



# Edwards HT10, HT16B, HT20B

## Technical Specifications

		HT10	HT16B	HT20B
AVS pumping (nitrogen)	l/s	2900	6700	8000
AVS pumping (helium)	l/s	4900	8500	16000
Maximum throughput (nitrogen)	mbar ls <sup>-1</sup> / Torr ls <sup>-1</sup>	10/7.5	18/13.5	24/18
Critical backing pressure (with DC704)	mbar/Torr	1.1/0.8	1.4/1	1.3/1
Minimum backing pump displacement for maximum throughput	m <sup>3</sup> h <sup>-1</sup> /ft <sup>3</sup> min <sup>-1</sup>	60/35	94/55	135/80
Recommended backing pump	-	E2M80	GXS250, E2M175	GXS250, E2M175
Recommended fluid	-	Edwards 704		
Fluid charge (dry)	ml/qt	1250/1.3	2400/2.5	3600/ 3.8
Inlet/backing connection	-	ANSI10/ANSI 2 or E12"/ E130mm or ISO320/ISO63	ANSI16/ANSI 3 or ISO500/ISO100	ANSI20/ANSI4 or ISO630/ISO160
Water connection	-	¾ inch NPT female		
Heater power	kW/hp	5.1/6.8	9/12	12.6/16.9
Warm-up time	min	30	60	60
Cool down time (to approximately 100°C)	min	120	180	300
Minimum cooling water flow at 25°C (inlet in addition)	lh <sup>-1</sup>	400	700	960
	US gal min <sup>-1</sup>	1.8	3.1	4.2
Pressure drop across cooling water supply	bar/psi	1/14.5	1/14.5	1.2/17.4
Weight	kg/lbs	80/176	185/408	275/605





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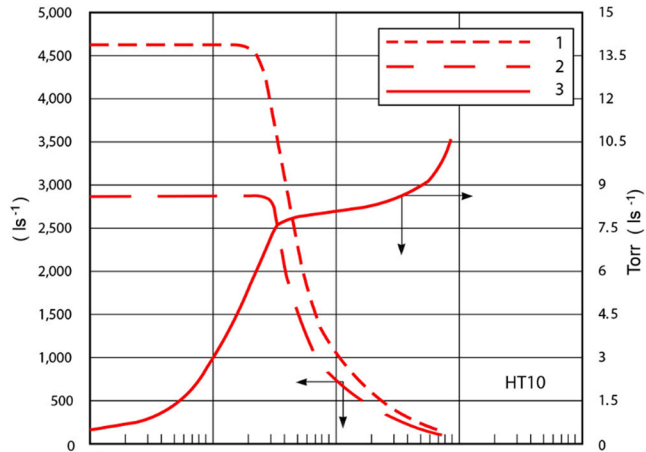
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# Edwards HT10, HT16B, HT20B Pumping Curves

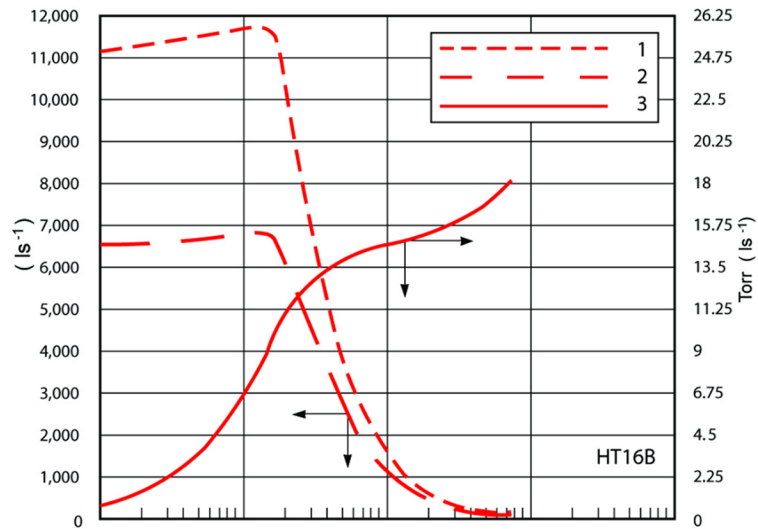
## HT10

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



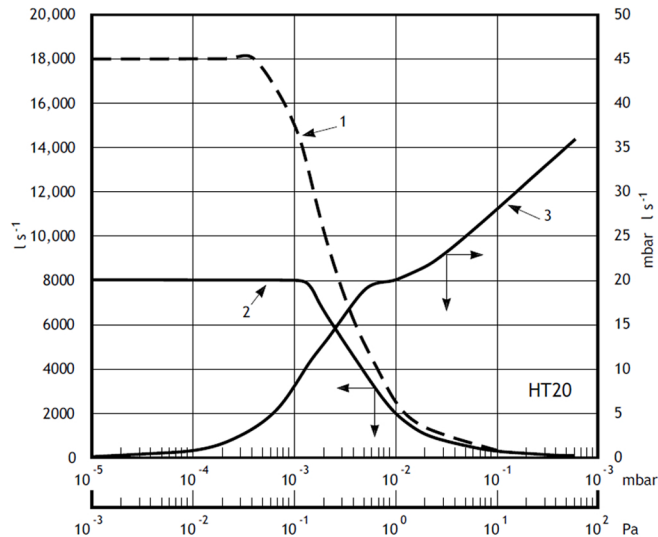
## HT16B

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



## HT20B

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

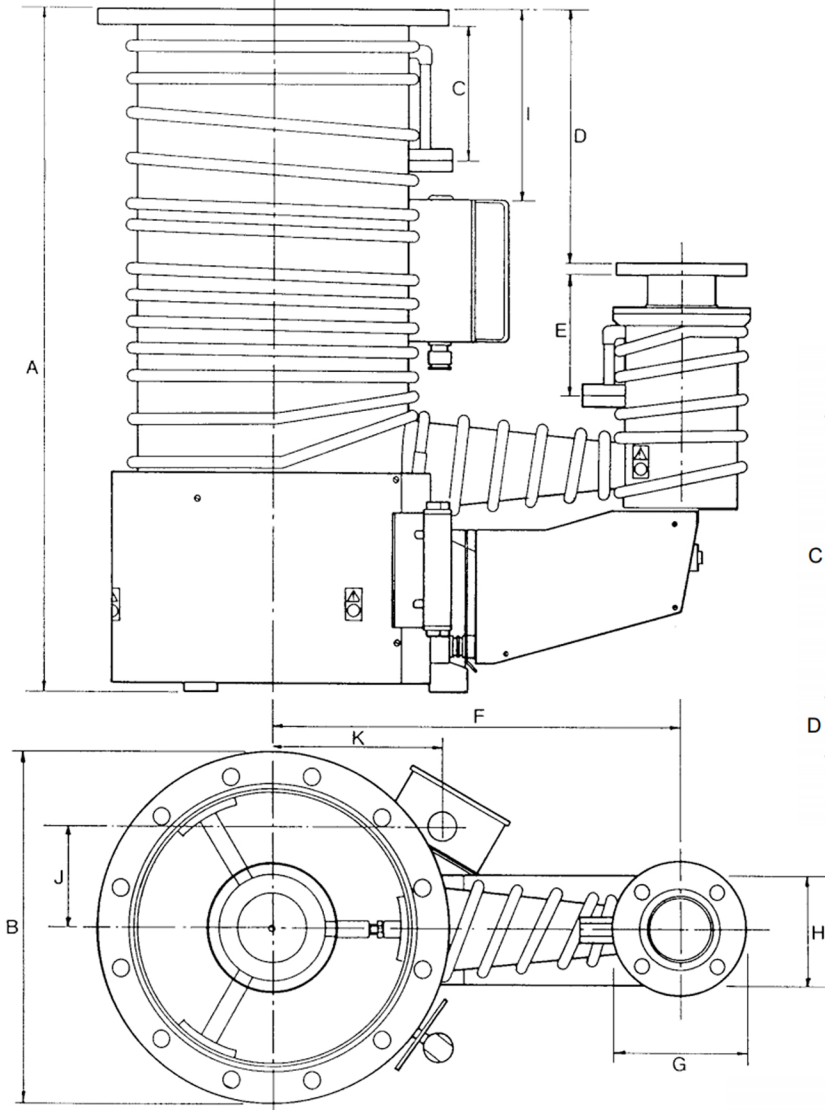




# Edwards HT10, HT16B, HT20B

## Dimensions

### HT10

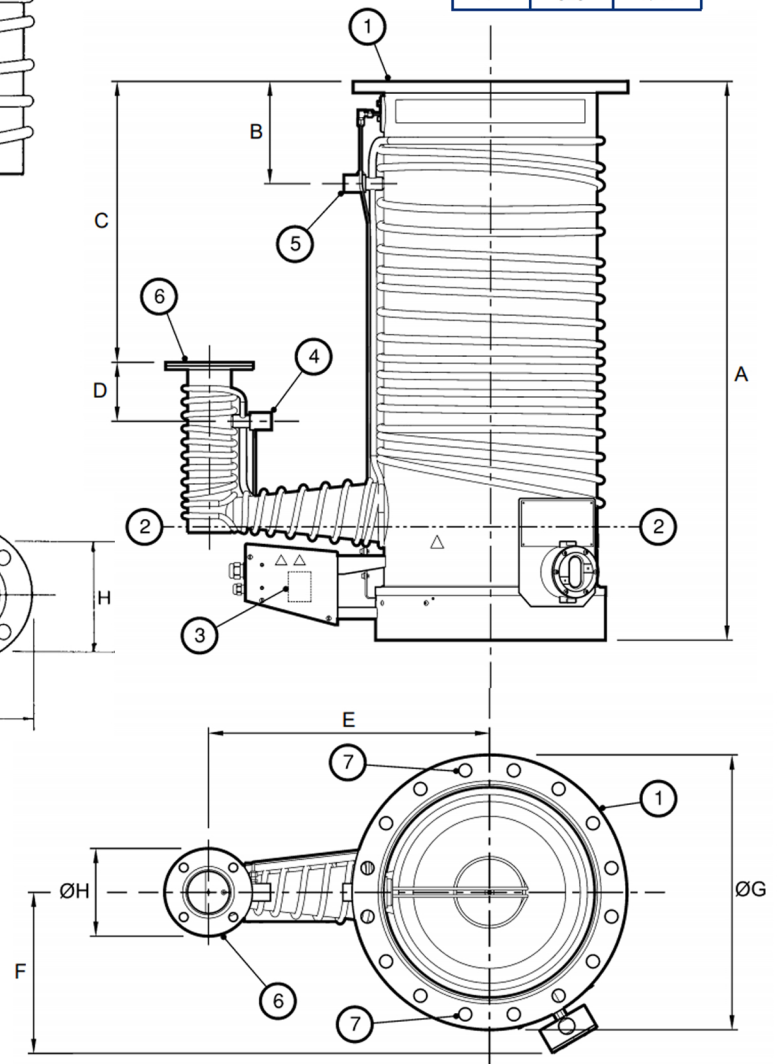


Key →	A	B			C	D	E	
		ANSI inlet	ISO inlet	EO inlet				
HT10	790	406	370	419	158	295	140	
F	G			H	I	J	K	
	ANSI outlet	ISO outlet	EO outlet					
	471	152	95	130	127	220	118	197

### HT16B, HT20B

1. Inlet
2. Surfaces below this line can reach temperatures of up to 250 °C
3. Identification and rating plate
4. Cooling-water outlet
5. Cooling-water inlet
6. Outlet
7. Lifting-bolt holes: Ø28 (ANSI pump only)

Pump	ØG	ØH	Key	HT16B	HT20B
HT16B ANSI	597	191	A	1214	1302
HT16B ISO	550	130	B	222	250
HT20B ANSI	699	229	C	610	584
HT20B ISO	690	180	D	128	158
			E	610	635
			F	323	N/A





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## S A L E S

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## Edwards HT10, HT16B, HT20B Features & Benefits

- highest throughput of any comparative sized pumps
- earliest crossover point compared to any similar sized pump
- self fractionating boiler for low ultimate pressure
- large oil level sight glass
- easy changing of heaters & oil fill and drain
- stainless steel body for corrosion resistance & process cleanliness
- cast & 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

## Applications

- vacuum metallurgy • distillation • drying & degassing • thin film coating & metallizing • large scale research