

#### Spec Sheet 102-001

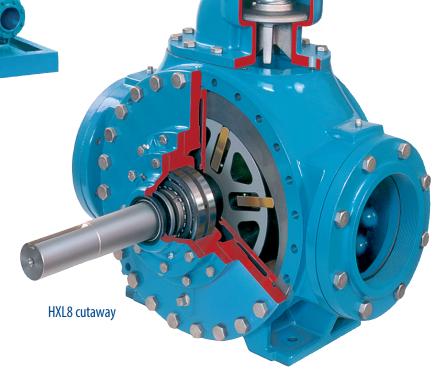
Section: 102
Effective: June 2015
Replaces: January 2012





HXL6 with motor





# **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 m<sup>3</sup>/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, trouble-free operation and low maintenance cost.







How Blackmer's sliding vane action works

### **Performance Data**

D 11		Viscosity (ssu / Cst)										
Pump M	odei	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	20,000***/4,250         50,000/10,500         100,000/21,000         200,000/44,000           155         100         68         45           325         204         133         90           74         46         30         20           1,230         772         503         341           20         14         11         10           155         100         68         45           518         327         215         145           118         74         49         33           1,961         1,238         814         549           30         21         16         15           155         100         68         45           1,500         950         650         430           341         216         148         98           5,678         3,596         2,461         1,628						
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			
hp         26         30         32         28         20         14           rpm         350         350         300         230         155         100           HXL8         gpm         1,175         1,200         1,020         780         518         327           HXL8         m³/h         267         273         232         177         118         74	215	145										
	m³/h	267	273	232	177	118	74	49	33			
HXLJ8	m³/h         168         171         145         111         74         46         30           L/min         2,801         2,858         2,423         1,855         1,230         772         503           hp         26         30         32         28         20         14         11           rpm         350         350         300         230         155         100         68           gpm         1,175         1,200         1,020         780         518         327         215           m³/h         267         273         232         177         118         74         49           L/min         4,448         4,543         3,861         2,953         1,961         1,238         814           hp         40         45         46         41         30         21         16           rpm         230         230         230         190         155         100         68           gpm         2,150         2,220         2,220         1,850         1,500         950         650	814	549									
	hp	40	45	46	41	30	21	16	15			
	rpm	230	230	230	190	155	100	68	45			
	gpm	2,150	2,220	2,220	1,850	1,500	950	650	430			
HXL6         m³/h         168         171         145         111         74         46           L/min         2,801         2,858         2,423         1,855         1,230         772           hp         26         30         32         28         20         14           HXL8         rpm         350         350         300         230         155         100           gpm         1,175         1,200         1,020         780         518         327           m³/h         267         273         232         177         118         74           L/min         4,448         4,543         3,861         2,953         1,961         1,238           hp         40         45         46         41         30         21           rpm         230         230         230         190         155         100           gpm         2,150         2,220         2,220         1,850         1,500         950           HXL10         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	3,000/630         10,000/2,200         20,000***/4,250         50,000/10,500         100,000/21,00           300         230         155         100         68           640         490         325         204         133           145         111         74         46         30           2,423         1,855         1,230         772         503           32         28         20         14         11           300         230         155         100         68           1,020         780         518         327         215           232         177         118         74         49           3,861         2,953         1,961         1,238         814           46         41         30         21         16           230         190         155         100         68           2,220         1,850         1,500         950         650           504         420         341         216         148	40	38						

<sup>\*</sup> 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**

											4
Pump Model	Differential Pressure		Differential Pressure Viscosity		Nominal Flowrate		Temperature		Working Pressure		Pump Speed
i unip model	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.

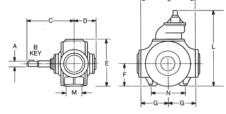
#### **Dimensions**

Pump	Model	A	В	C	D	E	F	G	J	L	М	N	Approx. Wt.
HXL6	in.	21/8		21	911/16	201/4	91/2	10³/ <sub>4</sub>	211/2	341/2	5 <sup>1</sup> / <sub>2</sub>	10 <sup>1</sup> / <sub>2</sub>	800 lbs.
IIVT0	mm			533	246	514	241	273	546	876	138	267	364 kg
HXL8	in.	25/8	5/8	22 <sup>1</sup> / <sub>4</sub>	9 <sup>11</sup> / <sub>16</sub>	223/4	10 <sup>3</sup> / <sub>4</sub>	1213/16	255/8	36 <sup>7</sup> /8	6	15	1,010 lbs.
HXLJ8	mm	-	_	565	246	578	273	325	651	937	152	381	458 kg

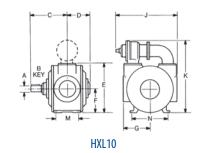
Pump Model		A	В	C	D	E	F	G	J	K	М	N	Approx. Wt.
HXL10	in.	37/8		22 <sup>1</sup> / <sub>2</sub>	13 <sup>7</sup> /8	321/8	143/4	16 <sup>5</sup> /8	39 <sup>1</sup> / <sub>8</sub>	445/16		21	2,610 lbs.
	mm			572	352	816	375	422	994	1,126	254	533	1,184 kg

Note: HXLJ8 is jacketed. Note: ANSI compatible flanges.





HXL6, HXL8, HXLJ8















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<sup>\*\*</sup> For viscosities 20,000 ssu (4,250 cSt) and higher, use metal vanes.