

Spec Sheet 102-001

Section: 102 Effective: January 2012 Replaces: July 1997



Design Features

The HXL pumps are constructed of ductile iron (ASTM 536) that will withstand sudden thermal shock and stress well beyond the capabilities of cast iron. All models are fitted with replaceable casing liners and end discs that allow easy rebuilding of the pump, without removing the pump from the piping.

Models are available in 6, 8 and 10-inch ANSI flanged port sizes with maximum rated capacities of 755, 1,228 and 2,220 gpm (171, 279, 504 m³/h) respectively.

Standard elastomers include FKM O-rings. Optional bolt-on relief valves designed to

protect the pump from excessive pressure are available for all sizes. The HXLJ8 model features jacketed heads for high viscous and high temperature applications.

Base-mounted unit assemblies with commercial gear reduction drives are available for all HXL models. Consult factory for details.

Applications

Blackmer HXL type pumps are commonly used in refineries, terminal operations, barge and ship loading, and off-loading applications where self-priming and high suction lift capabilities enable them to strip lines clean.

Benefits

Utilizing Blackmer's unique sliding vane design, these positive displacement rotary pumps offer the best combined characteristics of sustained high level performance, energy efficiency, troublefree operation and low maintenance cost.



How Blackmer's sliding vane action works

Performance Data

Pump Model		Viscosity (ssu / Cst)										
r unip mot	161	30/1.0	500 / 110	3,000 / 630	10,000 / 2,200	20,000** / 4,250	50,000 / 10,500	100,000 / 21,000 68 133 30 503 111 68 215 49 814 16 68 650 148 2,461	200,000 / 44,000			
	rpm	350	350	300	230	155	100	68	45			
	gpm	740	755	640	490	325	5^{+} $4,250$ $50,000/10,500$ $100,000/21,000$ $200,00$ 155 100 68 325 204 133 33 74 46 30 100,000/20,000 20,000 100,000/20,000 100,000 100,000/20,000 100,000 100,000 100,000 100,000 100,000 100,000 100,000 100,000 100,000 100,000 100,000 100,000 100,000 100,000 10,000	90				
HXL6	m³/h	168	171	145	111	74	46	30	20			
	L/min	2,801	2,858	2,423	1,855	1,230	772	503	341			
	hp	26	30	32	28	20	14	11	10			
HYLS	rpm	350	350	300	230	155	100	68	45			
	gpm	1,175	1,200	1,020	780	518	327	215	145			
	hp 2 rpm 32 gpm 1,1 m³/h 20 LJ8 L/min 4,4 hp 4	267	273	232	177	118	74	49	33			
HXLJ8		4,448	4,543	3,861	2,953	1,961	1,238	814	549			
	hp	40	45	46	41	30	21	100,000 / 21,000 68 68 63 133 30 503 11 68 63 133 14 16 16 16 68 650 148 148 14 16 148 14 16 148 14 16 1	15			
	rpm	230	230	230	190	155	100	68	45			
	gpm	2,150	2,220	2,220	1,850	1,500	950	650	430			
HXL10	m³/h	488	504	504	420	341	216	148	98			
	L/min	8,139	8,404	8,404	7,003	5,678	1,230 772 503 34 20 14 11 100 155 100 68 45 518 327 215 14 118 74 49 33 1,961 1,238 814 54 30 21 16 15 155 100 68 445 1,500 950 650 43 341 216 148 99 5,678 3,596 2,461 1,6 89 60 40 38	1,628				
	hp	93	97	115	115	89	60	40	38			

* Approximate capacities and horsepower (hp) are for the conditions specified at 50 psi (3.45 bar) differential pressure. Refer to performance curves for capacities and horsepower at other operating conditions.

** For viscosities 20,000 ssu (4,250 cSt) and higher, use metal vanes.

Maximum Operating Limits

Pumn Model	Differential Pressure		Visco	osity	Nominal	Flowrate	Tempe	erature	Working Pressure		Pump Speed
r unip mouer	psi	bar	ssu	cSt	gpm	m³/h	°F	°C	psi	bar	rpm
HXL6	125	8.6	250,000	54,100	755	172	400	204	150	10.3	350
HXL8 / HXLJ8	150	10.3	250,000	54,100	1,228	279	400	204	250	17.2	350
HXL10	150	10.3	250,000	54,100	2,220	504	400	204	250	17.2	230

Note: optional materials of construction may be required to meet specific application requirements – Refer to Blackmer Material Specification Sheets. For operating conditions that exceed those listed – Consult factory.

Dimensions

Pump	Model	A	В	c	D	E	F	G	J	L	М	N	Approx. Wt.
	in.	2 ¹ /8	¹ /2	21	9 ¹¹ /16	20 ¹ /4	9 ¹ /2	10 ³ /4	21 ¹ /2	34 ¹ /2	5 ¹ /2	10 ¹ /2	800 lbs.
HXLO	mm	-	-	533	246	514	241	273	546	876	138	267	364 kg
HXL8	in.	25/8	⁵ /8	22 ¹ /4	9 ¹¹ /16	22 ³ /4	10 ³ /4	12 ¹³ /16	25 ⁵ /8	36 ⁷ /8	6	15	1,010 lbs.
HXLJ8	mm	-	-	565	246	578	273	325	651	937	152	381	458 kg

Pump Mo	del	A	В	C	D	E	F	G	J	K	М	N	Approx. Wt.
HXL10	in.	3 ⁷ /8	1	22 ¹ /2	13 ⁷ /8	32 ¹ /8	14 ³ /4	16 ⁵ /8	39 ¹ /8	44 ⁵ /16	10	21	2,610 lbs.
	mm	-	-	572	352	816	375	422	994	1,126	254	533	1,184 kg

Note: HXLJ8 is jacketed.

Note: ANSI compatible flanges.



HXL6, HXL8, HXLJ8



HXL10



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