

Pump Performance Datasheet

Customer : AIR PRODUCTS MANUFACTURING LLC
 Customer reference : World Energy Renewables Project
 Item number : 18-P-1809A/B/C/D
 Service : Raw Feed Transfer Pump
 Quantity : 4

Sulzer Reference ID : USA.5539-AME.21.4675-F0
 Type / Size : OHH-4x6x9-1
 Stages : 1
 Based on curve number : OHH 37-1-1-02
 Date of Last Update : 20 Feb 2023 18:49

Operating Conditions		Liquid	
Flow, rated	: 800.0 (1,000.0) USgpm	Liquid type	: Other
Differential head / pressure, rated (requested)	: 283.0 (262.4) ft	Additional liquid description	: Raw Feed
Suction pressure, rated / max	: -0.50 / 22.20 psi.g	Solids diameter, max	: 0.00 in
NPSH available, rated	: 36.2 ft	Solids concentration, by volume	: 0.00 %
Site Supply Frequency	: 60 Hz	Temperature, rated / max	: 120.0 / 200.0 deg F
Performance		Fluid density, rated / max	: 0.900 / 0.900 SG
		Viscosity, rated	: 25.90 cP
		Vapor pressure, rated	: 0.0 psi.a
		Material	
Speed criteria : Synchronous		Material selected	: API A-8
Speed, rated : 3550 rpm		Pressure Data	
Impeller diameter, rated : 8.62 in		Maximum casing/bowl working pressure	: 141.2 psi.g
Impeller diameter, maximum : 9.25 in		Maximum allowable working pressure	: 580.2 psi.g @ 250 deg F
Impeller diameter, minimum : 7.44 in		Maximum allowable suction pressure	: 504.6 psi.g
Efficiency : 71.1 (75.8) %		Hydrostatic test pressure	: 870.3 psi.g
NPSH (3% head drop) / margin required : 18.6 (21.7) / 0.0 ft		Driver & Power Data (@Max density)	
Ns (imp. eye flow) / Nss (imp. eye flow) : 1,652 / 10,773 US Units		Driver sizing specification	: API 610 / ISO 13709
MCSF : 286.2 USgpm		Margin over specification	: 0.00 %
Head, maximum, rated diameter : 305.5 ft		Service factor	: 1.00
Head rise to shutoff : 8.02 (16.42) %		Power, hydraulic	: 51.4 (59.6) hp
Flow, best eff. point : 1,096.0 USgpm		Power, rated	: 72.4 (78.7) hp
Flow ratio, rated / BEP : 72.99 (91.24) %		Power, maximum, rated diameter	: 87.1 hp
Diameter ratio (rated / max) : 93.19 %		Minimum recommended motor rating	: 100 hp / 74.6 kW
Head ratio (rated dia / max dia) : 83.31 %			
Cq/Ch/Ce/Cn [ANSI/HI 9.6.7-2010] : 1.00 / 1.00 / 0.95 / 1.00			

