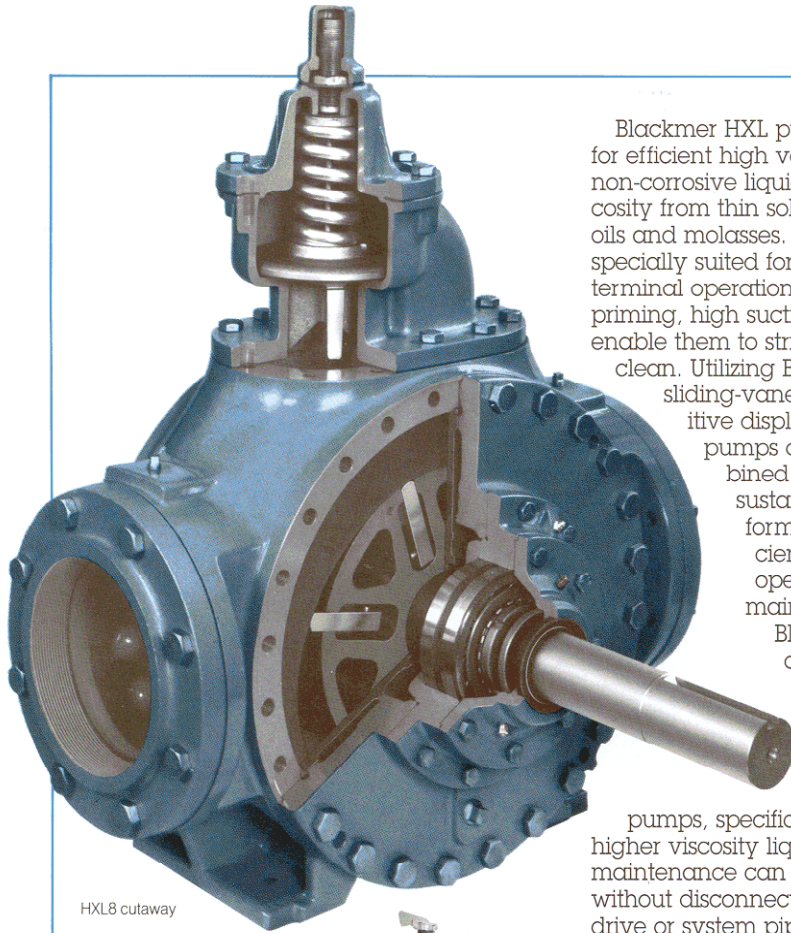




# HXL SERIES HIGH CAPACITY, DUCTILE IRON PUMPS



HXL8 cutaway

Blackmer HXL pumps are designed for efficient high volume transfer of non-corrosive liquids ranging in viscosity from thin solvents to heavy oils and molasses. HXL pumps are specially suited for barge, ship and terminal operations where their self-priming, high suction lift capabilities enable them to strip tanks and barges clean. 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.

Blackmer's high mechanical efficiency requires less horsepower to operate than other positive displacement pumps, specifically in transfer of higher viscosity liquids. Simplified maintenance can be performed without disconnecting the pump drive or system piping.

HXL models are available in 6, 8 and 10-inch ANSI flanged port sizes with maximum rated capacities of 755, 1228 and 2300 gpm. (172,279 and 522 m<sup>3</sup>/h) respectively.

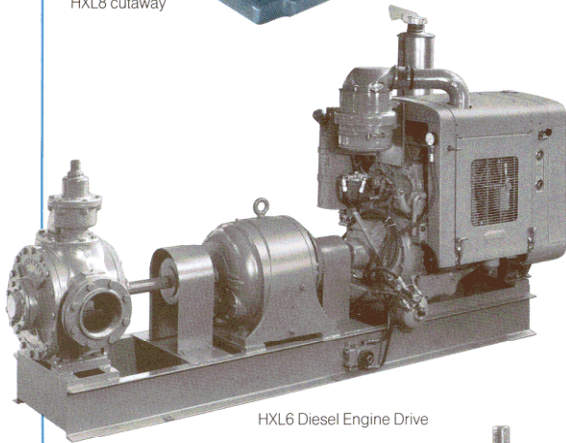
All models are constructed of thermal shock-resistant ductile iron and feature a replaceable liner for fast, easy rebuilding of the pumping chamber to original capacity. The 8 and 10-inch sizes are designed with locking collars on the bearing ends to secure the bearings in place, which permits vertical or horizontal pump mounting. Separate removable hubs allow access to the bearings and mechanical seals without removing the entire pump head.

All models are available with extra-clearance options for handling viscous liquids (in excess of 20,000 SSU 4250 Cs.). Optional jacketed heads are also available on the HXLJ8 models for highly viscous or sticky liquids, where steam or hot oil can be circulated through the jackets. The pumps may be powered with a standard electric motor or diesel engine through a commercial gear reducer. All HXL pumps use self-adjusting, easy-to-install, semi-cartridge type mechanical seals and external spherical roller bearings isolated from the pumpage. HXL pumps are equipped with pin-lock vanes which automatically alert the operator of the need for vane replacement, before excessive wear can occur. An Optional relief valve is also available which protects the pump from excessive pressure build-up and motor overload.

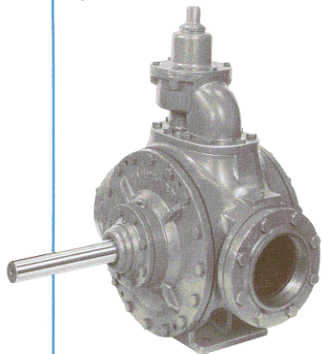
### Technical assistance

In some applications, selecting the right pump may require more detailed information than can be presented here. Your Blackmer representative can help you find the correct equipment to ensure the best performance possible for your specific application.

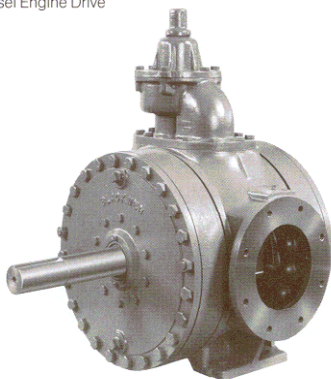
If you have a unique fluid handling problem, please call your Blackmer representative, or contact our main office listed on the back-side of this Spec Sheet.



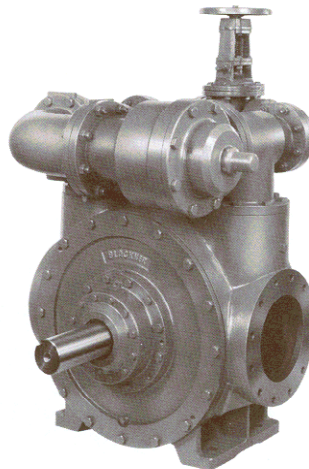
HXL6 Diesel Engine Drive



HXL6



HXLJ8



HXL10

## PUMP PERFORMANCE DATA

PUMP MODEL*	SSU	30	500	3000	10,000	20,000	50,000	100,000	200,000
	Cs	1.0	110	630	2200	4250	10,500	21,000	44,000
HXL 6	RPM	350	350	300	230	155	100	68	45
	GPM	740	755	640	490	325	204	133	90
	M <sup>3</sup> /H	168	172	145	111	74	47	31	21
	BPH**	1057	1079	914	700	464	291	190	129
	HP	25	30	32	28	20	14	11	10
HXL 8 HXLJ 8	RPM	350	350	300	230	155	100	68	45
	GPM	1180	1200	1020	785	518	327	215	145
	M <sup>3</sup> /H	268	273	232	178	118	74	49	33
	BPH**	1686	1714	1457	1121	740	467	307	207
	HP	40	45	45	41	29	21	16	15
HXL 10	RPM	230	230	230	190	155	100	68	45
	GPM	2150	2220	2220	1850	1500	950	650	430
	M <sup>3</sup> /H	488	504	504	420	341	216	148	98
	BPH**	3071	3171	3171	2643	2143	1357	929	614
	HP	90	97	110	110	89	60	39	38

\*Approximate capacities and horsepower (HP) are for the conditions specified at 50 psi (345 kPa) differential pressure. Refer to performance curves for capacities and horsepower at other operating conditions.

\*\*BPH – "Barrels Per Hour": One barrel equals 42 U.S. gallons.

## MAXIMUM OPERATING LIMITS

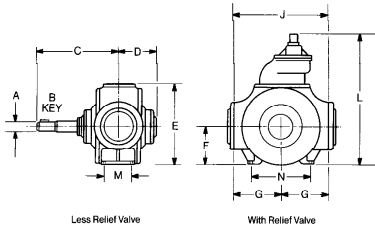
PUMP MODEL	DIFFERENTIAL PRESSURE		VISCOSITY		NOMINAL FLOWRATE		TEMPERATURE		WORKING PRESSURE		PUMP SPEED
	PSI	kPa	SSU	Cs	GPM	M <sup>3</sup> /H	°F	°C	PSI	kPa	RPM
HXL 6	125	862	250,000	54,100	755	172	400	204	150	1034	350
HXL 8	150	1034	250,000	54,100	1228	279	400	204	250	1724	350
HXL 10	150	1034	250,000	54,100	2300	522	400	204	250	1724	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.

## COMPANION FLANGES

PUMP MODEL	STANDARD <sup>1</sup>
HXL 6	6" ANSI
HXL 8 HXLJ 8	8" ANSI
HXL 10	10" ANSI

<sup>1</sup>ANSI COMPATIBLE

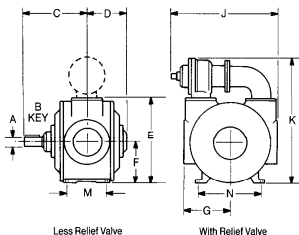


Less Relief Valve

With Relief Valve

## DIMENSIONS — Inches (mm)

PUMP MODEL	A	B	C	D	E	F	G	J	L	M	N	APPROXIMATE WT. WITH STD. FLANGES
HXL 6	2 <sup>1</sup> / <sub>4</sub> (54)	1/2 (13)	21 (533)	9 <sup>1</sup> / <sub>16</sub> (246)	20 <sup>1</sup> / <sub>4</sub> (514)	9 <sup>1</sup> / <sub>2</sub> (241)	10 <sup>3</sup> / <sub>4</sub> (273)	21 <sup>1</sup> / <sub>2</sub> (546)	34 <sup>1</sup> / <sub>16</sub> (876)	5 <sup>1</sup> / <sub>2</sub> (138)	10 <sup>1</sup> / <sub>2</sub> (267)	707 lb (321 kg)
HXL 8	2 <sup>5</sup> / <sub>8</sub> (67)	5/8 (16)	22 <sup>1</sup> / <sub>4</sub> (565)	9 <sup>1</sup> / <sub>16</sub> (246)	23 <sup>3</sup> / <sub>4</sub> (578)	10 <sup>3</sup> / <sub>4</sub> (273)	12 <sup>13</sup> / <sub>16</sub> (325)	25 <sup>5</sup> / <sub>8</sub> (651)	38 <sup>5</sup> / <sub>8</sub> (937)	6 (152)	15 (381)	1010 lb (458 kg)



Less Relief Valve

With Relief Valve

PUMP MODEL	A	B	C	D	E	F	G	J	K	M	N	APPROXIMATE WT. LESS FLANGES
HXL(S) 10	3 <sup>7</sup> / <sub>8</sub> (98)	1 (25)	22 <sup>7</sup> / <sub>8</sub> (572)	13 <sup>7</sup> / <sub>8</sub> (352)	32 <sup>1</sup> / <sub>2</sub> (816)	14 <sup>3</sup> / <sub>8</sub> (375)	16 <sup>5</sup> / <sub>8</sub> (422)	39 <sup>1</sup> / <sub>2</sub> (994)	44 <sup>9</sup> / <sub>16</sub> (1126)	10 (254)	21 (533)	3000 lb (1361 kg)



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