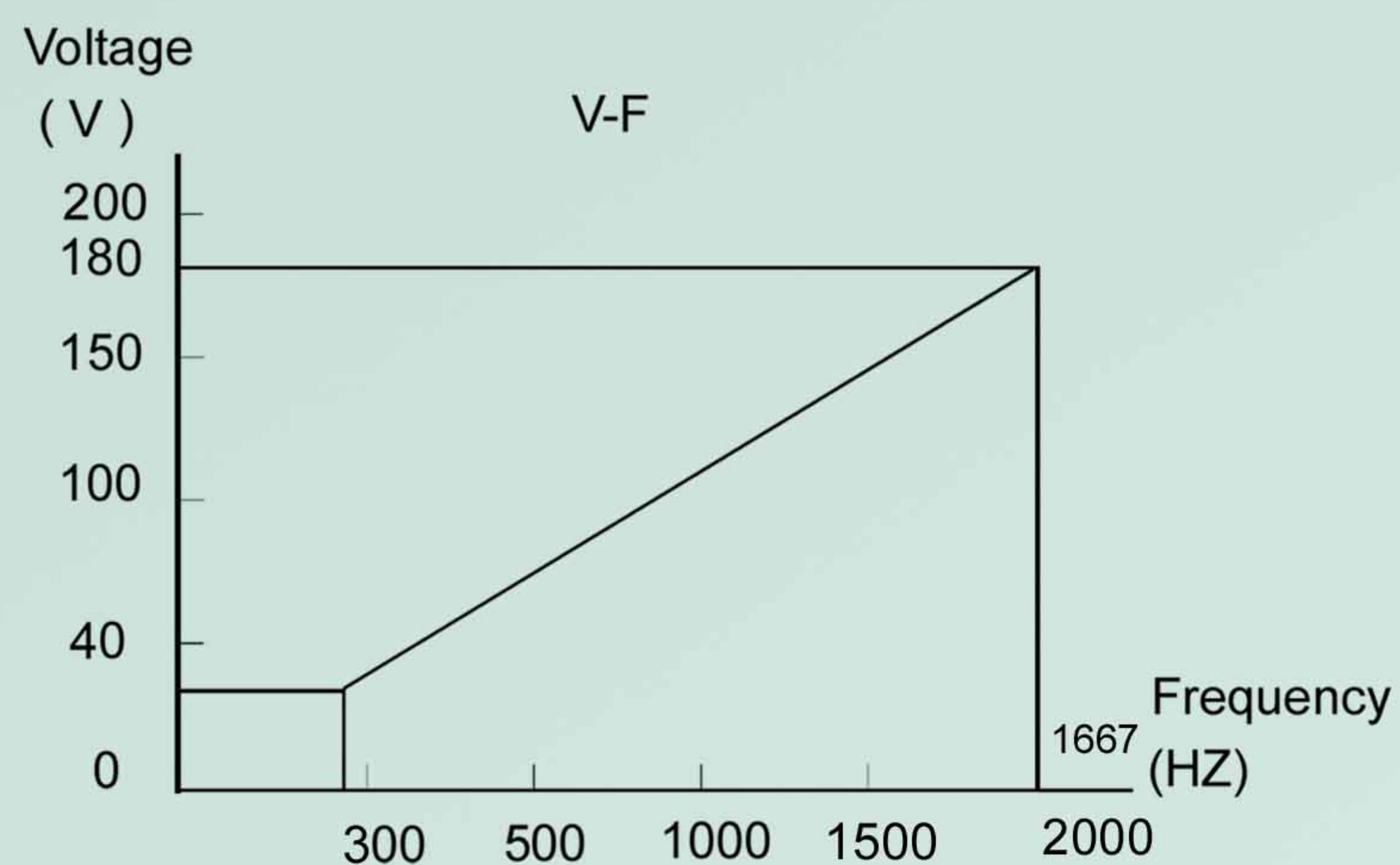
CEC-62, 100 K



CEC -62, 100 K

CEC -62, 100 K			
Model Number	CEC-62, 100 K	Range of RPM	18,000-100,000
Voltage Range (V)	40-180	Frequency (Hz)	300-1667
Rated Current (A)	4	Max Power (Kw)	0.85
Rated Power (V)	180	Recomended work speed (RPM)	75,000
Bearing Type	Air Bearing	Spindle Weight (Kg)	3.8
No.	Technical Parameters		
1	Inner Cone Runout	≤1.0 μm	
2	Static Runout	≤2.0 μm	
3	Vibration (mm/s)	≤0.5 mm/s	
4	Axial Thrust test (kgf)	20	
5	Axial Tension test (kgf)	20	
6	Radial Load Test (kgf)	≥8	
7	Motor Winding Insulation Grade	≥500MΩ(H-grade)	
8	Motor Winding Withstand Voltage Test	1500V/1min Withstand Voltage Test	
9	Power line resistance	2.1±0.2	
10	Temperature Sensor resistance	R=60±5% (at25°C)	
11	Cooling Water Pressure (kgf/cm ²)	≥2.5	
12	Cooling Water Temperature (°C)	18±2	
13	Cooling Water Flow (L/min)	≥1.4	
14	Cooling Oil flow (L/min)	≥3.2	
15	Spindle working air pressure (Kgf/cm ²)	≥6.0	
16	AS FLOW (L/min)	56 (at100, 000rpm)	
17	Decibel Adjusted (dBA)	≤65	

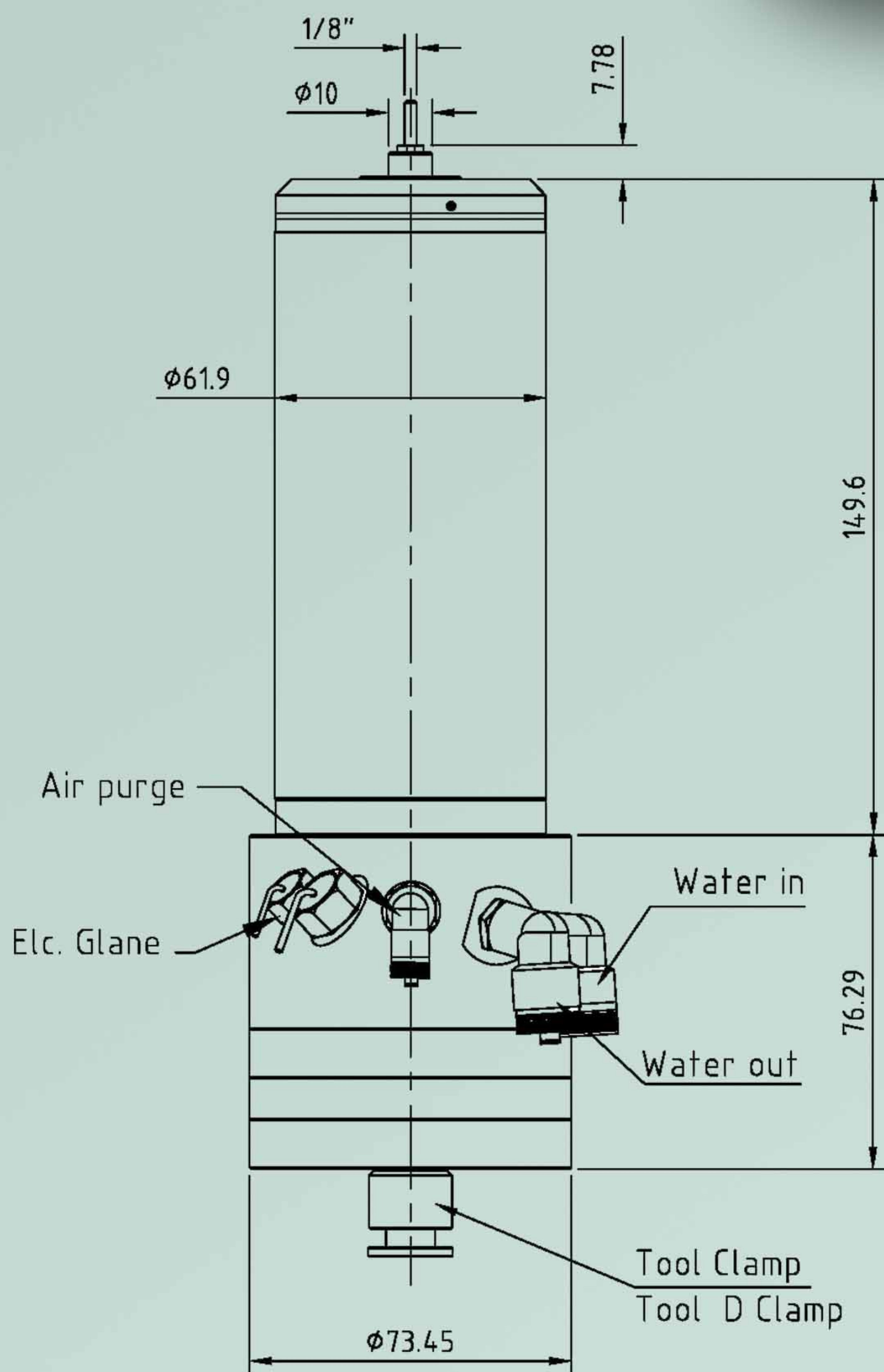
V-F PARAMETER REFERENCE CURVE



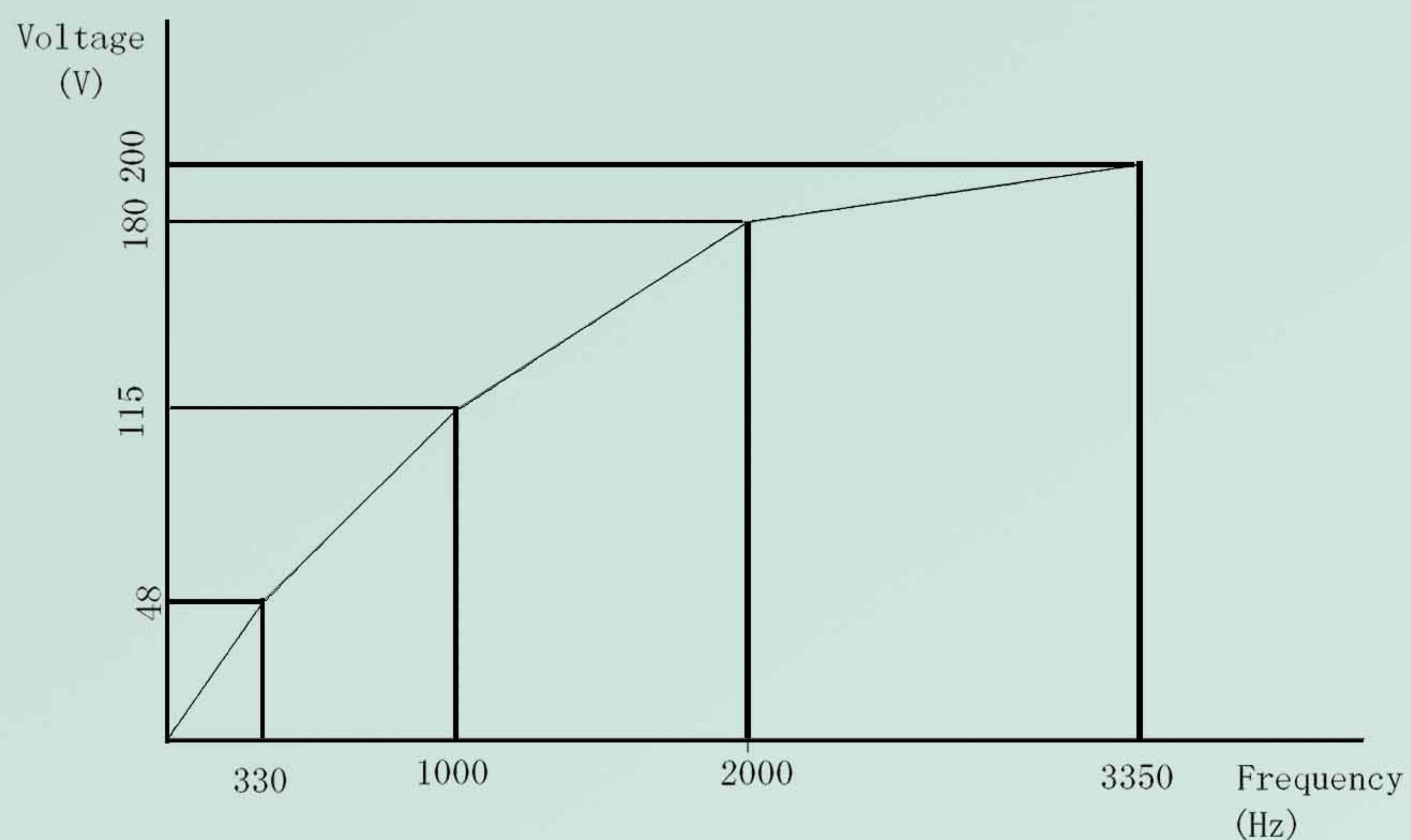
Model : CEC HF 62, 200K



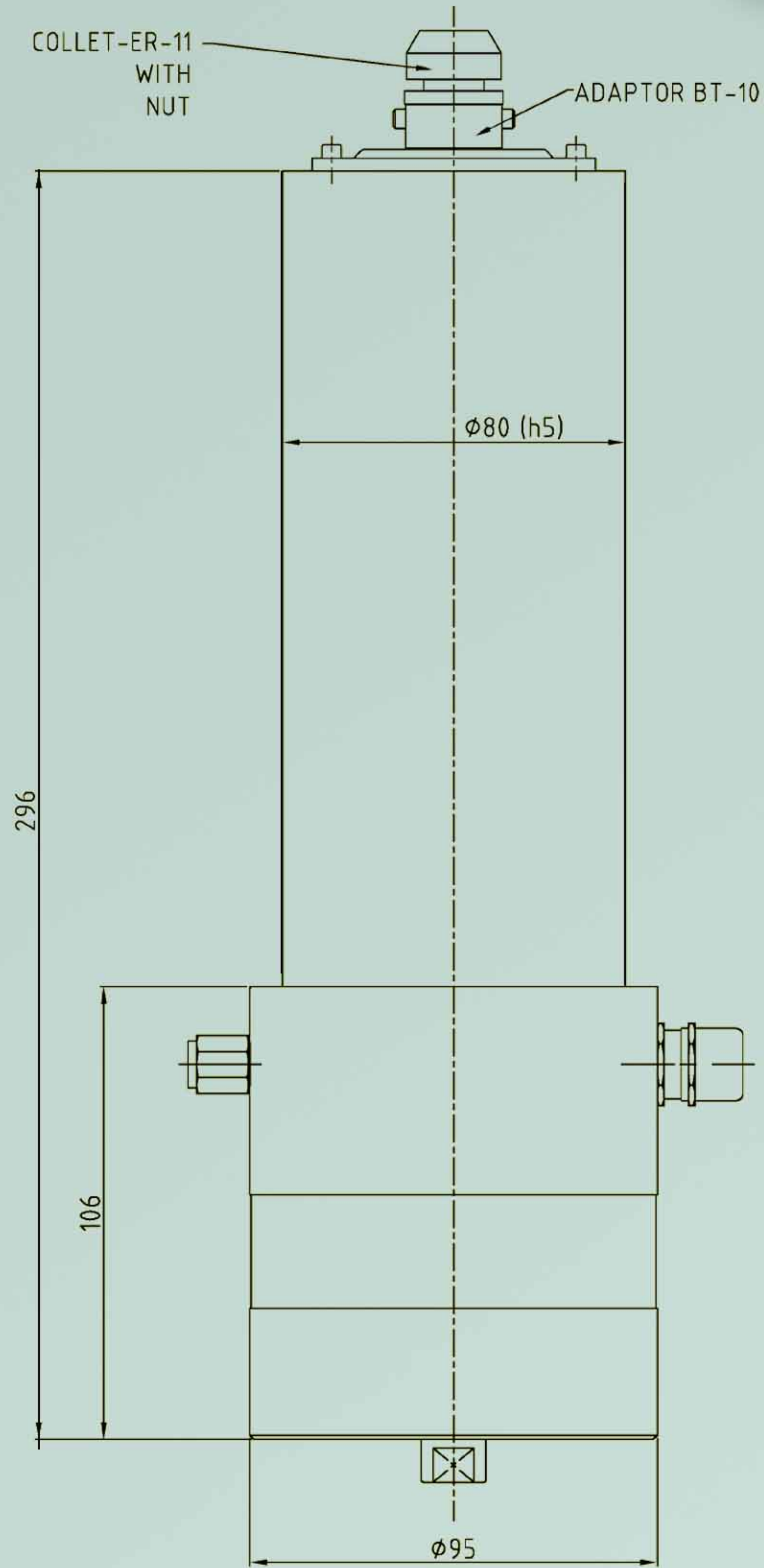
CEC -62, 200 K



CEC -62, 200 K			
Spindle model	CEC-62, 200 K	Speed range (rpm)	20,000-200,000
Voltage range (V)	38-200	Frequency range (Hz)	334-3350
Rated currenncy (A)	3	Max. Power (Kw)	0.85
Rated Voltage (V)	200		
Bearing type	Air bearing	Spindle Weight (Kg)	3.9
Item	PARAMETER		
1	Static run- out (μm)	≤2.0	
2	Dynamic run-out (μm)	≤6.0	
3	Vibration (mm/s)	≤0.5	
4	Collet torque (kgf.cm)	≥13(1/8")	
5	Axial Thrust test (kgf)	19	
6	Axial tension test (kgf)	19	
7	Radial Load Test (kgf)	6	
8	Motor Winding Insulaton Grade	≥500MΩ(H-Grade)	
9	Motor Winding Withstand Voltage Test	1500V/1 min withstand voltage test	
10	Power line resistance (Ω)	3.8±0.2	
11	Temperature Sensor resistance (KΩ)	R=0.1±5%(at 25°C)	
12	Cooling water temperature (°C)	20±2	
13	Cooling water flow (L/min)	≥2.0	
14	Cooling oil flow (L/min)	≥3.8	
15	Testing release pressure (kg/cm ²)	≥5.0	
16	Testing grip pressure (kg/cm ²)	≥2.5	
17	Spindle working air pressure (Kg/cm ²)	6-6.5	
18	Spindle static air flow (L/min)	50	
19	Air flow for spindle 20Krpm (L/min)	48	

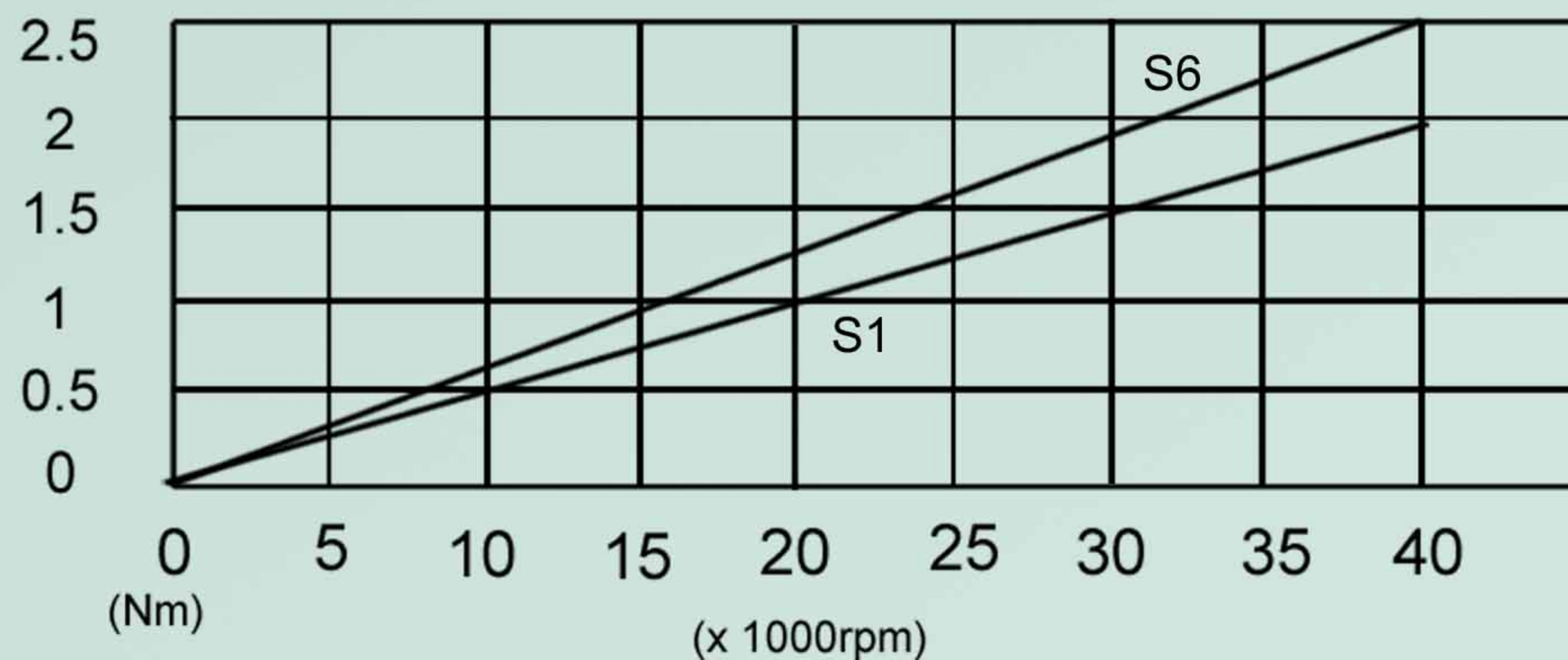


Model : CEC HF 80, 40K

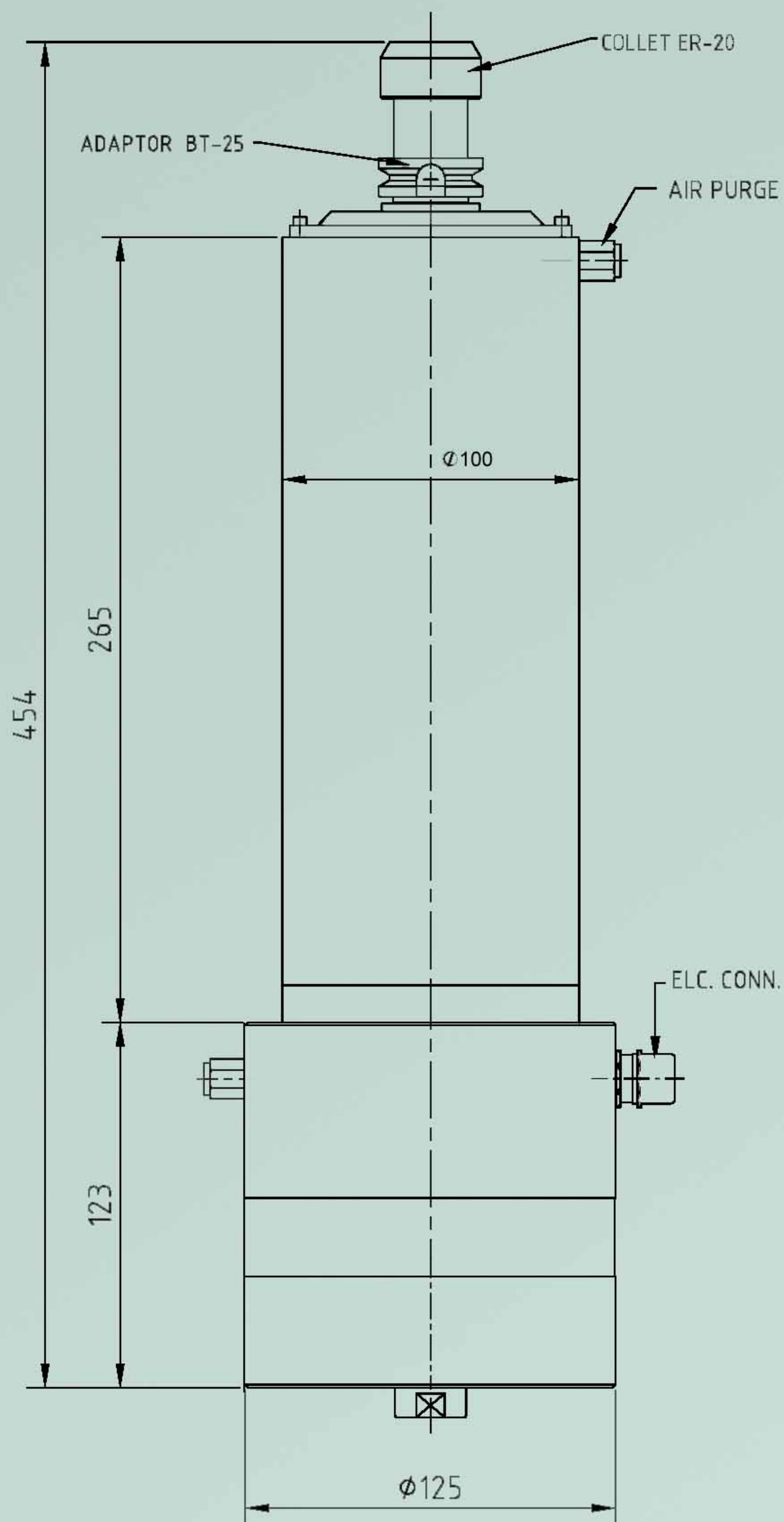


Max . Speed	40,000 RPM
MAX. Voltage	220 V
Pole Number	2 P
Max . Power	2.2 kw
Spindle Diameter	$\phi 80$
Bearing type	Ceramic bearing
Inner cone Run out	$\leq 1.0 \mu m$
Shaft end Static Runout	$\leq 8.0 \mu m$ (At test bar 30mm)
Vibration	$\leq 1.0 mm/s$
Clamping torque	800 N.cm
Motor winding insulation grade	$\geq 500M\Omega$ (H Grade)
Cooling water pressure	$\geq 2.5Kgf/cm^2$
Cooling water flow	$\geq 1.5 L / min$
Cooling water temperature	$20 \pm 2 \text{ } ^\circ C$
Lubrication	Grease
Tool change form	ATC,ISO-10
AS pressure	$\geq 0.8Kgf/cm^2$
AS flow	20 L/min
Cl pressure	7Kgf/cm ²
To retract	7Kgf/cm ²

(K.W) Power - Diagram



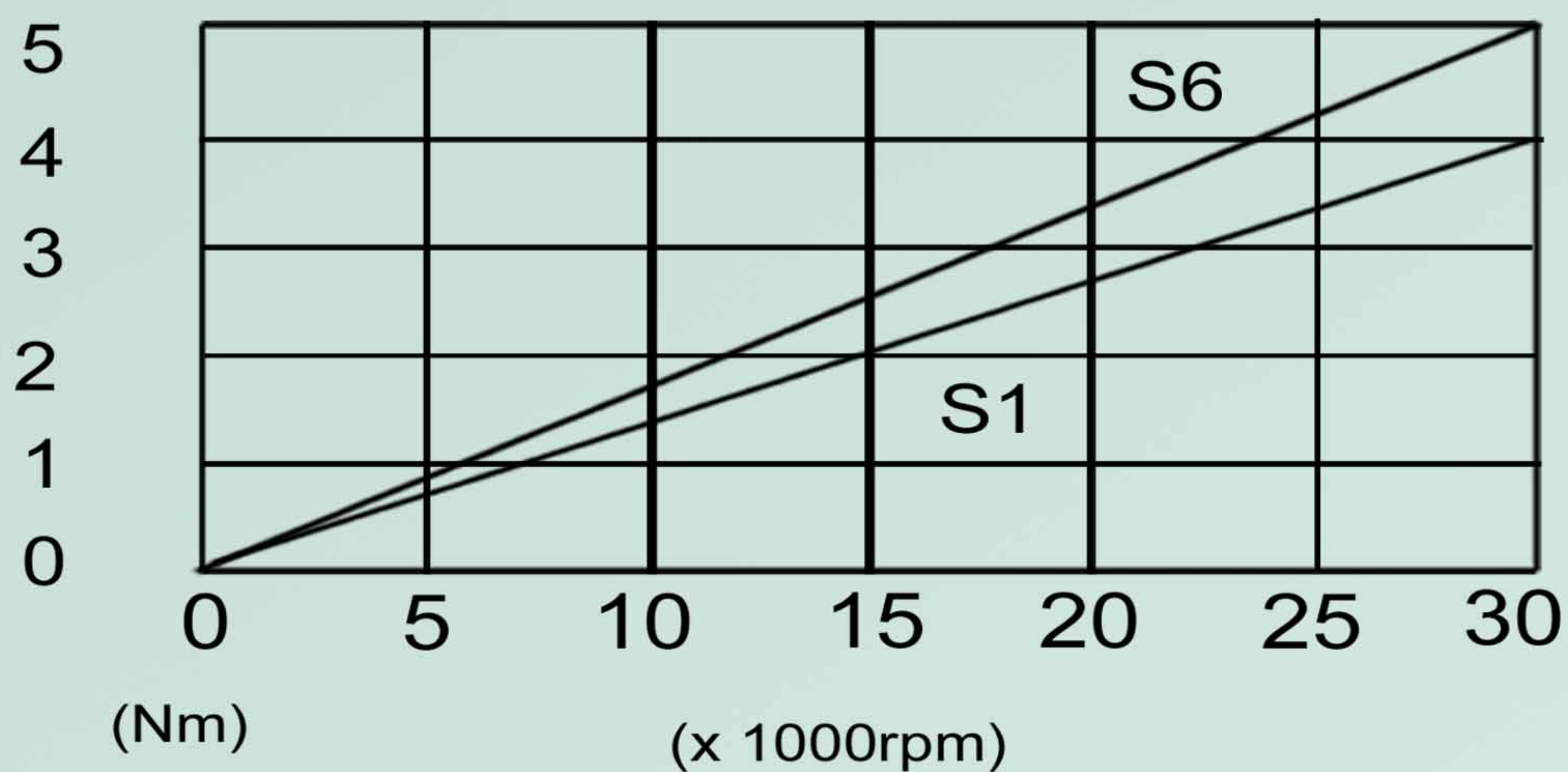
Model : CEC HF 100, 30K



Max . Speed	30,000 RPM
MAX. Voltage	350 V
Pole Number	4 P
Max . Power	5 kw
Spindle Diameter	φ100
Bearing type	Ceramic bearing
Inner cone Run out	≤1.0 μm
Shaft end Static Runout	≤8.0 μm (At test bar 30mm)
Vibration	≤1.0 mm/s
Clamping torque	1200 N.cm
Motor winding insulation grade	≥500MΩ(H Grade)
Cooling water pressure	≥2.5Kgf/cm ²
Cooling water flow	≥1.5 L /min
Cooling water temperature	20±2 ° C
Lubrication	Grease
Tool change form	BT-25
AS pressure	≥0.8Kgf/cm ²
AS flow	20 L/min
CL pressure	7Kgf/cm ²
To retract	7Kgf/cm ²

(K.W)

Power - Diagram



SPINDLE'S ACCESSORIES



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Tool Holders



High Frequency Drives



Collets



Force Gauge



Air Bearings



Drawbar

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