

Construction Datasheet

Project name	: Default	Tag Number	: 001	
Consulting engineer	:	Service	:	
Customer	: PFC EQUIPMENT INC	Model	: 12709 LF	
Customer ref. / PO	:	Quantity	: 1	
Quote Number / ID	: 1075123	Grundfos Partner	: PFC EQUIPMENT INC	
Date last saved	: 10/01/2024 3:12 PM	Quoted By (Sales Engineer)	: Corey Nath	
Construction		Motor Information		
Nozzle	Size (in.)	Nozzle Configuration	Pos'n	
Suction	1.5	NPS	End	
Discharge	1.25	NPS	Top	
Orientation / Configuration	: Horizontal		Manufacturer	: Baldor
Rotation	: Clockwise		Frame Size	: 213T
Wear Ring Configuration	: Single - Case		Power	: 7.50 hp
Discharge Elbow Size	: -		RPM	: 3600 rpm
Subplate	: -		Enclosure	: TEFC
Sump Depth (feet)	: -		Operating Power Supply	: 230/460/3/60
Bearing Frame	: 3P		Efficiency	: Premium
Bearing Frame Foot	: -		Service factor	: 1.15
Bearing Type (Radial/Thrust)	: Ball/Ball		Motor Application	: General Purpose
Bearing Lubrication	: Greased for life		Motor Options/Accessories	: -
Thrust Bearing	: -		Cord Length (feet)	: -
Intermediate Bearing	: -		Materials	
Lower Bearing	: -		Case	: Cast Iron, ASTM A48 - Class 30
Bearing Housing Accessories	: -		Motor Bracket	: -
PACO Construction Code	: 11-12709-133P08-2741P		Impeller	: Stainless Steel, AISI-304 (H304)
Baseplate, Coupling and Guard				
Baseplate	: Welded Steel Fabrication		Impeller Cap Screw and Washer	: Stainless Steel, AISI-303
Drip Pan	: Drip Pan		Impeller Key	: Stainless Steel, AISI 316
Coupling	: Woods Sureflex Type S (elastomeric) 6S		Case wear ring	: Tin Bronze, ASTM B584-90500 (B18)
Guard	: OSHA Approved		Impeller wear ring	: Not Applicable
Seal & Packing Construction				
Sealing Method	: Single Seal, Type 21S		Pump Shaft	: Stressproof Steel, AISI 1144
Seal Material	: Buna Carbon Ceramic SS-Spring and Hardware		Sleeve	: Bronze, III932, C89835
Packing Gland	: -		Line Shaft	: -
Lantern Ring	: -		Column	: -
Recirculation Lines	: None		Discharge Pipe	: -
Weights (Approx.)				
Pump	: 25.00 lb		Discharge Elbow	: -
Baseplate	: 75.00 lb		Suction Elbow	: -
Driver	: 126.0 lb		Subplate	: -
Estimated Shipping gross weight	: 226.0 lb		Hardware	: Steel, Grade 5
			O Rings	: Buna N
			Pump Coatings	: Standard Manufacturer's Paint

Pump Performance Datasheet

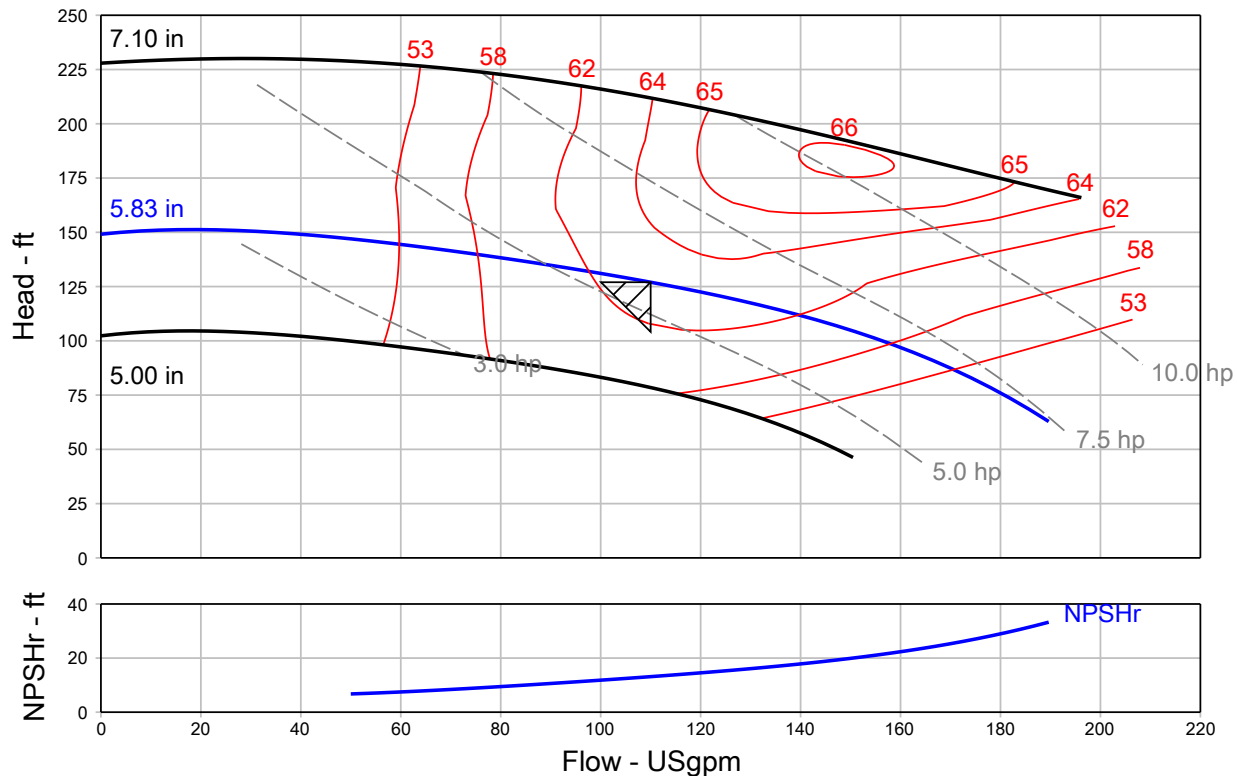
Customer :	Quote Number / ID :	1075123
Customer ref. / PO :	Model :	12709 LF
Tag Number : 001	Stages :	1
Service :	Based on curve number :	RC2275-1-SS Rev 1
Quantity : 1	Basic model number :	-
	Date last saved :	10/01/2024 3:12 PM

Operating Conditions		Liquid	
Flow, rated	: 110.0 USgpm	Liquid type	: Cold Water
Differential head / pressure, rated (requested)	: 127.0 ft	Additional liquid description	:
Differential head / pressure, rated (actual)	: 127.3 ft	Solids diameter, max	: 0.00 in
Suction pressure, rated / max	: 0.00 / 0.00 psi.g	Solids concentration, by volume	: 0.00 %
NPSH available, rated	: Ample	Temperature, max	: 68.00 deg F
Site Supply Frequency	: 60 Hz	Fluid density, rated / max	: 1.000 / 1.000 SG
		Viscosity, rated	: 1.00 cP
		Vapor pressure, rated	: 0.34 psi.a

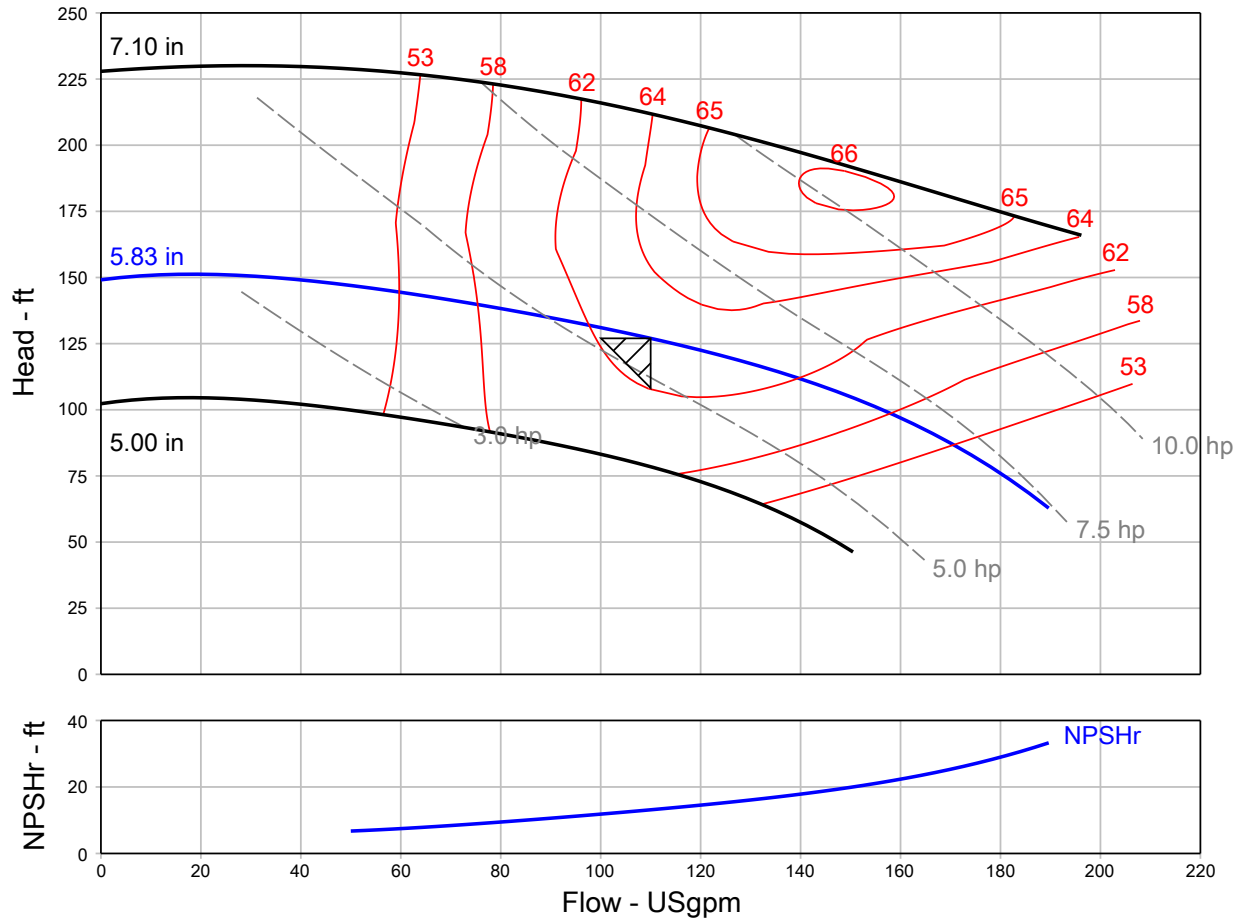
Performance		Material	
Speed, rated	: 3530 rpm	Material selected	: Cast iron
Impeller diameter, rated	: 5.83 in		
Impeller diameter, maximum	: 7.10 in		
Impeller diameter, minimum	: 5.00 in		
Efficiency	: 63.02 %		

Performance		Pressure Data	
NPSH required / margin required	: 13.13 / 0.00 ft	Maximum working pressure	: 65.46 psi.g
nq (imp. eye flow) / S (imp. eye flow)	: 16 / 89 Metric units	Maximum allowable working pressure	: 175.0 psi.g
MCSF	: 63.14 USgpm	Maximum allowable suction pressure	: 175.0 psi.g
Head, maximum, rated diameter	: 151.3 ft	Hydrostatic test pressure	: 263.0 psi.g
Head rise to shutoff	: 17.42 %		
Flow, best eff. point	: 119.5 USgpm		
Flow ratio, rated / BEP	: 92.08 %		
Diameter ratio (rated / max)	: 82.11 %		
Head ratio (rated dia / max dia)	: 59.94 %		
Cq/Ch/Ce/Cn [ANSI/HI 9.6.7-2010]	: 1.00 / 1.00 / 1.00 / 1.00		
Selection status	: Acceptable		

Energy Indexes		Driver & Power Data (@Max density)	
PEI (CL)	: 0.88	Motor sizing specification	: Max power (non-overloading)
ER (CL)	: 12	Margin over specification	: 0.00 %
		Service factor	: 1.00
		Power, hydraulic	: 3.53 hp
		Rated power (based on duty point)	: 5.60 hp
		Max power (non-overloading)	: 7.42 hp
		Nameplate motor rating	: 7.50 hp / 5.59 kW



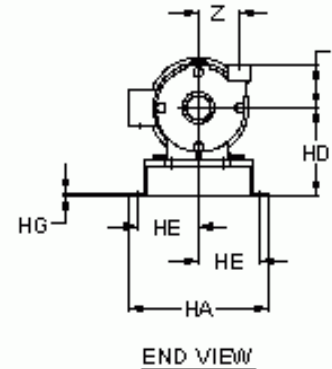
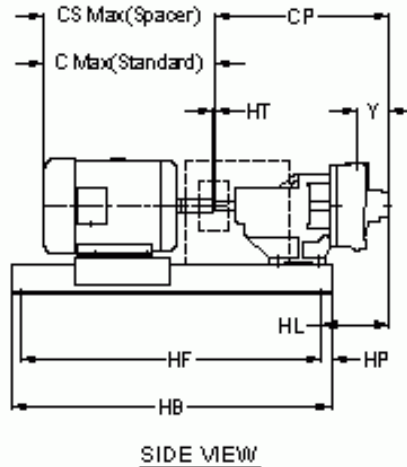
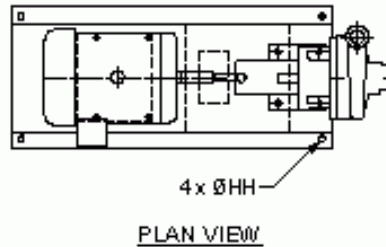
Pump Performance Curve



Customer :		Model :	12709 LF
Customer ref. / PO :		Stages :	1
Tag Number :	001	Speed, rated :	3530 rpm
Service :		Based on curve number :	RC2275-1-SS Rev 1
Quantity :	1	Efficiency :	63.02 %
Quote Number / ID :	1075123	Rated power (based on duty point) :	5.60 hp
Date last saved :	10/01/2024 3:12 PM	NPSH required :	13.13 ft
Flow, rated :	110.0 USgpm	Viscosity :	1.00 cP
Differential head / pressure, rated :	127.0 ft	Cq/Ch/Ce/Cn [ANSI/HI 9.6.7-2010] :	1.00 / 1.00 / 1.00 / 1.00
Fluid density, rated / max :	1.000 / 1.000 SG	Impeller diameter, rated :	5.83 in
		PEI (CL) :	0.88
		ER (CL) :	12

General Arrangement

Project name : Default	Tag Number : 001
Consulting engineer :	Service :
Customer :	Model : 12709 LF
Customer ref. / PO :	Quantity of pumps : 1
Quote Number / ID : 1075123	Grundfos Partner : PFC EQUIPMENT INC
Date last saved : 10/01/2024 3:12 PM	Quoted By (Sales Engineer) : Corey Nath



NOT FOR CONSTRUCTION, UNLESS CERTIFIED AND REFERENCED ON ORDER

Units	Frame	Ped	Suct(in)	Disch(in)	C	CP	HA	HB	HD	HE	HF	HG	HH	HL	HP	HT	MU	N	Q	U	X	Y	Z	Weight ea
inches	213T	3P	1.5	1.25	22.00	18.40	15.00	30.63	9.38	6.50	28.63	0.25	0.63	6.84	1.00	0.44	1.38	2.25	4.00	0.88	4.50	3.28	4.31	226.0
Conditions of Service					Motor Data																			
Flow: 110.0 USgpm			Fluid: Cold Water		HP: 7.5				Encl: TEFC				Phase: 3				Efficiency: Premium							
TDH: 127.0 ft			Temp.: 68.00 deg F		RPM: 3530 rpm				Hz: 60				Voltage: 230/460				S.F.: 1.15							