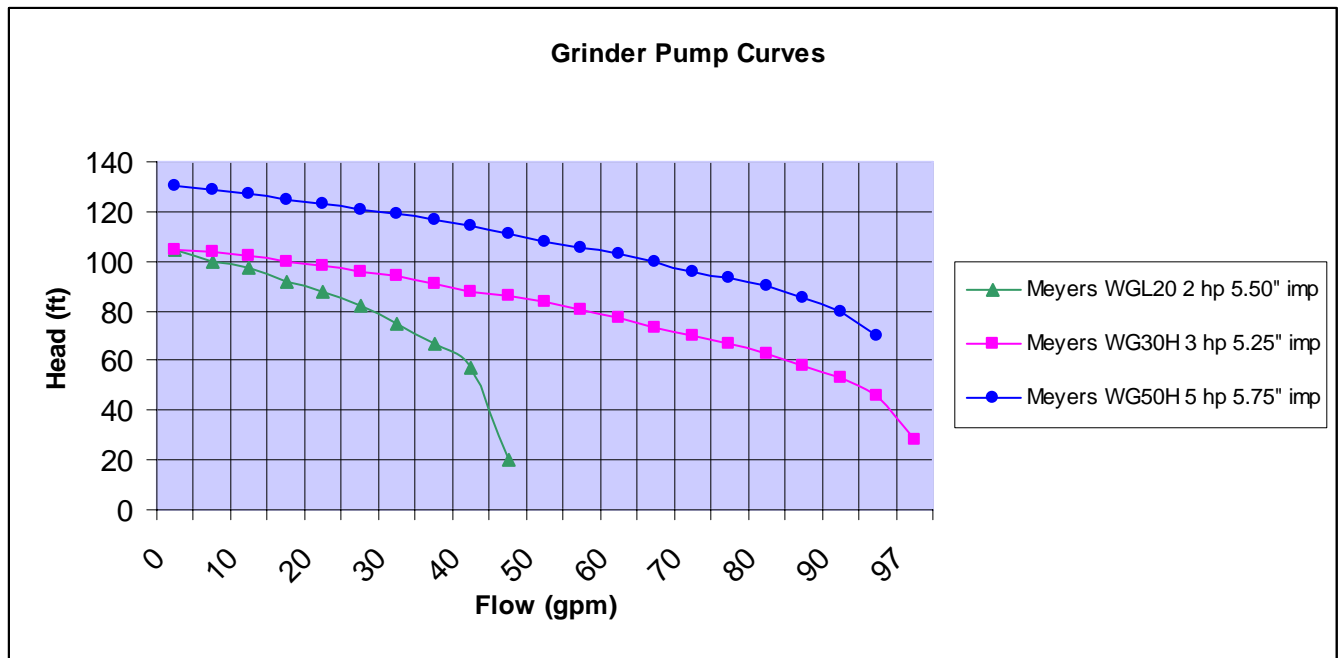
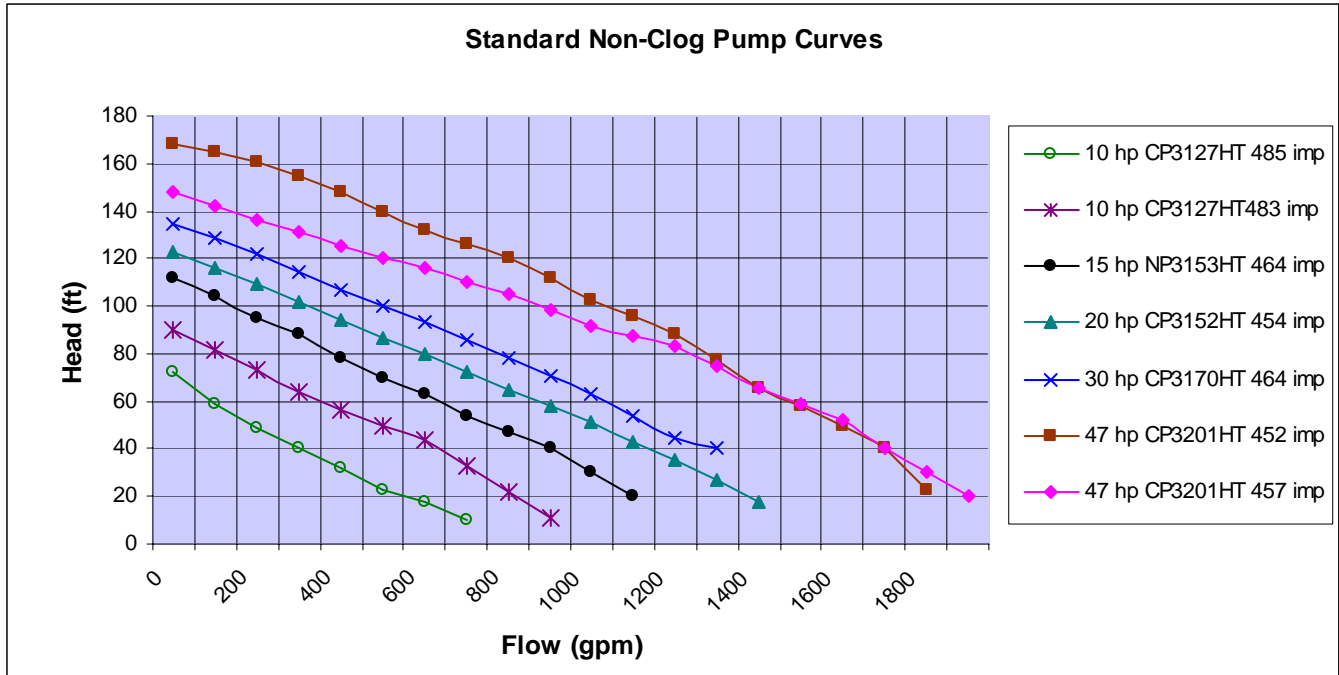
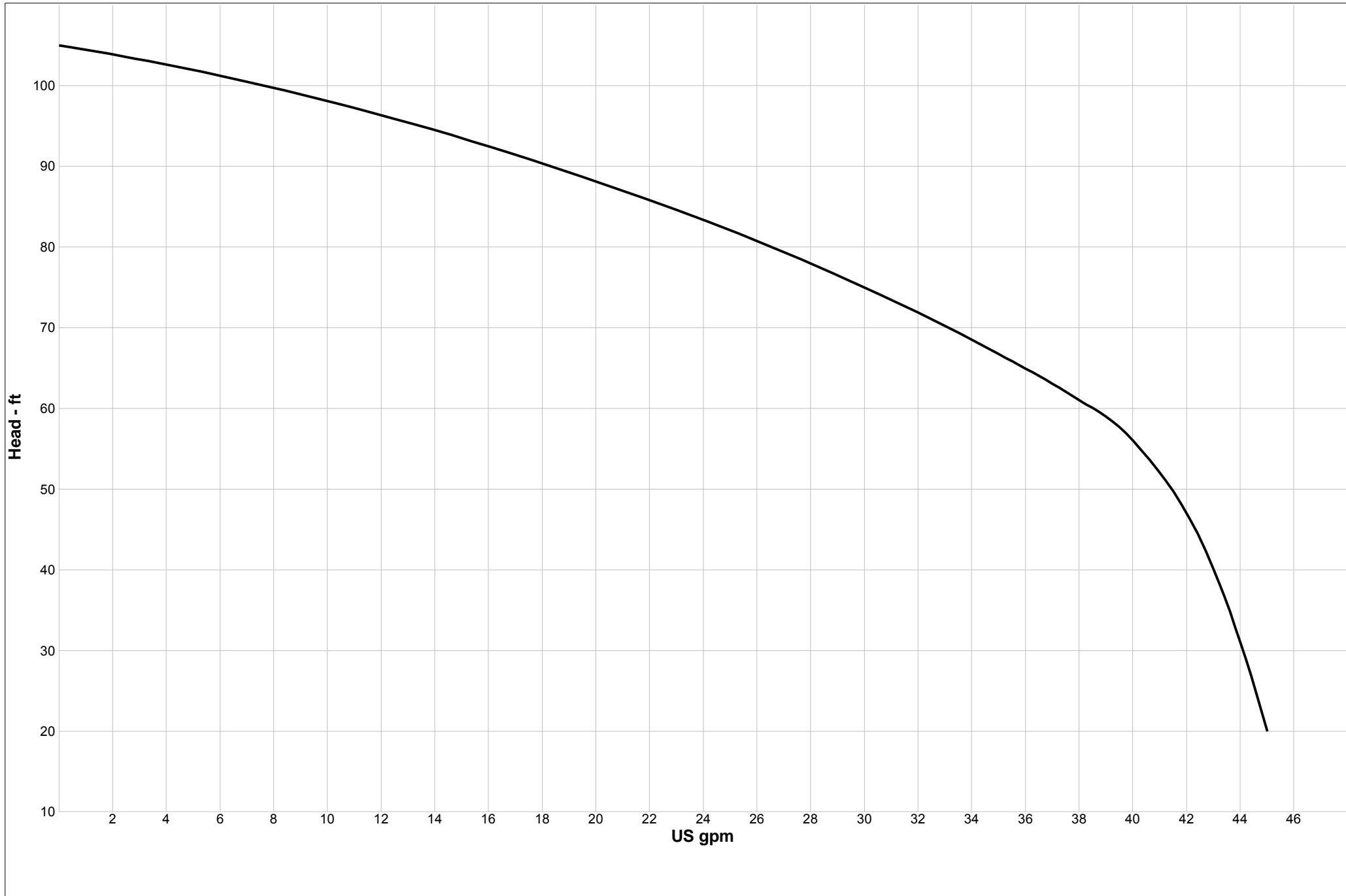




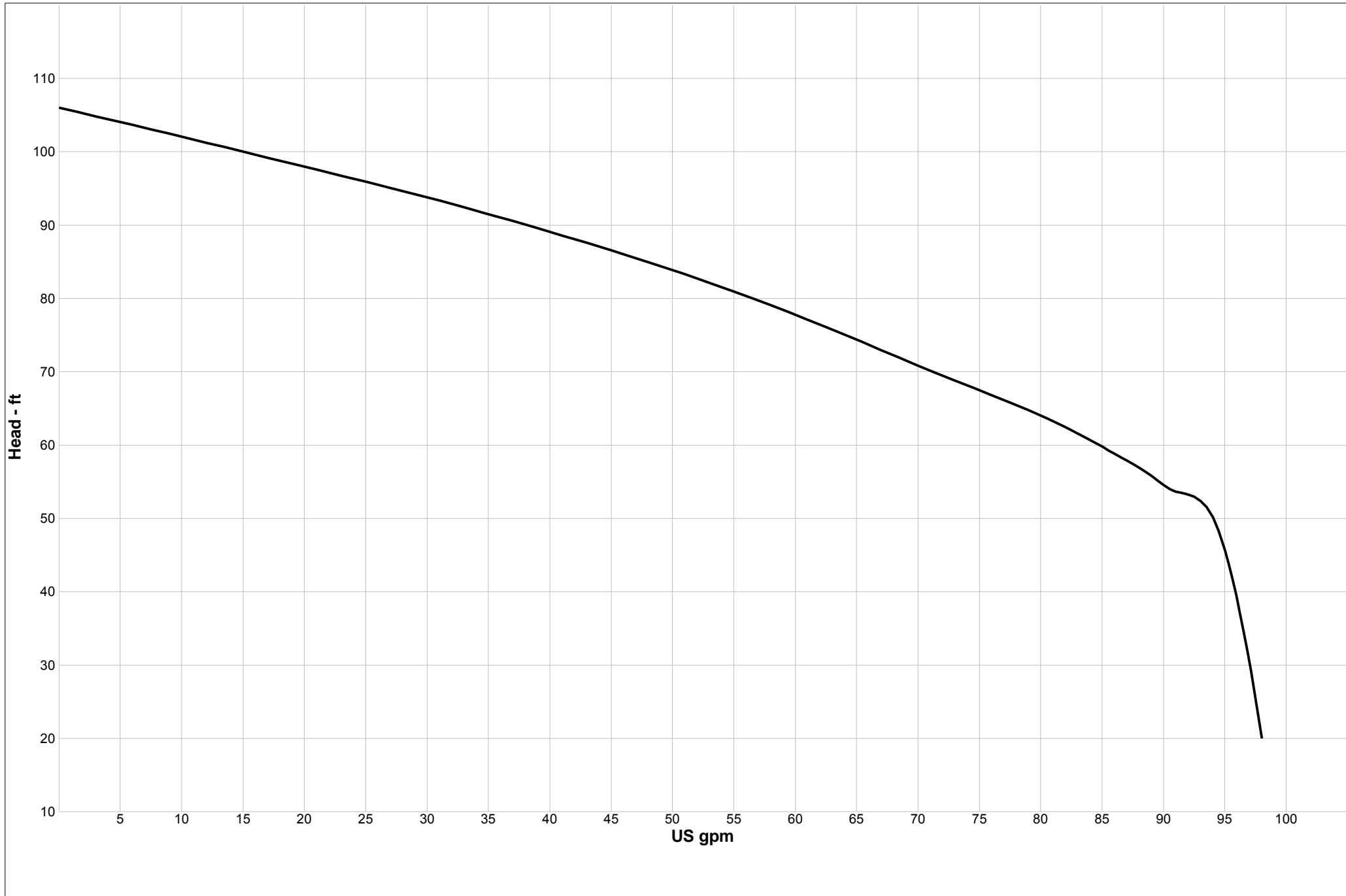
## Standard Lift Station Pumps





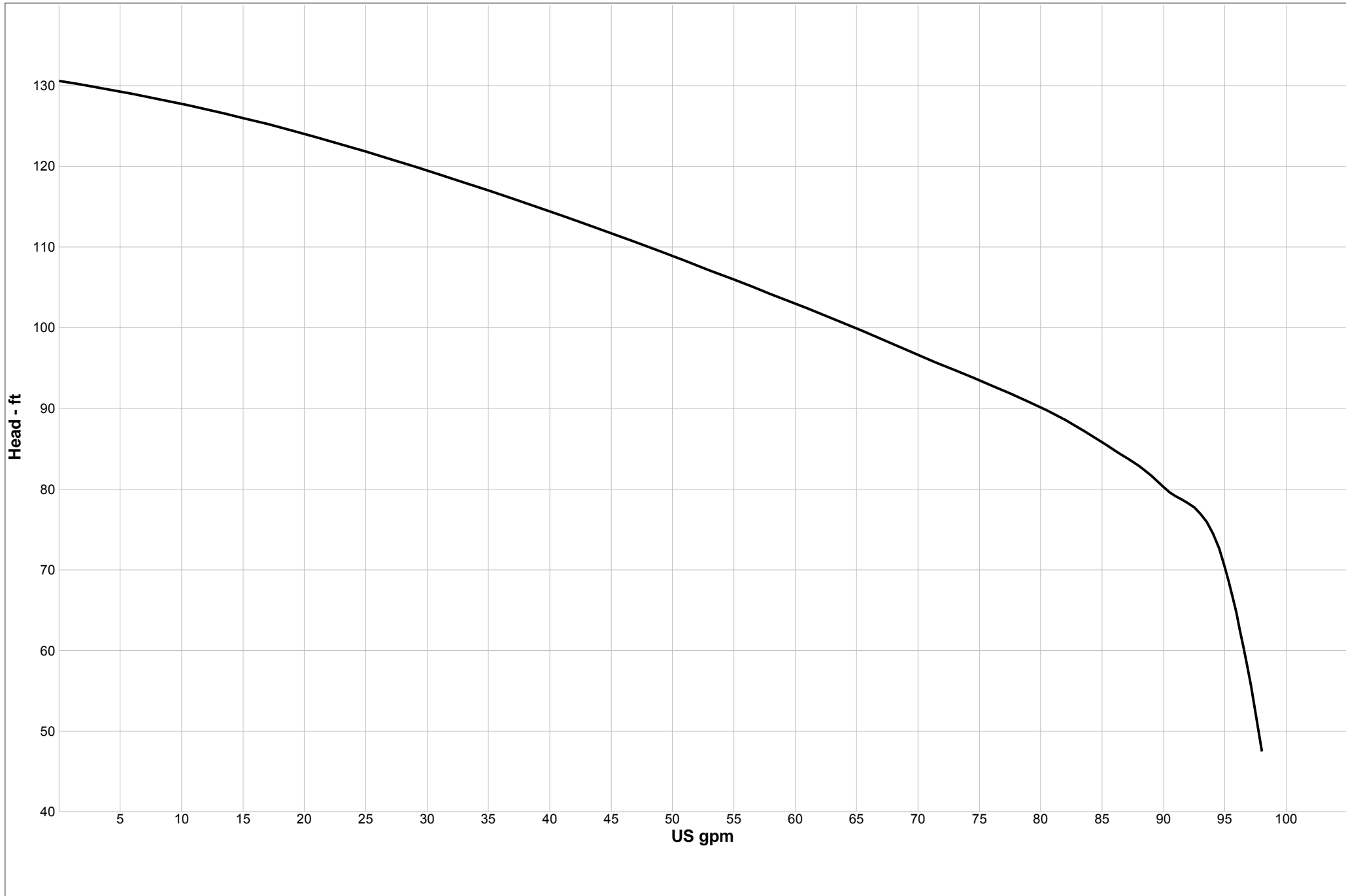
Company: FE Myers  
 Name: WGL20, 5.50" Impeller  
 Grinder: 3600  
 Size: WGL20  
 Speed: 3450 rpm  
 Diameter: 5.50 inches





Company: FE Myers  
Name: WG30H, 5.25" Impeller  
Grinder: 3600  
Size: WG30H  
Speed: 3450 rpm  
Diameter: 5.25 inches





Company: FE Myers  
Name: WG50H, 5.75" Impeller  
Grinder: 3600  
Size: WG50H  
Speed: 3450 rpm  
Diameter: 5.75"





# PERFORMANCE CURVE

PRODUCT  
**CP3127.181**

TYPE  
**HT**

DATE  
**2009-01-16**

PROJECT

CURVE NO  
**63-485-00-2202**

ISSUE  
**2**

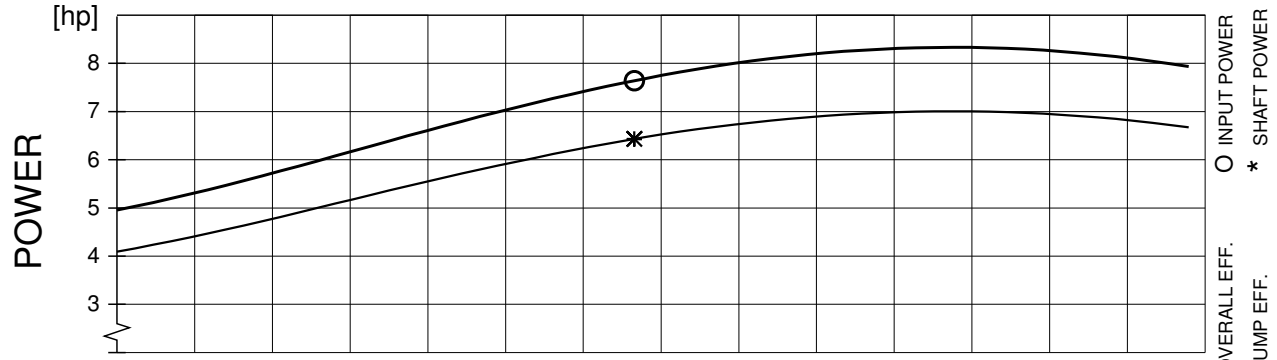
	1/1-LOAD	3/4-LOAD	1/2-LOAD
POWER FACTOR	0.89	0.87	0.81
EFFICIENCY	83.5 %	85.0 %	84.5 %
MOTOR DATA	---	---	---

RATED POWER .....	10	hp
STARTING CURRENT ...	64	A
RATED CURRENT ...	13	A
RATED SPEED .....	1735	rpm
TOT.MOM.OF INERTIA ...	0.099	kgm2
NO. OF BLADES	1	

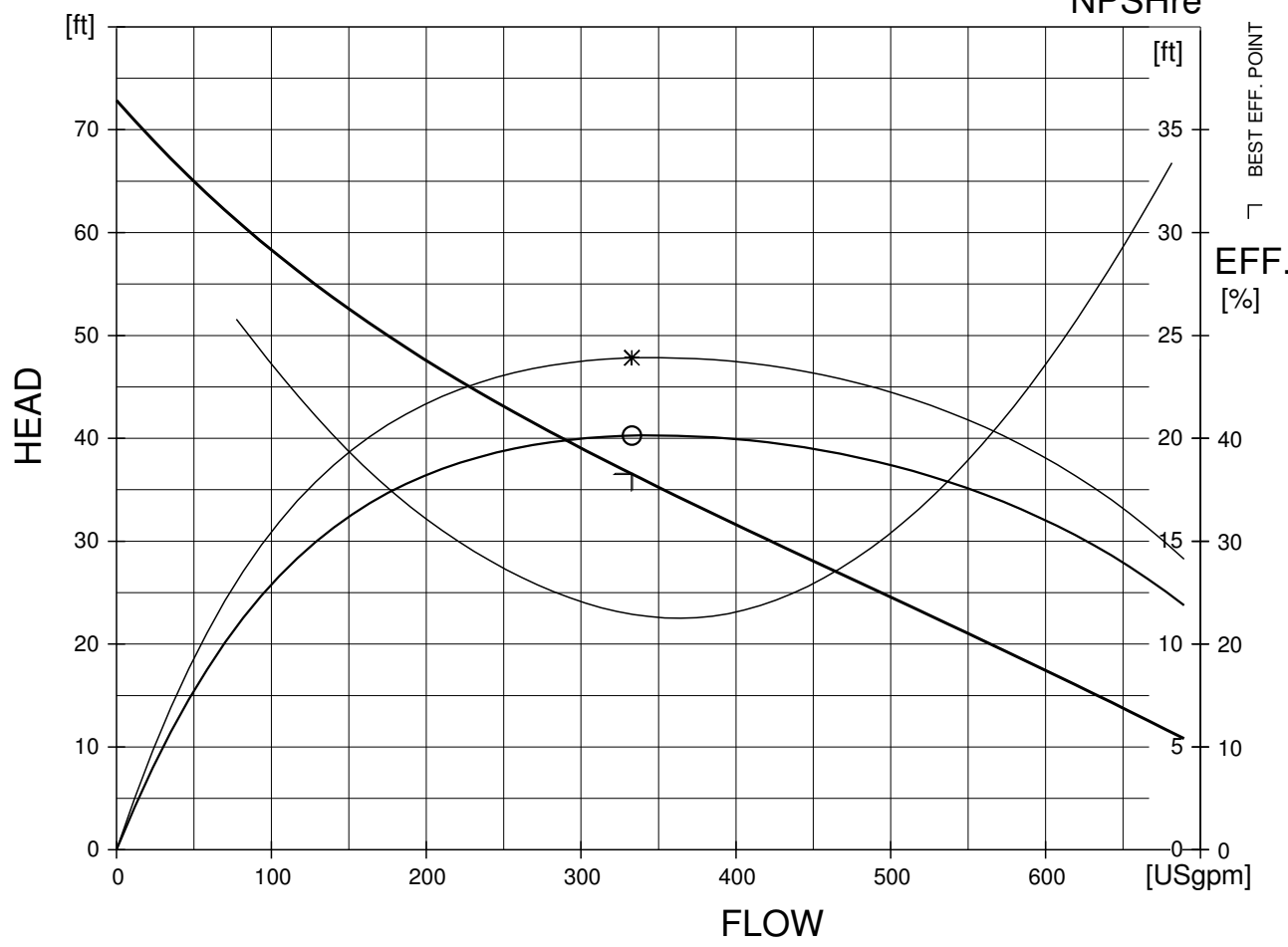
IMPELLER DIAMETER <b>200 mm</b>			
MOTOR #	STATOR	REV	
<b>21-12-4AL</b>	<b>12YSER</b>	<b>11</b>	
FREQ.	PHASES	VOLTAGE	POLES
<b>60 Hz</b>	<b>3</b>	<b>460 V</b>	<b>4</b>
GEARTYPE		RATIO	
---		---	

COMMENTS

INLET/OUTLET	-/ 4 inch
IMP. THROUGHLET	3.0 inch



DUTY-POINT	FLOW[USgpm]	HEAD[ft]	POWER [hp]	EFF. [%]	NPSHre[ft]
B.E.P.	333	36.5	7.64 (6.44)	40.3 (47.8)	11.5



FLYPS3.1.6.2 (20060531)

NPSHre = NPSH3% + min. operational margin  
 Performance with clear water and ambient temp 40 °C



## HI B Curve



# PERFORMANCE CURVE

PRODUCT  
**CP3127.181**

TYPE  
**HT**

DATE  
**2009-01-16**

PROJECT

CURVE NO  
**63-483-00-3702**

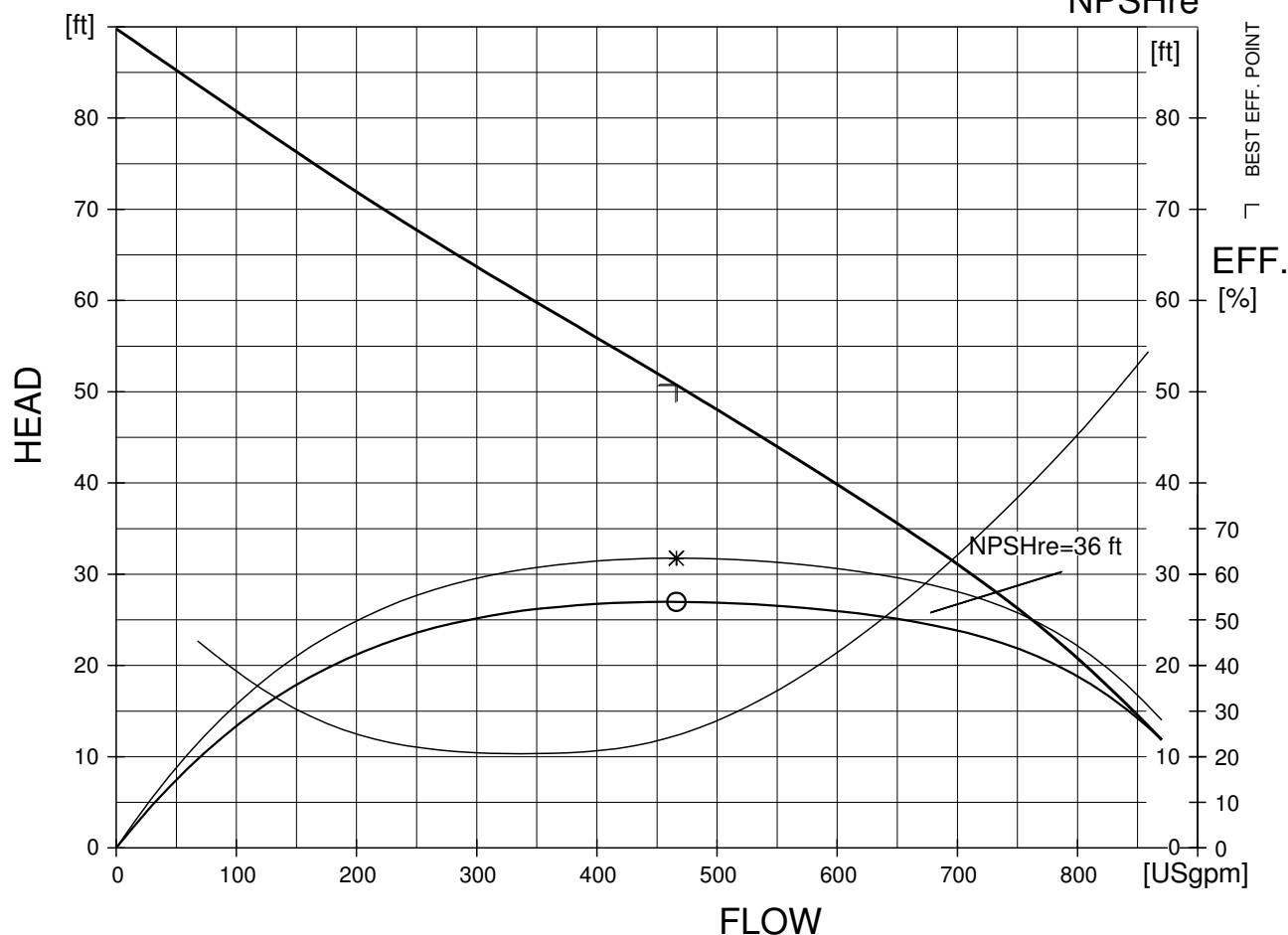
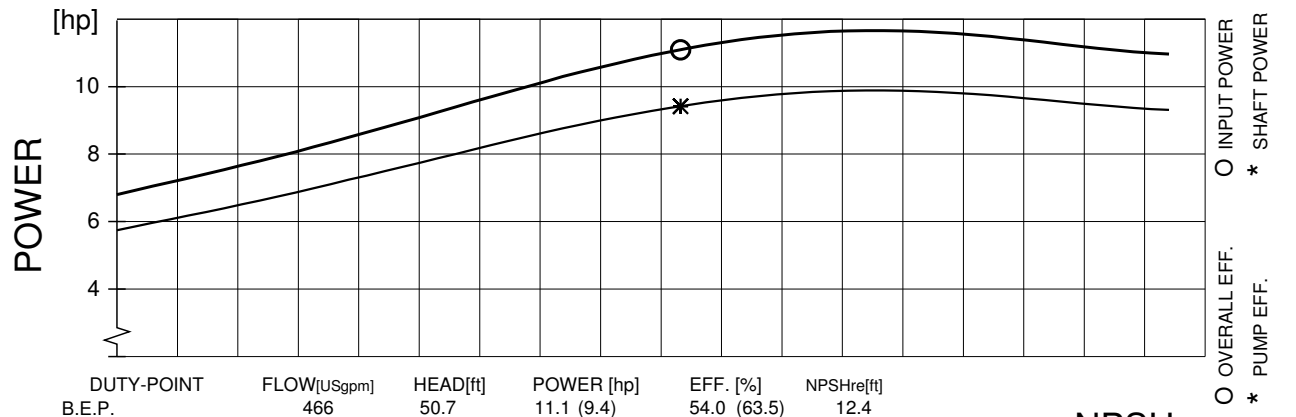
ISSUE  
**3**

	1/1-LOAD	3/4-LOAD	1/2-LOAD
POWER FACTOR	0.89	0.87	0.81
EFFICIENCY	83.5 %	85.0 %	84.5 %
MOTOR DATA	---	---	---

RATED POWER .....	10	hp
STARTING CURRENT ...	64	A
RATED CURRENT ...	13	A
RATED SPEED .....	1735	rpm
TOT.MOM.OF INERTIA ...	0.12	kgm2
NO. OF BLADES	1	

IMPELLER DIAMETER <b>228 mm</b>			
MOTOR #	STATOR	REV	
<b>21-12-4AL</b>	<b>12YSER</b>	<b>11</b>	
FREQ.	PHASES	VOLTAGE	POLES
<b>60 Hz</b>	<b>3</b>	<b>460 V</b>	<b>4</b>
GEARTYPE		RATIO	
---		---	

COMMENTS	INLET/OUTLET
	-/ 4 inch
	IMP. THROUGHLET
	3.0 inch



FLYPS3.1.6.2 (20060531)

NPSHre = NPSH3% + min. operational margin  
Performance with clear water and ambient temp 40 °C



## HI B Curve



# PERFORMANCE CURVE

PRODUCT  
**NP3153.181**

TYPE  
**HT**

DATE  
**2009-01-16**

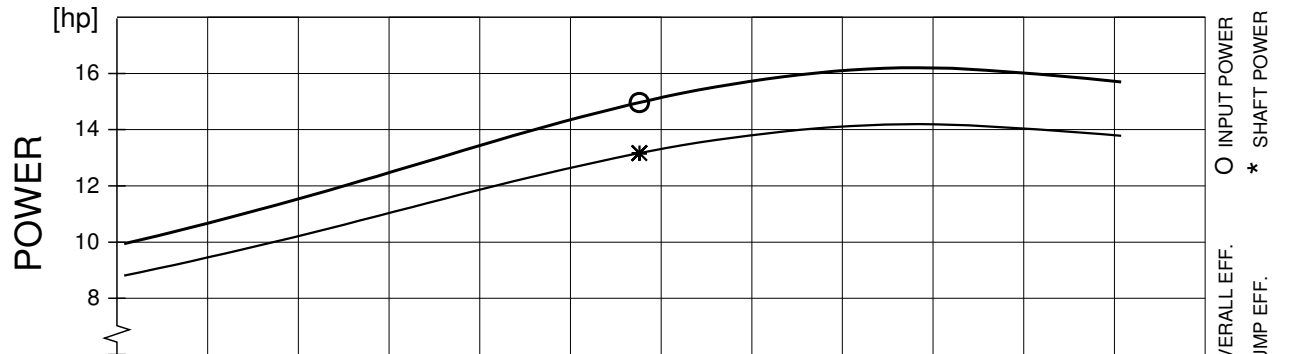
PROJECT

CURVE NO  
**63-464-00-4550**

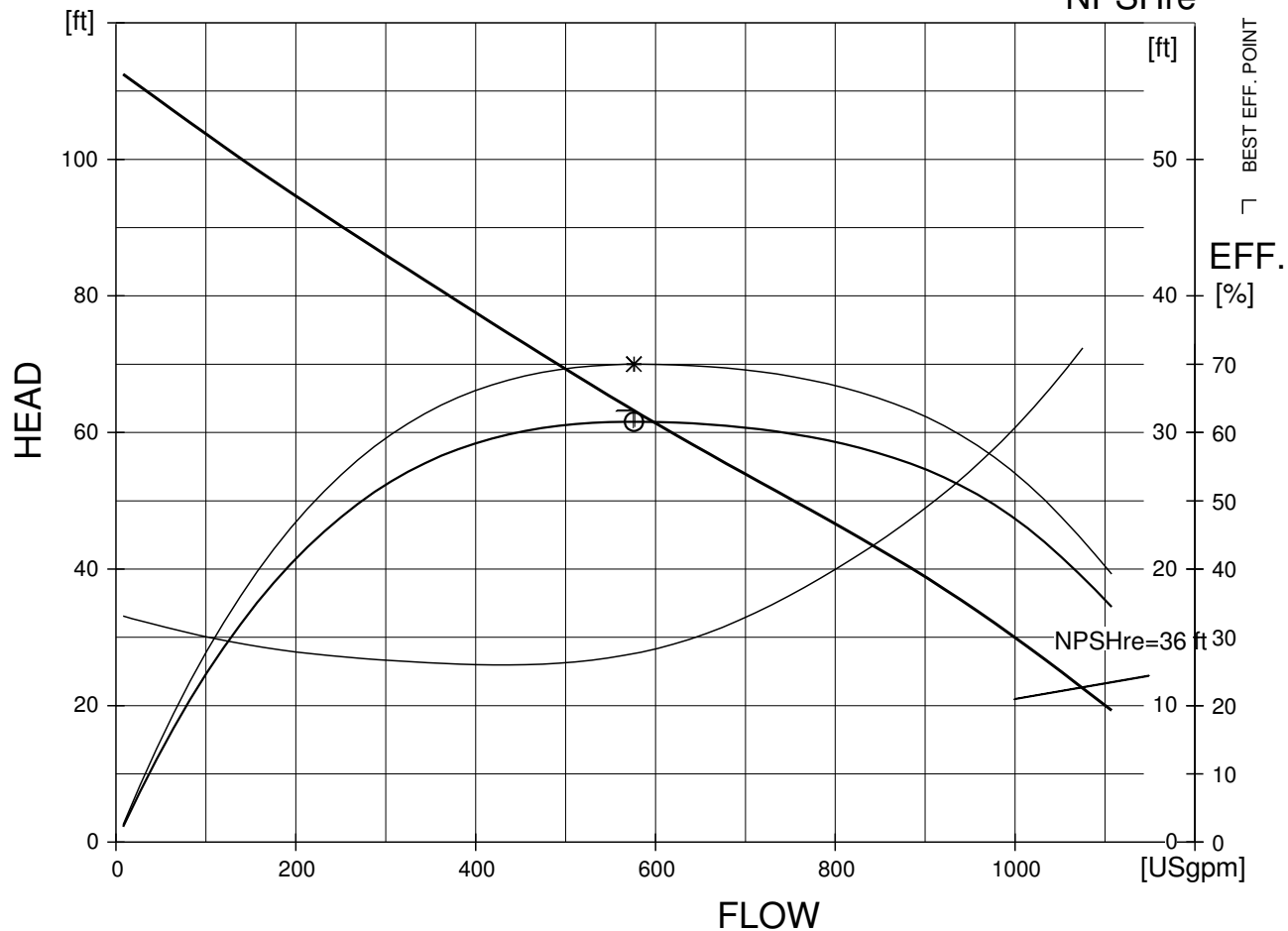
ISSUE  
**6**

	1/1-LOAD	3/4-LOAD	1/2-LOAD	RATED POWER .....	15	hp
POWER FACTOR	0.82	0.77	0.65	STARTING CURRENT ...	114	A
EFFICIENCY	87.5 %	88.5 %	88.0 %	RATED CURRENT ...	19	A
MOTOR DATA	---	---	---	RATED SPEED .....	1755	rpm
COMMENTS	INLET/OUTLET			TOT.MOM.OF	0.085	kgm2
	-/ 4 inch			INERTIA ...		
	IMP. THROUGHLET			NO. OF		
	---			BLADES	2	

IMPELLER DIAMETER			
253 mm			
MOTOR #	STATOR	REV	
21-15-4AA	05YSER	11	
FREQ.	PHASES	VOLTAGE	POLES
60 Hz	3	460 V	4
GEARTYPE		RATIO	
---		---	



DUTY-POINT	FLOW[USgpm]	HEAD[ft]	POWER [hp]	EFF. [%]	NPSHre[ft]
B.E.P.	576	63.2	15.0 (13.2)	61.6 (70.0)	13.8



FLYPS3.1.6.2 (20060531)

NPSHre = NPSH3% + min. operational margin  
Performance with clear water and ambient temp 40 °C



## HI B Curve



# PERFORMANCE CURVE

PRODUCT  
**CP3152.181**

TYPE  
**HT**

DATE  
**2009-01-16**

PROJECT

CURVE NO  
**63-454-00-5350**

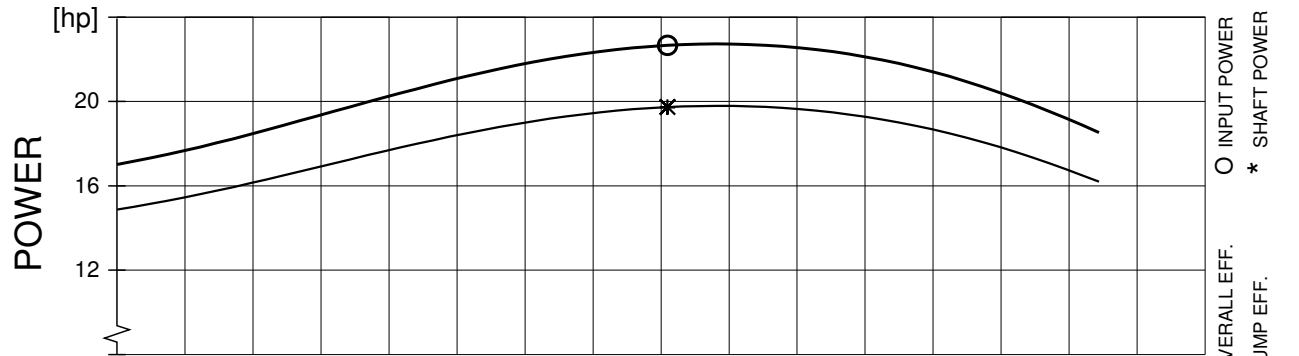
ISSUE  
**4**

	1/1-LOAD	3/4-LOAD	1/2-LOAD
POWER FACTOR	0.84	0.79	0.69
EFFICIENCY	87.0 %	87.0 %	86.0 %
MOTOR DATA	---	---	---

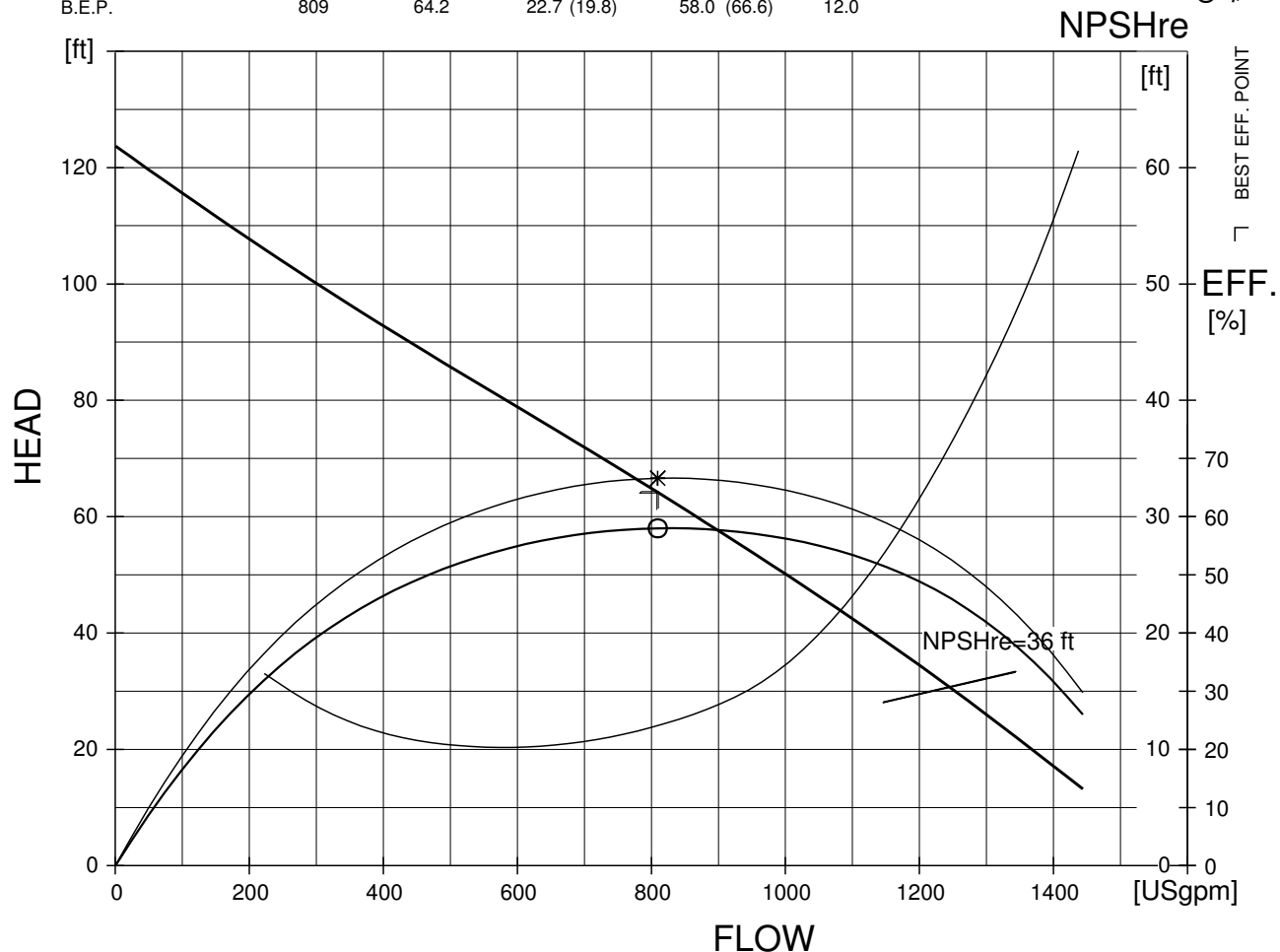
RATED POWER .....	20	hp
STARTING CURRENT ...	142	A
RATED CURRENT ...	26	A
RATED SPEED .....	1750	rpm
TOT.MOM.OF INERTIA ...	0.24	kgm2
NO. OF BLADES	1	

IMPELLER DIAMETER <b>275 mm</b>			
MOTOR #	STATOR	REV	
<b>25-15-4AA</b>	<b>12YSER</b>	<b>11</b>	
FREQ.	PHASES	VOLTAGE	POLES
<b>60 Hz</b>	<b>3</b>	<b>460 V</b>	<b>4</b>
GEARTYPE	RATIO		
---	---		

COMMENTS	INLET/OUTLET
	-/ 6 inch
	IMP. THROUGHLET
	3.0 inch



DUTY-POINT	FLOW[USgpm]	HEAD[ft]	POWER [hp]	EFF. [%]	NPSHre[ft]
B.E.P.	809	64.2	22.7 (19.8)	58.0 (66.6)	12.0



FLYPS3.1.6.2 (20060531)

NPSHre = NPSH3% + min. operational margin  
Performance with clear water and ambient temp 40 °C



## HI B Curve





# PERFORMANCE CURVE

PRODUCT  
**CP3170.180**

TYPE  
**HT**

DATE  
**2009-01-16**

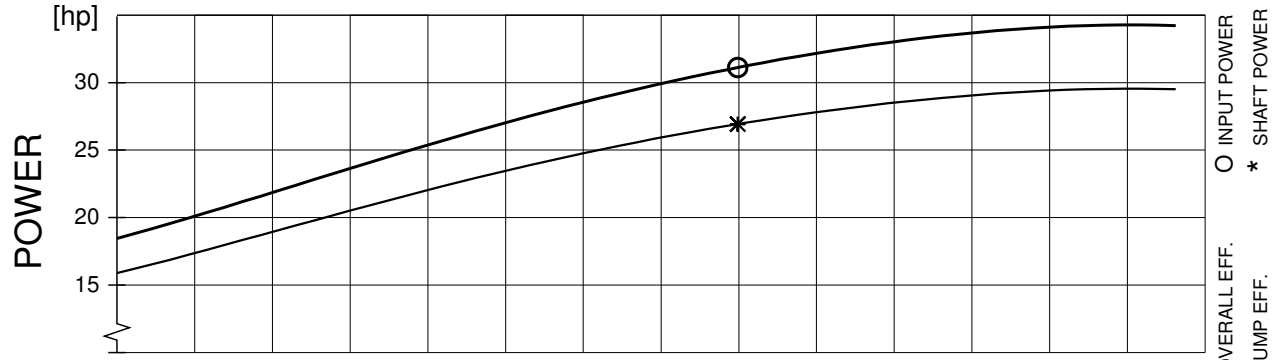
PROJECT

CURVE NO  
**63-464-00-2350**

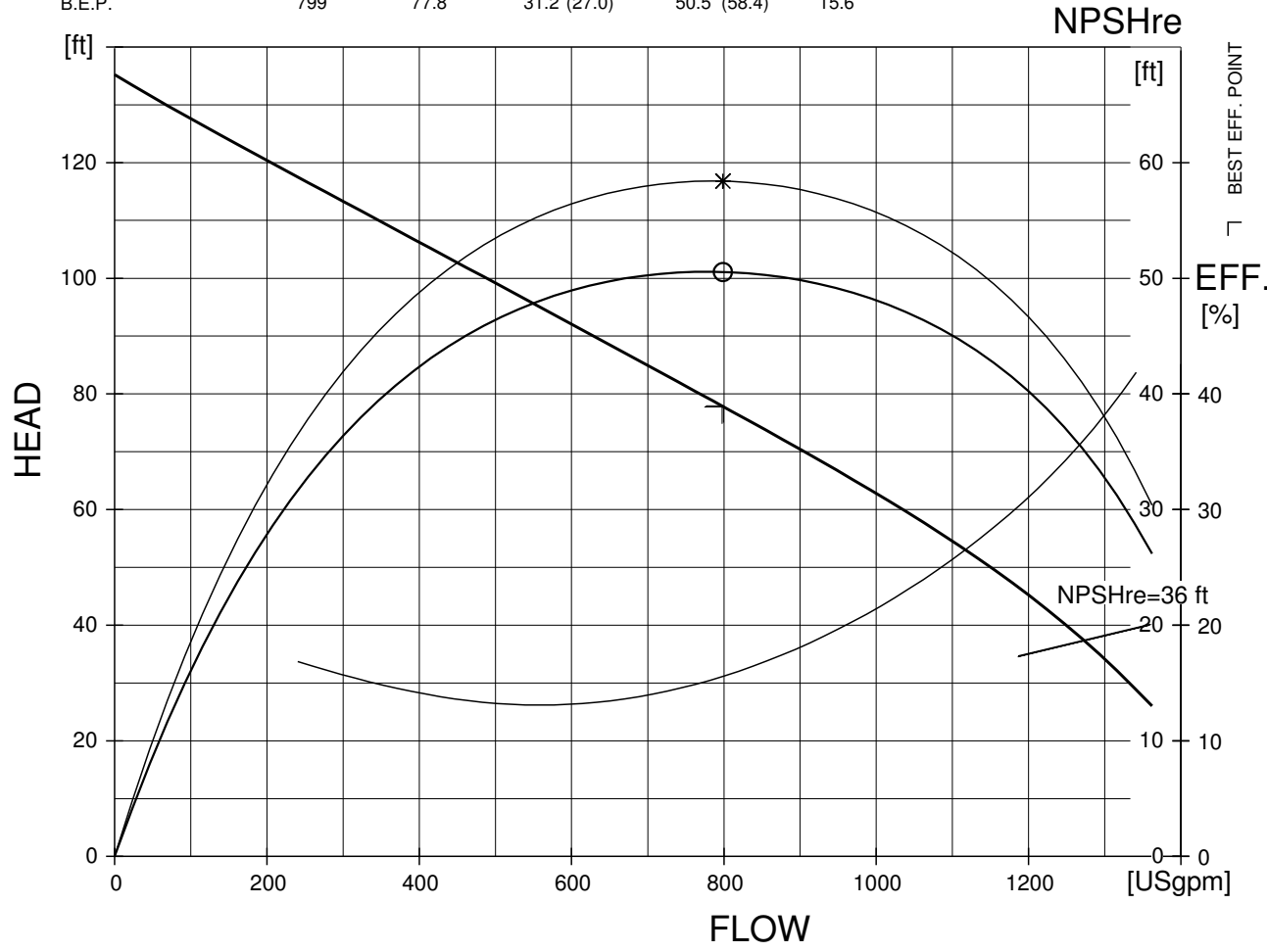
ISSUE  
**3**

	1/1-LOAD	3/4-LOAD	1/2-LOAD	RATED POWER .....	30	hp
POWER FACTOR	0.90	0.88	0.83	STARTING CURRENT ...	221	A
EFFICIENCY	86.0 %	86.5 %	85.5 %	RATED CURRENT ...	36	A
MOTOR DATA	---	---	---	RATED SPEED .....	1750	rpm
COMMENTS	INLET/OUTLET			TOT.MOM.OF	0.29	kgm2
	- / 4 inch			INERTIA ...		
	IMP. THROUGHLET			NO. OF		
	3.0 inch			BLADES	1	

IMPELLER DIAMETER <b>281 mm</b>			
MOTOR #	STATOR	REV	
<b>27-20-4AA</b>	<b>37YSER</b>	<b>11</b>	
FREQ.	PHASES	VOLTAGE	POLES
<b>60 Hz</b>	<b>3</b>	<b>460 V</b>	<b>4</b>
GEARTYPE		RATIO	
---		---	



DUTY-POINT	FLOW[USgpm]	HEAD[ft]	POWER [hp]	EFF. [%]	NPSHre[ft]
B.E.P.	799	77.8	31.2 (27.0)	50.5 (58.4)	15.6



FLYPS3.1.6.2 (20060531)

NPSHre = NPSH3% + min. operational margin  
Performance with clear water and ambient temp 40 °C



## HI B Curve



# PERFORMANCE CURVE

PRODUCT  
**CP3201.180**

TYPE  
**HT**

DATE  
**2009-01-16**

PROJECT

CURVE NO  
**63-452-00-5350**

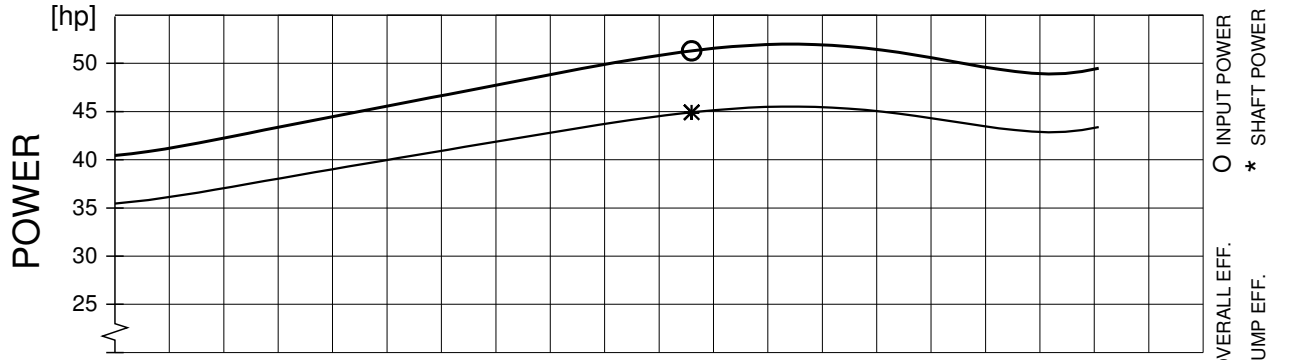
ISSUE  
**7**

	1/1-LOAD	3/4-LOAD	1/2-LOAD
POWER FACTOR	0.89	0.86	0.80
EFFICIENCY	87.5 %	87.5 %	86.0 %
MOTOR DATA	---	---	---

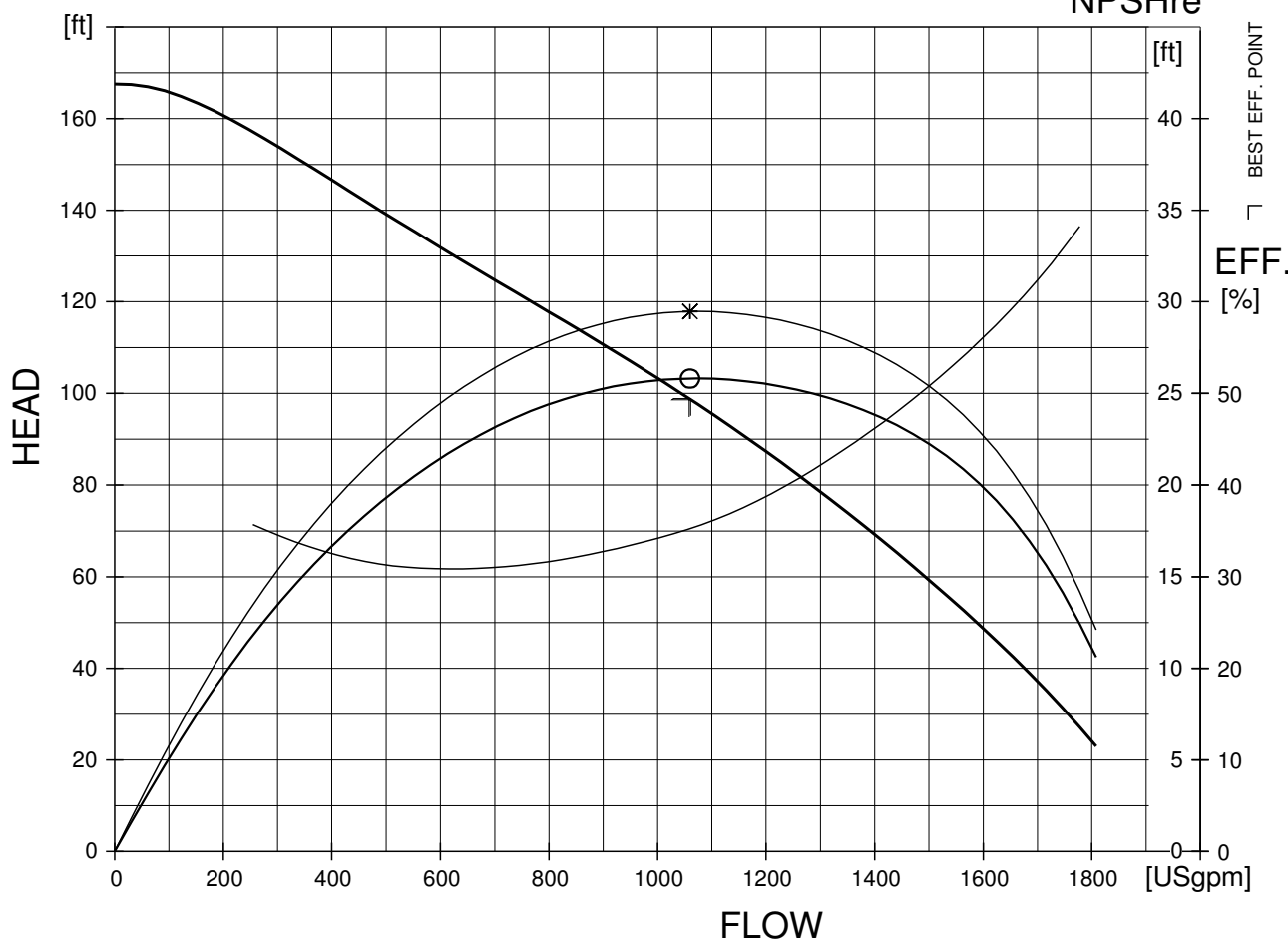
RATED POWER .....	47	hp
STARTING CURRENT ...	375	A
RATED CURRENT ...	57	A
RATED SPEED .....	1755	rpm
TOT.MOM.OF INERTIA ...	0.58	kgm2
NO. OF BLADES	1	

IMPELLER DIAMETER <b>330 mm</b>			
MOTOR #	STATOR	REV	
<b>27-26-4AA</b>	<b>37YSER</b>	<b>11</b>	
FREQ.	PHASES	VOLTAGE	POLES
<b>60 Hz</b>	<b>3</b>	<b>460 V</b>	<b>4</b>
GEARTYPE	RATIO		
---	---		

COMMENTS	INLET/OUTLET
	-/ 6 inch
	IMP. THROUGHLET
	3.0 inch



DUTY-POINT	FLOW[USgpm]	HEAD[ft]	POWER [hp]	EFF. [%]	NPSHre[ft]
B.E.P.	1060	98.7	51.3 (45.0)	51.6 (58.9)	17.6



FLYPS3.1.6.2 (20060531)

NPSHre = NPSH3% + min. operational margin  
Performance with clear water and ambient temp 40 °C



## HI B Curve



# PERFORMANCE CURVE

PRODUCT  
**CP3201.180**

TYPE  
**HT**

DATE  
**2009-01-16**

PROJECT

CURVE NO  
**63-457-00-5350**

ISSUE  
**8**

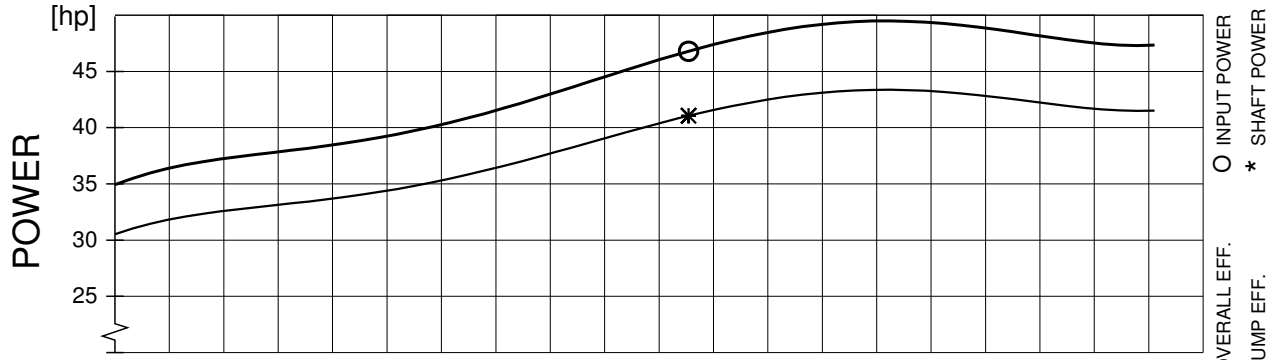
	1/1-LOAD	3/4-LOAD	1/2-LOAD
POWER FACTOR	0.89	0.86	0.80
EFFICIENCY	87.5 %	87.5 %	86.0 %
MOTOR DATA	---	---	---

RATED POWER .....	47	hp
STARTING CURRENT ...	375	A
RATED CURRENT ...	57	A
RATED SPEED .....	1755	rpm
TOT.MOM.OF INERTIA ...	0.56	kgm2
NO. OF BLADES	1	

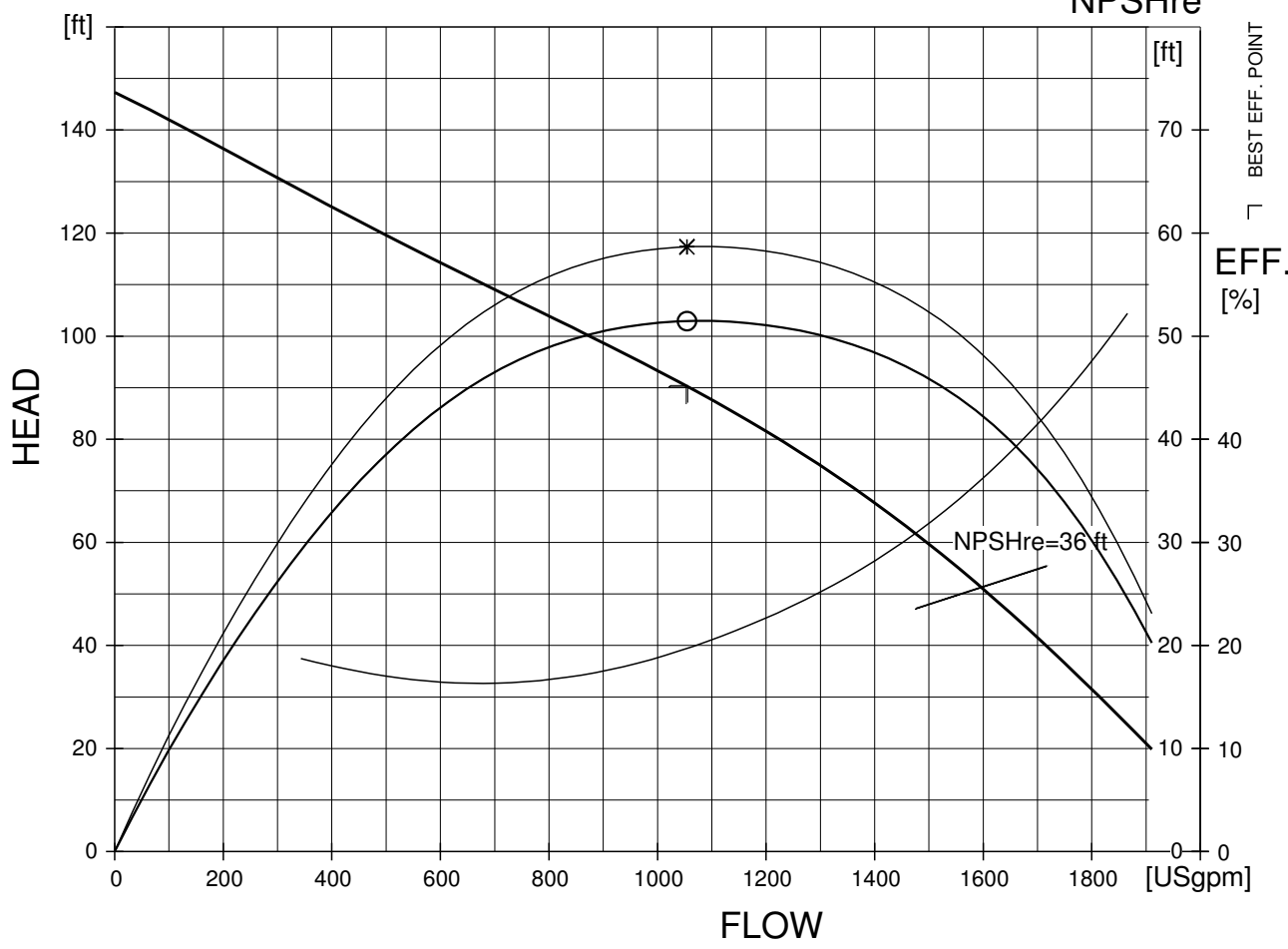
IMPELLER DIAMETER <b>300 mm</b>			
MOTOR #	STATOR	REV	
<b>27-26-4AA</b>	<b>37YSER</b>	<b>11</b>	
FREQ.	PHASES	VOLTAGE	POLES
<b>60 Hz</b>	<b>3</b>	<b>460 V</b>	<b>4</b>
GEARTYPE		RATIO	
---		---	

COMMENTS

INLET/OUTLET  
-/ 6 inch  
IMP. THROUGHLET  
3.9 inch



DUTY-POINT	FLOW[USgpm]	HEAD[ft]	POWER [hp]	EFF. [%]	NPSHre[ft]
B.E.P.	1054	90.3	46.8 (41.1)	51.5 (58.7)	19.7



FLYPS3.1.6.2 (20060531)

NPSHre = NPSH3% + min. operational margin  
Performance with clear water and ambient temp 40 °C



## HI B Curve

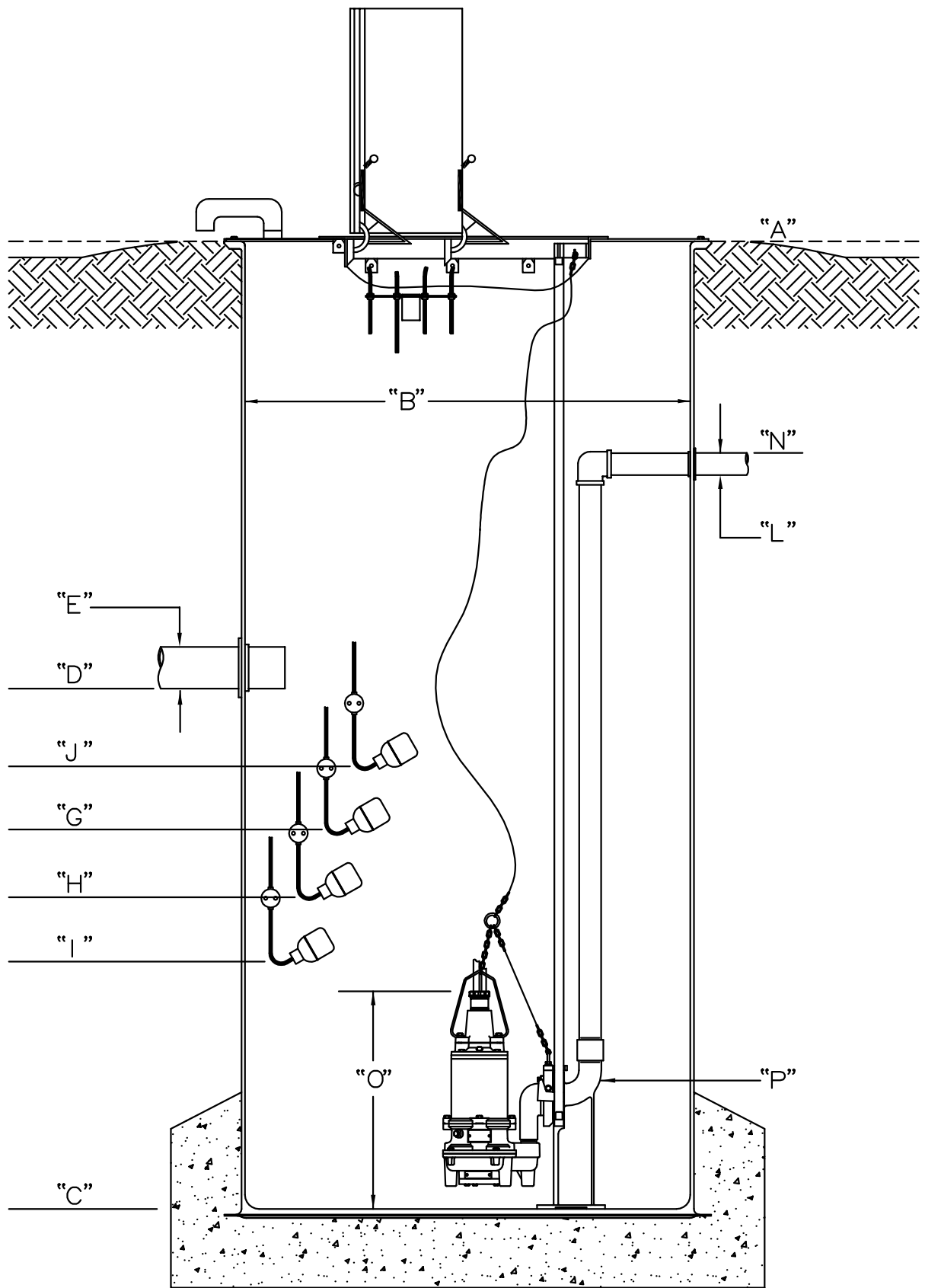
**PUMPING STATION DATA TABLE**

PSLUSD Lift Station ID #

						<b>Soft Start</b>				
Pump Model Number	WGL20	WG30H	WG50H	CP3127	CP3127	NP3153	CP3152	CP3170	CP 3201	CP 3201
Pump Manufacturer	Myers	Myers	Myers	Flygt	Flygt	Flygt	Flygt	Flygt	Flygt	Flygt
Pump Type	Grinder	Grinder	Grinder	Non-Clog	Non-Clog	Non-Clog	Non-Clog	Non-Clog	Non-Clog	Non-Clog
Horse Power	2	3	5	10	10	15	20	30	47	47
Impeller	5.5"	5.25"	5.5"	485	483	464	454	464	452	457
Phase	3	3	3	3	3	3	3	3	3	3
Voltage	230	230	230	230	230	460	460	460	460	460
Cycles (Hz)	60	60	60	60	60	60	60	60	60	60
RPM	3450	3450	3450	1745	1745	1745	1745	1745	1745	1745
Shut Off Head (ft)	105	105	120	72	90	112	123	135	168	148
Best Efficiency Point Flow (gpm)	N/A	N/A	N/A	333	480	580	809	799	1060	1054
Best Efficiency Point Head (ft)	N/A	N/A	N/A	36.5	50	63	64	78	99	90
Pump Efficiency @ BEP Point (%)	N/A	N/A	N/A	48	64	70	67	58	59	59
Run Out Flow (gpm)	40	97	95	700	900	1100	1400	1300	1800	1900
Run Out Head (ft)	20	28	60	10	11	20	18	40	23	20
"A" Wet Well Rim Elevation (NAVD)										
"B" Wet Well Diameter (ft)	4	4	4	6	6	8	8	12	12	12
"C" Wet Well Bottom Elevation (NAVD)										
"D" Influent Pipe Invert Elevation (NAVD)										
"E" Influent Pipe Diameter (in)										
"F" Lag Pump 2 On Elevation (Tri-plex only)										
"G" Lag Pump On Elevation (NAVD)										
"H" Lead Pump On Elevation (NAVD)										
"I" Pumps Off Elevation (NAVD)										
"J" Alarm Elevation (NAVD)										
"K" Emergency Off Elevation (NAVD)										
"L" Discharge Pipe Diameter (in)	2	2	3	6	6	6	8	8	8	8
"M" Pump Out Diameter (in)	3	3	3	4	4	4	6	6	6	6
"N" Discharge Pipe Elevation (NAVD)										
"O" Pump Submergence (in)	23	34	34	28	28	38	39	55	56	56
"P" Pump Discharge Diameter (in)	2	3	3	4	4	4	6	4	6	6
"Q" C/L of wetwell to C/L of pump (in)	N/A	N/A	N/A	16	16	16	18	18	18	18
"R" C/L of wetwell to C/L of pump bolts (in)	N/A	N/A	N/A	14.75	14.75	15.75	17.25	16.75	18.375	18.375
"S" C/L of pump to C/L of pump (in)	20	22.75	22.75	32	32	32	36	36	36	36
"T" Wet Well Hatch (in)	24	24	24	48	48	66	66	72	72	72
"U" Wet Well Hatch (in)	36	36	36	36	36	40	40	47	47	47
"V" Exterior Valve Vault (in)	N/A	40	40	N/A	N/A	N/A	N/A	N/A	N/A	N/A
"W" Exterior Valve Vault (in)	N/A	50	50	N/A	N/A	N/A	N/A	N/A	N/A	N/A
"X" Valve Vault Hatch (in)	N/A	30	30	N/A	N/A	N/A	N/A	N/A	N/A	N/A
"Y" Valve Vault Hatch (in)	N/A	36	36	N/A	N/A	N/A	N/A	N/A	N/A	N/A
"Z" C/L of Wet Well to Inside Edge of Hatch	N/A	N/A	N/A	12	12	13	13	16	16	16

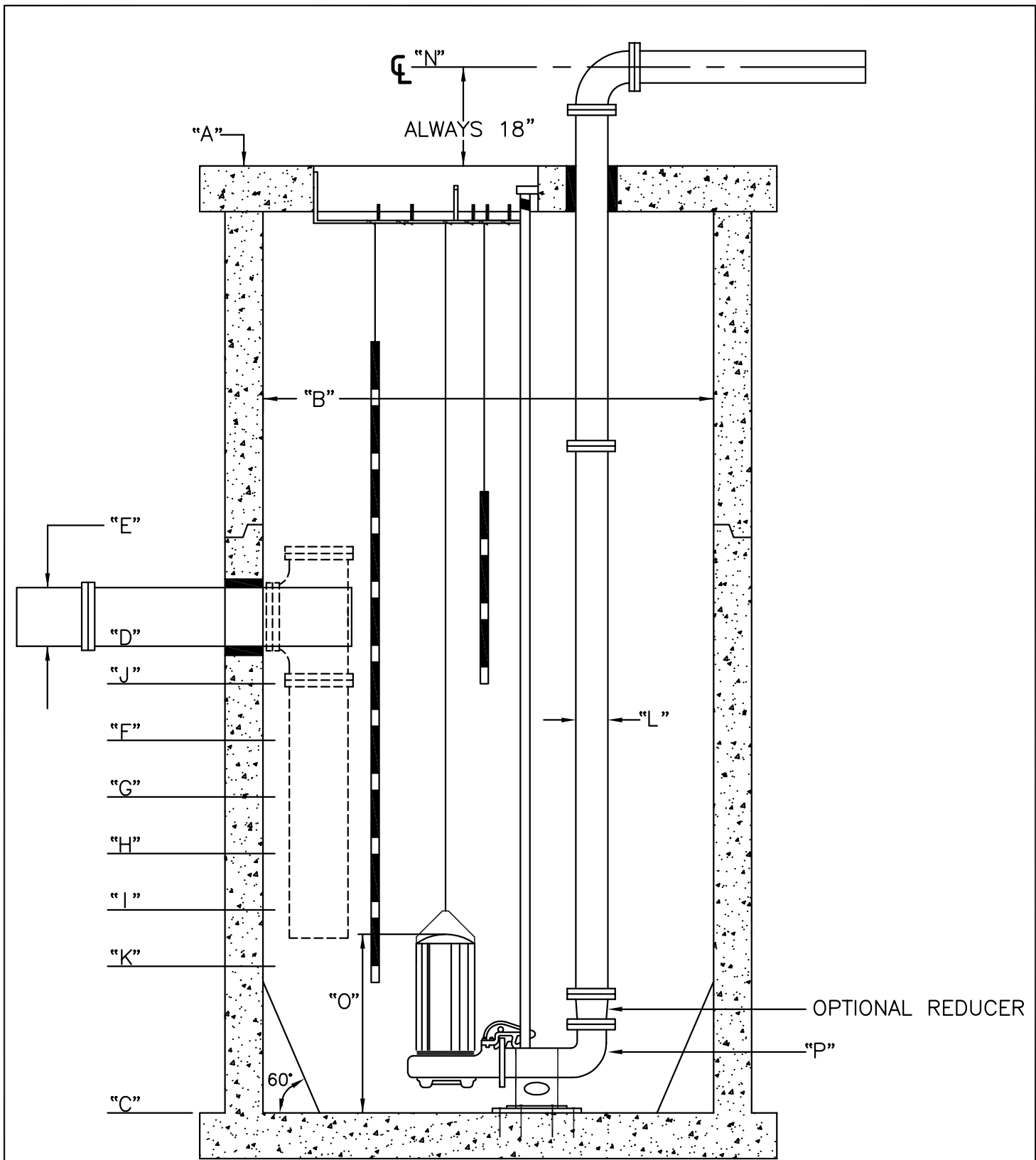
**Pumping Station Data Table Notes**

1. The Engineer of Record (EOR) shall verify all dimensions shown and add or revise the specific pump information in the appropriate column as necessary, and provide additional details not shown as may be required by applicable codes and standards. All changes to these pages shall be clearly identified when submitting for approval.
2. The EOR shall submit the information on this table to the PSLUSD for review and approval with all items filled in or revised for the specific pump model chosen.



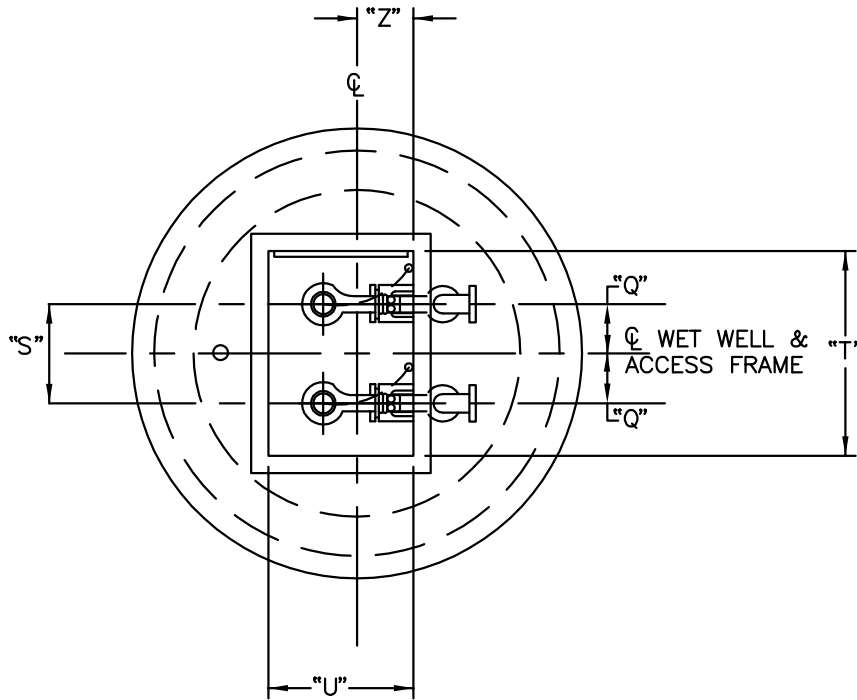
NOTE: INFORMATION RELATING TO THE DIMENSIONS AND/OR ELEVATIONS NOTED IN " " SHALL BE SUBMITTED BY ENGINEER-OF-RECORD TO THE PSLUSD.

**GRINDER SYSTEM WET WELL**

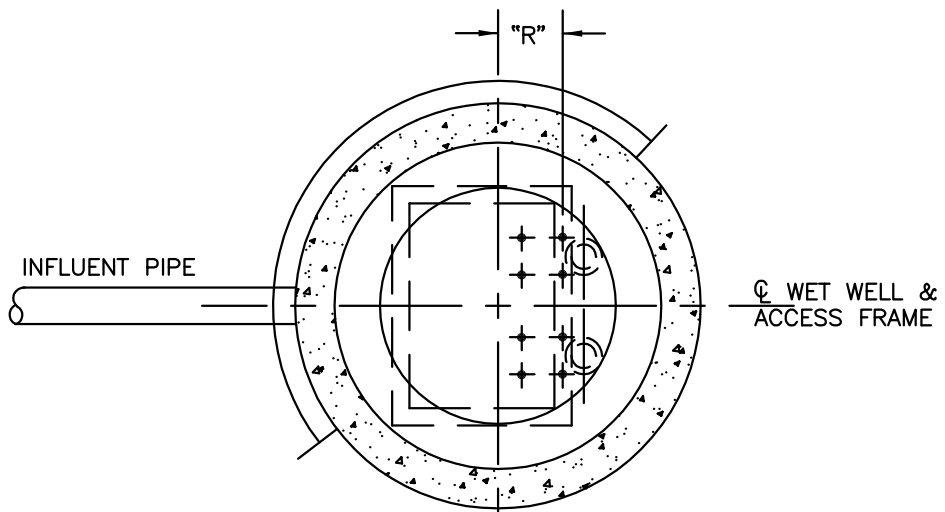


NOTE: INFORMATION RELATING TO ITEMS "A" THROUGH "P" SHALL BE SUBMITTED ON PSLUSD FORM NO. 29 BY THE ENGINEER-OF-RECORD TO THE PSLUSD WITH THE CONSTRUCTION PLANS.

**LIFT STATION WET WELL**



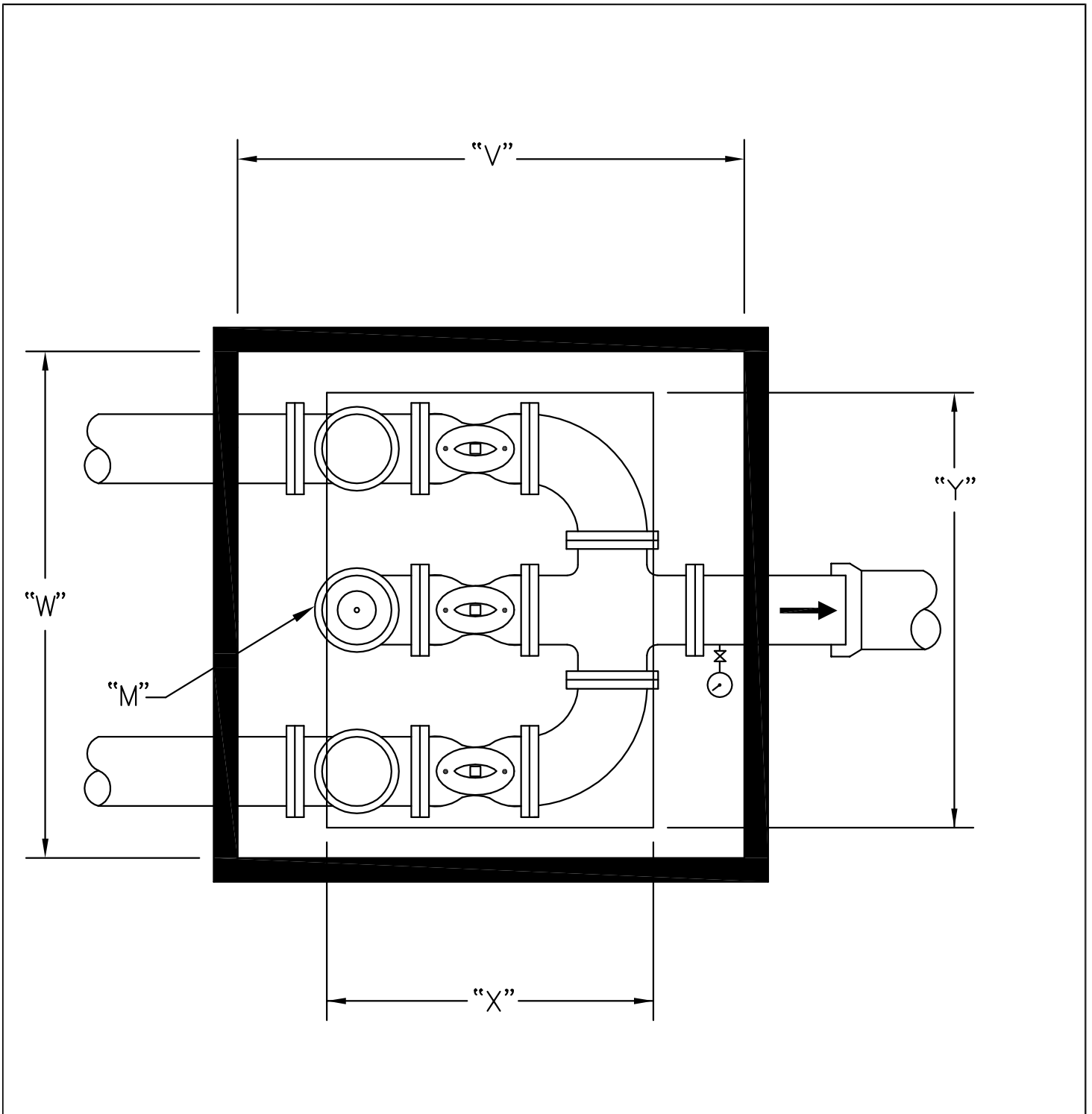
PLAN VIEW GRADE ELEVATION



PLAN VIEW BASE ELEVATION

NOTE: THE DIMENSIONS SHOWN SHALL BE SUBMITTED BY THE ENGINEER-OF-RECORD TO THE PSLUSD WITH THE SHOP DRAWINGS.

**PUMP STATION WET WELL**



NOTE: DIMENSIONS FOR ITEMS "M" AND "V" THROUGH "Y" SHALL BE SUBMITTED BY THE ENGINEER-OF-RECORD TO THE PSLUSD WITH THE SHOP DRAWINGS.

**VALVE VAULT**