



Spec Sheet 201-003

Section: 201

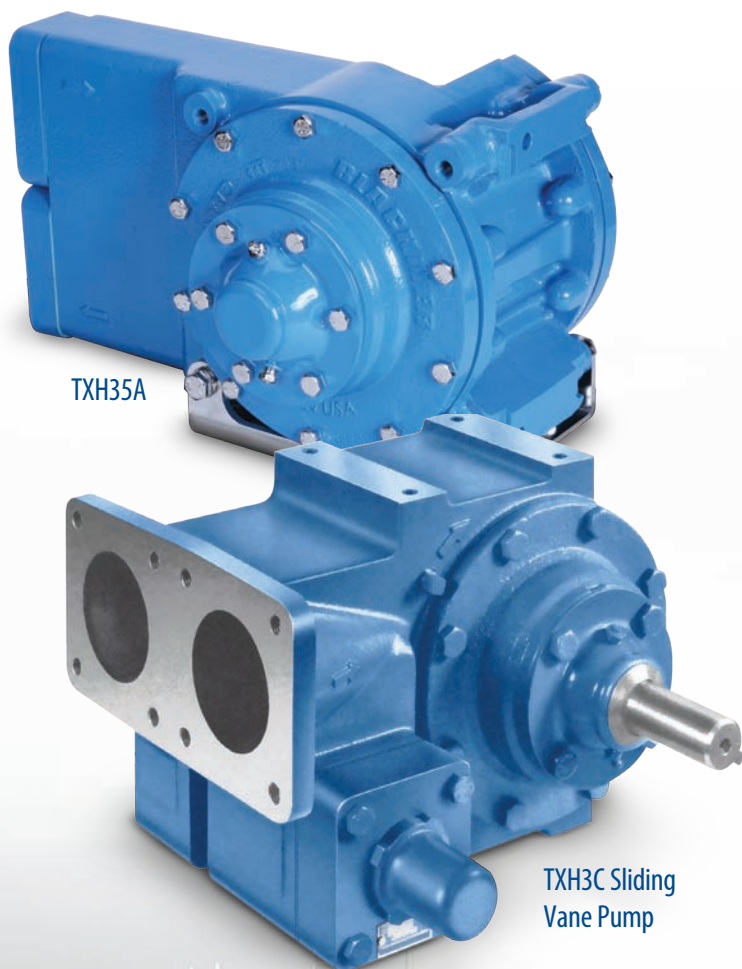
Effective: October 2017

Replaces: July 2012



## TXH Series Sliding Vane Pumps

Versatile, Pumps for Tank Trucks and Transports



### Applications

Blackmer's TXH3C and TXH35A cast-iron rotary vane pumps have been designed for use on tank trucks and transports that handle a wide range of clean, non-abrasive and non-corrosive fluids that are compatible with cast iron.

### Design Features

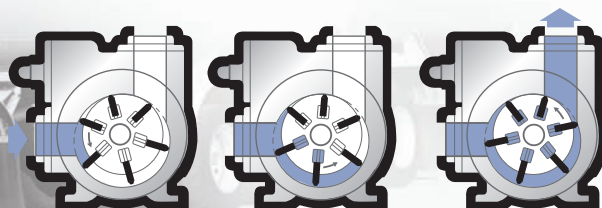
While very similar in the types of fluids that they can handle, the pumps do have a number of design differences that make them unique.

The TXH3C pumps are designed with horizontal parallel porting that can offer installers easier piping connections than pumps with 90-degree ported pumps. TXH3C pumps are also installed using mounting feet, rather than brackets. Other features of the TXH3C models are a large-diameter shaft with low-friction, grease-lubricated ball bearings for smooth, quiet operation. Cartridge-type mechanical seals provide reliable service while preventing external leakage. The double-ended shaft allows for either clockwise or counter-clockwise rotation. Internal safety relief valves are standard with an optional piston air valve for trucks with automatic pressure-control systems also available.

TXH35A pumps feature vertical parallel porting for easy piping. Pumps are installed using a mounting bracket in one of three positions on the pump. Other features are similar to the TXH3C models: grease-lubricated ball bearings; cartridge-type mechanical seals; Duravanes; and a hardened-steel drive shaft with ductile-iron rotor. TXH35A options include 3-inch cast-iron NPT or steel weld pipe flanges and hydraulic motor adaptors.

### Performance

The TXH3C pumps offer fast unloading rates up to 240 gpm (908 L/min.) at 1,200 rpm at differential pressures up to 125 psi (8.6 bar). The TXH35A pumps offer speeds up to 1,000 rpm and delivery rates to 300 gpm (1,135 L/min.). They can handle viscosities up to 20,000 ssu (4,250 cSt) at operating temperatures to 240°F (115°C)



How Blackmer's sliding vane action works



## Maximum Operating Limits

Pump Model	Flowrate			Speed	Viscosity	
	US gpm	m <sup>3</sup> /h	L/min	rpm	ssu	cSt
TXH3C	240	55	908	1,200	20,000	4,250
TXH35A	300	68	1,135	1,000	20,000	4,250

Pump Model	Differential Pressure		Working Pressure <sup>1</sup>		Temperature	
	psi	bar	psi	bar	°F	°C
TXH3C	125	8.6	175	12.1	240	115
TXH35A	125	8.6	175	12.1	240	115

<sup>1</sup>Maximum Relief Valve Setting

## Performance Data

Pump Model	Pump Speed	Flow Rate 50 psi (3.45 bar)	
	rpm	gpm	L/min
TXH3C	750	145	549
	1,000	195	738
	1,200	235	890
TXH35A	500	137	519
	750	212	802
	1,000	293	1,109

## Dimensions

Pump Model		A	B	C	D	E	F	G	H	J	K	L	M	N	P
TXH3C	in.	1 1/8	—	2 1/4	8 3/4	6	4	5 1/4	—	4 23/32	6 1/8	5 5/16	4 19/32	3 3/32	6 3/32
	mm	—	—	57.15	222.25	152.40	101.60	133.35	—	119.86	155.58	134.94	116.68	78.58	154.70
TXH35A	in.	1 1/8	2 5/16	2 1/8	9 1/16	6 7/8	7 25/32	7	1 7/32	7 1/4	8 7/8	1 7/8	5	—	—
	mm	—	—	54.0	242.9	174.6	197.6	177.8	13.5	184.2	229.4	47.6	127	—	—

Pump Model		Q	R	T	U	V	W	X	Y	Z	AA	BB	CC	Approx. Wt.	
														lbs.	kg
TXH3C	in.	9 3/16	3 1/2	3 7/8	8 13/16	2 7/16	1 1/8	1 1/16	—	—	9 1/2	1/4	7/64	99	45
	mm	233.36	88.90	98.43	223.82	61.91	28.57	30.16	—	—	241.30	—	—		
TXH35A	in.	10	3 7/8	4 23/32	10 3/8	2 7/16	1 1/2	1 1/4	2 7/16	5	1 1/4	3/16	12 1/2	170	77
	mm	254	98.4	126.2	269.9	61.91	29.2	31.81	61.91	127	—	—	307		

## Pipe Companion Flanges

Pump Size	Standard	Optional Materials
TXH3C TXH35A	Two 3" NPT Tapped Flanges, Cast Iron: ASTM A48	3" Weld Flanges, Steel: ASTM A216 WCB

## Sales Information and Equipment Application Assistance

Blackmer has a world wide distribution network to assist you in specifying any of our family of pumps, compressors and other equipment for your application. For more information, or to find the distributor nearest to you, please contact us at the telephone, fax or internet address listed below.

**Blackmer**

Process | Energy | Military & Marine  
PSG Grand Rapids  
1809 Century Avenue SW, Grand Rapids, MI 49503-1530 USA  
T 616.241.1611 • F 616.241.3752  
[blackmer.com](http://blackmer.com)

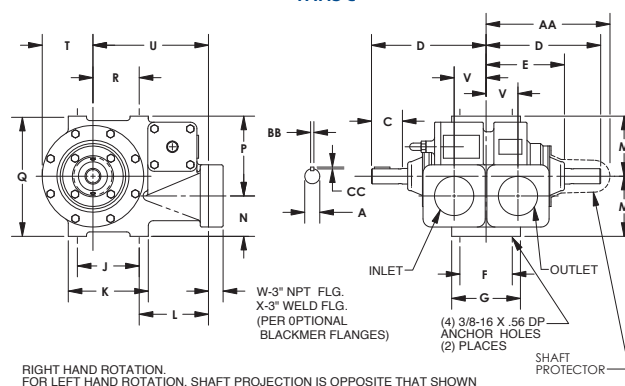
**NTTC**  
NATIONAL TANK TRUCK CARRIERS

**PEI**  
PUMP EQUIPMENT INC.

**PSG**  
a DOVER company

Authorized PSG® Partner:

TXH3C



TXH35A

