

Pump Performance Datasheet

Customer	: Petroamazonas EP	Sulzer Reference ID	:
Inquiry Number/ID	:	Type / Size	: BBS 10x14x20.5M-1
Item number	: Default	Stages	: 1
Service	: Crude Oil	Based on curve number	: BBS 33-1-4-01
Quantity	: 2	Date of Last Update	: 09/17/2020 9:45 PM

Operating Conditions		Liquid	
Flow, rated	: 3,000.0 USgpm	Liquid type	: Other
Differential head / pressure, rated (requested)	: 180.0 ft	Additional liquid description	: Crude Oil
Suction pressure, rated / max	: 4.00 / 15.00 psi.g	Solids diameter, max	: 0.00 in
NPSH available, rated	: 13.10 ft	Solids concentration, by volume	: 0.00 %
Site Supply Frequency	: 60 Hz	Temperature, rated / max	: 180.0 / 210.0 deg F
Performance		Fluid density, rated / max	: 0.920 / 0.930 SG
		Viscosity, rated	: 228.0 cP
Speed criteria	: Synchronous	Vapor pressure, rated	: 10.23 psi.a
Speed, rated	: 1170 rpm	Material	
Impeller diameter, rated	: 20.28 in	Material selected	: API S-5
Impeller diameter, maximum	: 20.51 in	Pressure Data	
Impeller diameter, minimum	: 17.01 in	Maximum casing/bowl working pressure	: 94.67 psi.g
Efficiency	: 64.60 %	Maximum allowable working pressure	: 600.0 psi.g
NPSH (3% head drop) / margin required	: 7.27 / 0.00 ft	Maximum allowable suction pressure	: N/A
nq (imp. eye flow) / S (imp. eye flow)	: 23 / 198 Metric units	Hydrostatic test pressure	: N/A
MCSF	: 1,965.8 USgpm	Driver & Power Data (@Max density)	
Head, maximum, rated diameter	: 197.9 ft	Driver sizing specification	: API 610 / ISO 13709
Head rise to shutoff	: 9.95 %	Margin over specification	: 0.00 %
Flow, best eff. point	: 4,334.1 USgpm	Service factor	: 1.00
Flow ratio, rated / BEP	: 69.22 %	Power, hydraulic	: 127 hp
Diameter ratio (rated / max)	: 98.85 %	Power, rated	: 196 hp
Head ratio (rated dia / max dia)	: 97.24 %	Power, maximum, rated diameter	: 267 hp
Cq/Ch/Ce/Cn [ANSI/HI 9.6.7-2010]	: 0.96 / 0.97 / 0.81 / 1.00	Minimum recommended motor rating	: 250 hp / 186 kW
Selection status	: Acceptable		

