



Pump Division  
Worthington Spa

VENDOR'S DOCUMENT No.

PDS-0646201

SHEET

1 of 2

TITLE

**PUMP DATA SHEET**

**Vendor's name:** FLOWSERVE PUMP DIVISION - *WORTHINGTON S.p.a.*  
**Company's name:** SUNCOR ENERGY INC.  
**Purchaser's name:** SUNCOR ENERGY INC.  
**Plant Location:** Sarnia, ON  
**Project name:** Suncor Sarnia Refinery  
**Purchase Order No.:** 4500086160  
**Unit / Service:** Slop Oil Pump  
**Pump Type:** 3 HPX 8A  
**Equipment name:** CENTRIFUGAL PUMPS  
**Item Number:** 03-P1006B

00	12/07/06	FIRST ISSUE FOR APPROVAL	F.MERONI	F.MERONI	U.MARCHI
REV.	DATE	DESCRIPTION	PREPARED	VERIFIED	APPROVED

Customer	: Suncor	Pump / Stages	: 3HPX8A / 1
Customer reference	: Slop Oil Pump	Based on curve no.	: 3HPX8A-1-2
Item number	: 03-P1006B	Vendor reference	: 2458-80013
Service	: Slop Oil	Date	: June 1, 2006

Operating Conditions		Materials / Specification	
Capacity	: 350.0 USgpm	Material column code	: S-6
Water Capacity (CQ=1.00)	: 350.0 USgpm	Pump specification	:
Normal capacity	: -	<b>Other Requirements</b>  Hydraulic selection : No specification Construction : No specification Test tolerance : API-610 8th Edition Driver Sizing : Max Power(MCSF to EOC)with SF Performance data based on standard impeller Seal configuration : Tandem Seal	
Total Developed Head	: 140.00 ft		
Water head (CH=1.00)	: 140.24 ft		
NPSH available (NPSHa)	: 13.0 ft		
NPSHa less NPSH margin	: -		
Maximum suction pressure	: 0.0 psig		
Liquid			
Liquid type	: Hydrocarbon		
Temperature / SG	: 300 °F / 1.000		
Solids diameter	: -		
Viscosity / Vapor pressure	: 10.0 cP / 1.00 psia		

Performance			
Hydraulic power	: 12.37 hp	Impeller diameter	
Pump speed	: 3540 rpm	Rated	: 6.69 in
Efficiency (CE=0.93)	: 59.6 %	Maximum	: 8.43 in
		Minimum	: 6.50 in
NPSH required (NPSHr)	: 10.6 ft	Suction specific speed	: 8050 US units
Rated power	: 20.8 hp	Minimum continuous flow	: 126.7 USgpm
Maximum power	: 22.3 hp	Maximum head @ rated dia	: 175.8 ft
Driver power	: 25.0 hp / 18.6 kW	Flow at BEP	: 359.0 USgpm
Casing working pressure	: 76.1 psig	Flow as % of BEP	: 97.5 %
(based on shut off @ cut dia)		Efficiency at normal flow	: -
Maximum allowable	: 800.2 psig	Impeller dia ratio (rated/max)	: 79.4 %
Hydrostatic test pressure	: 900.3 psig	Head rise to shut off	: 25.6 %
Est. rated seal chamb. press.	: 25.00 psig	Total head ratio (rated/max)	: 54.5 %

