



Edwards iQDP-80/QMB-500

Technical Specifications

iQ system →			iQDP40	iQDP80	iQDP40/ iQMB250	iQDP40/ iQMB500	iQDP80/ iQMB250	iQDP80/ iQMB500	iQDP80/ iQMB1200
Parameter		Units							
Typical peak pumping speed	50 Hz	m ³ h ⁻¹	44	80	235	350	260	390	815
	60 Hz	m ³ h ⁻¹	55	96	290	425	305	460	940
Displacement (swept volume)	50 Hz	m ³ h ⁻¹	52.0	91.5	310	505	310	505	1195
	60 Hz	m ³ h ⁻¹	62.4	109.8	375	605	375	605	1435
Typical ultimate vacuum with shaft-seals purge only	50 Hz	mbar	5 × 10 ⁻²	3 × 10 ⁻²	2.5 × 10 ⁻³	2.5 × 10 ⁻³	2.0 × 10 ⁻³	2.0 × 10 ⁻³	2.0 × 10 ⁻³
		Pa	5	3	2.5 × 10 ⁻¹	2.5 × 10 ⁻¹	2.0 × 10 ⁻¹	2.0 × 10 ⁻¹	2.0 × 10 ⁻¹
	60 Hz	mbar	3 × 10 ⁻²	1 × 10 ⁻²	2.0 × 10 ⁻³	2.0 × 10 ⁻³	7.0 × 10 ⁻⁴	7.0 × 10 ⁻⁴	7.0 × 10 ⁻⁴
		Pa	3	1	2.0 × 10 ⁻¹	2.0 × 10 ⁻¹	7.0 × 10 ⁻²	7.0 × 10 ⁻²	7.0 × 10 ⁻²
Maximum continuous inlet pressure		mbar	1 × 10 ³	1 × 10 ³	20	20	20	20	1
		Pa	1 × 10 ⁵	1 × 10 ⁵	2 × 10 ³	2 × 10 ³	2 × 10 ³	2 × 10 ³	1 × 10 ²
Inlet connection		-	ISO40 bolted	ISO63 bolted	ISO63 bolted	ISO100 bolted	ISO63 bolted	ISO100 bolted	ISO 160 bolted
Outlet connection		-	NW40	NW40	NW40	NW40	NW40	NW40	NW40

iQDP pump operating temperature (measured at the thermal snap-switch position)	Maximum water consumption (l h ⁻¹) of pump operating with 50 Hz electrical supply, at ultimate vacuum with cooling-water supply temperature of 20 °C and a pressure differential across the supply and return of 30 psi (1.9 × 10 ⁵ Pa)				
	iQDP40	iQDP80	iQDP40/iQMB250 iQDP40/iQMB500	iQDP80/iQMB250 iQDP80/iQMB500	iQDP80/iQMB1200
55 °C	300	324	300	324	324
70 °C	150	165	225	240	246
90 °C	135	126	225	216	204



PROVAC

SALES

PHONE: 831-462-8900

FAX: 831-462-3536

WWW.PROVAC.COM

Edwards iQDP-80/QMB-500

Technical Specifications cont.

General

Warm-up time to nominal performance	15 min
Vacuum system maximum leak-rate	1×10^{-5} mbar l s ⁻¹ (1×10^{-3} Pa l s ⁻¹)
Exhaust system maximum leak-rate	1×10^{-5} mbar l s ⁻¹ (1×10^{-3} Pa l s ⁻¹)
Ambient operating temperature range	5 to 40 °C
Maximum ambient operating humidity	90% RH
Noise level	< 70 dB(A) *
Mass	
iQDP80 system	216 kg

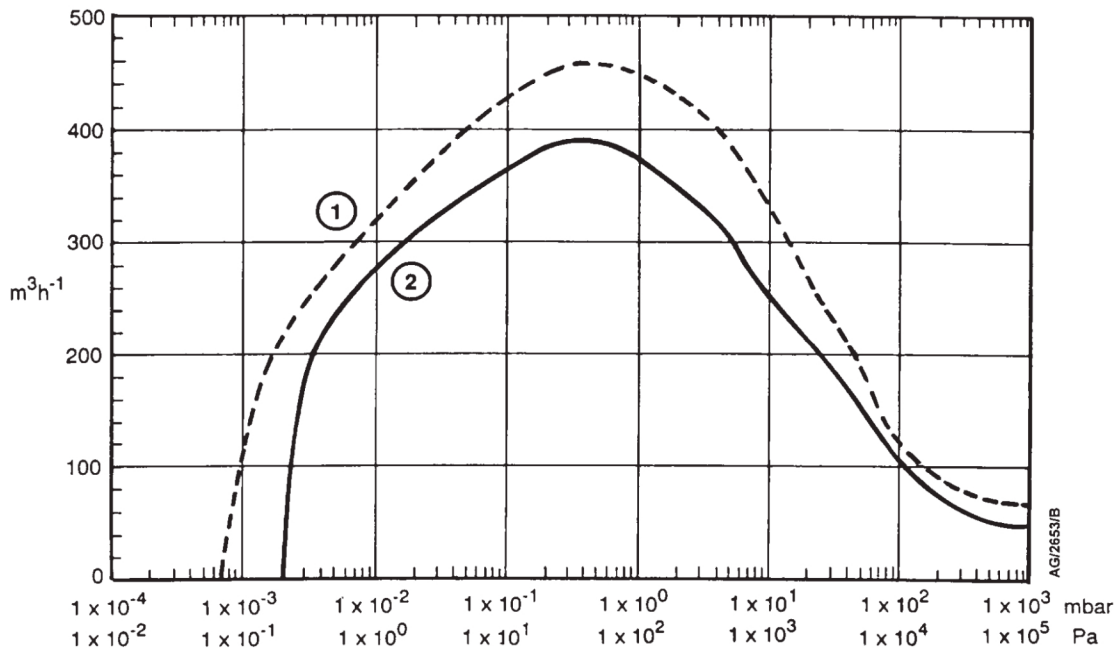
iQDP80/iQMB500 system

Direct mounted	Frame mounted
299 kg	359 kg

Cooling-water supply

Maximum supply pressure	100 psig (6.9 bar, 6.9×10^5 Pa)
Minimum required pressure differential across supply and return	30 psi (2.1 bar, 2.1×10^5 Pa)
Typical heat removed from iQDP pump	1.75 kW (iQDP40), 2.75 kW (iQDP80)
Maximum particle size in supply	0.03 mm ²

Pumping Curves



1. 60 Hz

2. 50 Hz

Typical pumping speeds for iQDP80/iQMB500F: pumping speed (m³ h⁻¹) against pressure



PROVAC

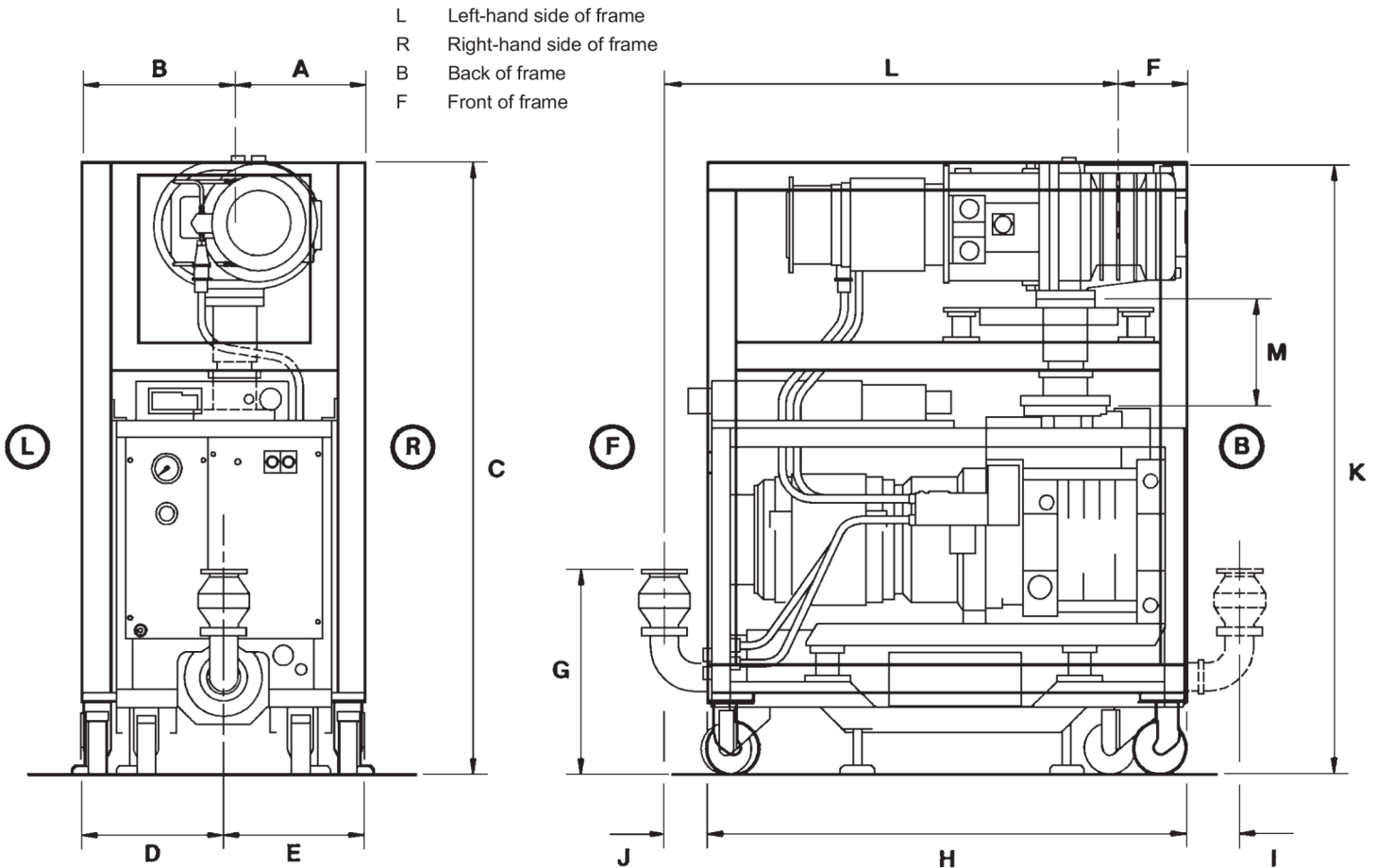
SALES

PHONE: 831-462-8900

FAX: 831-462-3536

WWW.PROVAC.COM

Edwards iQDP-80/QMB-500 Dimensions



Pumping system	A	B	C	D	E	F	G	H	I	J	K	L	M
iQDP40/iQMB250F	251.5	268.5	990	260	260	164.5	314	760	108.5	83.5	967	679	179
iQDP40/iQMB500F	251.5	268.5	990	260	260	262.5	314	890	108.5	-46.5*	948	581	179
iQDP80/iQMB250F	251.5	268.5	990	260	260	140.5	314	890	98.5	71.5	967	821	204
iQDP80/iQMB500F	251.5	268.5	990	260	260	238.5	314	890	98.5	71.5	948	723	204
iQDP80/iQMB1200F	251.5	268.5	1050	260	260	318.5	314	1050	-69.5*	79.5	1018	811	218

* In these pump combinations, the centre of the exhaust-silencer check-valve is (46.5 mm or 69.5 mm) inside the end of the iQMB Booster Frame

Dimensions of booster frame mounted iQ systems, without acoustic enclosures (mm)