

# HT20B high throughput diffusion pump

Edwards HT20B (ANSI20 / ISO630 inlet) diffusion pump is designed for all light and heavy duty industrial applications. The robust construction gives high pumping speed at high pressure. The cast and machined aluminum interior provides consistent performance, while the stainless steel body prevents corrosion and ensures process cleanliness.

The HT20B features a sight glass as standard and three power modes: 1/3, 2/3 and full power are included, allowing power consumption to be reduced when the pump is on standby or lightly loaded, but allows the pump to be rapidly switched to full power for process. The Edwards range of HT diffusion pumps continues to provide low cost of ownership and is easily maintained.



## Features and benefits

- Performance and pump down
  - Highest throughput of any comparative sized pumps
  - Earliest crossover point compared to any similar sized pumps
  - Self fractionating boiler for low ultimate pressure
  - 1/3 and 2/3 power - energy saving modes
  - Fast warm-up - 60 minutes
- Operation
  - Large oil level sight glass
  - Easy changing of heaters
  - Easy oil fill and drain
- Process reliability
  - Stainless steel body for corrosion resistance and process cleanliness
  - Cast and machined interior provides exceptional pump stability
  - High critical backing pressure for very good tolerance to gas surges
  - No busbars for improved electrical reliability
  - Integral water cooled cold cap ensures minimal back-streaming
  - New nine heater configuration for lower cost of ownership

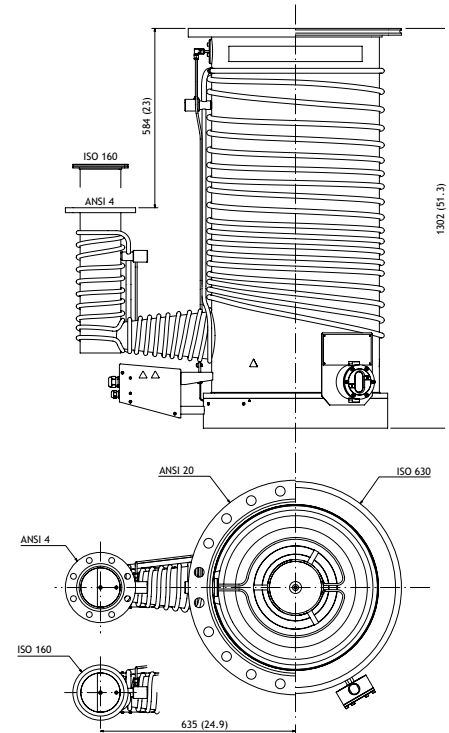
## Technical data

Comparative pumping speed	18000 ls <sup>-1</sup>
ISO pumping speed	
Nitrogen	8000 ls <sup>-1</sup>
Helium	16000 ls <sup>-1</sup>
Maximum throughput (Nitrogen)	19 mbar ls <sup>-1</sup> /14 torr ls <sup>-1</sup>
Critical backing pressure (DC704EU)	1.3 mbar/1 torr
Minimum backing pump displacement for maximum throughput	135 m <sup>3</sup> h <sup>-1</sup> /80 ft <sup>3</sup> min <sup>-1</sup>
Recommended backing pump	GXS160/E2M175
Recommended fluid	DC704EU
Fluid charge (dry)	3600 ml/3.8 qt
Inlet/backing connection	ANSI20/ANSI14 or ISO630/ ISO160
Water connections	3/4 inch NPT female
Heater power	12.6 kW/16.9 hp
Warm-up time	60 mins
Minimum cooling-water flow at 25 °C	960 lh <sup>-1</sup> /4.2 US gal min <sup>-1</sup>
Pressure drop across cooling-water supply	1.2 bar/17.4 psi
Weight (dry pump)	275 kg/605 lbs

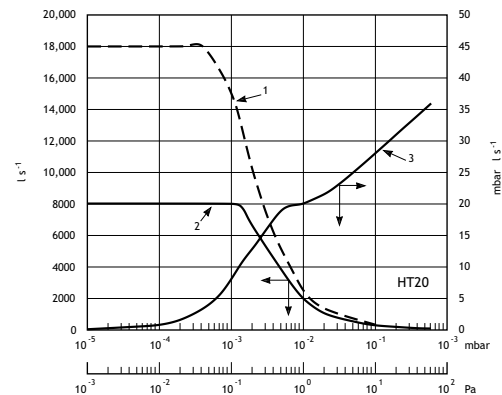
## Ordering information

HT20B, ANSI20/ANSI14		HT20B, ISO630/ISO160	
	Item number		Item number
200 V	B31420200	200 V	B31422200
220 V	B31420220	220 V	B31422220
380 V	B31420380	380 V	B31422380
400 V	B31420400	400 V	B31422400
415 V	B31420415	415 V	B31422415
440 V	B31420440	440 V	B31422440
460 V	B31420460	460 V	B31422460
480 V	B31420480	480 V	B31422480

## Dimensions



## Performance



- 1 Comparative pumping speeds from back to back testing
- 2 ISO pumping speed obtained using total pressure gauges
- 3 ISO throughput obtained using total pressure gauges

## Global contacts

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