

2.2 Performance

Rotational speed (50 Hz supply)	0 to 2900 r.min ⁻¹
Rotational speed (60 Hz supply)	0 to 3500 r.min ⁻¹
Total pressure (single-stage backing pump, with gas-ballast)	2 x 10 ⁻² mbar absolute (2 Pa)
Ultimate pressure (single-stage backing pump without gas-ballast, permanent gases)	2 x 10 ⁻³ mbar absolute (2 x 10 ⁻¹ Pa)
Total pressure (two-stage backing pump with gas-ballast)	1 x 10 ⁻³ mbar absolute (1 x 10 ⁻¹ Pa)
Maximum outlet pressure (see Section 1.2.4)	1000 mbar absolute (1 x 10 ⁵ Pa)
Pressure differential across pump (determined by the hydrokinetic drive)	

Pump	50 Hz		60 Hz	
EH250	0 to 180 mbar	0 to 1.8 x 10 ⁴ Pa	0 to 150 mbar	0 to 1.5 x 10 ⁴ Pa
EH500A	0 to 110 mbar	0 to 1.1 x 10 ⁴ Pa	0 to 90 mbar	0 to 0.9 x 10 ⁴ Pa
EH1200/1200C	0 to 90 mbar	0 to 0.9 x 10 ⁴ Pa	0 to 75 mbar	0 to 0.75 x 10 ⁴ Pa
EH2600/2600C	0 to 80 mbar	0 to 0.8 x 10 ⁴ Pa	0 to 67 mbar	0 to 0.67 x 10 ⁴ Pa
EH4200/4200C	0 to 60 mbar	0 to 0.6 x 10 ⁴ Pa	0 to 50 mbar	0 to 0.5 x 10 ⁴ Pa

2.3 Recommended backing pumps

Because of the flexibility of the hydrokinetic drive, there is a wide range of backing pumps which are suitable for use with the EH Mechanical Booster pumps. Contact your supplier or BOC Edwards for advice on suitable backing pumps.

2.4 Connections

2.4.1 Vacuum connections

	Inlet	Outlet
EH250	ISO63	ISO40
EH500A	ISO100	ISO63
EH1200/1200C	ISO160	ISO100
EH2600/2600C	ISO160	ISO100
EH4200/4200C	ISO250	ISO100

2.4.2 Cooling-water connections

Inlet connection	³ / ₈ inch BSP male
Outlet connection	³ / ₈ inch BSP male

2.4.3 Coupling-cover purge connection (EH1200C/2600C/4200C only)

Purge connection	¹ / ₄ inch compression fitting
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2.5 Electrical data

Note: The motors of EH250 and EH500A pumps are supplied configured for 'low voltage' operation (240 V and lower), the motors of EH1200/1200C, EH2600/2600C and EH4200/4200C pumps are supplied configured for 'high voltage' operation (380 V and higher): refer to Section 3.6.

Number of phases	3
Supply voltage	220-240 V/380-415 V at 50 Hz 208-230 V/460 V at 60 Hz
Voltage tolerance	±6%
Full load current ratings	See Table 2

		220 V 50 Hz	240 V 50 Hz	380 V 50 Hz	415 V 50 Hz	208 V 60 Hz	230 V 60 Hz	460 V 60 Hz
EH250 & EH500A	Full load (A)	6.3	5.8	3.7	3.4	6.1	5.5	2.8
	Rating (kW)	1.5	1.5	1.5	1.5	1.5	1.5	1.5
EH1200	Full load (A)	11.1	10.2	6.4	5.9	11.9	10.7	5.4
	Rating (kW)	3	3	3	3	3	3	3
EH2600 & EH4200 (7.5 kW)	Full load (A)	19.8	18.2	11.5	10.5	20.9	18.9	9.5
	Rating (kW)	7.5	7.5	7.5	7.5	7.5	7.5	7.5
EH2600 & EH4200 (11 kW)	Full load (A)	-	-	21.5	20.7	-	34.8	17.4
	Rating (kW)	-	-	11	11	-	11	11
EH1200C	Full load (A)	-	-	6	5.7	-	10	5
	Rating (kW)	-	-	3	3	-	3	3
EH2600C & EH4200C	Full load (A)	-	-	22	20	-	36	18
	Rating (kW)	-	-	11	11	-	11	11

Table 2 - Full load current ratings

2.6 Coupling-cover nitrogen purge supply (EH1200C/2600C/4200C only)

Nitrogen supply pressure	1 to 9 bar gauge (2 to 10 bar absolute, 2×10^5 to 1×10^6 Pa)
Regulated pressure	0.3 to 0.5 bar absolute (3×10^4 to 5×10^4 Pa)