

STX3 *Stainless Steel* **TRANSPORT PUMP**

Stainless Steel Construction

Blackmer's STX3 is designed to meet a wide range of corrosive and non-corrosive fluids for common carriers. Standard construction: 316 stainless steel with external ball bearings, non-metallic Duravanes, Teflon[®] elastomers, Blackmer chemical mechanical seals. See Typical Applications List.

Fast Off-Loading

The STX3 offers flow rates up to 250 GPM (946 LPM) with differential pressures up to 125 PSI (8.6 bar or 862 kPa) and maximum speed of 800 RPM. A typical 6,000 gallon (22,700 liter) tanker can be off-loaded as quick as 24 minutes.

Dry Run Capability

Blackmer's non-metallic vanes self-compensate for wear and allow the STX3 to run dry for short periods of time for self-priming and blowing lines clean, without pump damage.

Easy Maintenance

Internal wear is limited almost completely to the sliding-vanes, which can be replaced with ordinary metric hand tools.



Typical applications:

- Solvents
- Chemicals
- Chlorides
- Sulfates
- Vegetable oils
- Urea
- Many acids

Unique Features:

- 316 Stainless Steel
- Self-Priming
- Line Clearing
- Ball Bearing Construction
- Chemical Mechanical Seals
- Adjustable Relief Valve
- Versatile Mounting Bracket

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CHARACTERISTIC FLOW RATES

PUMP SPEED	Pump Capacity @ 3.45 bar (50 psid) with 22 cSt (100 SSU) Fluid			Maximum Fluid Viscosity at RPM Shown	
	LPM	m3/h	US GPM	cSt	SSU
800	946	56	250	105	500
700	832	50	220	105	500
600	719	43	190	1,050	5,000
500	567	34	150	2,200	10,000
400	473	28	125	4,250	20,000

APPLICATION ASSISTANCE

In some applications, selecting the right pump may require more detailed information than can be presented in this Spec Sheet. Blackmer has a worldwide distribution network to assist in specifying the proper pump for your application.

Please contact Blackmer's Application Group at the telephone or fax number listed below for the name of your nearest Blackmer distributor.

PUMP HORSEPOWER REQUIREMENTS

PUMP SPEED	13 cSt (50SSU) Viscosity		105 cSt (500 SSU) Viscosity		1050 cSt (5000 SSU) Viscosity		2200 cSt (10,000 SSU) Viscosity		4250 cSt (20,000 SSU) Viscosity	
	3.45 bar (50 PSI)	6.9 bar (100 PSI)	3.45 bar (50 PSI)	6.9 bar (100 PSI)	3.45 bar (50 PSI)	6.9 bar (100 PSI)	3.45 bar (350 PSI)	6.9 bar (100 PSI)	3.45 bar (50 PSI)	6.9 bar (100 PSI)
RPM	9.8	17.9	11.0	19.0	—	—	—	—	—	—
800	8.2	15.3	9.2	16.1	—	—	—	—	—	—
700	6.9	13.2	7.6	13.5	10.0	16.3	—	—	—	—
600	5.5	10.6	6.1	11.0	8.0	13.2	9.1	14.3	—	—
500	4.3	8.3	4.7	8.5	6.1	10.3	6.9	11.1	8.3	12.4

Refer to Blackmer Characteristic Curves for flow rates and torque requirements for your specific conditions.

OPTIONS

• **Hydraulic drive packages:** fully integrated, factory engineered hydraulic drive packages custom matched to the application, along with Blackmer's Hydrive cooler/controller are also available.

MAXIMUM OPERATING LIMITS

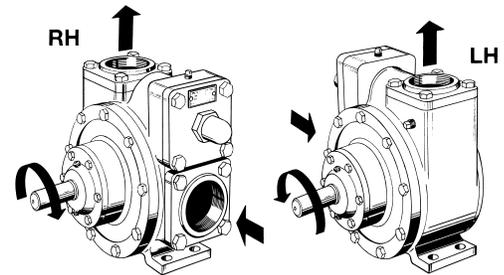
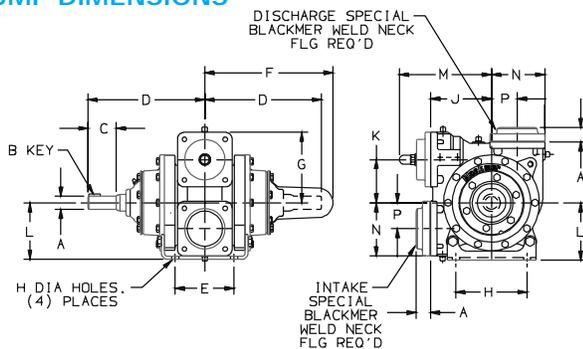
NOMINAL FLOW RATE			PUMP SPEED	VISCOSITY		DIFFERENTIAL PRESSURE		TEMPERATURE ¹	
LPM	m3/h	US GPM		RPM	cSt	SSU	bar	PSI	°C
946	56	250	800	4,250	20,000	8.6	125	115	240

¹For higher temperature or viscosity conditions, consult factory.

PUMP ROTATION

Blackmer STX3 pump models are equipped with a double-ended straight-keyed drive shaft for either clockwise (RH) or counterclockwise (LH) rotation.

PUMP DIMENSIONS



PUMP MODEL		A	B	C	D	E	F	G	H	J	K	L	M	N	P	APPROX WEIGHT
STX3	MM	35	10	54	242	127	283	156	150	149	95	137	203	118	57	60 kgs
	IN	1 3/8	5/16	2 1/8	9 1/2	5	11 1/8	6 1/8	6 1/4	5 1/4	3 3/4	5 3/8	8	4 5/8	2 1/4	132 lbs

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