

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 presure are available for all sizes. The HXLJ8 model features jacketed heads for high viscous and high temperature applications.

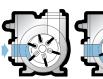
Base-mounted unit assemblies with commericial gear reduction drives are available for all HXL models. Consult factory for details.

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, trouble-free operation and low maintenance cost.







How Blackmer's sliding vane action works

Performance Data

Pump Model		Viscosity (ssu / Cst)										
		30 / 1.0	500 / 110	3,000 / 630	10,000 / 2,200	20,000** / 4,250	50,000 / 10,500	100,000 / 21,000	200,000 / 44,000			
	rpm	350	350	300	230	155	100	68	45			
	gpm	740	755	640	490	325	204	133	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			
	rpm	350	350	300	230	155	100	68	45			
HXL8	gpm	1,175	1,200	1,020	780	518	327	215	145			
	m³/h	267	273	232	177	118	74	49	33			
HXLJ8	L/min	4,448	4,543	3,861	2,953	1,961	1,238	814	549			
	hp	40	45	46	41	30	21	16	15			
	rpm	230	230	230	190	155	100	68	45			
HXL10	gpm	2,150	2,220	2,220	1,850	1,500	950	650	430			
	m³/h	488	504	504	420	341	216	148	98			
	L/min	8,139	8,404	8,404	7,003	5,678	3,596	2,461	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.

Maximum Operating Limits

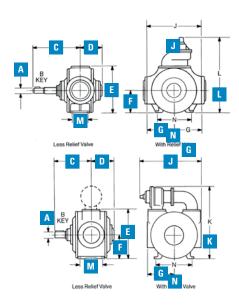
Pump Model	Differential Pressure		Viscosity		Nominal Flowrate		Tempe	rature	Working Pressure		Pump Speed
r unip mouci	psi	bar	ssu	cSt	gpm	m³/h	°F	°C	psi	bar	rpm
HXL6	125	8.6	250,000	54,100	755	172	400	204	150	10.3	350
HXL8 / HXLJ8	150	10.3	250,000	54,100	1,228	279	400	204	250	17.2	350
HXL10	150	10.3	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	M	N	Approx. Wt.
HXL6	in.	21/8	1/2	21	911/16	20 ¹ / ₄	9 ¹ / ₂	10³/ ₄	211/2	34 ¹ / ₂	5 ¹ / ₂	10 ¹ / ₂	800 lbs.
	mm	-	-	533	246	514	241	273	546	876	138	267	364 kg
HXL8	in.	25/8	5/8	22 ¹ / ₄	911/16	223/4	10³/ ₄	1213/16	255/8	36 ⁷ /8	6	15	1,010 lbs.
HXLJ8	mm	-	-	565	246	578	273	325	651	937	152	381	458 kg
Pump Model A B C D E F G J K M N Approx. Wt.													
Pump	Pump Model		В	C	D	E	F	G	J	K	M	N	Approx. Wt.
HXL10	in.	3 ⁷ /8	1	221/2	13 ⁷ /8	32 ¹ / ₈	14³/ 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.













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