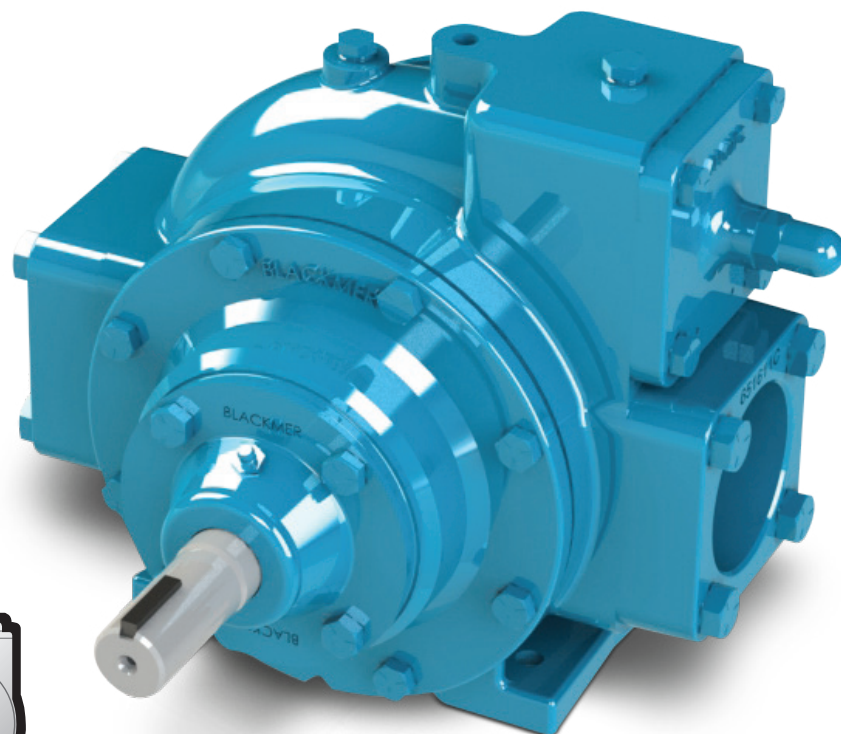
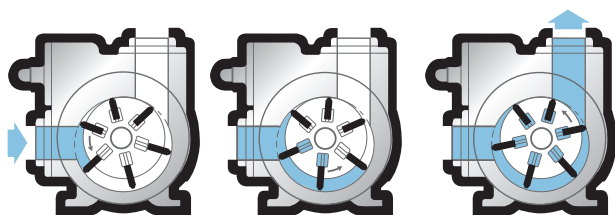




XH Series General Duty Pumps



XH Series



How Blackmer's sliding vane action works

Design

Blackmer's XH series models are available in 2, 2.5, 3 and 4-inch flanged port sizes with capacities from 30 to 520 U.S. gpm (114-1,855 L/min). The pump cylinders are all constructed of ductile iron with 180 degree ports. All models have external ball bearings isolated from the pumpage by mechanical seals.

Self-Priming and Dry Run Capability

The XH pumps are self-priming, and the self-adjusting vanes help maintain this capability. XH pumps can run dry for short periods of time for priming and line stripping.

Application

Blackmer's XH type pumps are designed to handle a wide range of non-corrosive, non-abrasive industrial liquids and petroleum products. Typical applications include fuel oils, lube oils, jet fuels, gasoline, edible oils and a variety of solvents and thinners such as esters, ketones, naphthas, ethers, amines, aromatics, alcohols, terpenes, glycols and many other similar liquids.

Benefit

Blackmer's positive displacement rotary pumps utilizing their unique sliding vane design offers the best combined characteristics of sustained high level performance, energy efficiency, trouble-free operation and low maintenance cost. Also, the high suction lift capability of these pumps makes them especially suitable for pumping from underground tanks, bulk plant service and aircraft refueling.



XH Series General Duty Pumps

Performance Data*

Pump Model	XH2				XH2.5			XH3			XH4						
Rated Pump Speed (rpm)	640	520	420	350	640	520	420	350	640	520	420	350	500	400	300	230	190
U.S. gpm	67	54	43	35	121	97	77	63	270	220	177	146	507	404	299	225	190
L/min	253	204	163	134	457	367	292	240	1023	835	671	544	1919	1532	1135	855	695
hp	2.7	2.2	1.8	1.5	4.7	3.7	2.9	2.3	11.2	8.5	6.5	5.2	20.8	15.9	11.5	8.6	7.0

* Approximate capacities and horsepower (HP) are based on a 100 ssu (22 cSt) fluid at a 50 psi (3.45 bar) differential pressure. Refer to Characteristic Curves for capacities and horsepower at other pressures and viscosities.
Centipoise (cP) = Centistokes (cSt) at fluid specific gravity of 1.0

Maximum Operating Limits

Pump Model	Maximum Pump Speed			Minimum Pump Speed			Maximum Differential Pressure	Maximum Working Pressure	Maximum Operating Temperature
	Speed	Flow ¹	Viscosity ²	Speed	Flow ¹	Viscosity ²			
	rpm	gpm (L/min)	ssu (cSt) ³	rpm	gpm (L/min)	ssu (cSt) ³			
XH2	780	82 (311)	100 (22)	68	7 (26)	20,000 (4,250)	125 (8.6)	175 (12.1)	300 (149)
XH2.5	780	148 (562)	100 (22)	68	12 (45)	20,000 (4,250)	125 (8.6)	175 (12.1)	300 (149)
XH3	640	270 (1,022)	100 (22)	68	28 (106)	20,000 (4,250)	125 (8.6)	175 (12.1)	300 (149)
XH4	520	528 (1,999)	100 (22)	68	66 (250)	20,000 (4,250)	125 (8.6)	175 (12.1)	300 (149)

¹ Flow is normal at 50 psi (3.45 bar) differential pressure.

² Viscosity listed is maximum. Blackmer XH pump models are also well suited for viscosities less than 31 ssu (1 cSt).

³ Centipoise (cP) = Centistokes (cSt) at fluid specific gravity of 1.0

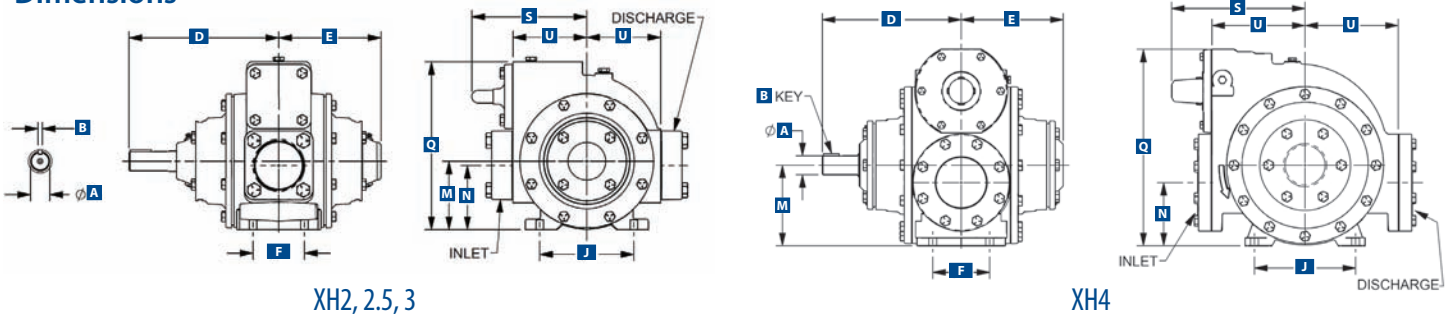
Note: Optional materials of construction may be required to meet specific application requirements – refer to Blackmer Material of Construction Sheet 101-095.

Pipe Companion Flanges

Pump Model	Standard	Optional
XH2	2" NPT	2" Blackmer Weld
		2" ANSI**
XH2.5	2.5" NPT	2.5" Blackmer Weld
		3" ANSI**
XH3	3" NPT	3" Blackmer Weld
		3" ANSI**
XH4	4" NPT	4" Blackmer Weld
		4" ANSI**

** ANSI Compatible flanges are Raised Faced.

Dimensions



XH2, 2.5, 3

XH4

Pump Model	A	B	D	E	F	J	M	N	Q	S	U	Pump Weight	With STD Flanges	
XH2	in.	1 1/8	1/4	8	5 1/4	1 5/8	5	4	3 1/2	8 7/8	6 1/16	4	65 lbs	70 lbs
	mm	—	—	203.2	133.4	41.3	127	101.6	88.9	225.4	154	101.6	29 kg	32 kg
XH2.5	in.	1 1/8	1/4	8 3/4	6	3	5 1/2	4	3 3/4	9 13/16	6 13/16	4 5/16	85 lbs	91 lbs
	mm	—	—	222.3	152.4	76.2	139.7	101.6	95.3	249.2	173	109.5	39 kg	41 kg
XH3	in.	1 1/8	1/4	9 5/8	6 3/8	2 1/2	6	5 3/8	4 5/8	12 1/16	8 9/16	5	137 lbs	145 lbs
	mm	—	—	244.5	161.9	63.5	152.4	136.6	117.5	306.4	217.5	127	62 kg	66 kg
XH4	in.	1 1/2	3/8	11	8 1/6	4 1/2	8	6 3/8	5	15 9/16	10 9/16	7 3/8	288 lbs	292 lbs
	mm	—	—	279.4	204.8	114.3	203.2	161.9	127	395.3	268.3	187.3	131 kg	132 kg

Note: Please refer to Blackmer catalog Dimension Sheets for optional jacketed head dimensions and NPT, weld neck, or ANSI compatible companion flange dimension.



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