

RECEIVED

DEC 05 2014

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
STATEMENT OF COMPLETION
FOR SUBMITTING PROOF OF BENEFICIAL USE

FOR OFFICE USE ONLY
Amt. of Fee \$: 50.00
Receipt No. N030978
Receipt By: NS
Date Received: 12-5-14

IDWR / NORTH

The Idaho Department of Water Resources considers this form a statement by the permit holder(s) that development of a water right has been completed and that water has been applied to beneficial use to the extent described below. This form must be accompanied by an examination fee, when necessary, or by a completed Beneficial Use Field Report prepared by a certified water right examiner. Please refer to the instructions and fee schedule for this form. If ownership of the permit has changed, please contact any Department office or visit the Department's website at: www.idwr.idaho.gov for an Assignment of Permit form. If you wish to relinquish your permit because you have not established the authorized use of the water and are not applying for an extension, please notify the Department in writing.

- Permit No.: 95-16651 Telephone No.: 208 755-0605 Cell
208 765-5316 Home
- Name of Permit Holder(s): RAY BRADLEY
- Mailing Address: 351 S. Hidden Island Ln. City: Coeur d'Alene
State: ID Zip: 83814 Email: ray@rkbradley.com
- Source of Water: GROUND WATER If GROUND WATER (well), Date Drilled: mo. DEC / yr. 2013
Well Driller: BUDINGER & ASSOC INC Drilling Permit Number: 870621
- Extent of use(s) completed (as authorized by the water right permit):
Domestic (No. of households): 1 Stockwater (No. and type of stock): _____
Irrigation (No. of acres): _____ Other: GEO THERMAL
- Total rate of diversion or storage volume for which proof is submitted: 0.03 cfs OR _____ acre-feet.
- Compliance with a measuring device requirement, lockable controlling device requirement, and/or other conditions of permit: Refer to the approval conditions on your permit and respond accordingly. The Department will not issue a license if permit conditions are not met.

Measuring Device: Is a measuring device required?

Yes ☐ No ☒

If yes, has the measuring device been installed?

Yes ☐ No ☐

Lockable Controlling Device: Is a lockable device required to control the diversion?

Yes ☐ No ☒

If yes, has the lockable device been installed?

Yes ☐ No ☐

Other Conditions of Permit: Do the approval conditions on your permit require you to submit additional information in connection with your proof of beneficial use? If yes, list the conditions below and attach documents with the required information.

NONE

Completed?

Yes ☐ No ☐

8. Fee Enclosed: \$ 50.00 See fee schedule on back of the instructions for filing proof of beneficial use.
Proofs filed without an appropriate fee, will be considered incomplete.

9. Person to contact to accompany the Department representative during field examination of the water system.

Name: RAY BRADLEY Telephone Number: 208-755-0605Mailing Address: 351 S Hidden Island Ln City: Coeur d'AleneState: ID Zip: 83814 Email: ray@rkbradley.com

The information given on this form is my true statement of the extent to which the above numbered permit has been developed and water has been diverted and applied to a beneficial use. I understand that any undeveloped portion of the permit is relinquished to the State of Idaho.

Signature of permit holder:

Raymond R Bradley

Date:

9-21-14

RECEIVED

(Include your title, if on behalf of company or organization)

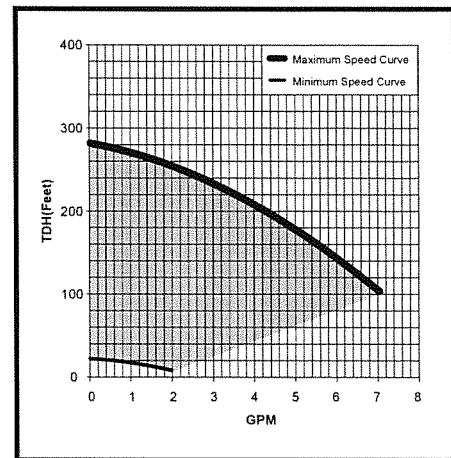
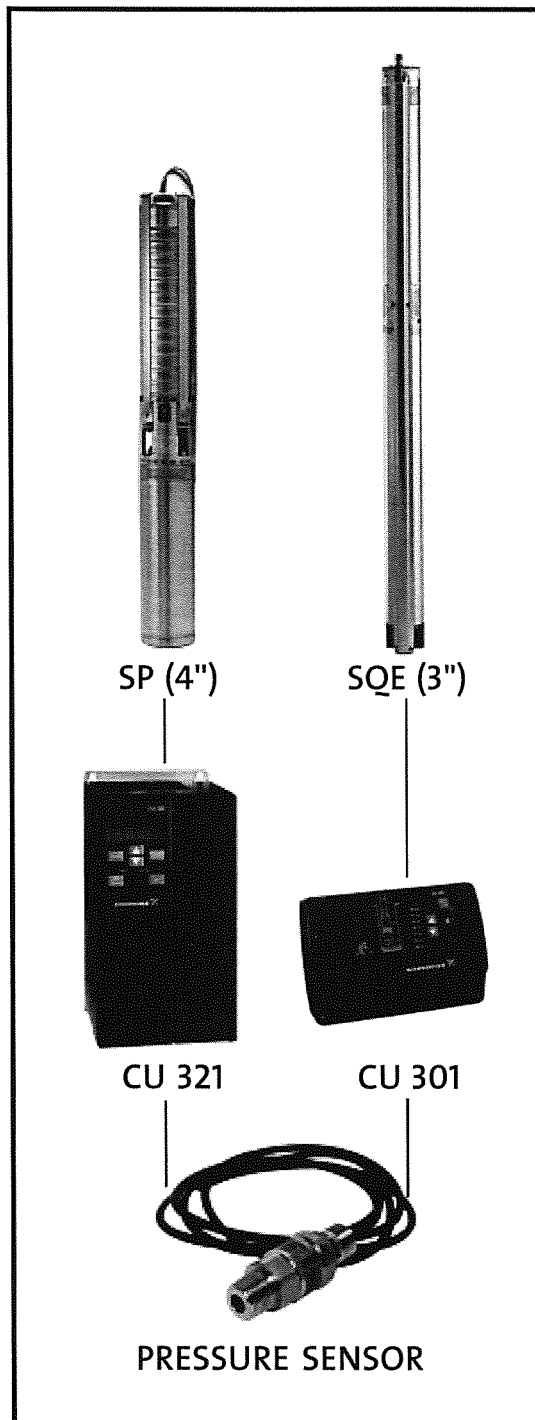
Mail to: Idaho Department of Water Resources, PO Box 83720, Boise, ID 83720-0098

Form No. 217-11/09

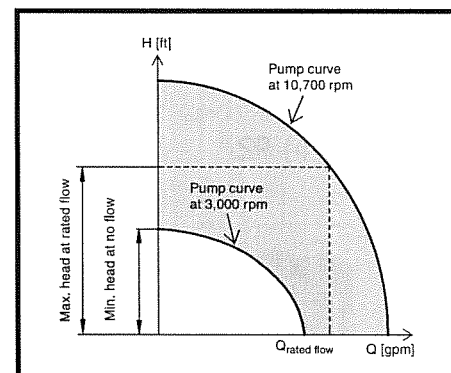
DEPARTMENT OF
WATER RESOURCES

Performance Curves and Technical Data

For 3-Inch & larger well applications



Performance Curves



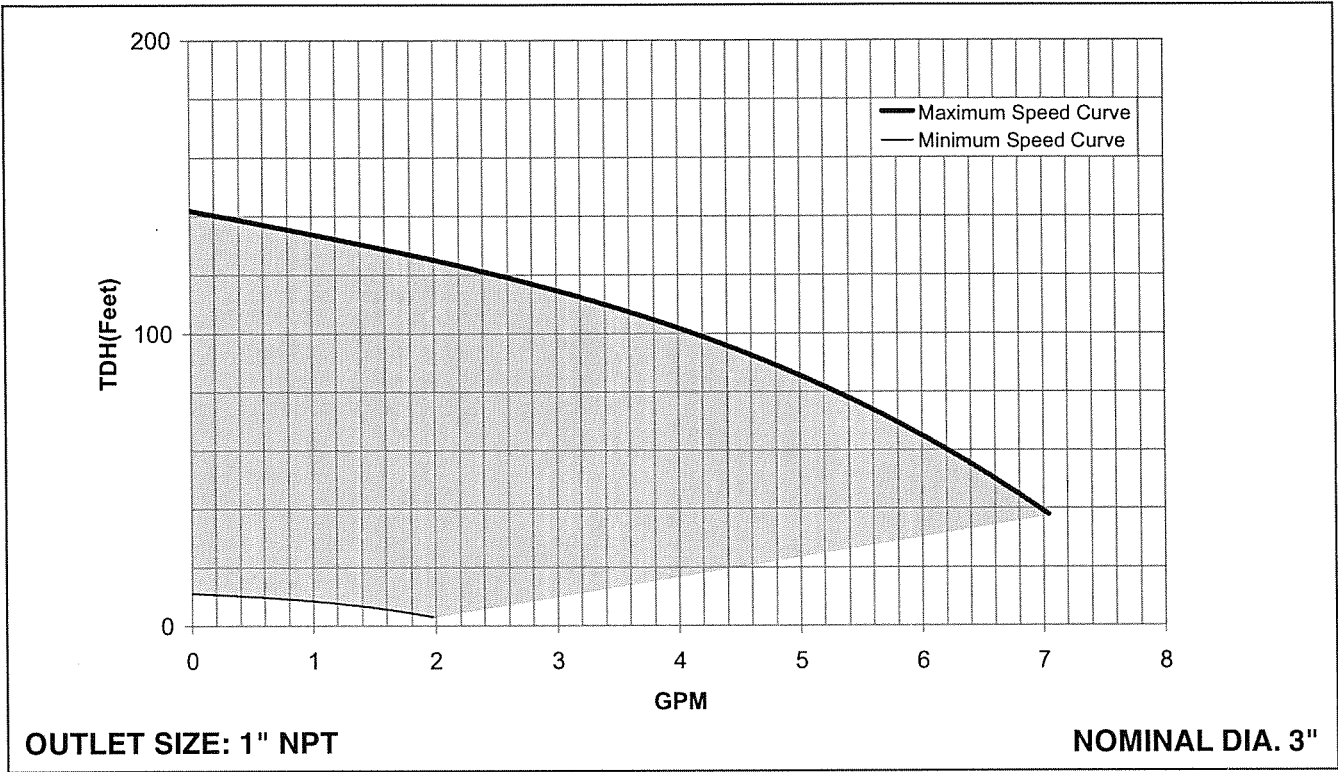
System Sizing Guide



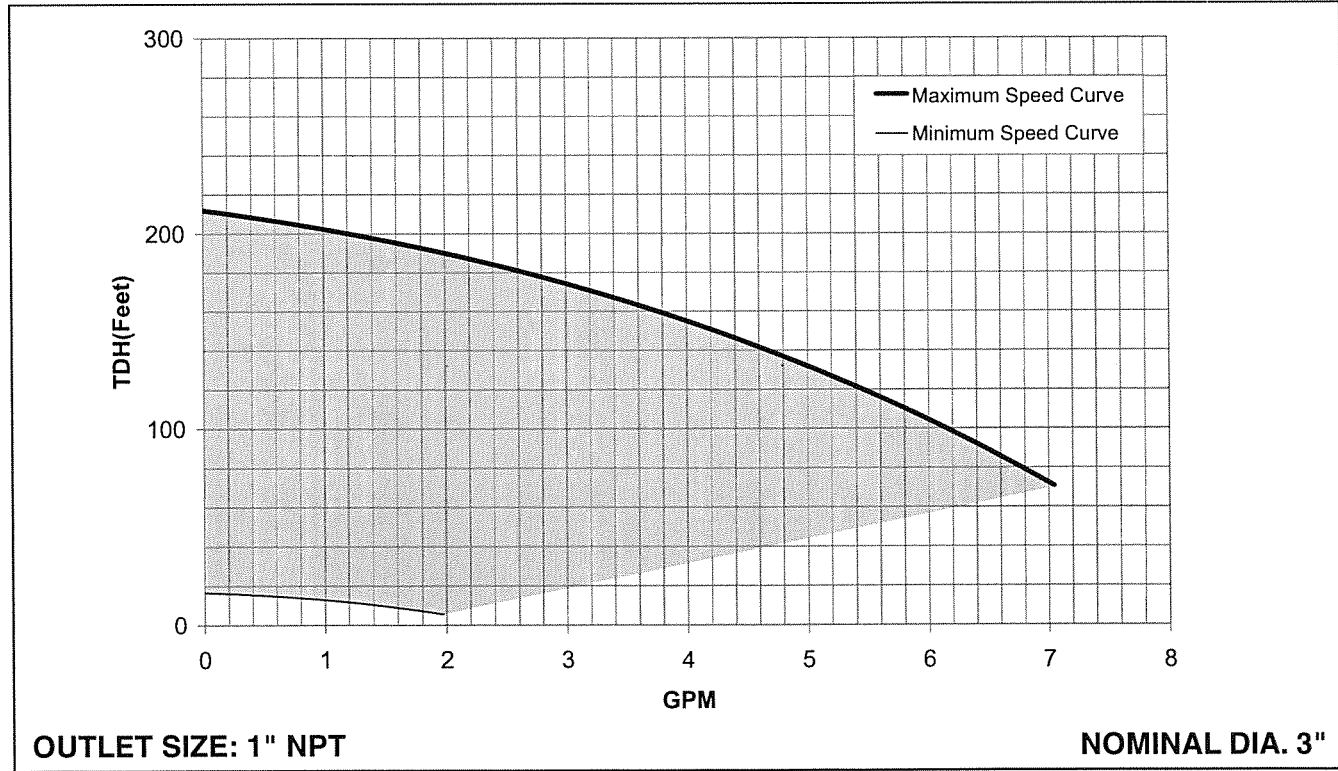
WATER TANK

2 gallon tank min. for SQE
4 gallon tank min. for CU 321

5 GPM • MODEL 5SQE05-90

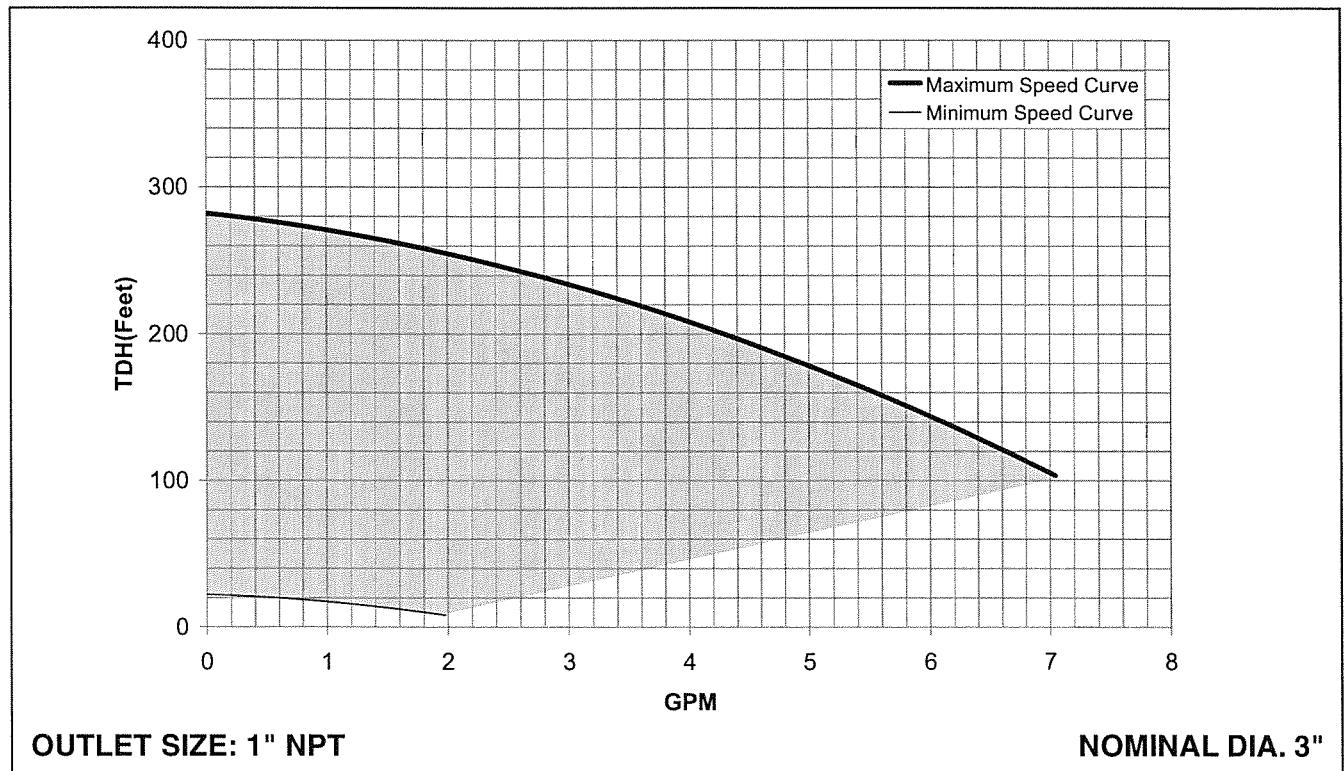


5 GPM • MODEL 5SQE05-140

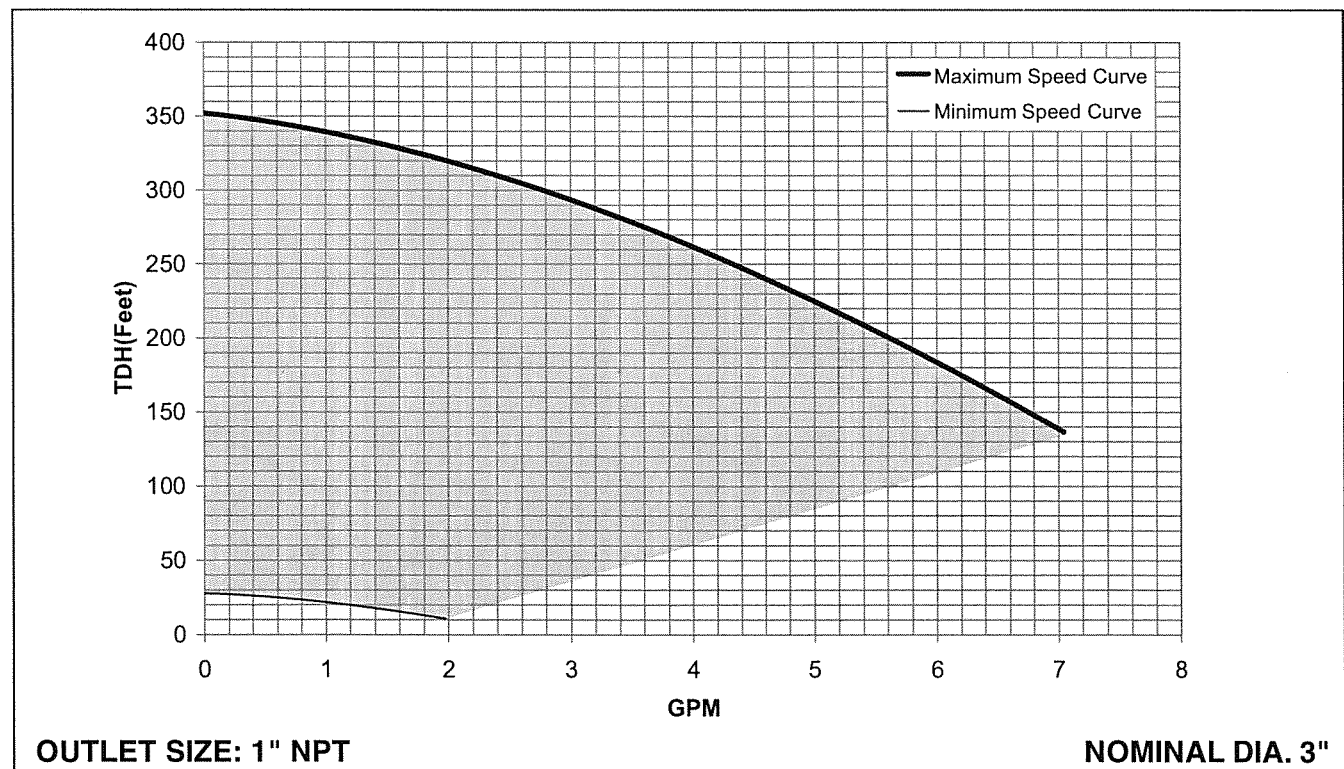


SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

5 GPM • MODEL 5SQE05-180

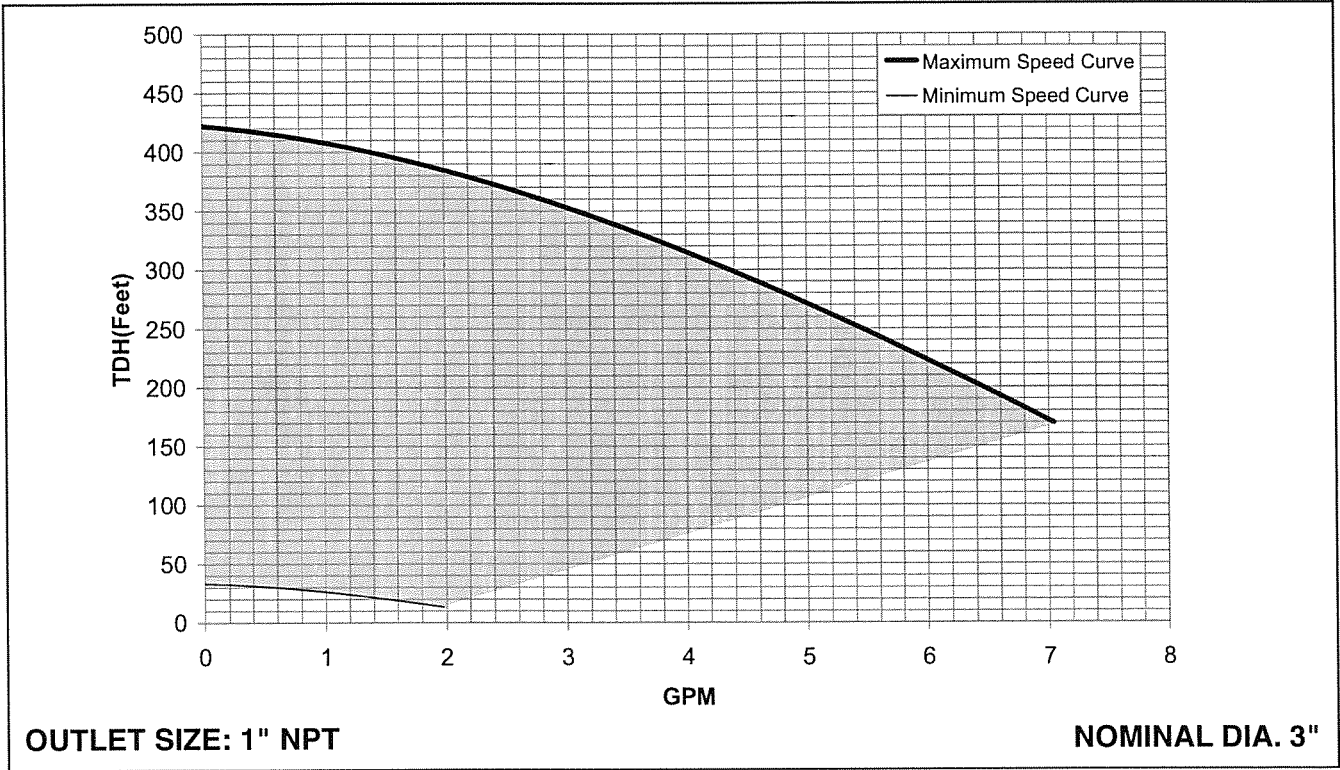


5 GPM • MODEL 5SQE07-230

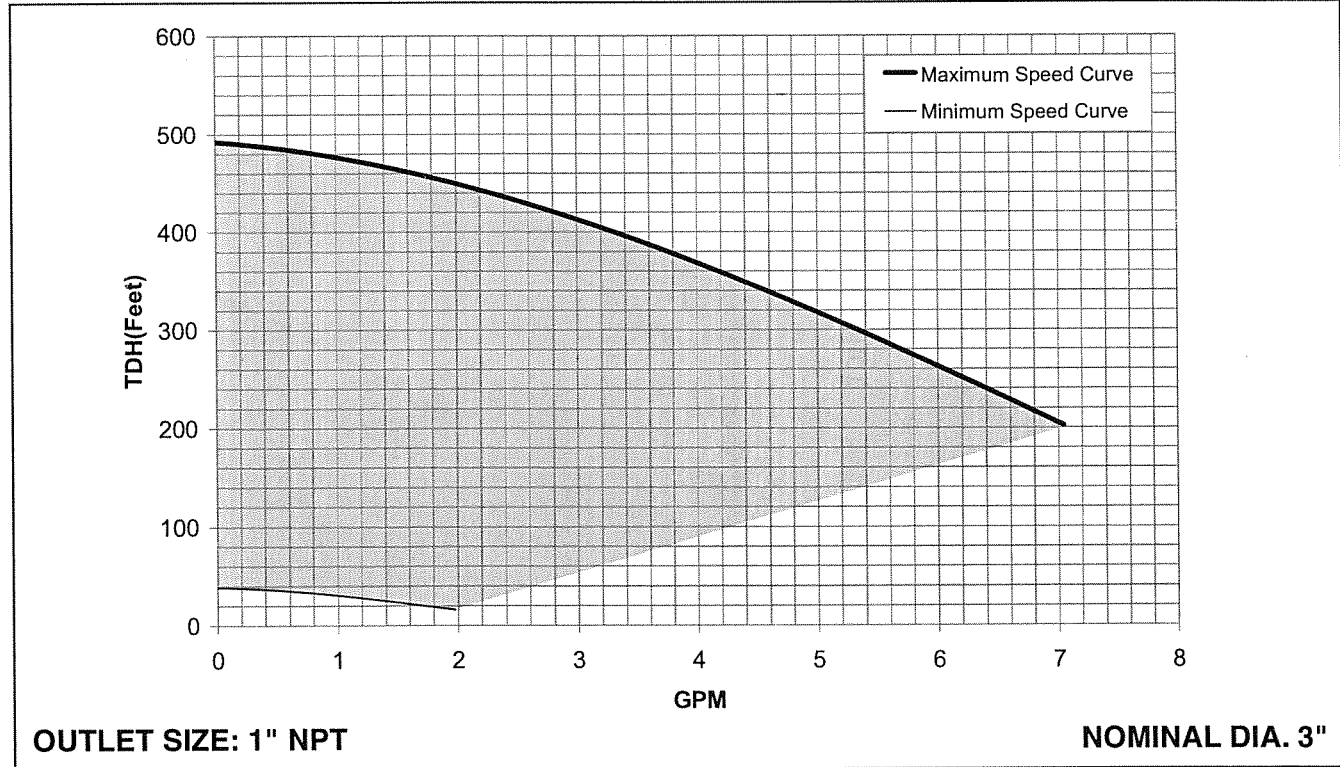


SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

5 GPM • MODEL 5SQE07-270

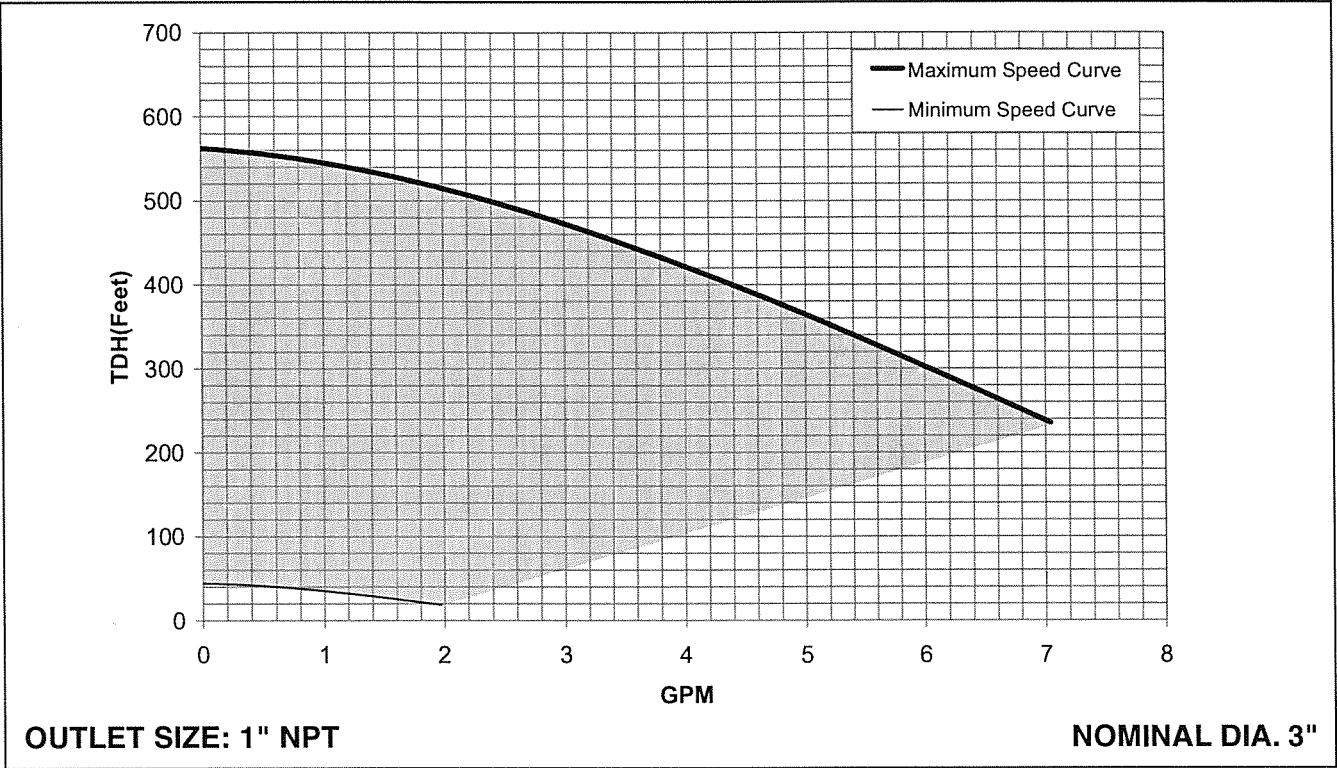


5 GPM • MODEL 5SQE07-320

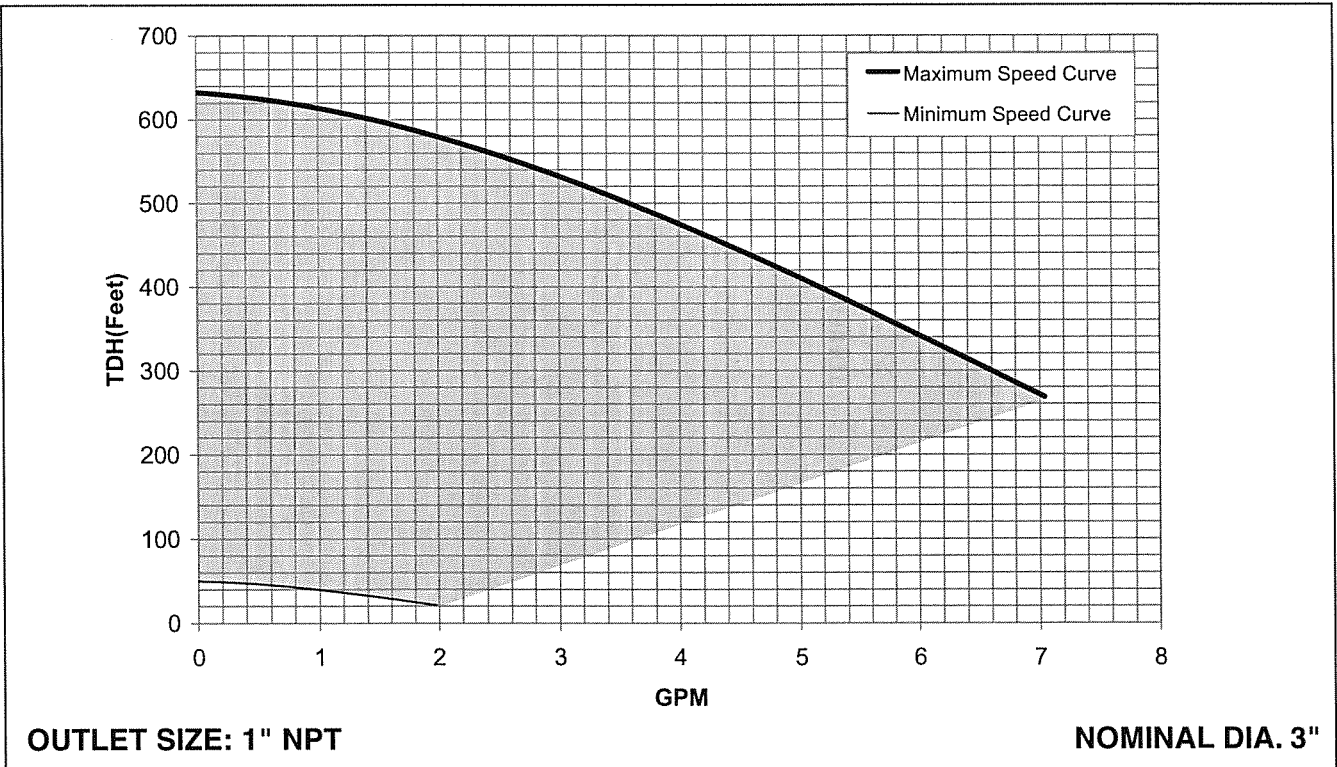


SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

5 GPM • MODEL 5SQE10-360

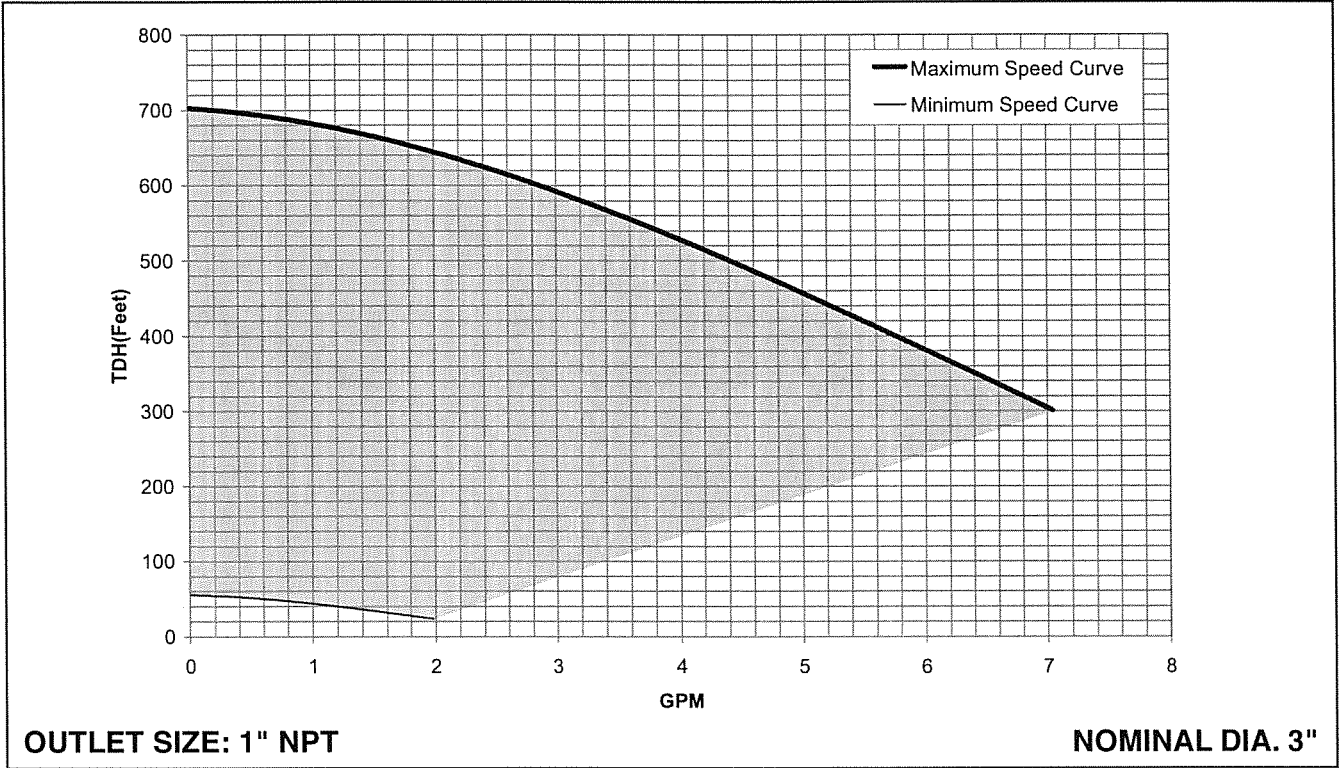


5 GPM • MODEL 5SQE10-410

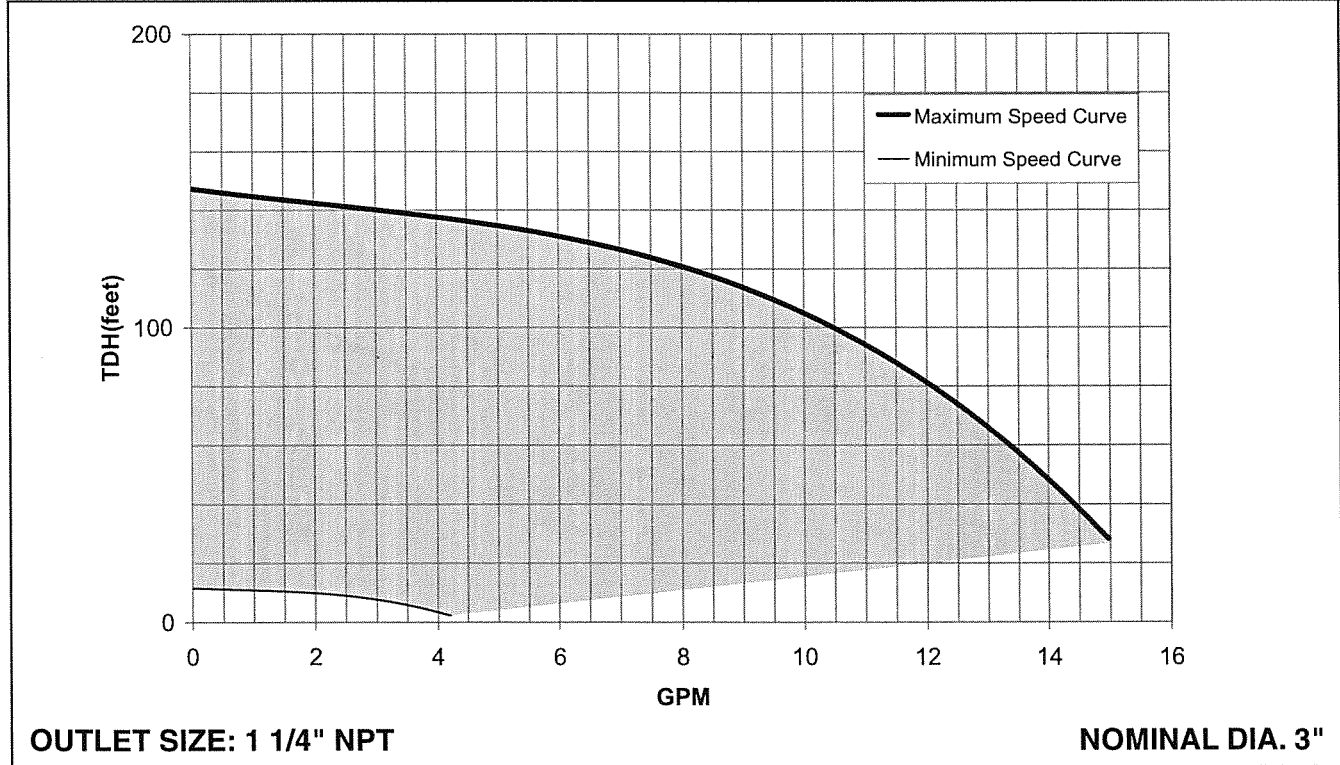


SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

5 GPM • MODEL 5SQE15-450

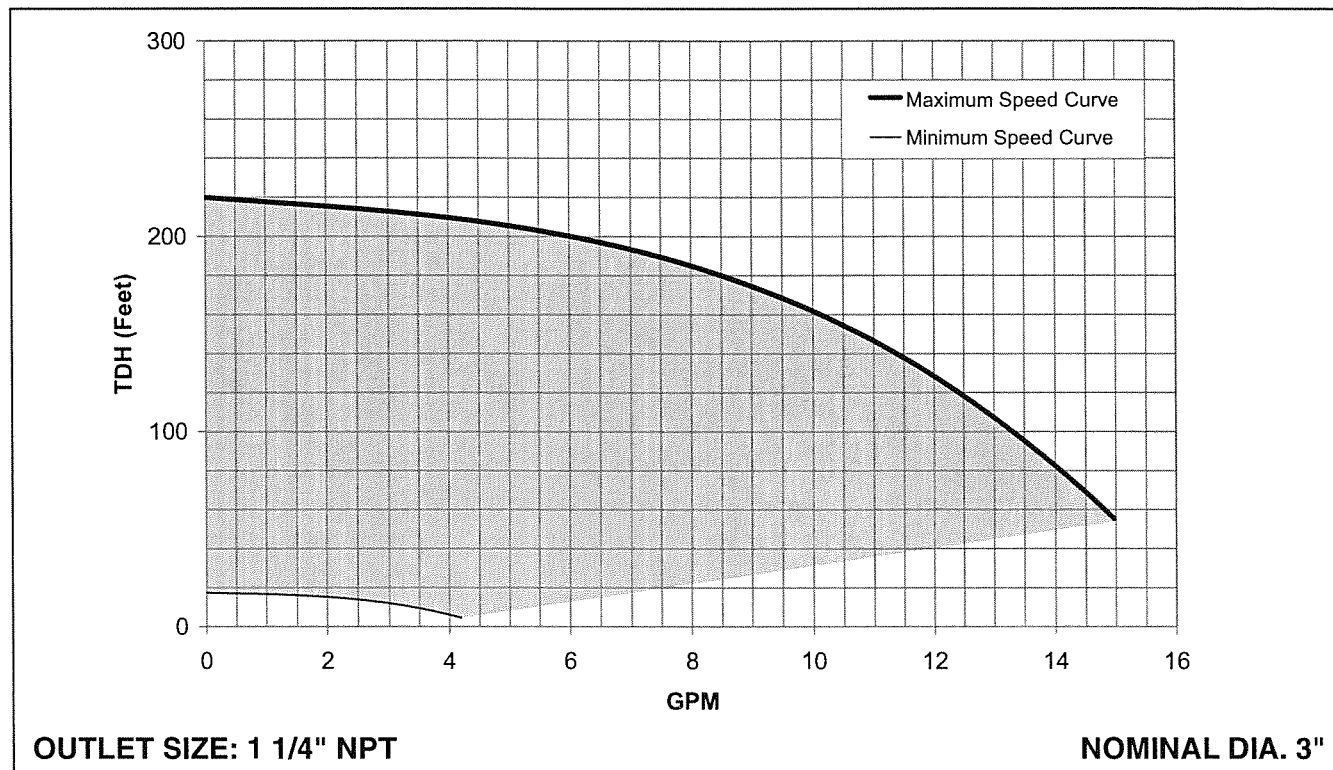


10 GPM • MODEL 10SQE05-110

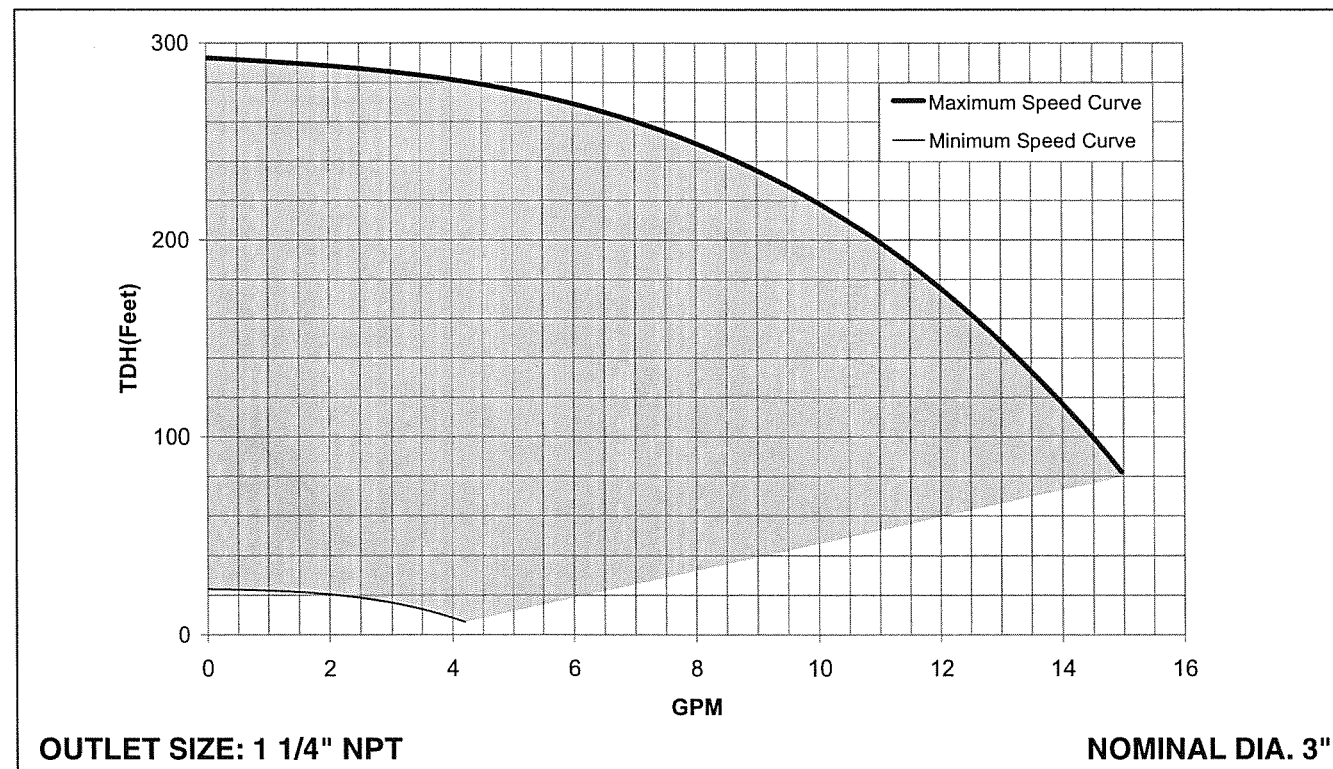


SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

10 GPM • MODEL 10SQE05-160

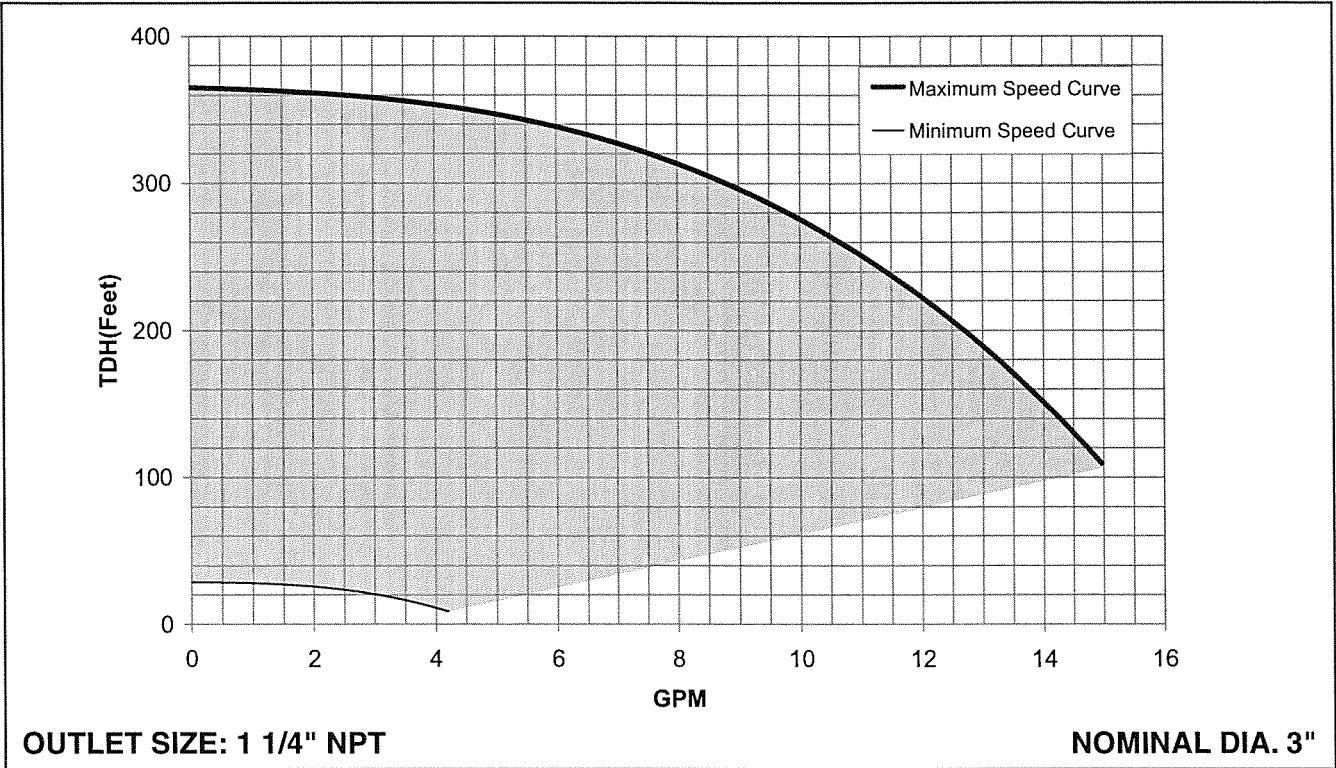


10 GPM • MODEL 10SQE07-200

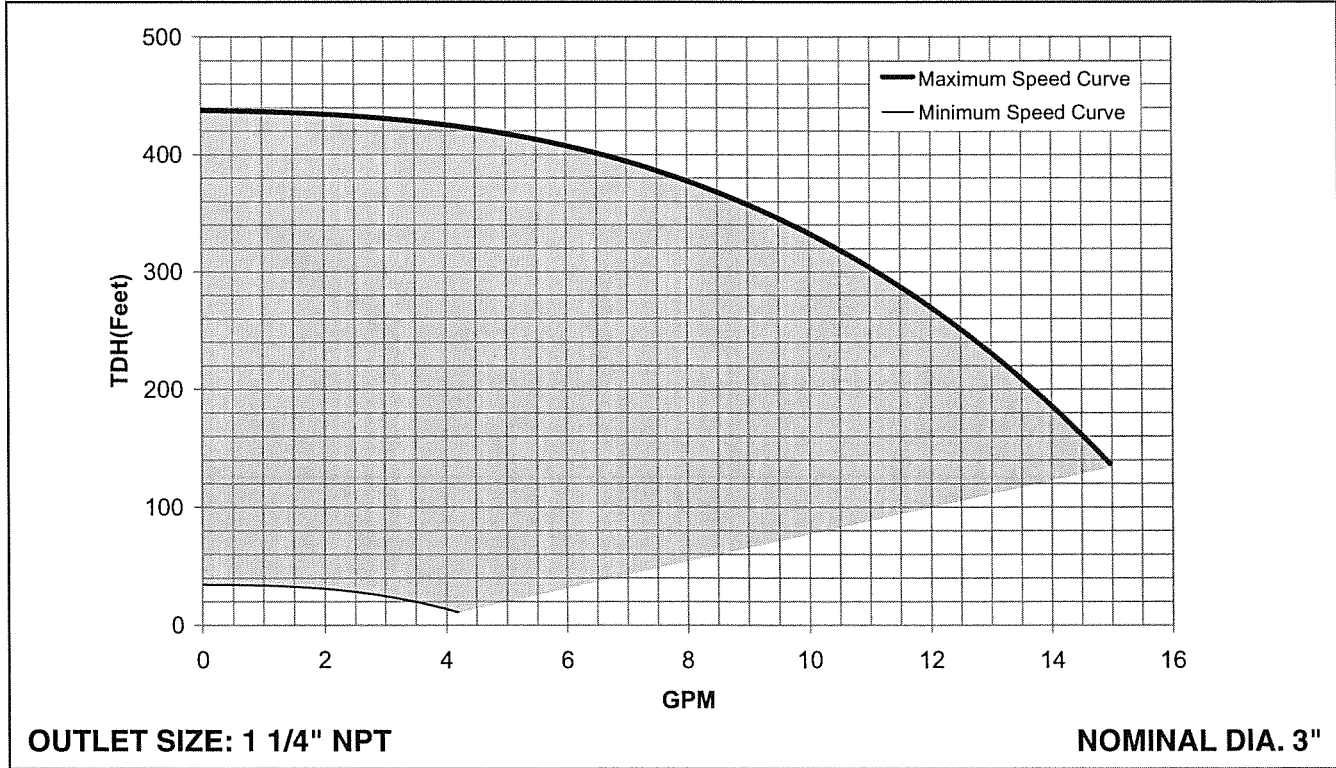


SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

10 GPM • MODEL 10SQE07-240

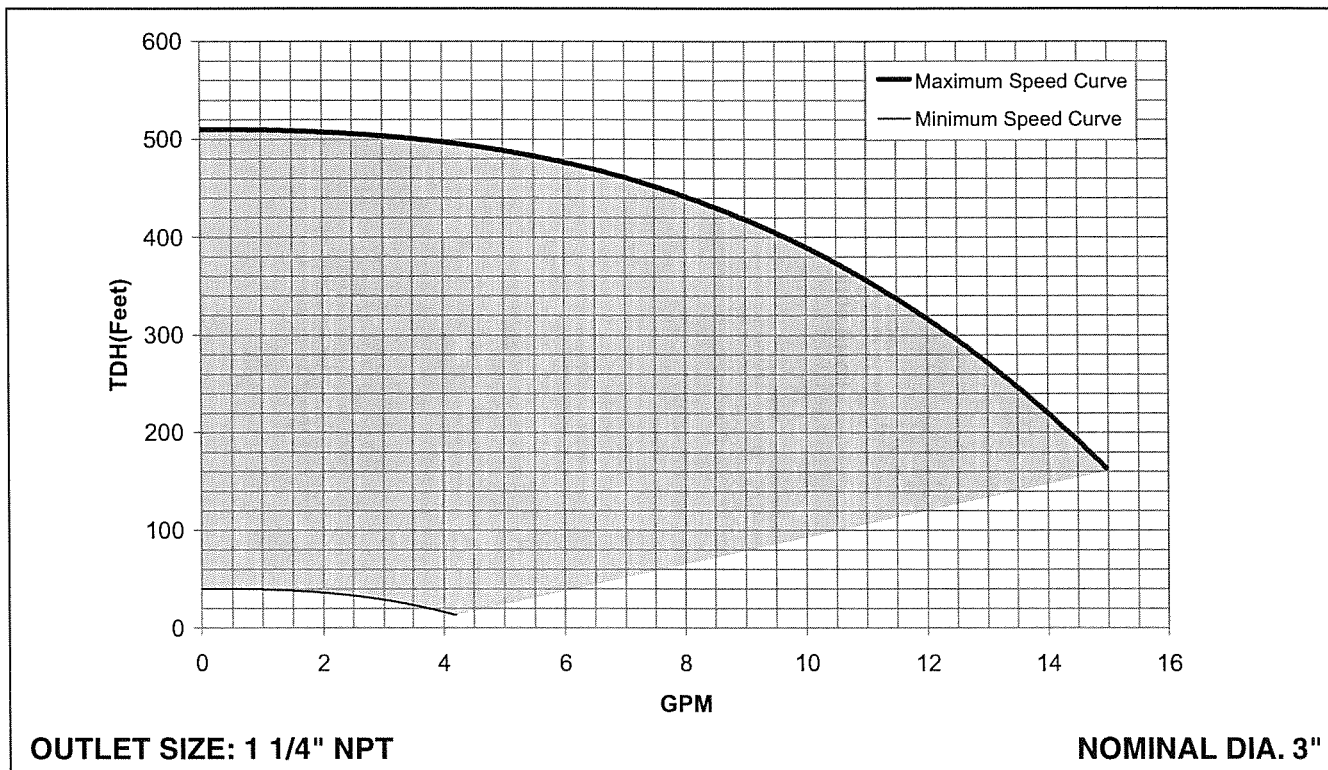


10 GPM • MODEL 10SQE10-290

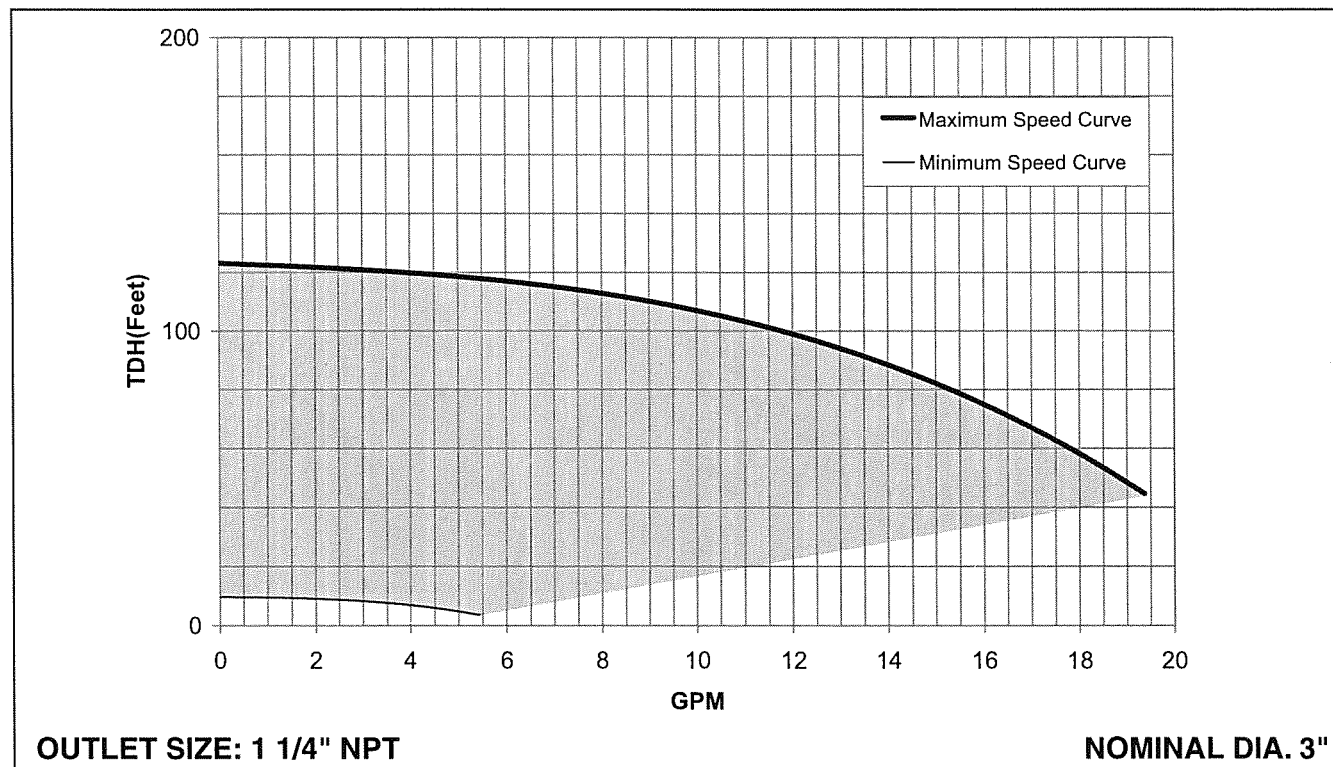


SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

10 GPM • MODEL 10SQE15-330

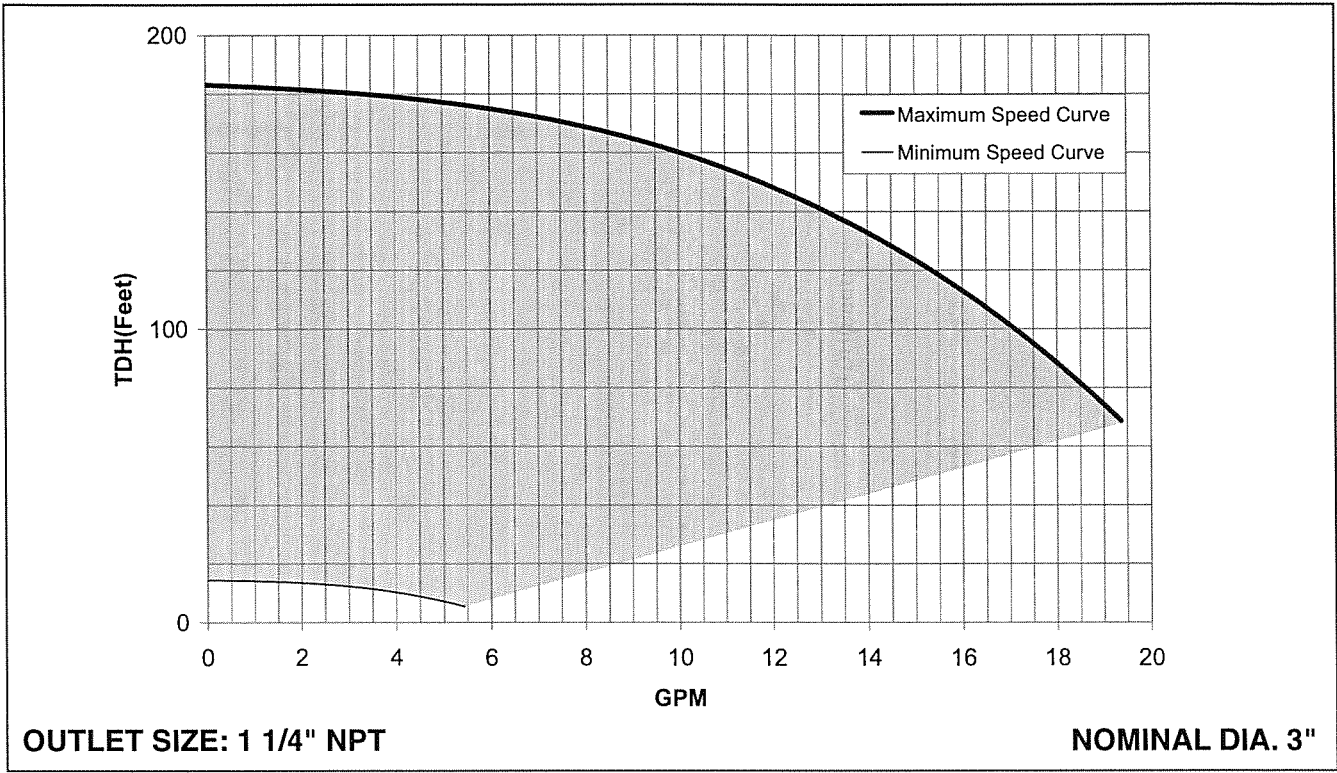


15 GPM • MODEL 15SQE05-70

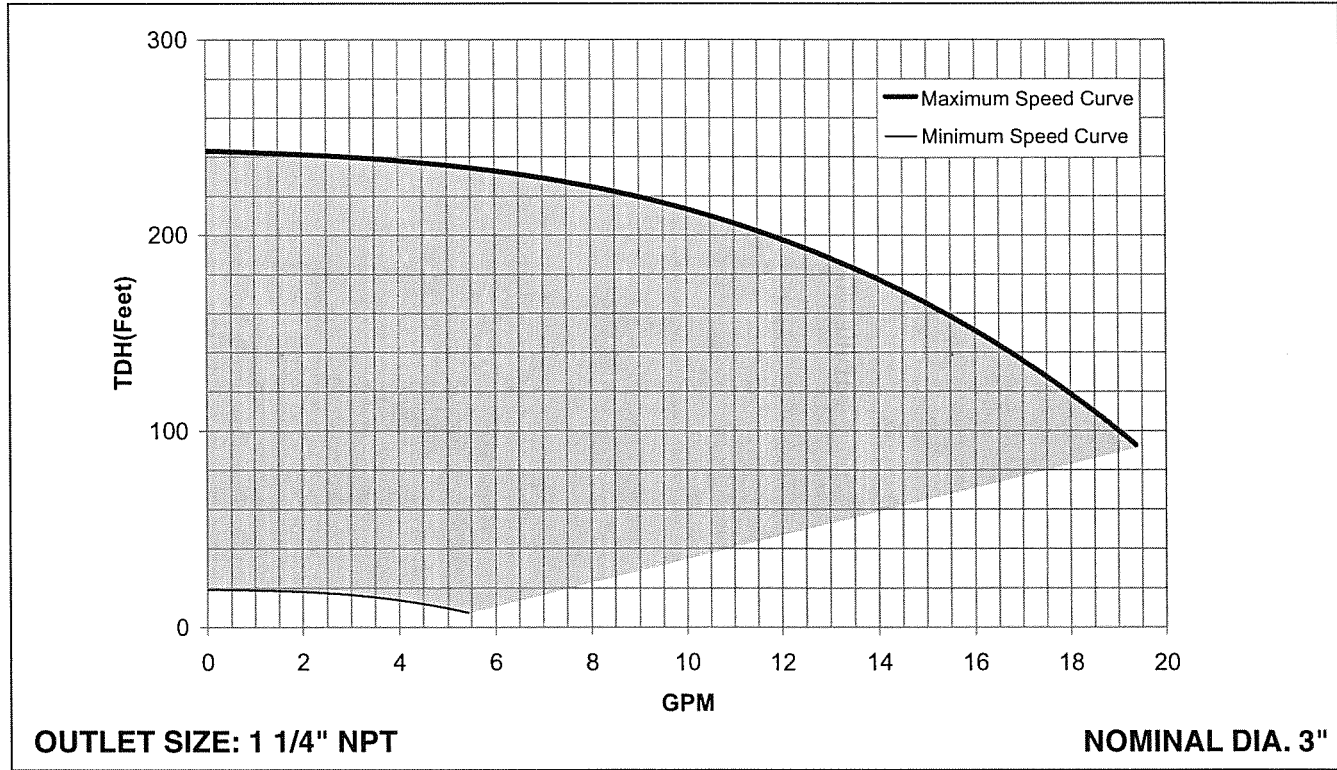


SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

15 GPM • MODEL 15SQE05-110

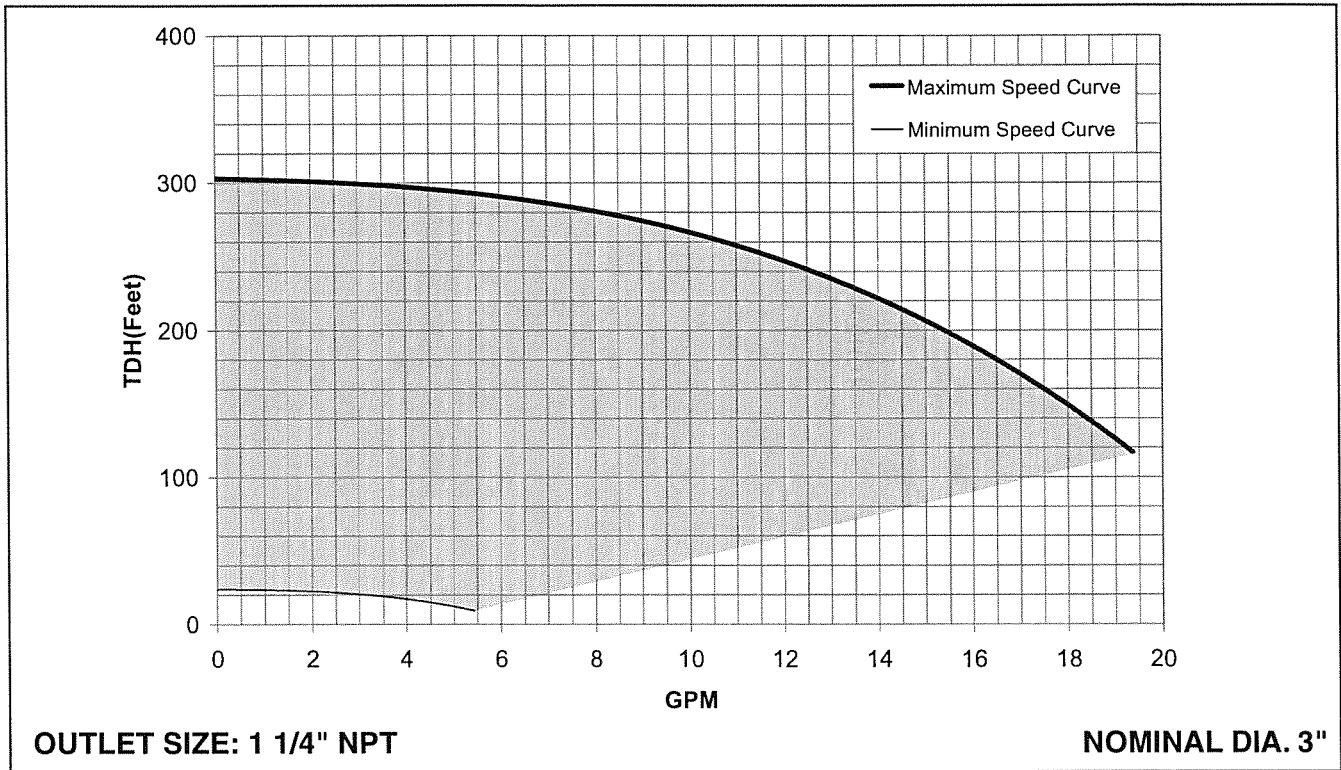


15 GPM • MODEL 15SQE07-150

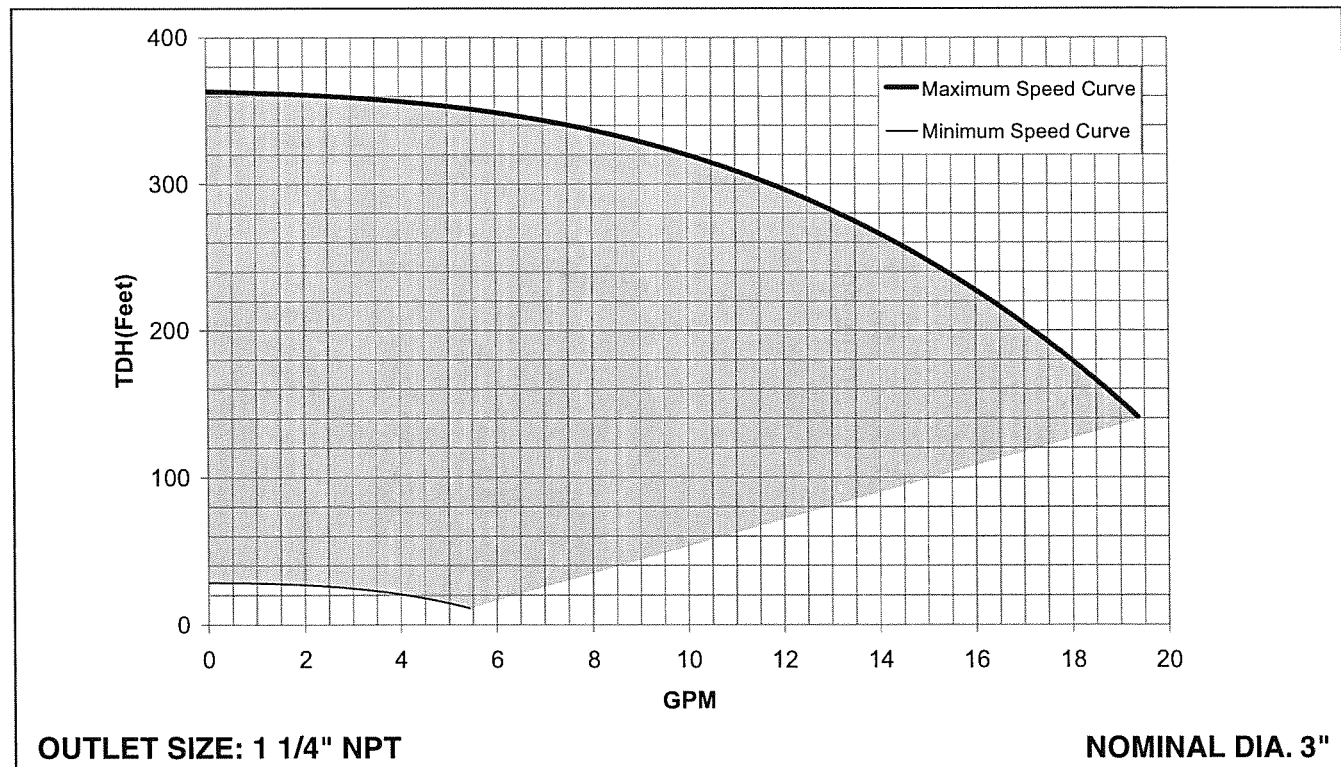


SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

15 GPM • MODEL 15SQE07-180

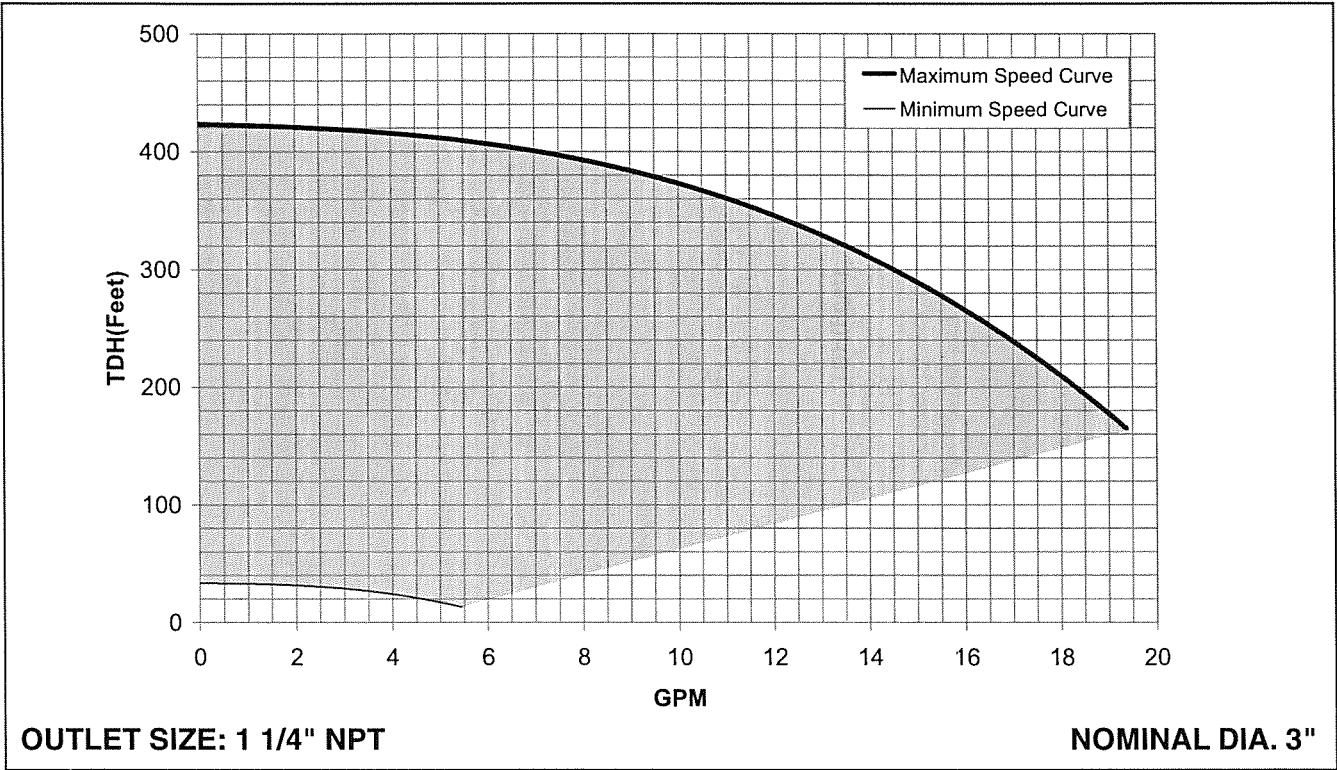


15 GPM • MODEL 15SQE10-220

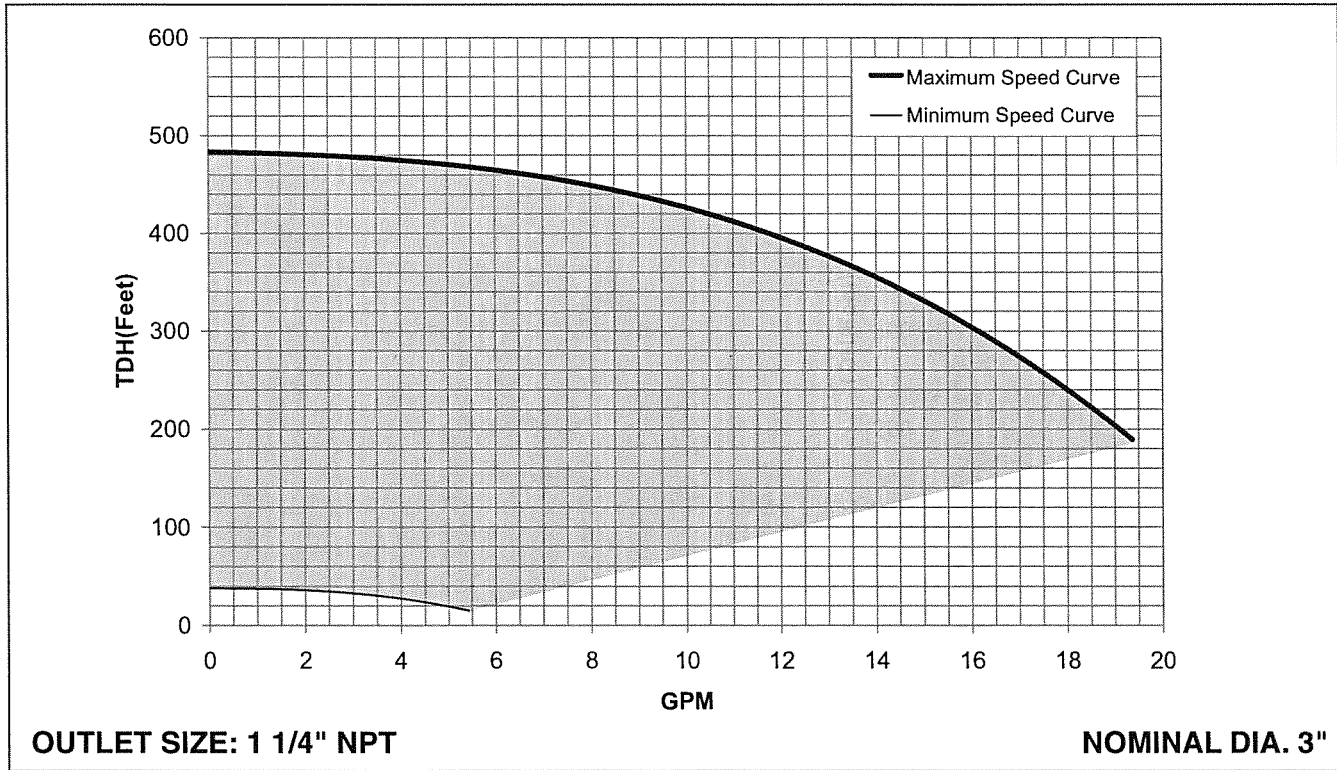


SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

15 GPM • MODEL 15SQE10-250

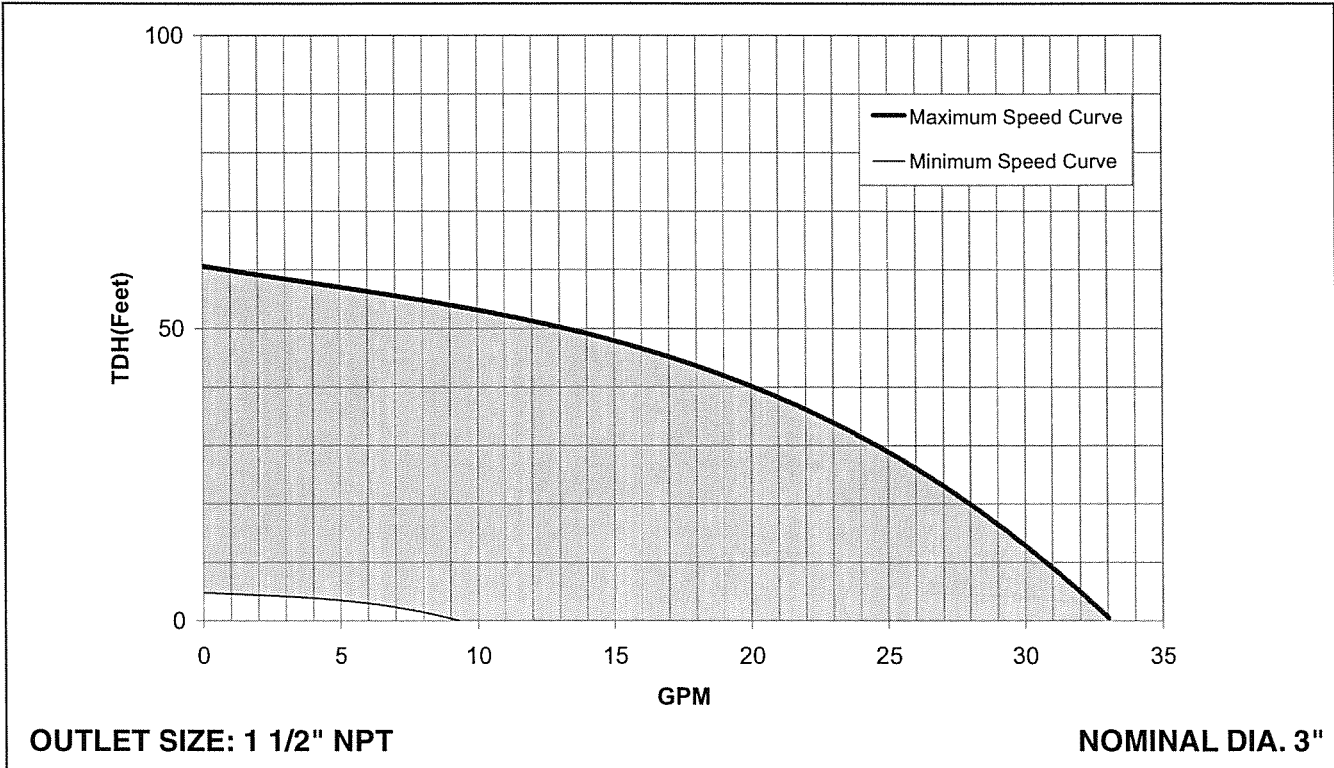


15 GPM • MODEL 15SQE15-290

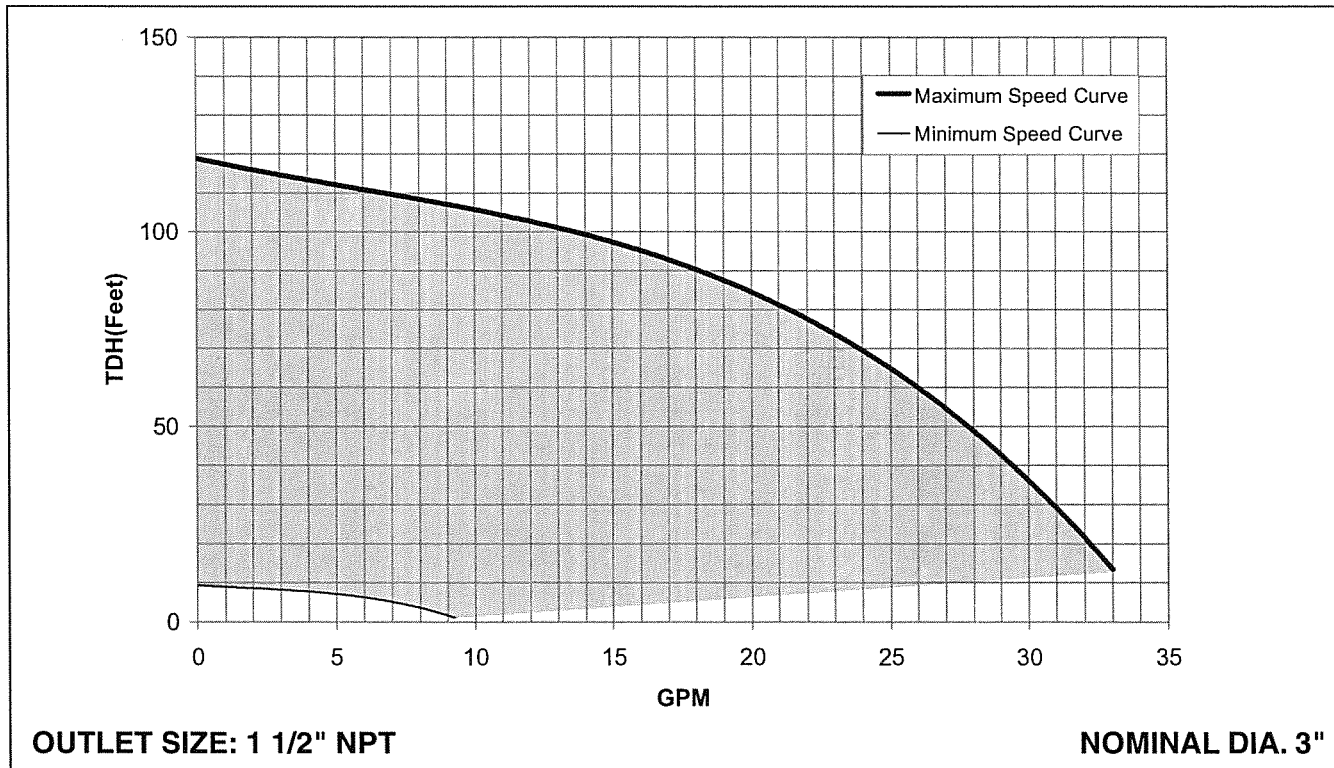


SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

22 GPM • MODEL 22SQE05-40

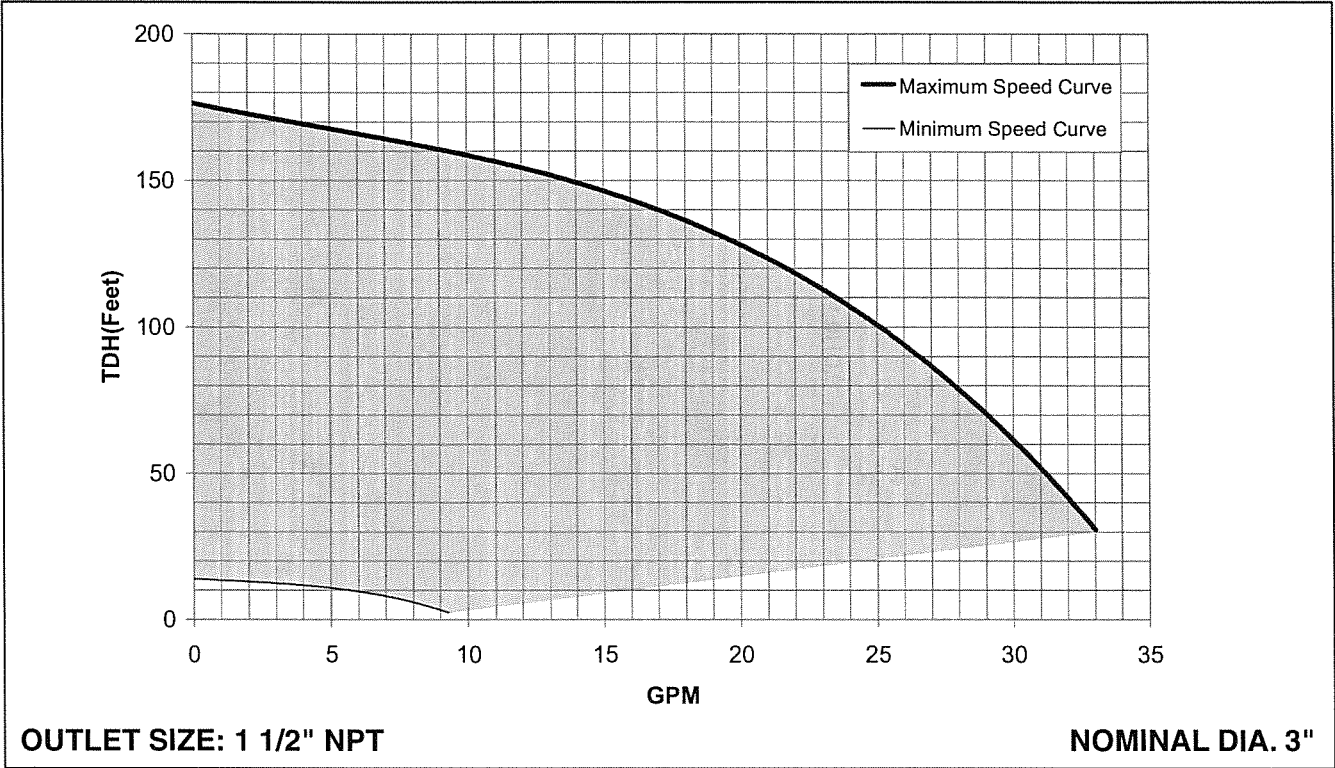


22 GPM • MODEL 22SQE05-80

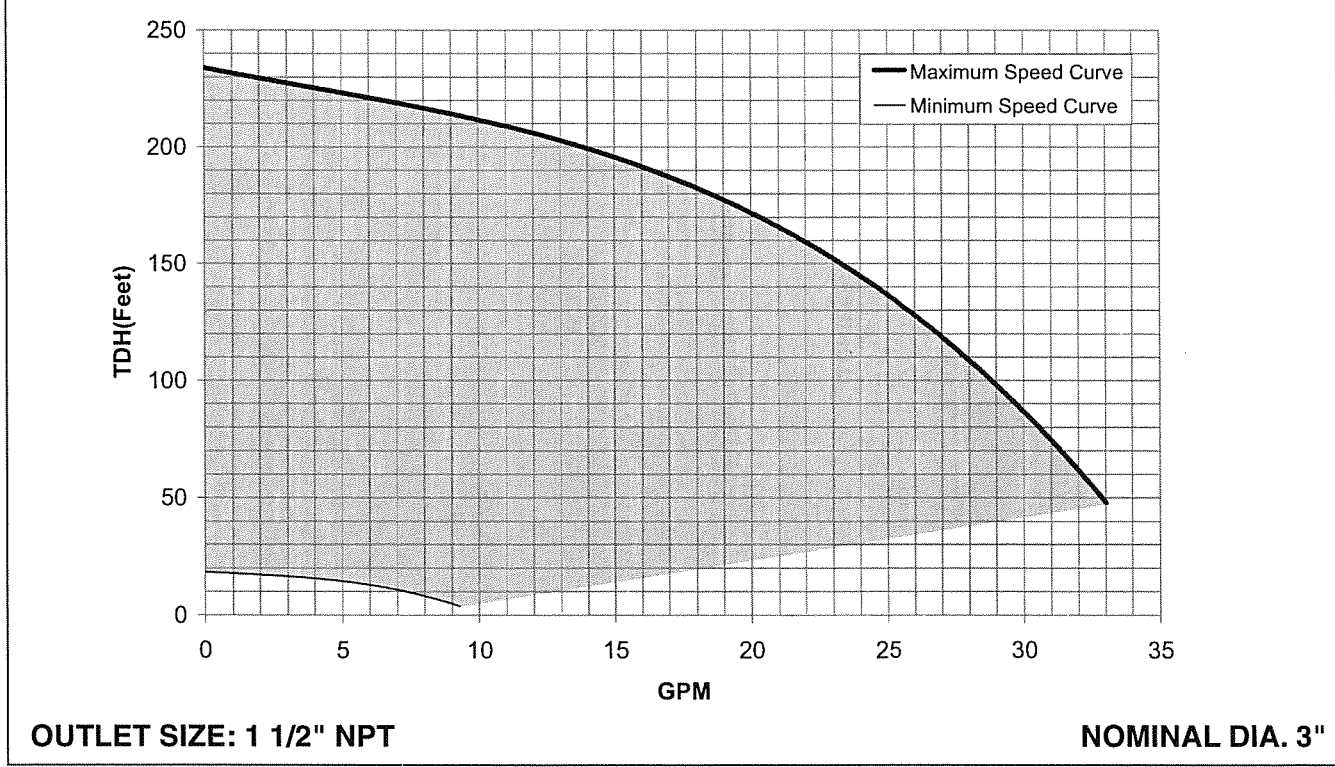


SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

22 GPM • MODEL 22SQE07-120

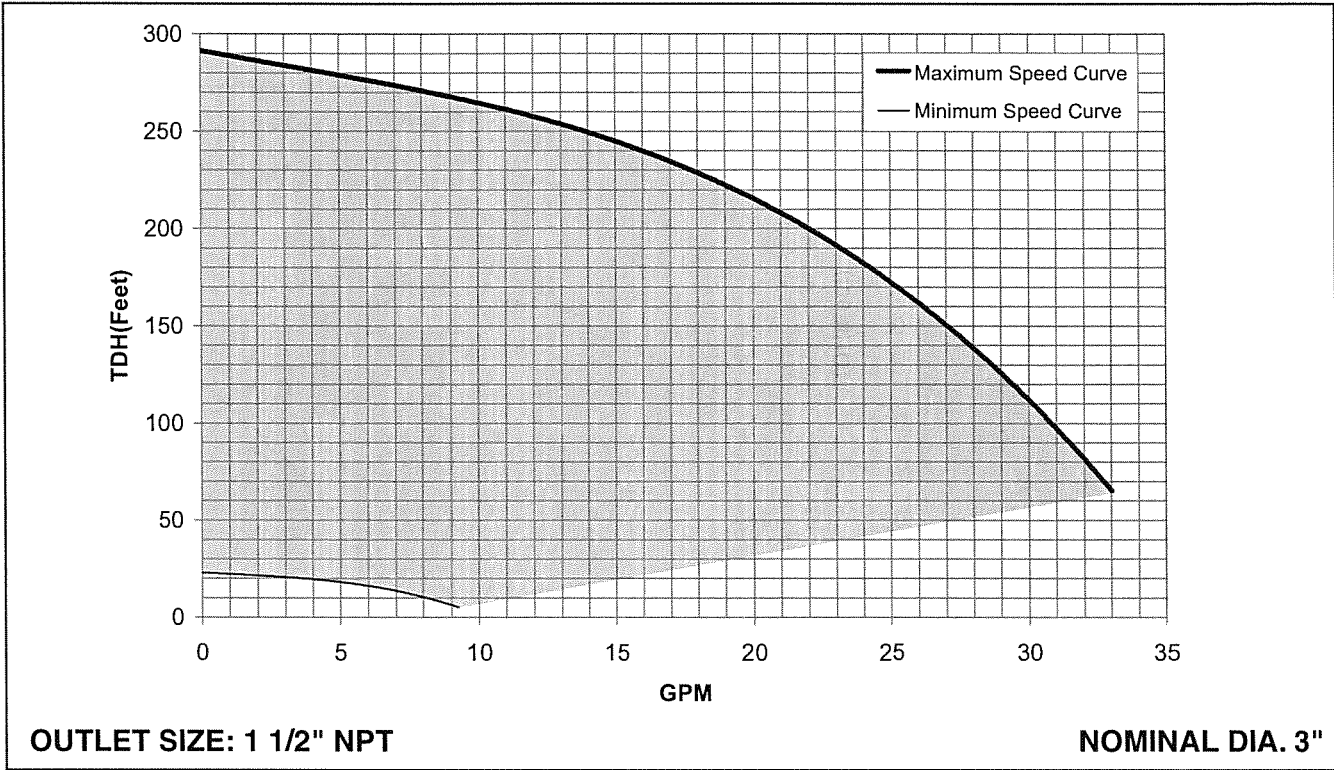


22 GPM • MODEL 22SQE07-160

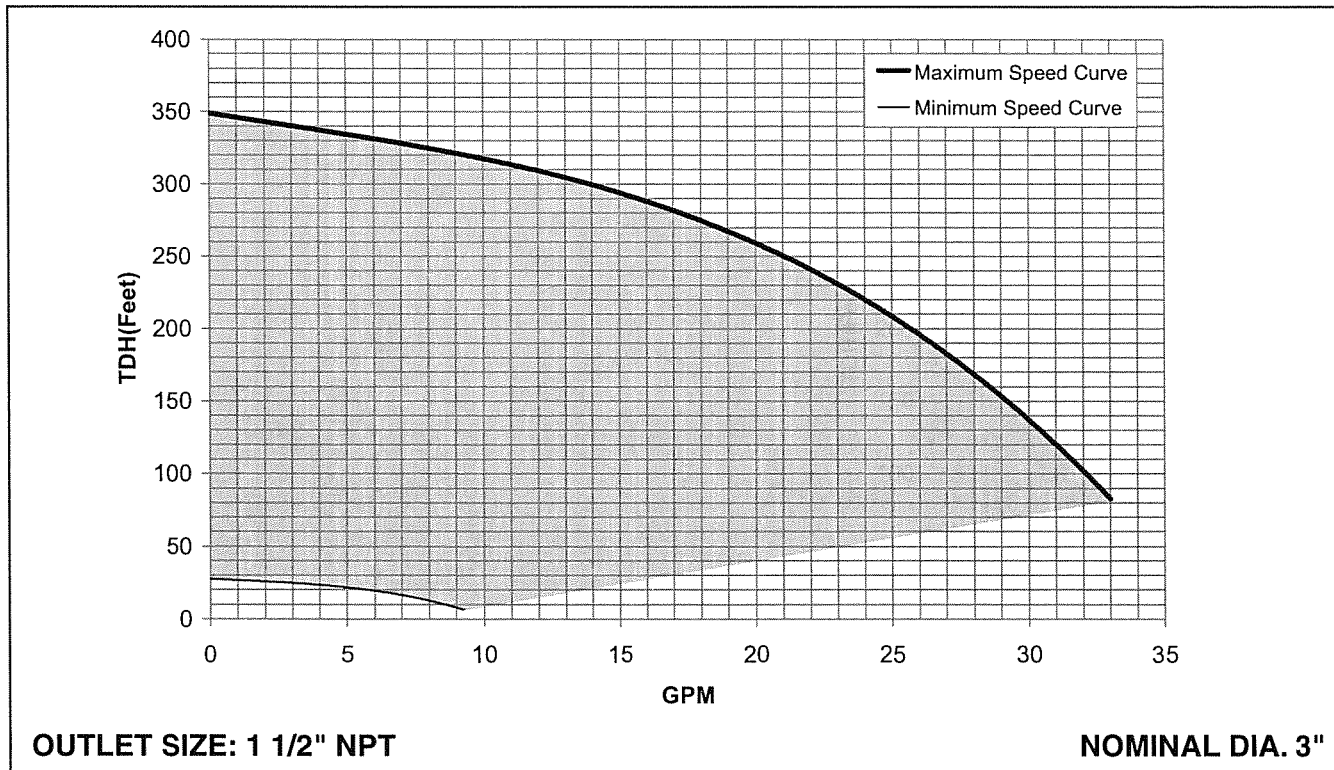


SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

22 GPM • MODEL 22SQE10-190

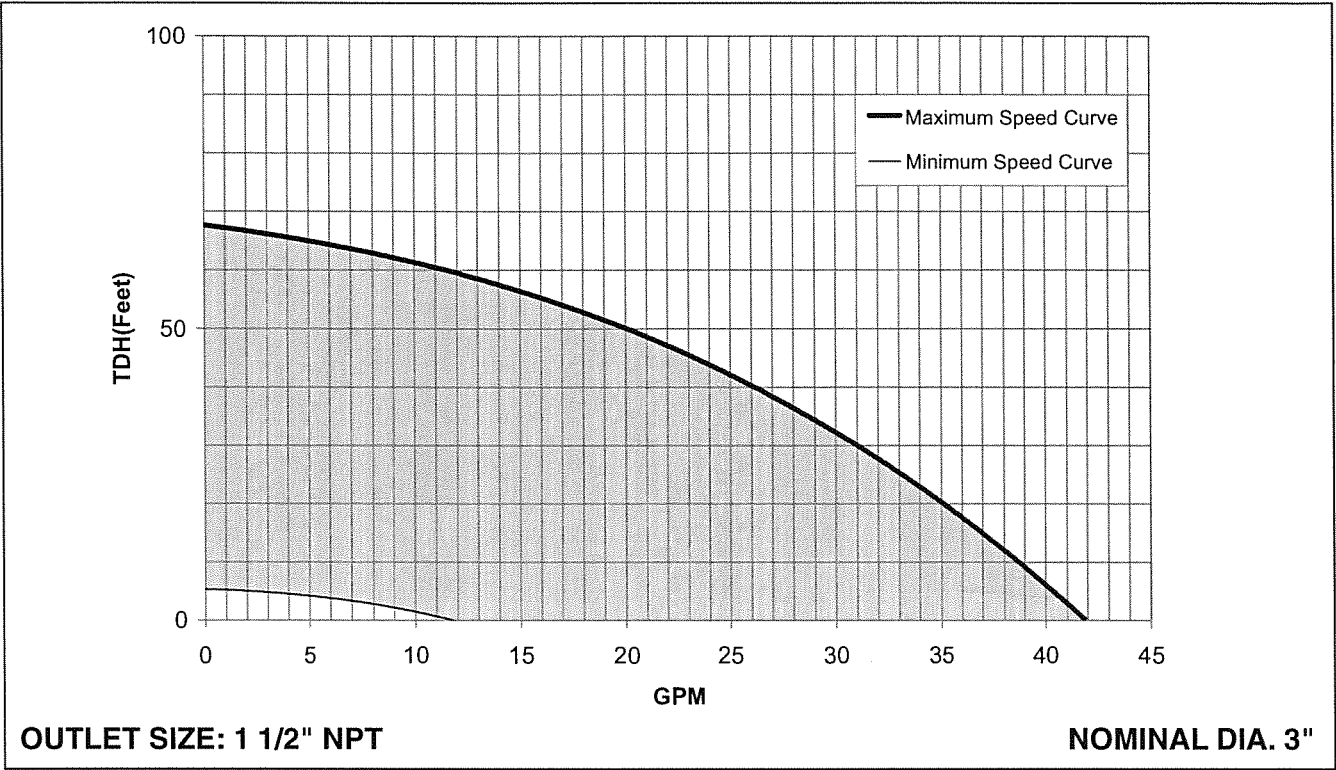


22 GPM • MODEL 22SQE15-220

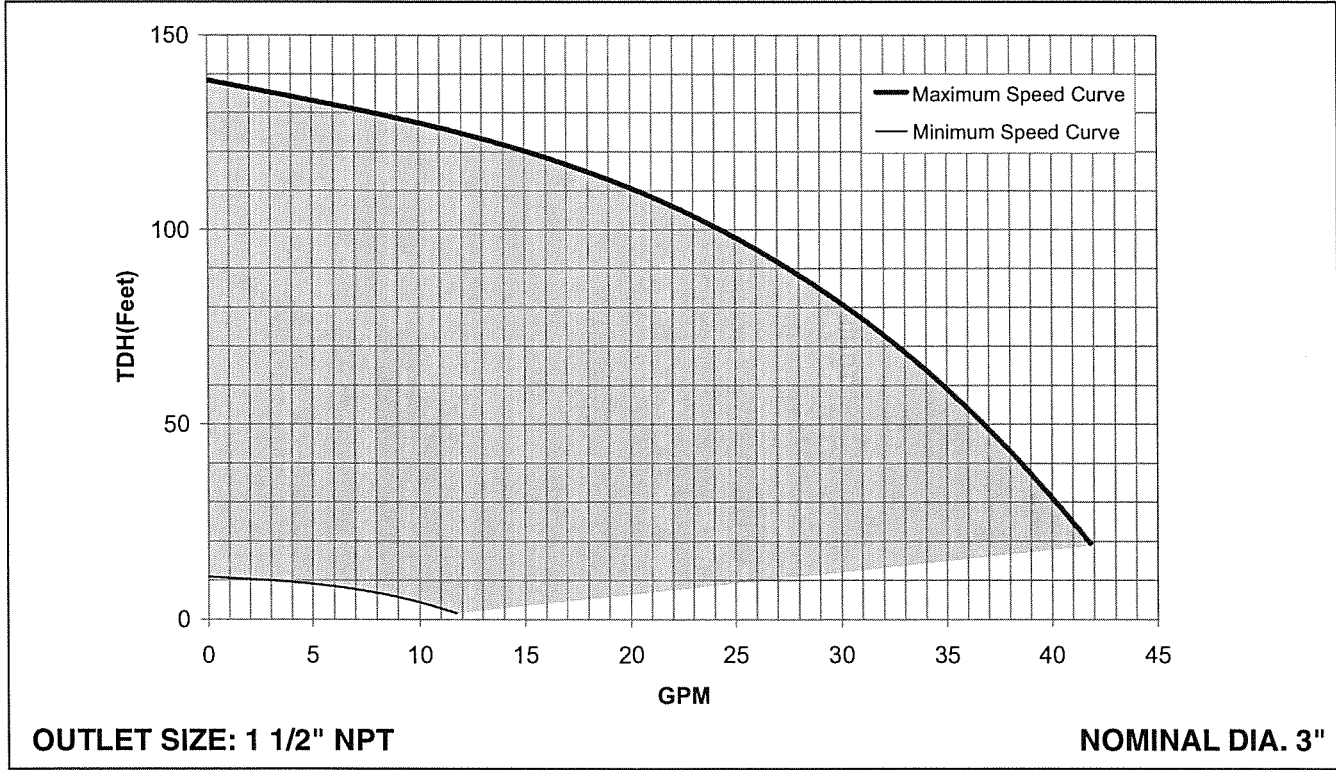


SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

30GPM • MODEL 30SQE05-40

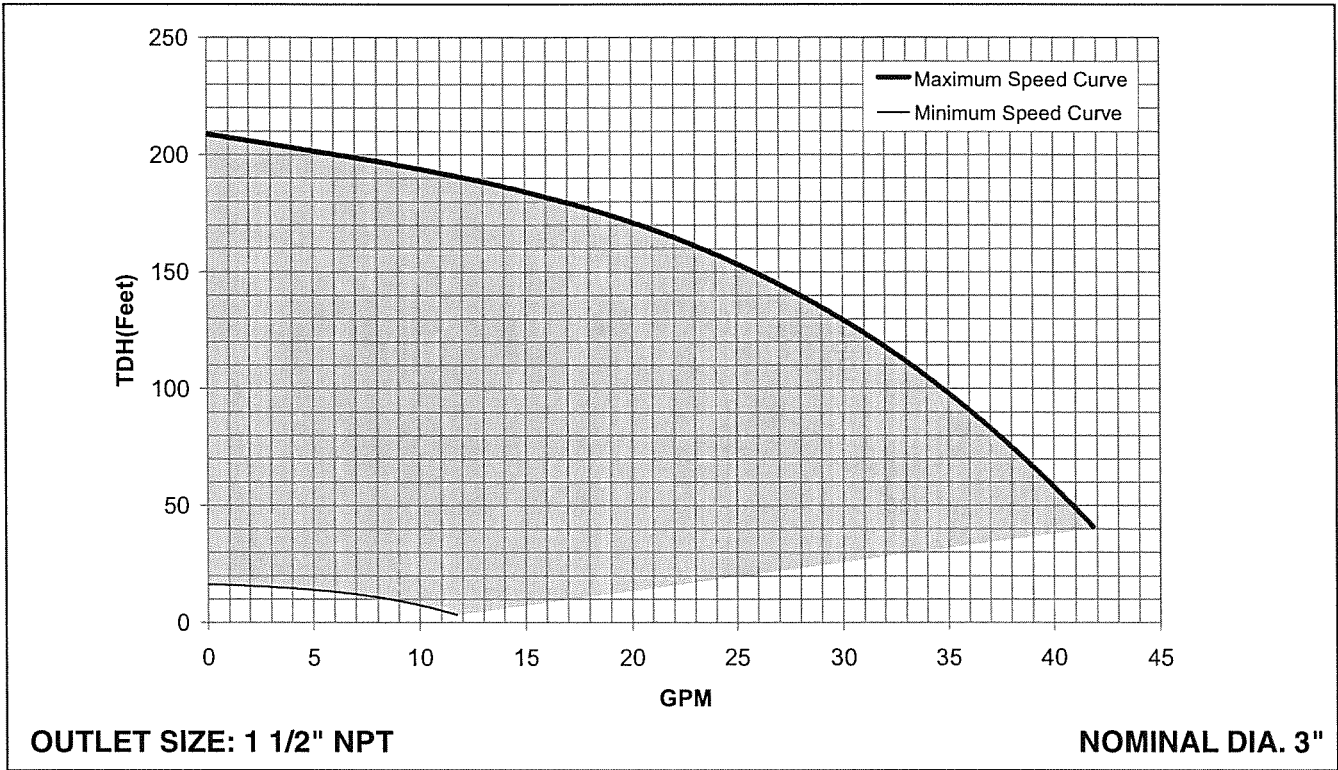


30 GPM • MODEL 30SQE07-90



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

30 GPM • MODEL 30SQE10-130



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

Step 1

Calculate minimum head requirements at no flow conditions:

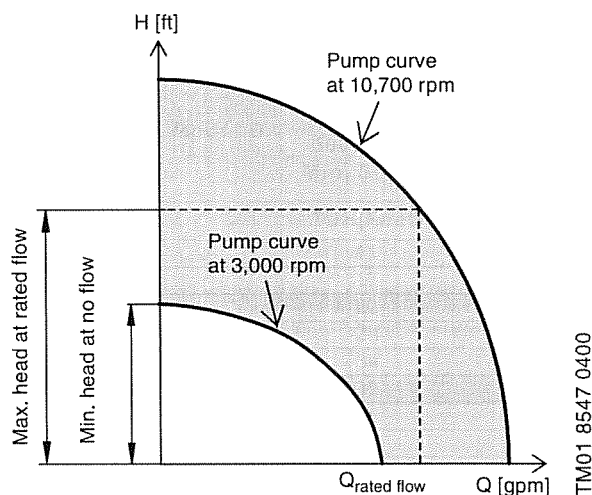
$H_{max} \text{ (required)} = \text{dynamic head} + \text{system pressure (in feet)} + \text{above grade elevation} + \text{friction loss.}$

Step 2

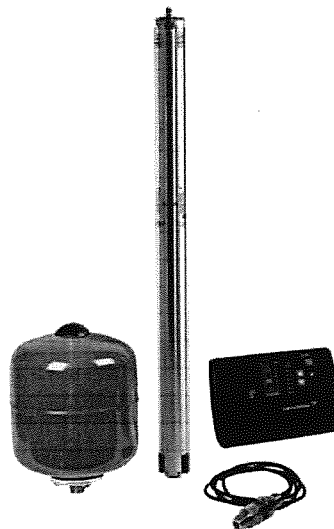
Select pump from chart as follows:

- Choose model family based on the desired flow rate. i.e. 15SQE for a flow rate of 15gpm
 - Select the first model with a value in Column 2 greater than the H_{max} calculated in Step 1
 - For example: the choice for a 22gpm model with an H_{max} of 140' would be the 22SQE-160.
- Double check your selection in the performance curves found in the previous pages of this book.

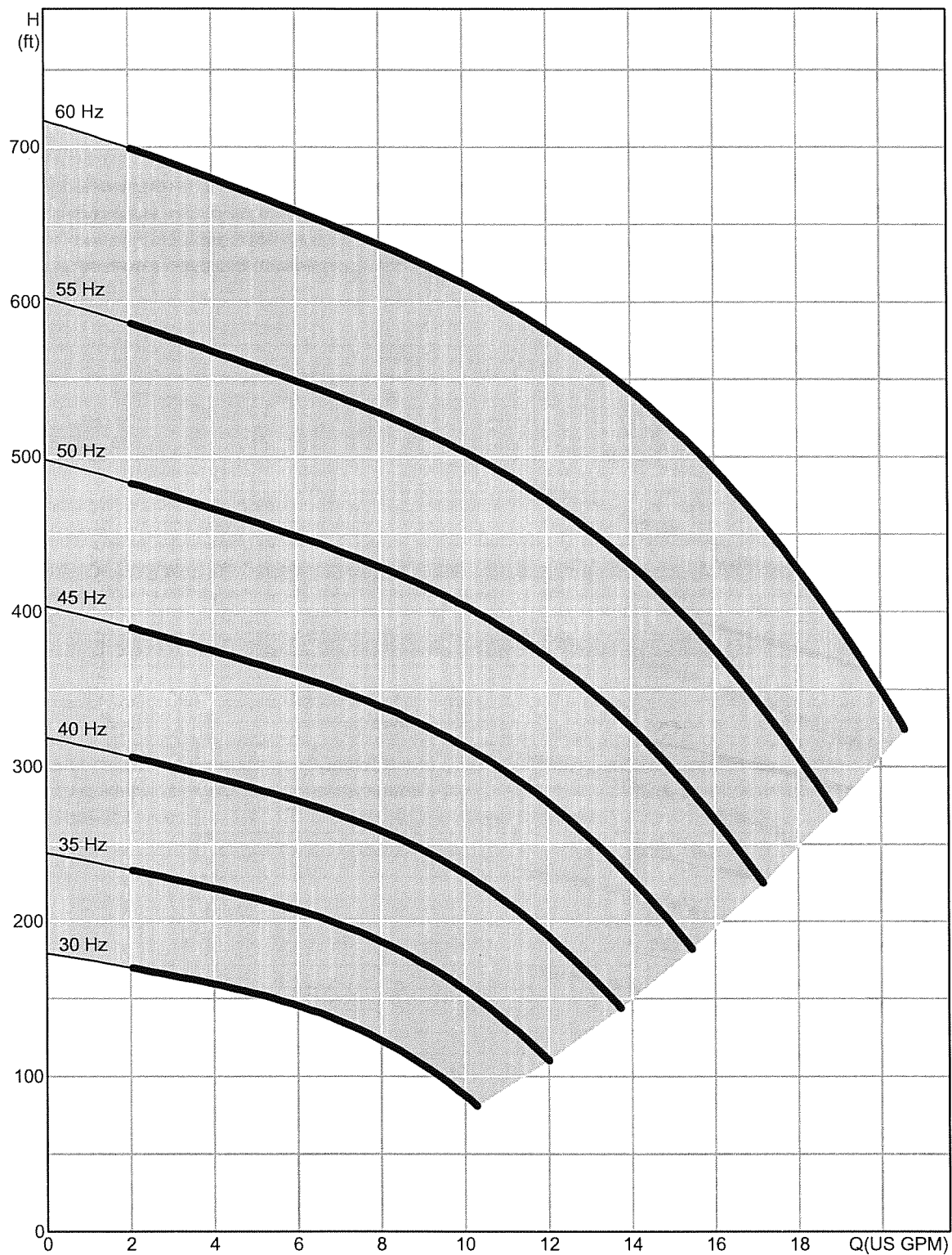
	Col. 1	Col. 2
System Sizing Matrix		
Pump Type Model B	Shutoff Head (0 GPM) @ 3000 RPM Min. Speed	Head @ Rated GPM @ 10700 RPM Max. Speed
	TDH(Feet)	TDH(Feet)
5SQE-90	11	86
5SQE-140	17	131
5SQE-180	22	177
5SQE-230	28	222
5SQE-270	34	270
5SQE-320	39	315
5SQE-360	45	360
5SQE-410	51	405
5SQE-450	56	450
10SQE-110	12	105
10SQE-160	17	164
10SQE-200	23	215
10SQE-240	29	267
10SQE-290	34	328
10SQE-330	40	390
15SQE-70	10	75
15SQE-110	14	123
15SQE-150	19	164
15SQE-180	24	205
15SQE-220	29	246
15SQE-250	33	287
15SQE-290	38	328
22SQE-40	5	36
22SQE-80	9	77
22SQE-120	14	117
22SQE-160	18	159
22SQE-190	23	200
22SQE-220	27	240
30SQE-40	5	33
30SQE-90	11	82
30SQE-130	16	126



Note: All calculated head requirements must lie between the selected pump models minimum and maximum speed curves.

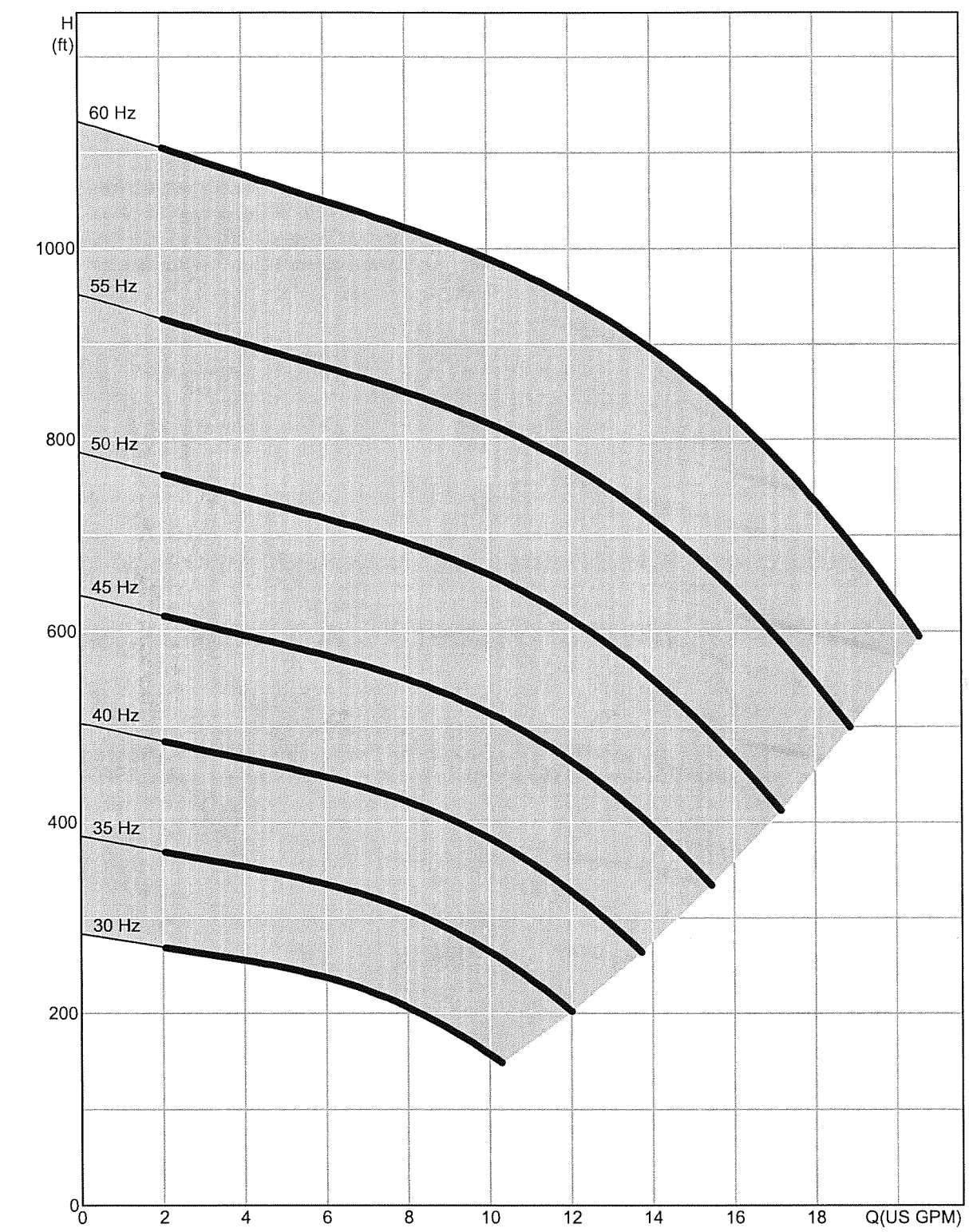


16 GPM • MODEL 16S30-24



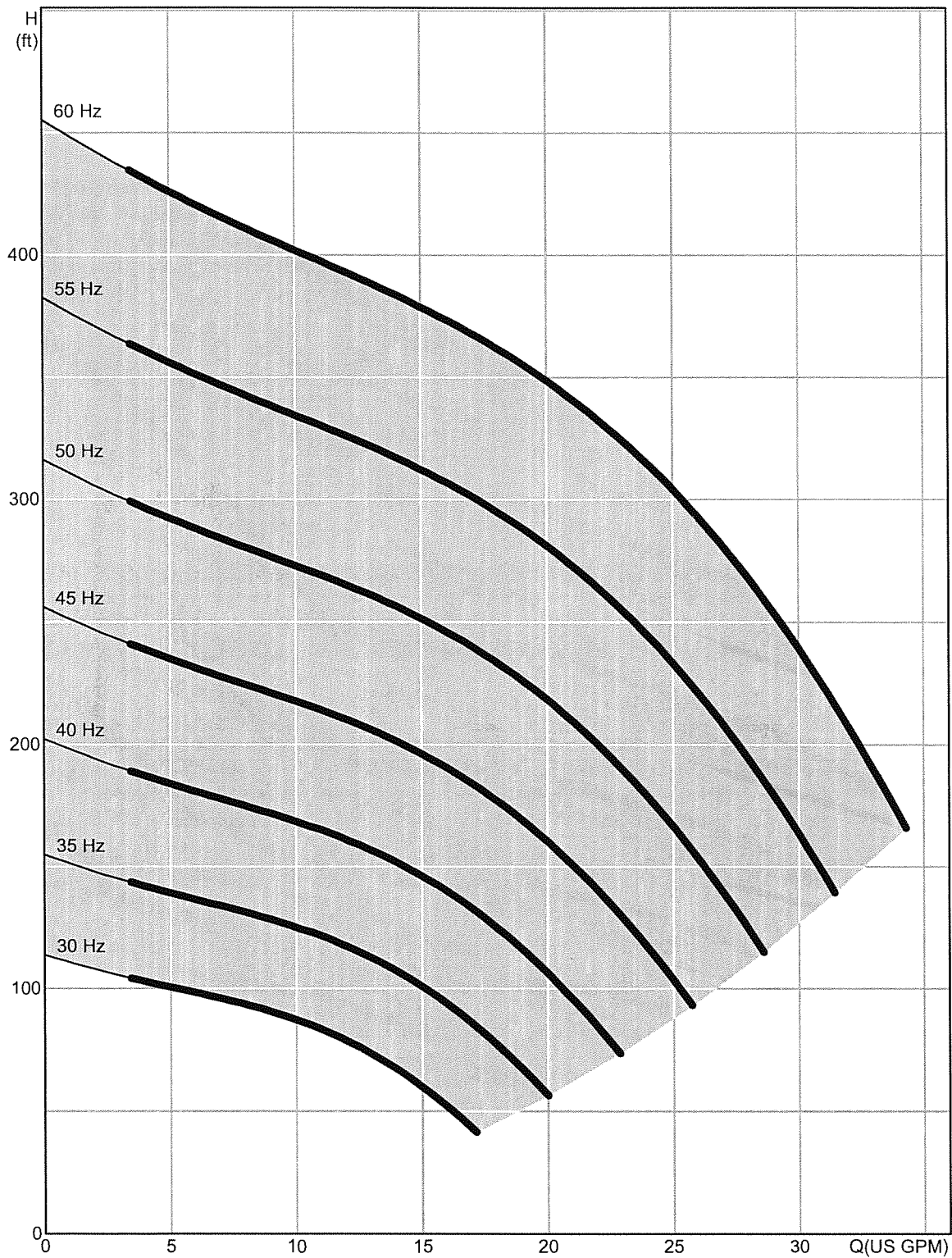
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

16 GPM • MODEL 16S50-38



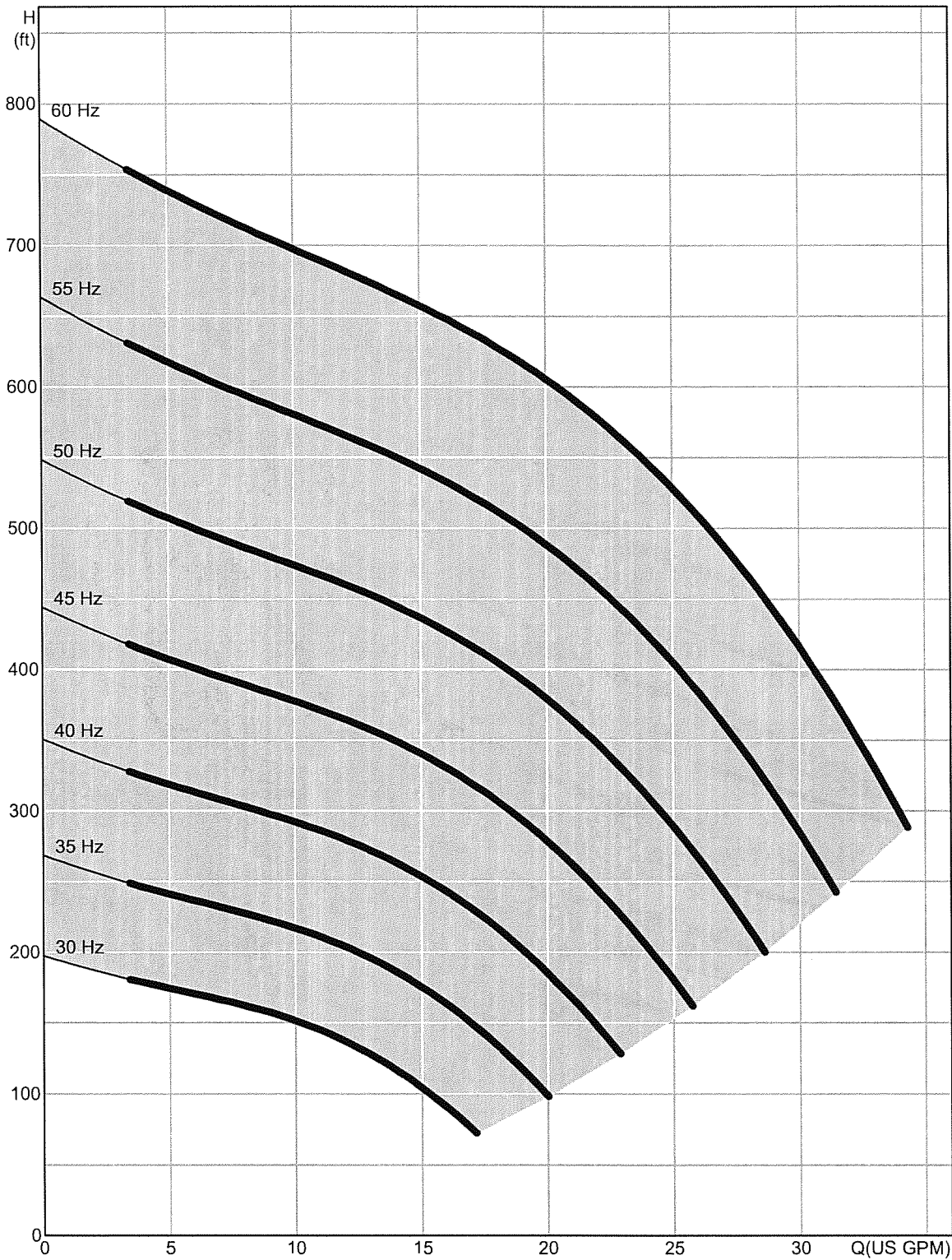
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

25 GPM • MODEL 25S30-15



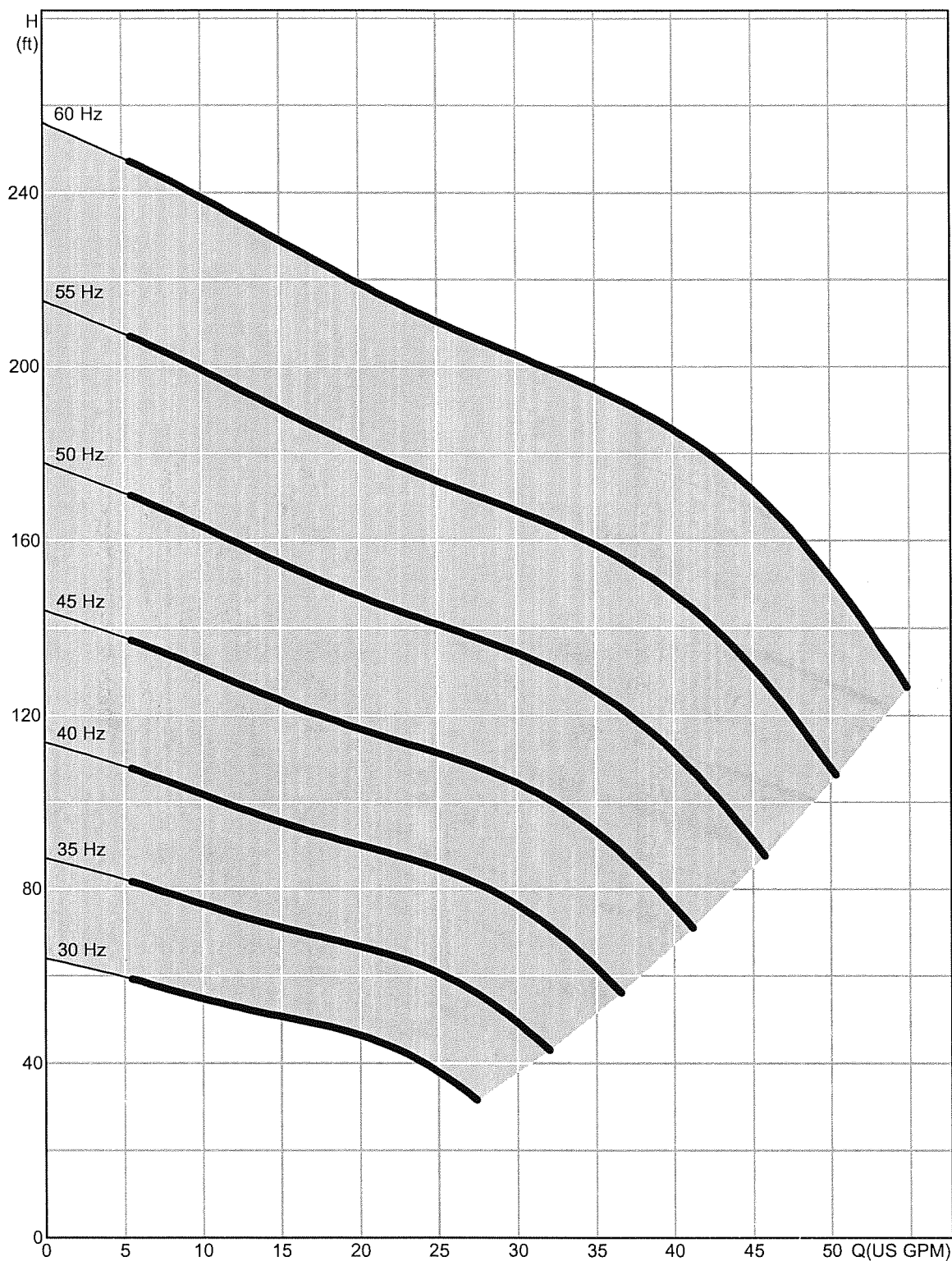
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

25 GPM • MODEL 25S50-26



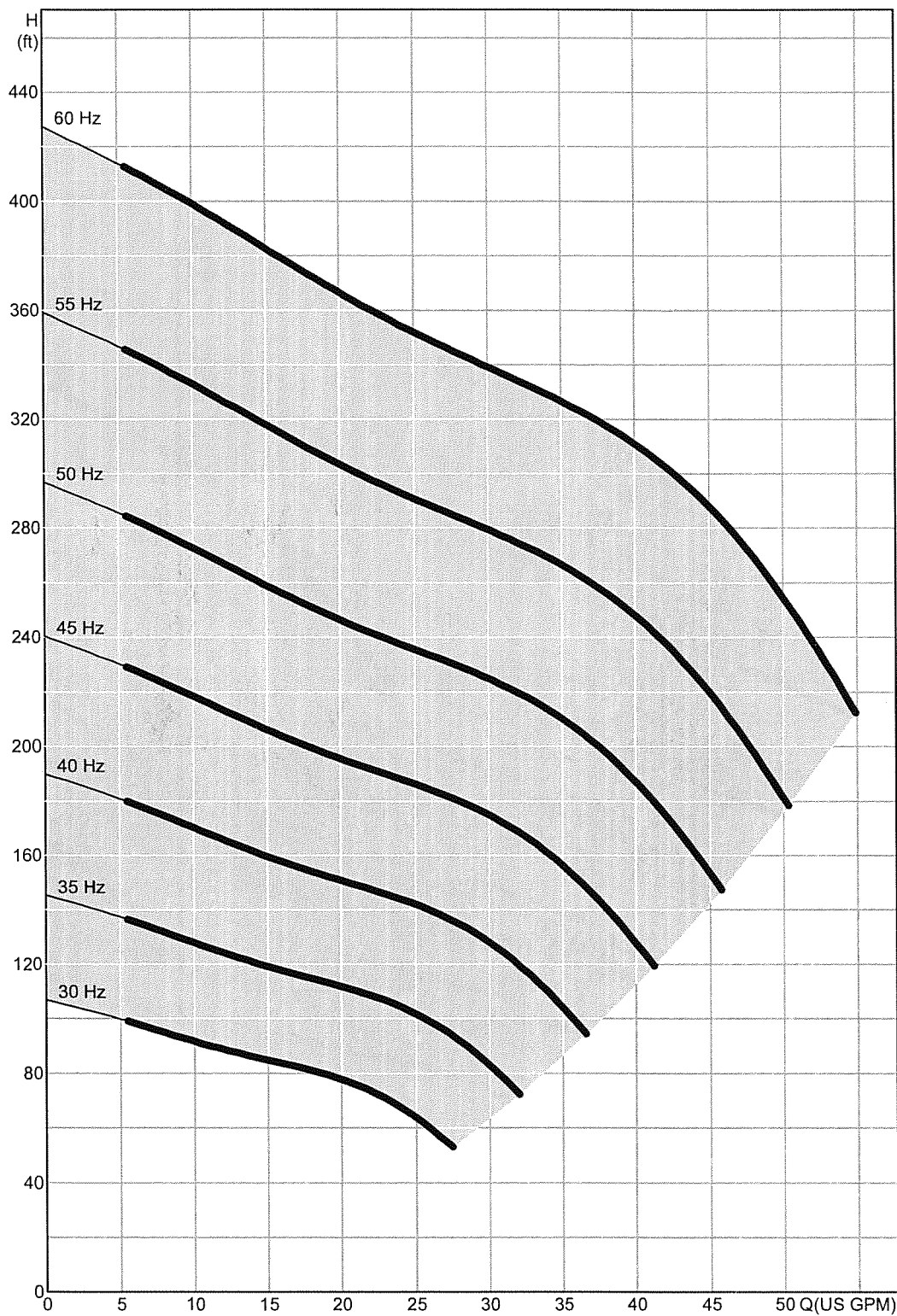
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

40 GPM • MODEL 40S30-9



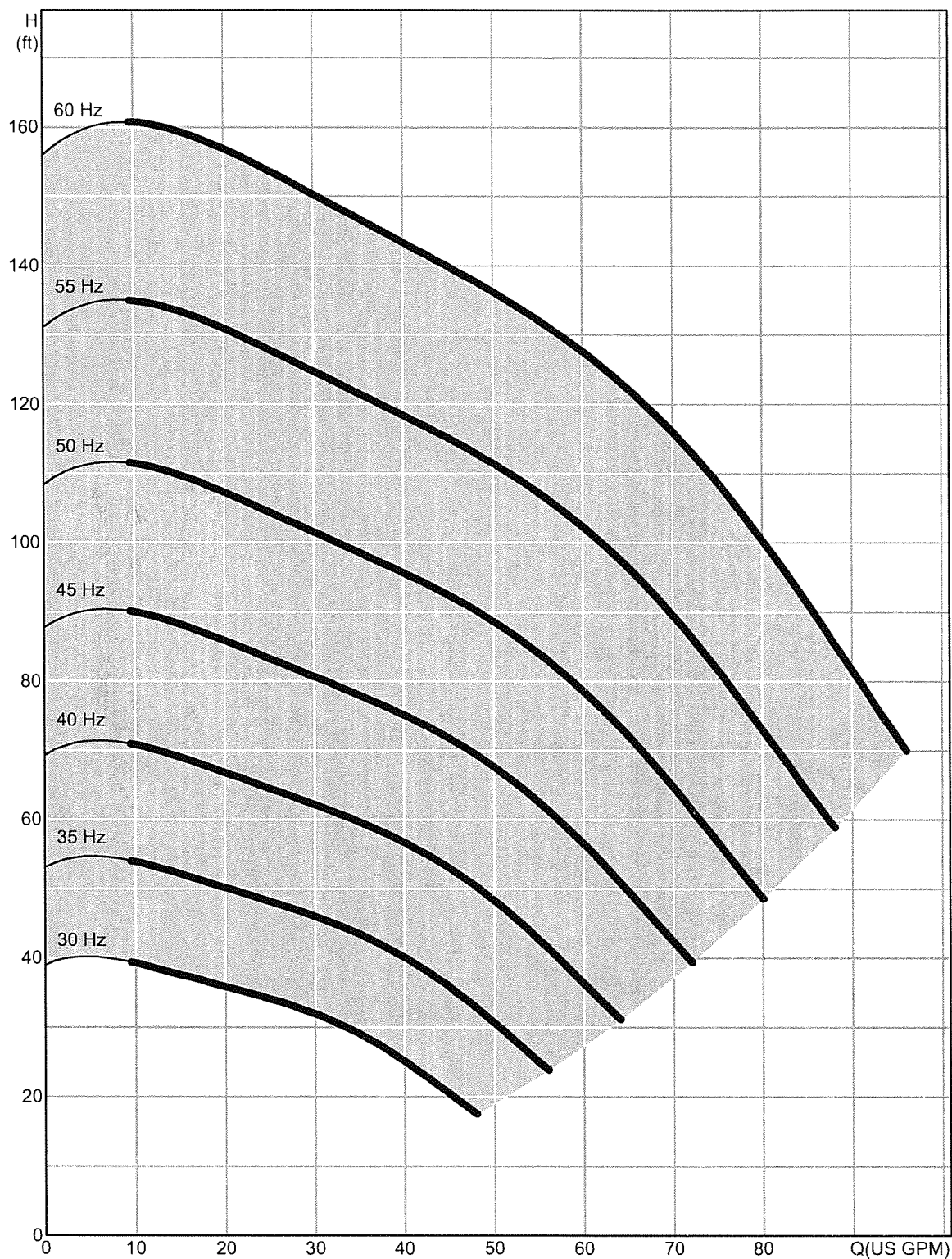
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

40 GPM • MODEL 40S50-15



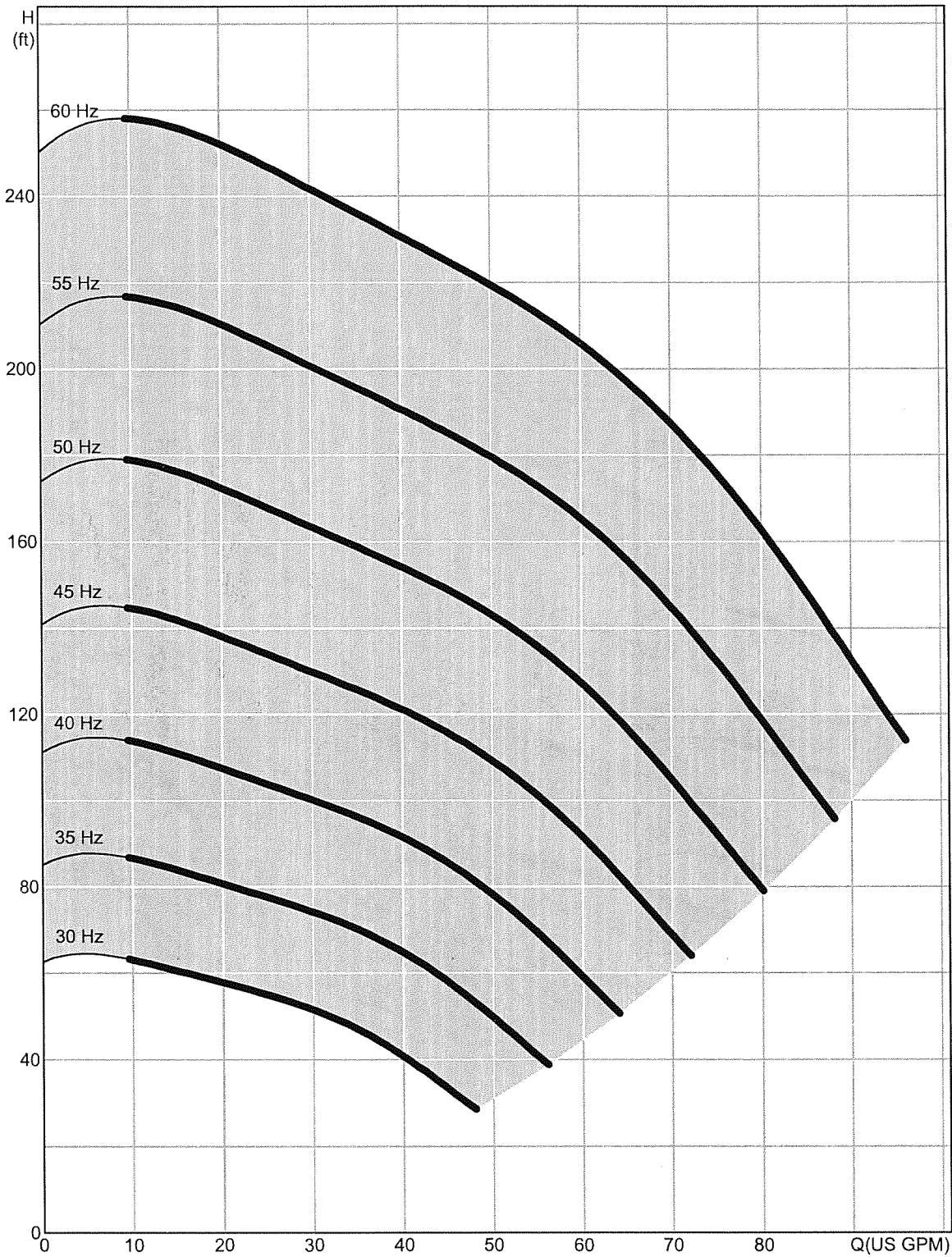
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

75 GPM • MODEL 75S30-5



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

75 GPM • MODEL 75S50-8



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

Step 1

Calculate maximum head requirements at rated flow conditions:

$H_{max} = \text{dynamic head} + \text{system psi (in feet)} + \text{friction loss} + \text{above grade elevation}$

Step 2

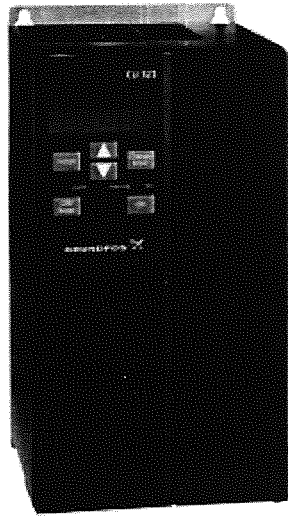
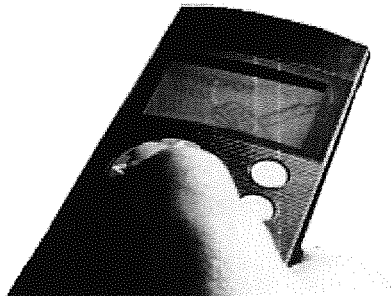
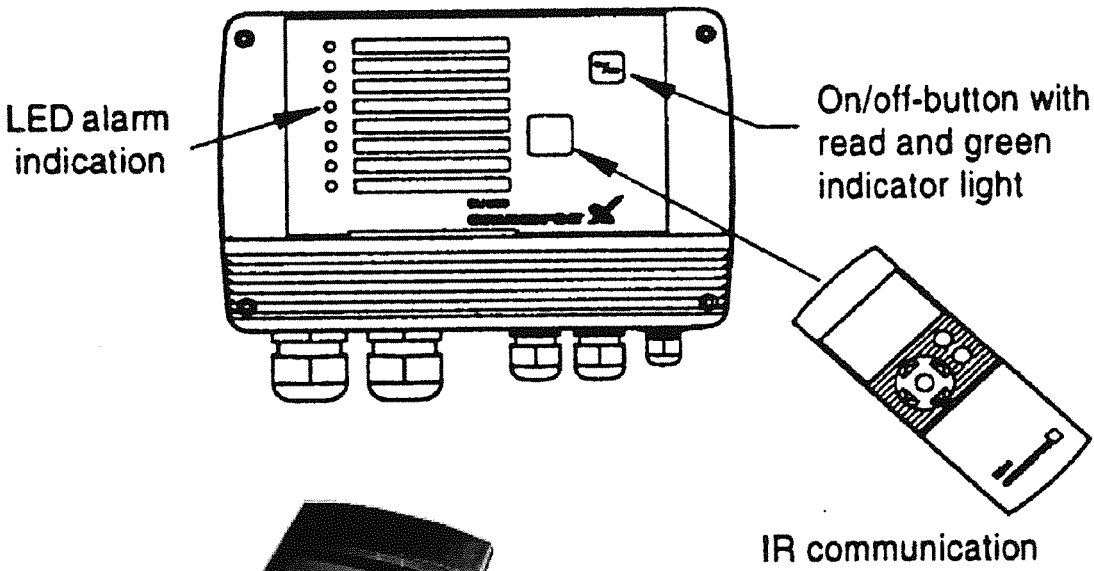
Select pump from chart as follows:

- Select a model in which the calculated value of H_{max} is below the value in columns 2
- For example: the choice for a 40gpm model with an H_{max} of 150 would be the 40S30-9

	Col. 1	Col. 2
System Sizing Matrix		
Pump Type	Shutoff Head (0 GPM) @ 1500 RPM Min. Speed	Head @ Rated GPM @ 3600 RPM Max. Speed
3HP	TDH(Feet)	TDH(Feet)
16S30-24	128	490
25S30-15	80	305
40S30-9	45	185
75S30-5	30	105
5HP		
16S50-38	200	825
25S50-26	105	530
40S50-15	75	310
75S50-8	45	175



SmartFlo™ Accessories



SmartFlo™ ACCESSORIES

CU301 SQE 3" Constant Pressure System "SmartFlo"



Description	Product no.
"SmartFlo" Constant Pressure Kit (Includes CU301 and Transducer)	96438895

CU321 SP 4" Constant Pressure System "SmartFlo"



Description	HP	Input PH	Input VOLTS	Product no.
CU321 Constant Pressure Kit	3	1	200-240	96581690
CU321 Constant Pressure Kit	5	3	200-240	96581691
Pressure Sensor	—	—	—	96437852

Note: Kits include CU321 and pressure sensor

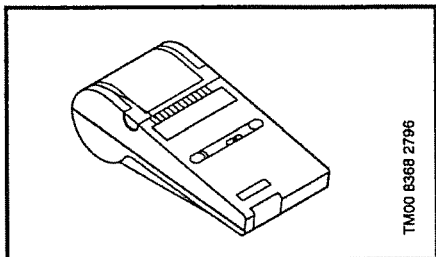
CU300 Status Box & R100



Description	Product no.
CU300 Status Box	96422776

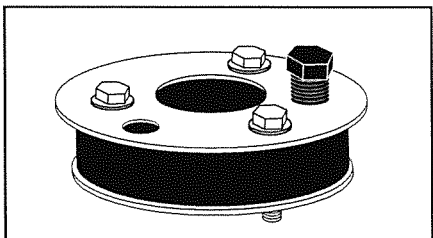
Description	Product no.
The R100 is used for wireless infrared communication with the CU300	625333

Printer



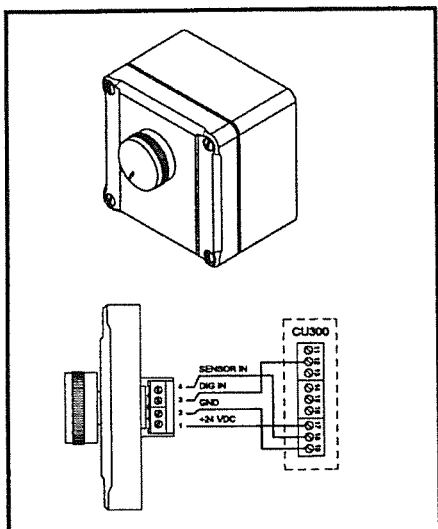
Description	Product no.
Printer for R100, infrared communication	620480
Type: Hewlett Packard, HP 82240B	
Paper Roll	620481

3" Well Seal



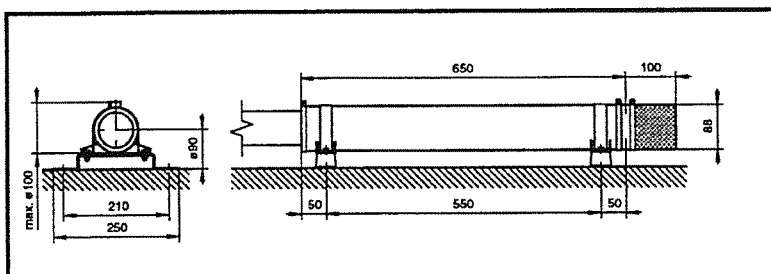
Description	Product no.
3" Sanitary Well Seal	1B5102

Potentiometer



Description	Version	Product no.
External potentiometer with cabinet for wall mounting. Screened cables, 4-wire cable, max. length of cable: 100m	Grundfos potentiometer, SPP1 Enclosure class: IP 55	625468

SQ/SQE - Flow sleeve



Description	Product no.
Flow Sleeve Complete	96037505