

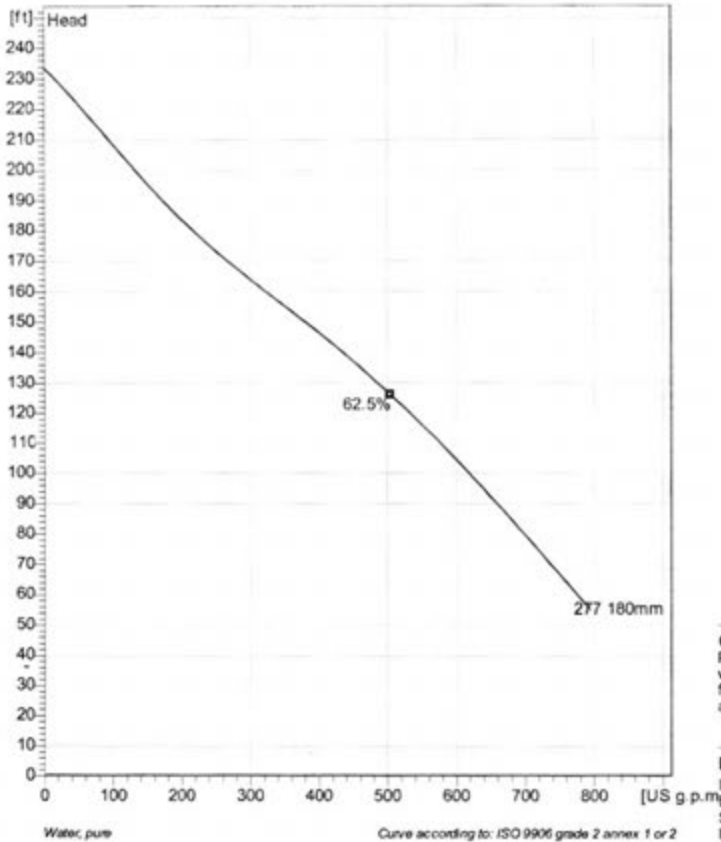


Xylem Water Solutions USA, Inc.
Flygt Products

Section 2

Pump Information

NP 3171 SH 3~ 277
Technical specification



Note: Picture might not correspond to the current configuration.

General

Patented self cleaning semi-open channel impeller, ideal for pumping in waste water applications. Possible to be upgraded with Guide-pin® for even better clogging resistance. Modular based design with high adaptation grade.

Impeller

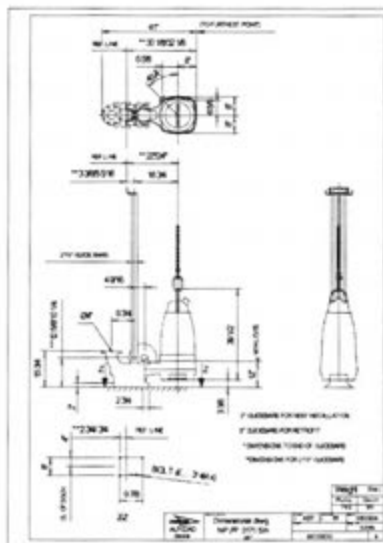
Impeller material	Hard-Iron™
Discharge Flange Diameter	3 15/16 inch
Suction Flange Diameter	100 mm
Impeller diameter	180 mm
Number of blades	2

Motor

Motor #	N3171.095 25-18-2AA-W 35hp
Stator variant	9
Frequency	60 Hz
Rated voltage	460 V
Number of poles	2
Phases	3~
Rated power	35 hp
Rated current	40 A
Starting current	292 A
Rated speed	3530 rpm
Power factor	
1/1 Load	0.91
3/4 Load	0.89
1/2 Load	0.82
Efficiency	
1/1 Load	91.0 %
3/4 Load	91.5 %
1/2 Load	92.0 %

Configuration

Installation: P - Semi permanent, Wet





NP 3171 SH 3~ 277
Performance curve

Pump

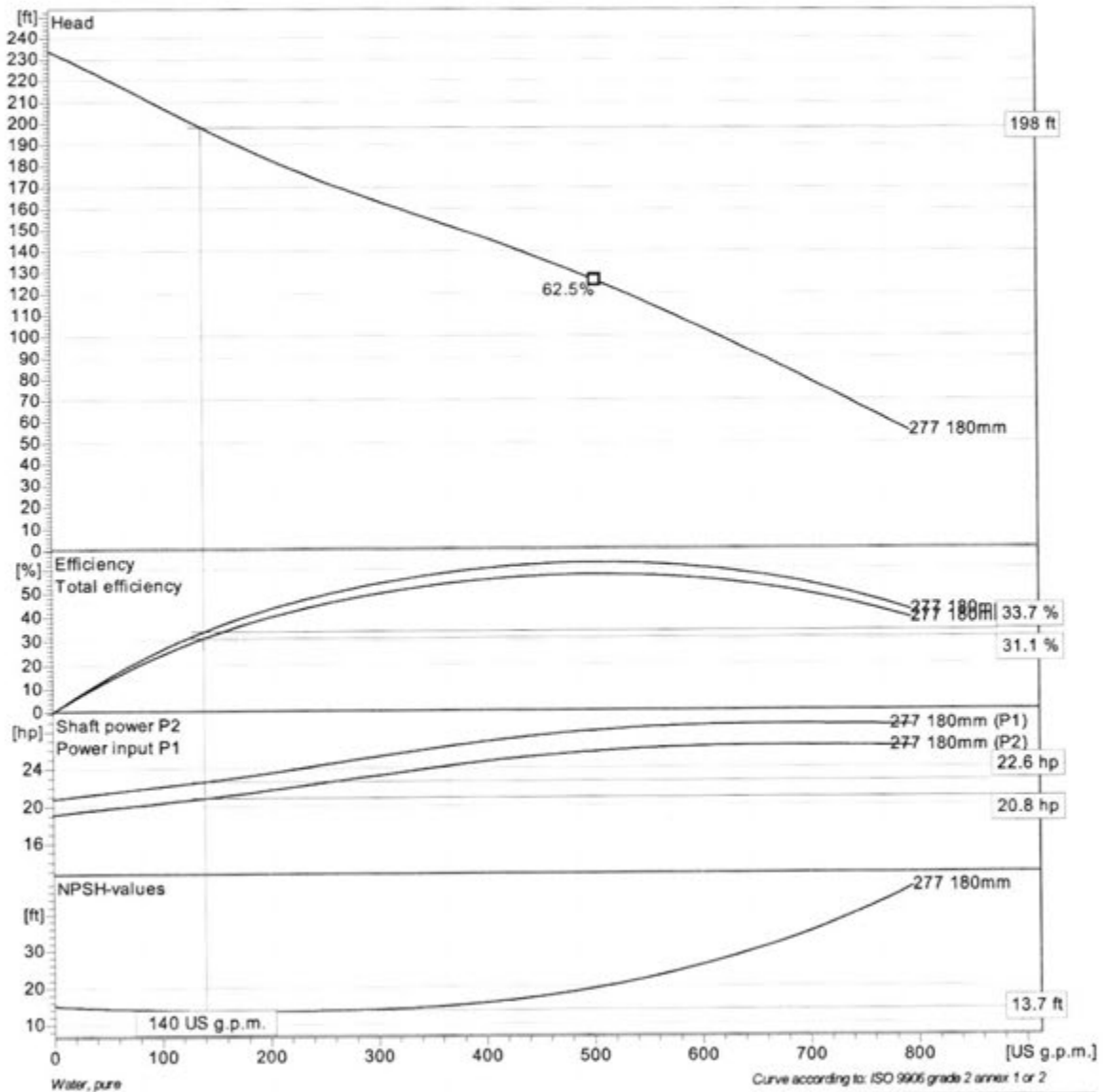
Discharge Flange Diameter 3 15/16 inch
Suction Flange Diameter 100 mm
Impeller diameter 7 1/4"
Number of blades 2

Motor

Motor # N3171.095 25-18-2AA-W 35hp
Stator variant 9
Frequency 60 Hz
Rated voltage 460 V
Number of poles 2
Phases 3~
Rated power 35 hp
Rated current 40 A
Starting current 292 A
Rated speed 3530 rpm

Power factor
1/1 Load 0.91
3/4 Load 0.89
1/2 Load 0.82

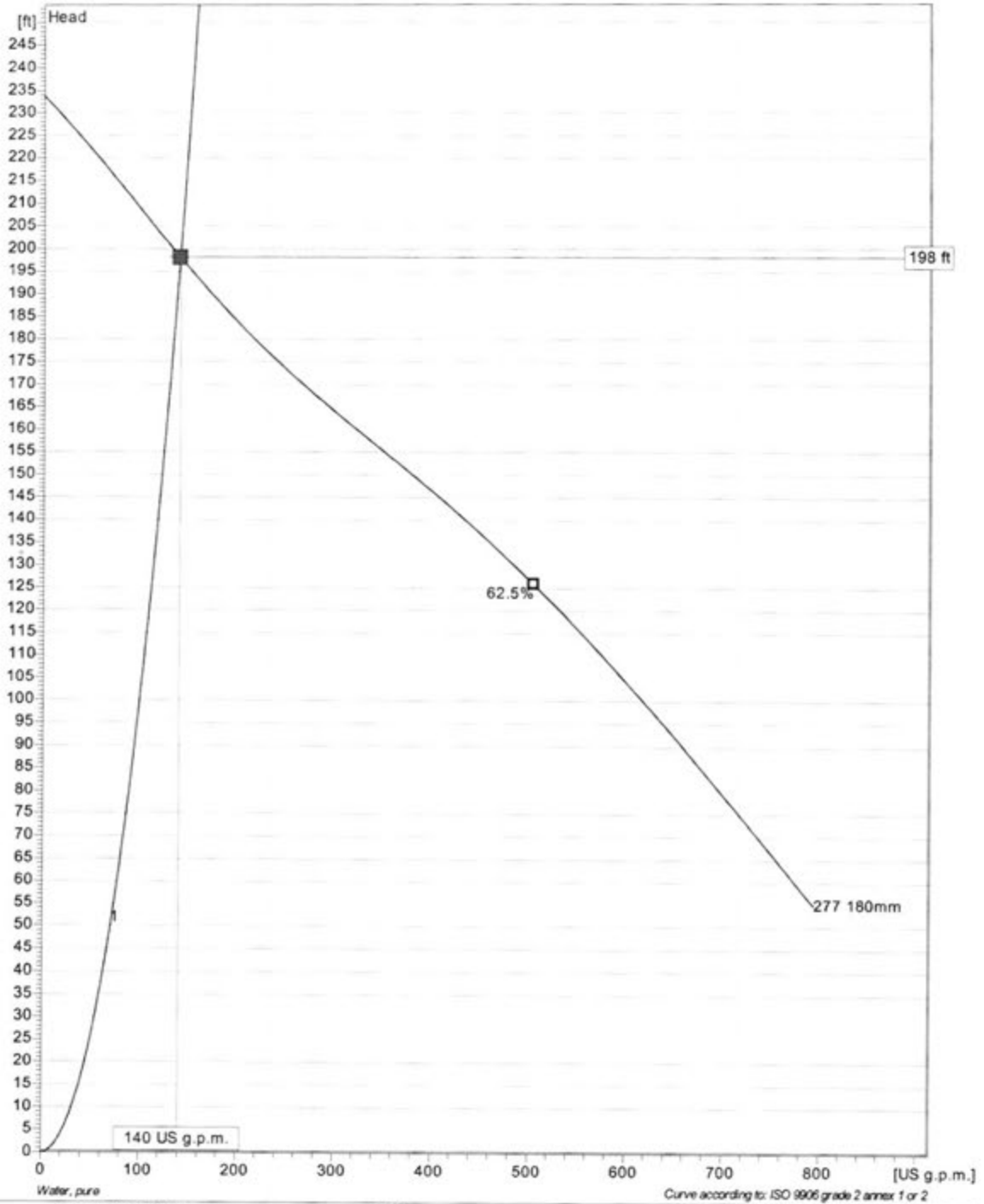
Efficiency
1/1 Load 91.0 %
3/4 Load 91.5 %
1/2 Load 92.0 %



Project	Project ID	Created by	Created on	Last update
			2014-06-30	



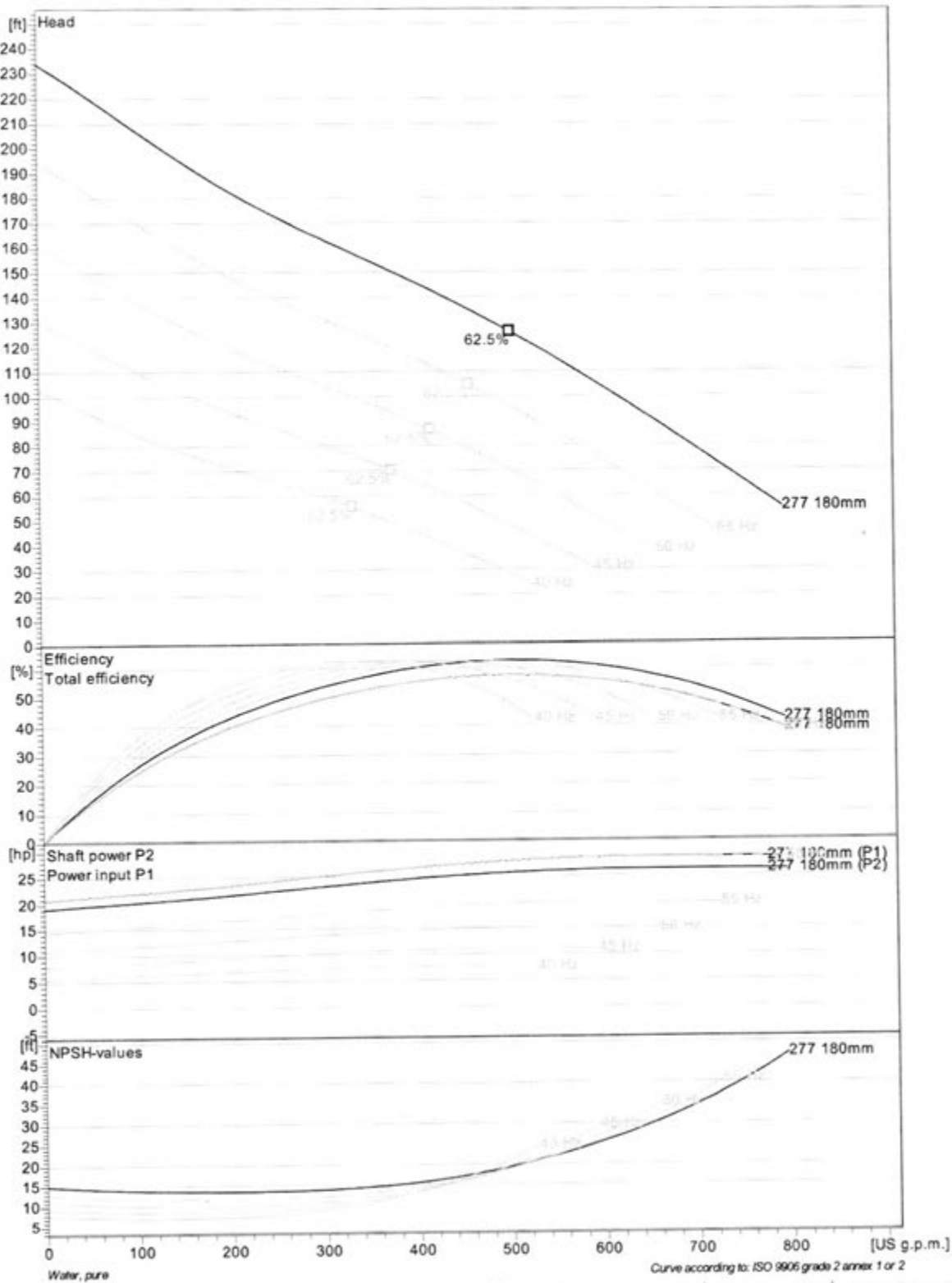
NP 3171 SH 3~ 277
Duty Analysis



Pumps running /System	Individual pump			Total			Hyd. eff.	Specific energy	NPSHre
	Flow	Head	Shaft power	Flow	Head	Shaft power			
1	140 US g.p.m.	198 ft	20.8 hp	140 US g.p.m.	198 ft	20.8 hp	33.7 %	2000 kWh/US MG	13.7 ft

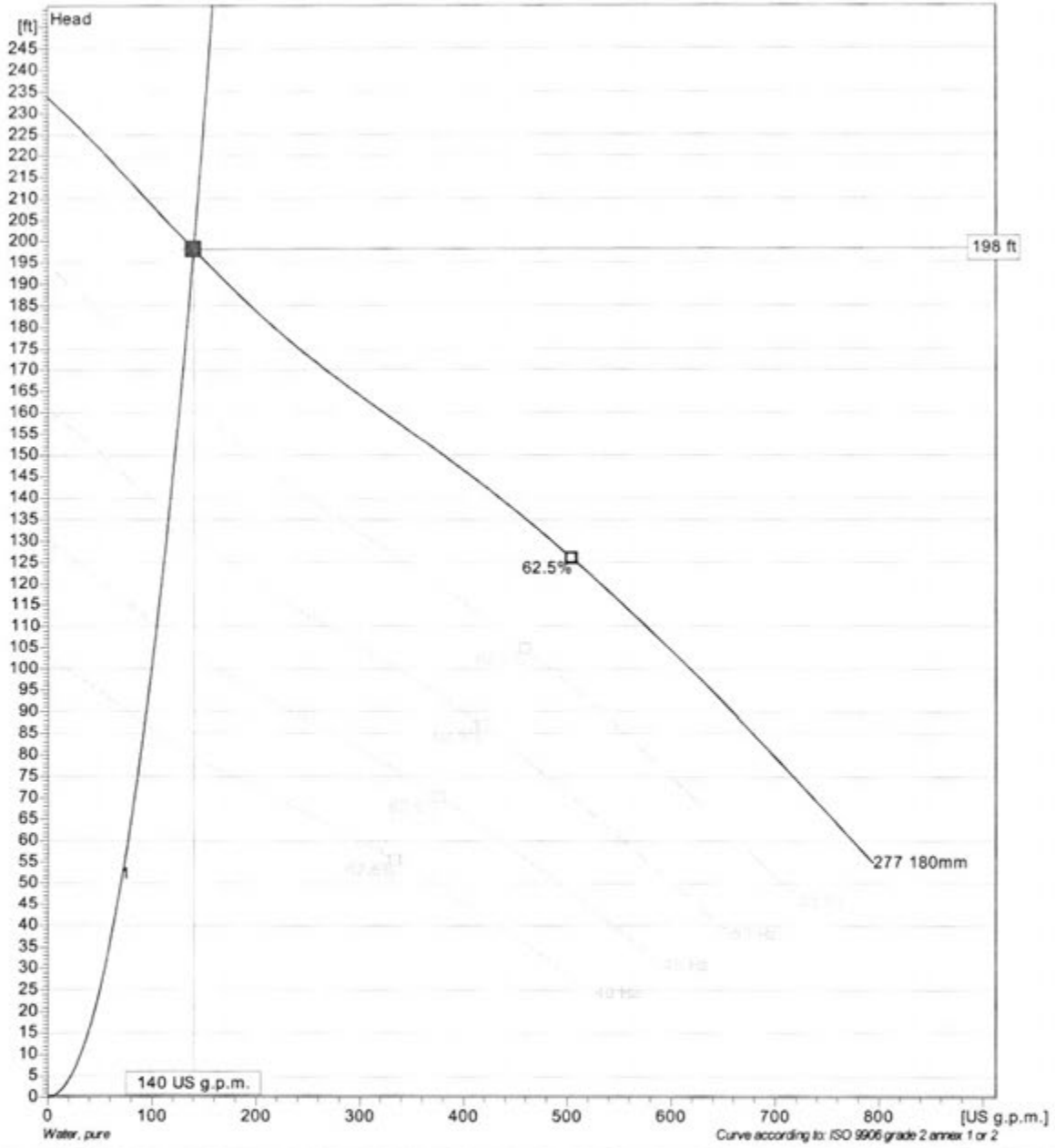
Project	Project ID	Created by	Created on	Last update
			2014-06-30	

NP 3171 SH 3~ 277
VFD Curve



Project	Project ID	Created by	Created on	Last update
			2014-08-30	

NP 3171 SH 3~ 277
VFD Analysis



Pumps running /System	Individual pump				Total					
	Frequency	Flow	Head	Shaft power	Flow	Head	Shaft power	Hyd. eff.	Specific energy	NPSHr
1	60 Hz	140 US g.p.m.	198 ft	20.8 hp	140 US g.p.m.	198 ft	20.8 hp	33.7 %	2000 kWh/US MG13.7 ft	
1	55 Hz	128 US g.p.m.	165 ft	15.8 hp	128 US g.p.m.	165 ft	15.8 hp	33.7 %	2190 kWh/US MG11.8 ft	
1	50 Hz	116 US g.p.m.	136 ft	11.8 hp	116 US g.p.m.	136 ft	11.8 hp	33.7 %	2380 kWh/US MG10.1 ft	
1	45 Hz	104 US g.p.m.	110 ft	8.64 hp	104 US g.p.m.	110 ft	8.64 hp	33.7 %	2530 kWh/US MG8.55 ft	
1	40 Hz	92.9 US g.p.m.	87.1 ft	6.07 hp	92.9 US g.p.m.	87.1 ft	6.07 hp	33.7 %	2940 kWh/US MG7.06 ft	

Project	Project ID	Created by	Created on	Last update
			2014-06-30	



NP 3171 SH

Serial No 3171.095 1460021-22

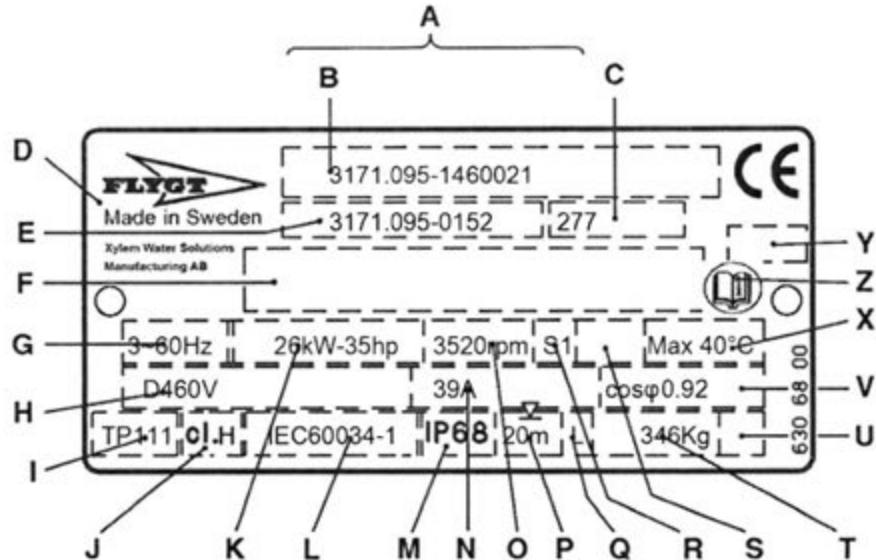


Dataplate

Flygt NP 3171 SH

Date: 2015-01-25

Serial No: 3171.095 1460021 -22



Dataplate interpretation:

A Serial number	M Degree of protection
B Product code + Number	N Rated current
C Curv code / Propeller code	O Rated speed
D Country of origin	P Max. submergence
E Product number	Q Direction of rotation R=right, L=left
F Additional information	R Duty class
G Phase; Type of current; Frequency	S Duty factor
H Rated voltage	T Product weight
I Thermal protection	U Locked rotor code letter
J Thermal class	V Power factor
K Rated shaft power	X Max. ambient temperature
L International standard	Y Notified body Only for EN-approved Ex-products
	Z Read Installation Manual

(1 kg = 2.2 pound, 1 Lit=0.26 US gallon, 1 l = 0,22 UK gallon)

Recommended spare parts:

See REC. column: **A** = Parts for inspection and maintenance
B = Parts for major overhaul

For service;

To ensure long operating life use Flygt Bearing Grease 90 20 61 (Cartridge).
Lubrication kit 84 15 40 contains two 90 20 61 and one 84 15 30 (Grease gun).

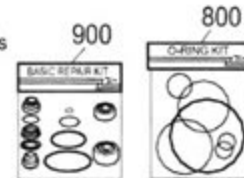
The O-ring kit contains a full set of O-rings. Position no 800.

The Basic Repair kits contain both inner and outer Mechanical seals, bearings and a O-ring kit. Position no 900.

A complete set of tools can be ordered for repair and maintenance work, i.e. standard hand tools and special tools for seal change and hydraulic-end use.
Order:

This partlist can be used as an order form by marking out the number of parts in the Qty/Order column.

Please send or fax the form to your Flygt representative.



Parts List

Flygt NP 3171 SH

Serial No 3171.095 1460021 -22

Item no	Part no	Type	Rec	Denomination	Qty/ord.
1	651 05 00			Lifting handle	1
2	83 04 53			Hex.socket hd screw M12X45-A4-80	2
7	83 45 52			Cable tie 292X3.5 MM	1
7	83 45 59			Cable tie 200X2.4 PA 6/6 -55+105	1
8	630 68 00			Data plate USE 6306801 AS SPARE PART	2
8	630 70 00			Certificate plate FM	2
9	81 65 46			Marking plate	1
9	83 93 50			Marking strip 5-GW(T1,T2,T15,T16)	1
9	83 93 51			Marking strip W5,V5,U5,V2,W1,U2,V1,W2,U	1
9	773 29 00			Connection plate	1
10	82 20 88			Drive screw 4X5-A2/A4	6
11	82 00 11			Hex.socket hd screw M6X12-A2-70	2
13	642 16 00			Earthing plate	1
23	94 19 81			Motor cable subcab	16.6 m
24	642 17 01 (Ex)			Entrance flange	1
26	83 04 53			Hex.socket hd screw M12X45-A4-80	2
31	82 74 63			O-ring 49.5X3 NBR	1
32	650 87 01 (Ex)			Entrance cover	1
33	82 74 92			O-ring 194.3X5.7 NBR	1
35	83 04 53			Hex.socket hd screw M12X45-A4-80	4
45	82 00 11			Hex.socket hd screw M6X12-A2-70	2
53	82 00 11			Hex.socket hd screw M6X12-A2-70	2
53	82 00 11			Hex.socket hd screw M6X12-A2-70	2
54	651 04 00			Rail	1
56	642 16 00			Earthing plate	2
60	82 56 25			Spring washer 71.5X59X0.55 MM	1
61	83 30 16			Ball bearing 30X72X30.2 MM	1
69	650 90 05 (Ex)			Stator housing	1
72	82 74 97			O-ring 239.5X5.7 NBR	1
73	647 45 00 (Ex)			Shaft unit	1
79	647 43 01			Stator 25-18-2a	1
82	650 93 01			Cooling jacket	1
83	82 74 99			O-ring 259.3X5.7 NBR	1
84	82 75 05			O-ring 339.3X5.7 NBR	1
101	650 51 00			Cable unit FLS10	1
103	663 04 00 (Ex)			Level sensor FLS10	1

Ordered by:

Company:.....Ref:.....Tel:.....Date:.....

Parts List

Item no	Part no	Type	Rec	Denomination	Qty/ord.
105	650 80 01	(Ex)		Bearing holder	1
107	82 59 12			Retaining ring SGA 55	1
108	82 44 19			Supporting washer 55X68X3	2
109	83 30 21			Ball bearing 3311A-2Z/C3VT113	1
110	83 07 63			Retaining ring 120/2,85	1
120	642 13 00			Plug	1
122	82 76 85			O-ring 17X3 NBR	1
129	650 78 00			Seal housing cover	1
130	82 78 59			O-ring 290X3 NBR	1
131	82 75 05			O-ring 339.3X5.7 NBR	1
133	83 04 53			Hex.socket hd screw M12X45-A4-80	6
141	619 64 30			Mechanical seal DIAM.45 PLUGIN	1
145	83 04 58			Hex.socket hd screw M16X60-A4-80	4
153	681 31 00			Insert ring	1
158	704 35 65			Impeller	1
162	82 38 00			Plain washer STAINLESS STEEL A4	1
169	83 04 66			Hex.socket hd screw M12X80-A4-80	1
186	704 63 00			Insert ring	1
193	83 04 56			Hex.socket hd screw M10X35-A4-80	3
200	704 61 03			Pump housing	1
200.4	83 04 56			Hex.socket hd screw M10X35-A4-80	2
200.5	82 81 93			O-ring 44,2X5,7 FPM	1
200.6	648 00 00			Cover	1
209	651 08 00			Sliding bracket	1
229	667 40 01			Sticker	2
232	83 53 58			Terminal clamp WDU6/10	3
233	83 53 61			Terminal clamp WDU16,1000V	6
234	83 53 67			Cross connection WQV16/2	3
234	650 20 02			Cross connection WQV16/10	1
235	83 53 54			End support WEW 35/2	2
236	83 53 50			Partition	1
239	650 84 01			El.lead through unit	1
240	607 48 04			Spring	1
241	82 74 95			O-ring 219.3X5.7 NBR	1
242	650 88 11	(Ex)		Adapter	1
243	83 04 61			Hex.socket hd screw M12X25-A4-80	2
245	82 75 05			O-ring 339.3X5.7 NBR	1
246	82 78 59			O-ring 290X3 NBR	1
247	82 95 70			O-ring 92X4 FPM	1
248	608 27 01			Strip	1
249	82 32 50			Clip	1
251	642 13 00			Plug	2
252	82 76 85			O-ring 17X3 NBR	2

Ordered by:

Company:.....Ref:.....Tel:.....Date:.....

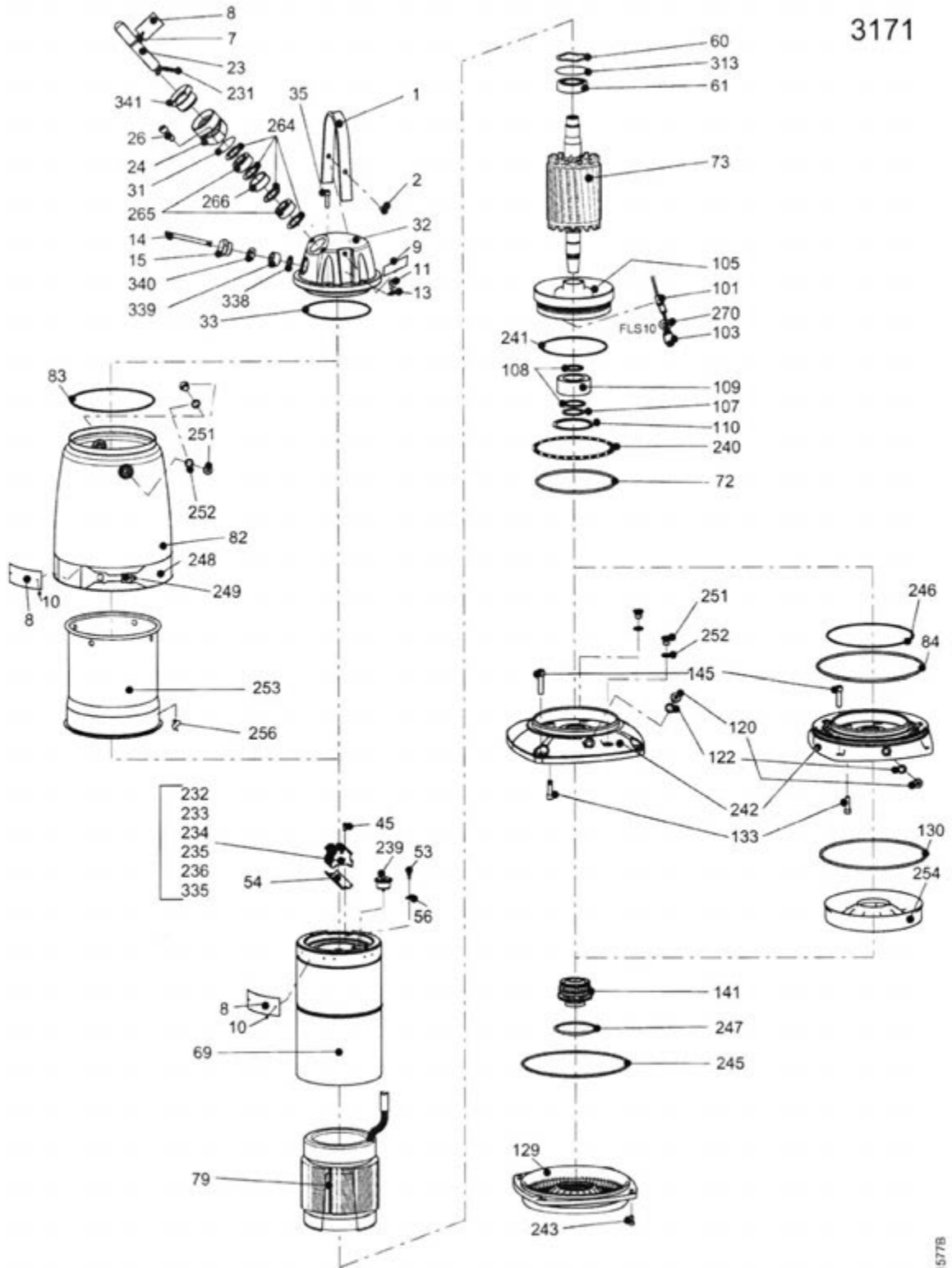
Parts List

Item no	Part no	Type	Rec	Denomination	Qty/ord.
253	650 94 01			Cooling jacket	1
254	651 06 01			Flow diffusor	1
256	608 42 00			Wire bow	4
258	720 15 00			Sleeve unit	1
258.1	643 66 00			Adjustment screw	1
258.2	651 03 01			Sleeve	1
264	82 40 82			Plain washer (32)-34 MM	4
265	84 18 03			Seal sleeve (23)-26 MM	2
266	597 98 02			Sleeve	1
267	725 06 00			Plug	3
270	608 31 00			Lock washer	1
313	82 71 72			O-ring 71.2X3 FPM	1
335	83 53 77			Terminal clamp WPE 2,5 WS	1
336	83 42 36			End sleeve 0.75 MM2, L=6 MM	2
800	82 96 96			O-ring kit STANDARD	1
900	657 17 01			Basic repair kit	1
901	90 37 08			Monopropylene glycol "DOWCAL N"	5l
912	82 76 85			O-ring 17X3 NBR	3
	82 70 86			Cap 6X16 PVC	1
	82 97 74			Cap 24X45 MM PVC	1
	83 04 53			Hex.socket hd screw M12X45-A4-80	4
	90 29 12			Top coat	0.7 l
...
...
...
...

Ordered by:

Company:.....Ref:.....Tel:.....Date:.....

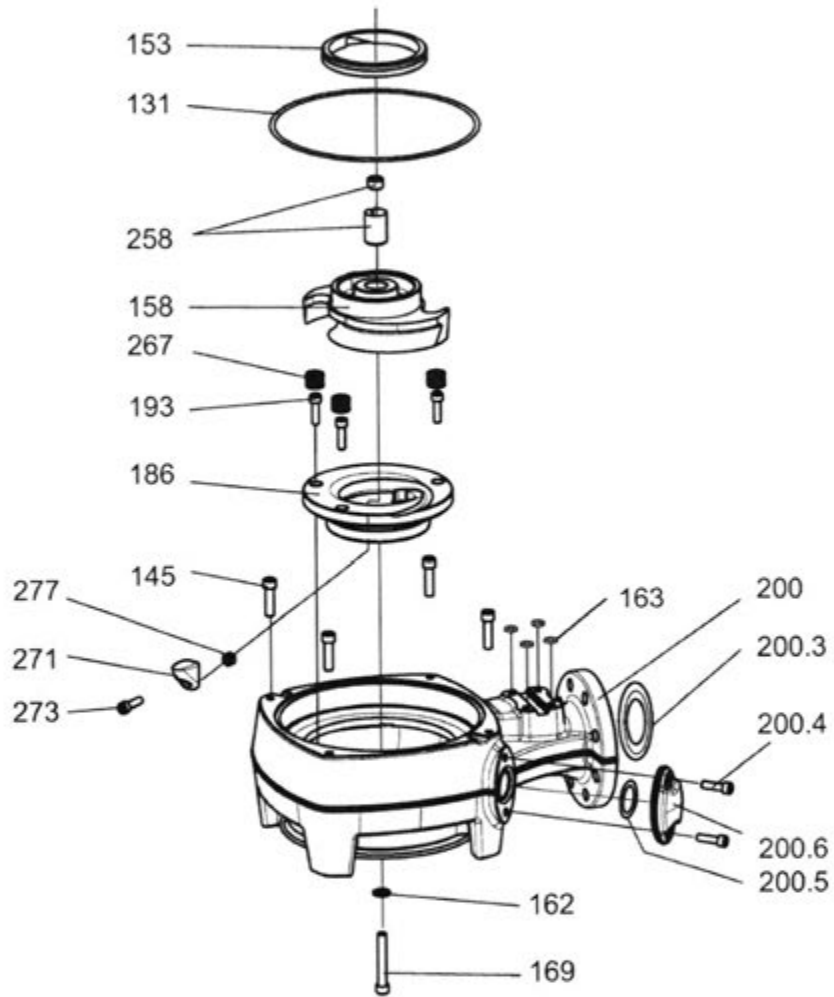
Exploded View



3171

Hydraulic Parts

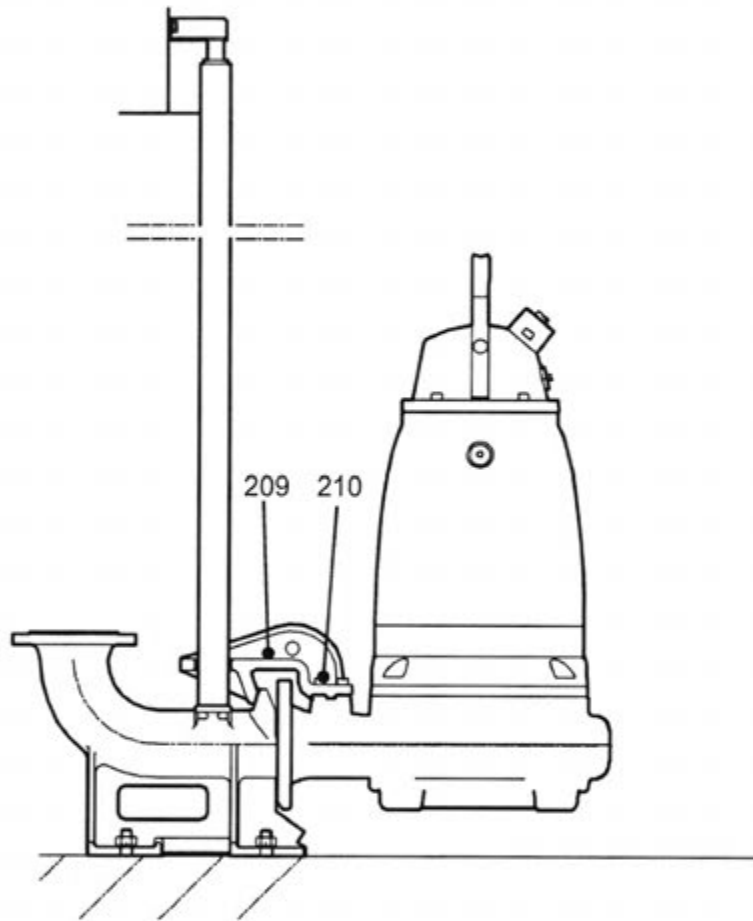
N_3171 SH



31332

Connection

FP/NP 3171



30902

Xylem |'zīləm|

- 1) The tissue in plants that brings water upward from the roots
- 2) A leading global water technology company

We're 12,900 people unified in a common purpose: creating innovative solutions to meet our world's water needs. Developing new technologies that will improve the way water is used, conserved, and reused in the future is central to our work. We move, treat, analyze, and return water to the environment, and we help people use water efficiently, in their homes, buildings, factories and farms. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise, backed by a legacy of innovation.

For more information on how Xylem can help you, go to xyleminc.com

XYLEM WATER SOLUTIONS U.S.A. INC
14125 SOUTH BRIDGE CIRCLE

CHARLOTTE, NC 28273
USA

Telephone No: 704-4099700

xylem
Let's Solve Water

Xylem Water Solutions Manufacturing AB
361 80 Emmaboda
Sweden
Tel: +46 471 24 70 00
Fax: +46 471 24 74 01