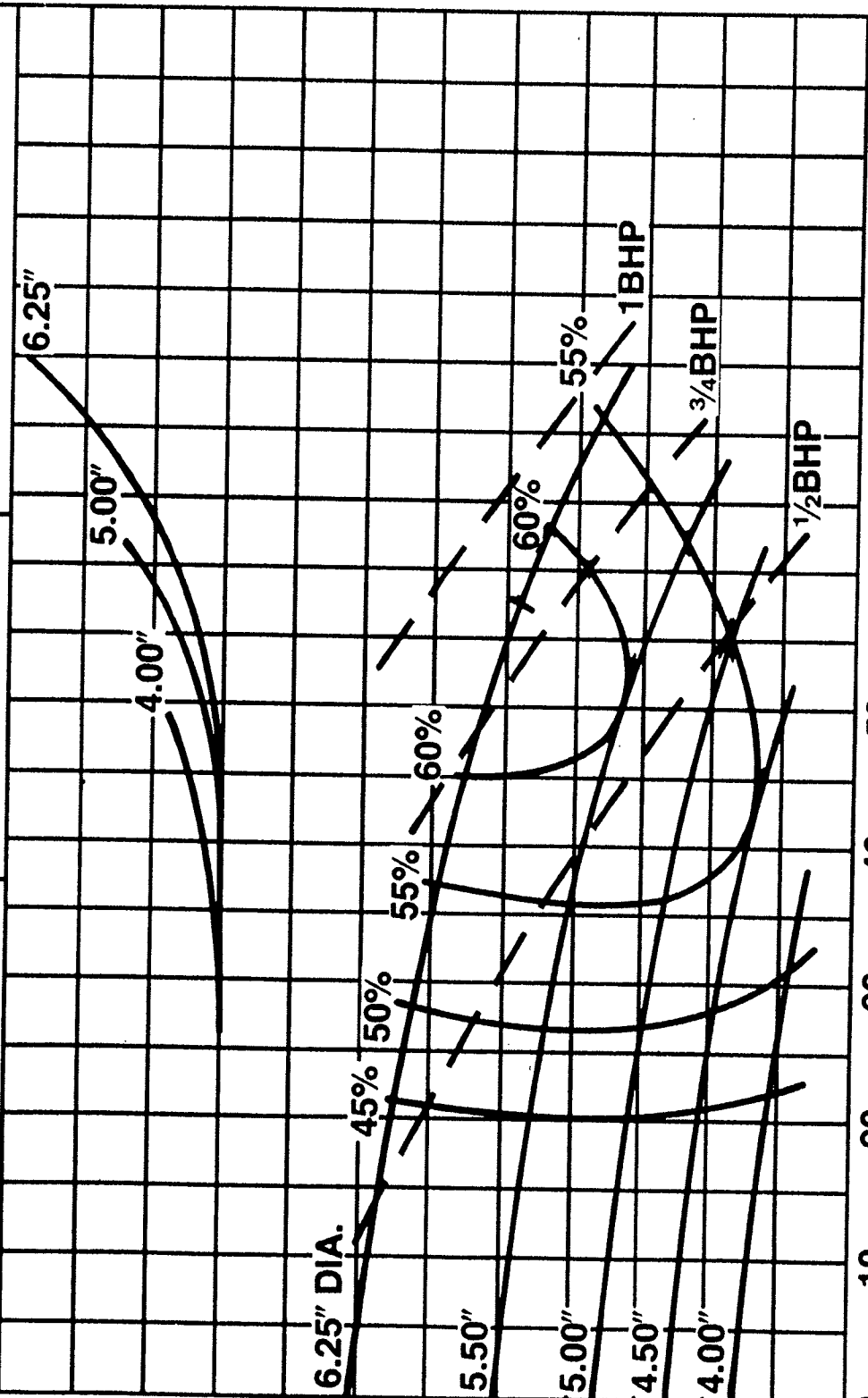
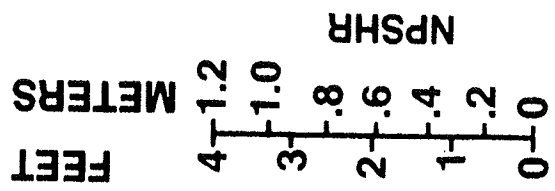


METERS  
 FEET

|  |                                |                             |
|--|--------------------------------|-----------------------------|
| PUMP SIZE & TYPE<br><b>1 1/2 X 1 X 6 HOC 2</b> | <b>INGERSOLL-RAND</b><br>PUMPS | CURVE NO.<br><b>6HOC2-G</b> |
| <b>1 1/2 X 1 X 6 ESP 2</b>                     | RPM<br><b>1750</b>             | DATE<br><b>5/1/87</b>       |

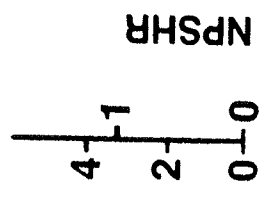
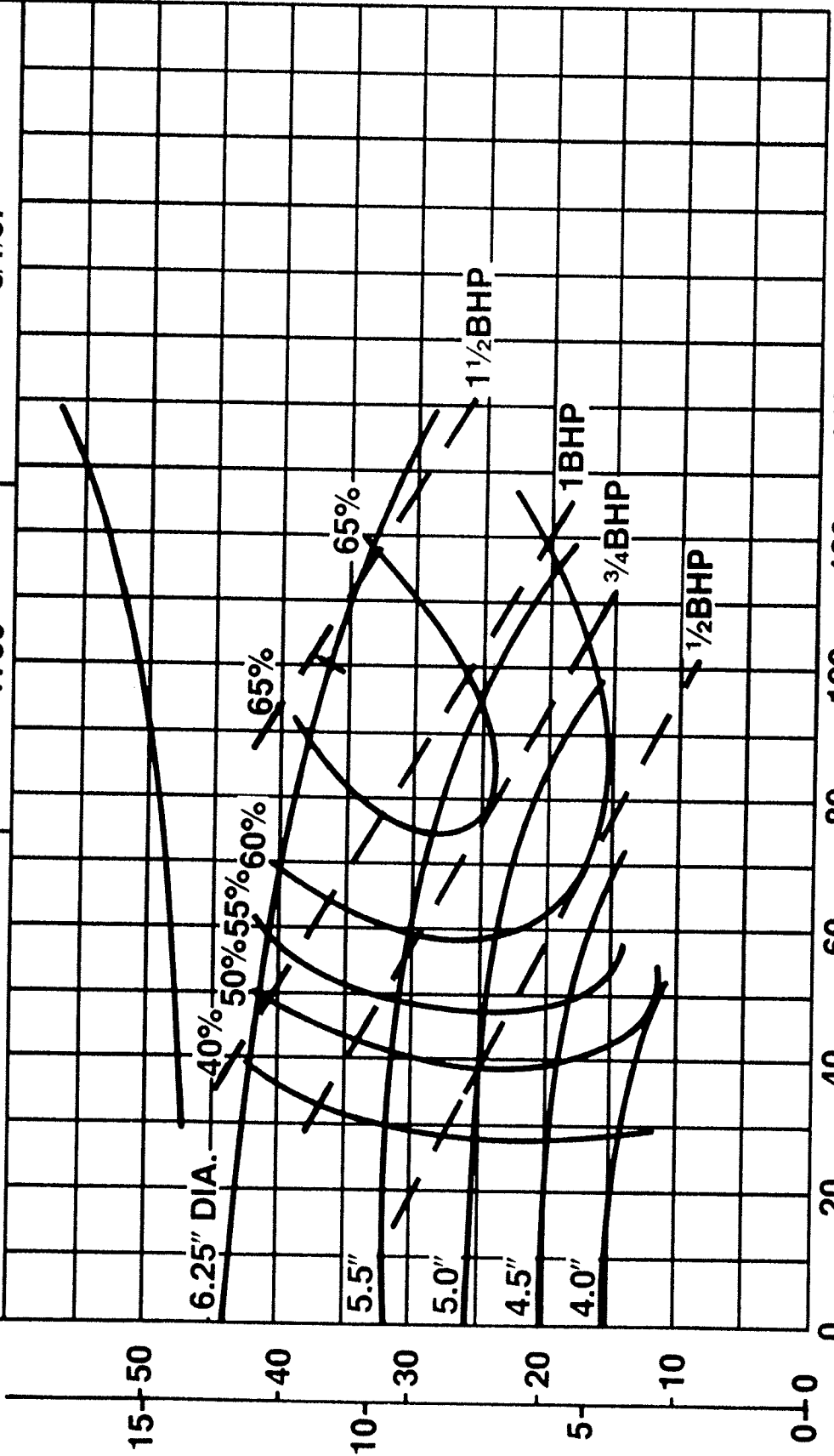


TOTAL HEAD  
 METERS  
 FEET  
 CAPACITY  
 U.S. GPM  
 CU. METERS/HR.



|  |                          |                             |
|--|--------------------------|-----------------------------|
| PUMP SIZE & TYPE<br><b>3X1 1/2X6HOC2</b> | INGERSOLL-RAND®<br>PUMPS | CURVE NO.<br><b>6HOC2-H</b> |
| <b>3X1 1/2X6ESP2</b>                     | RPM<br><b>1750</b>       | DATE<br><b>5/1/87</b>       |

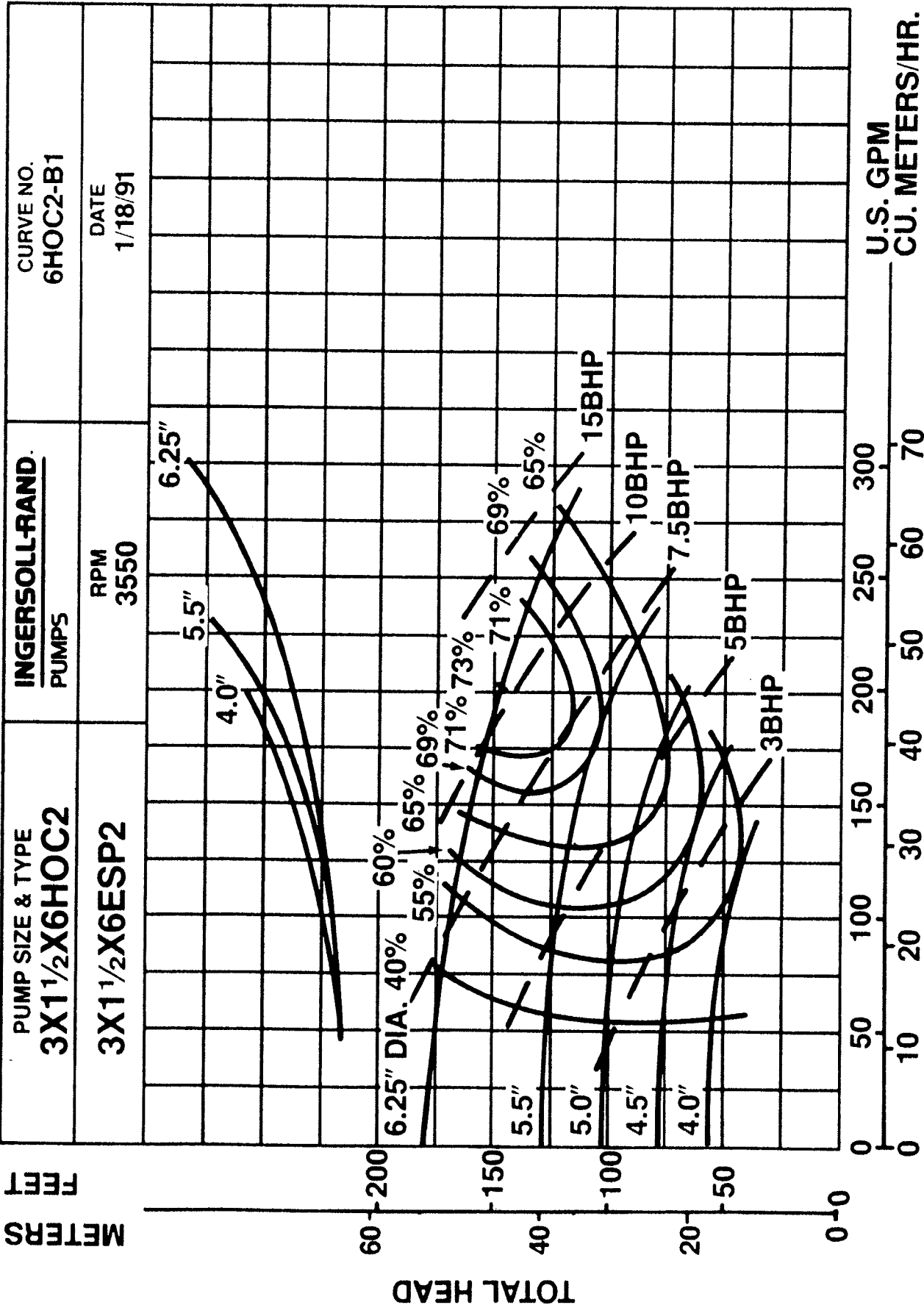
METERS  
 FEET



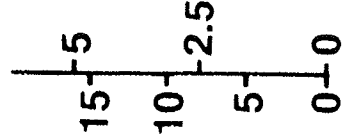
NPSHR

U.S. GPM  
 CU. METERS/HR.

CAPACITY



METERS  
FEET



NPSHR

METERS  
FEET

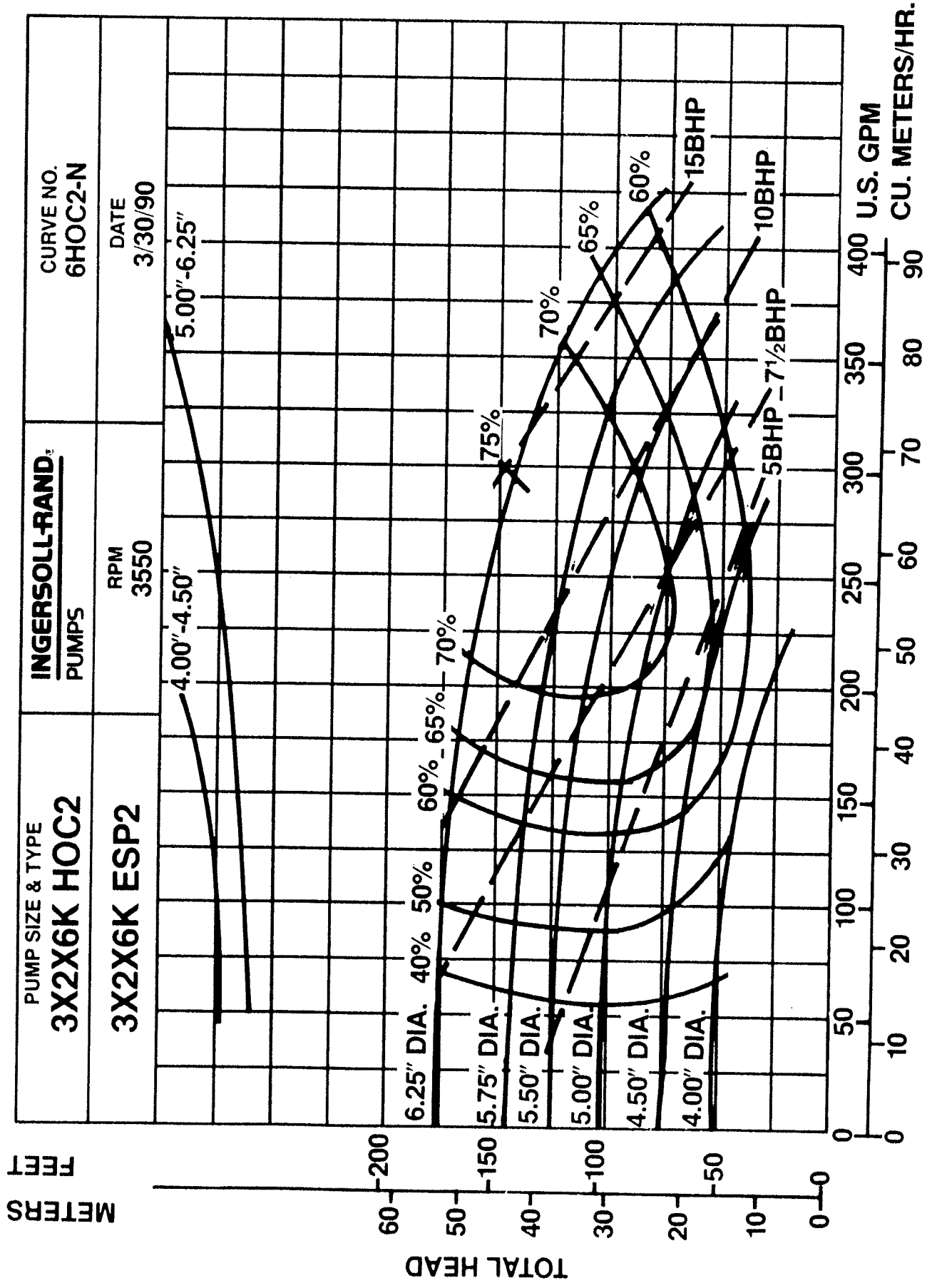
PUMP SIZE & TYPE  
**3X2X6K HOC2**  
**3X2X6K ESP2**

**INGERSOLL-RAND**  
PUMPS

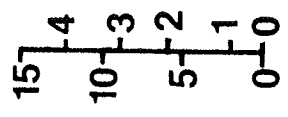
CURVE NO.  
**6HOC2-N**

DATE  
**3/30/90**

RPM  
**3550**



METERS  
FEET



NPSHR

CAPACITY

METERS  
FEET

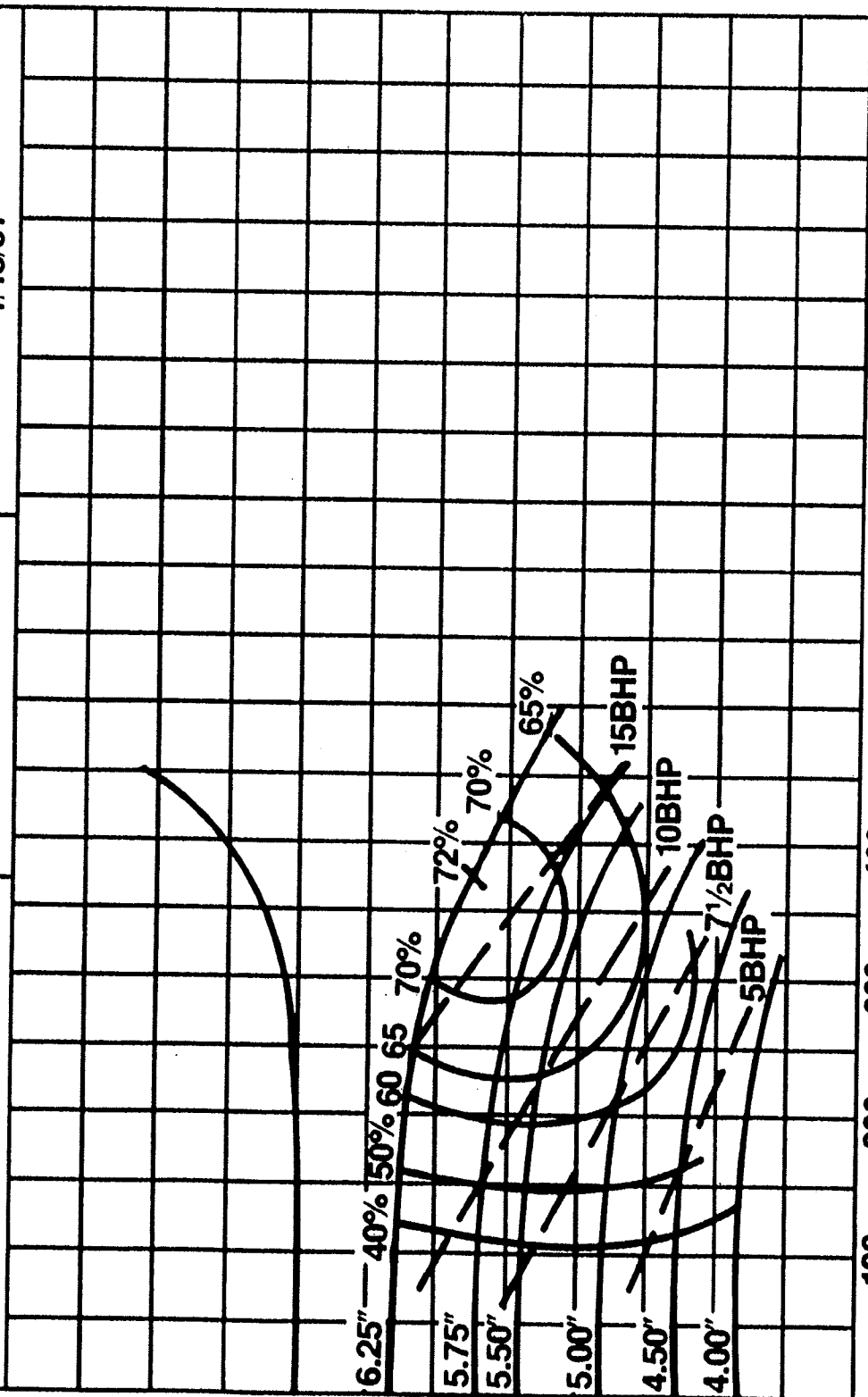
PUMP SIZE & TYPE  
**3X2X6HOC2**

**INGERSOLL-RAND**  
PUMPS

CURVE NO.  
**6HOC2-C2**

RPM  
**3550**

DATE  
**1/18/91**



TOTAL HEAD

50-175  
40-150  
30-125  
20-100  
10-75  
0-50  
0-25

U.S. GPM  
CU. METERS/HR.

0 100 200 300 400 500 120

CAPACITY

FEET  
METERS

40-12  
30-8  
20-4  
10-0  
0-0

NPSHR

METERS  
FEET

PUMP SIZE & TYPE  
3 X 2 X 6K HOC2

INGERSOLL-RAND  
PUMPS

CURVE NO.  
6HOC2-Q

RPM  
1750

DATE  
3/30/90

METERS  
FEET

15  
10  
5  
0  
-1  
-2  
-3  
-4

NPSH

TOTAL HEAD

15  
10  
5  
0  
-1  
-2  
-3  
-4

6.25" DIA.  
5.75"  
5.50"  
5.00"  
4.50"  
4.00"

40%  
50%  
60%  
65%  
70%  
73%

5.00"-6.25"  
4.00"-4.50"

1BHP

.75BHP

1.5BHP

2BHP

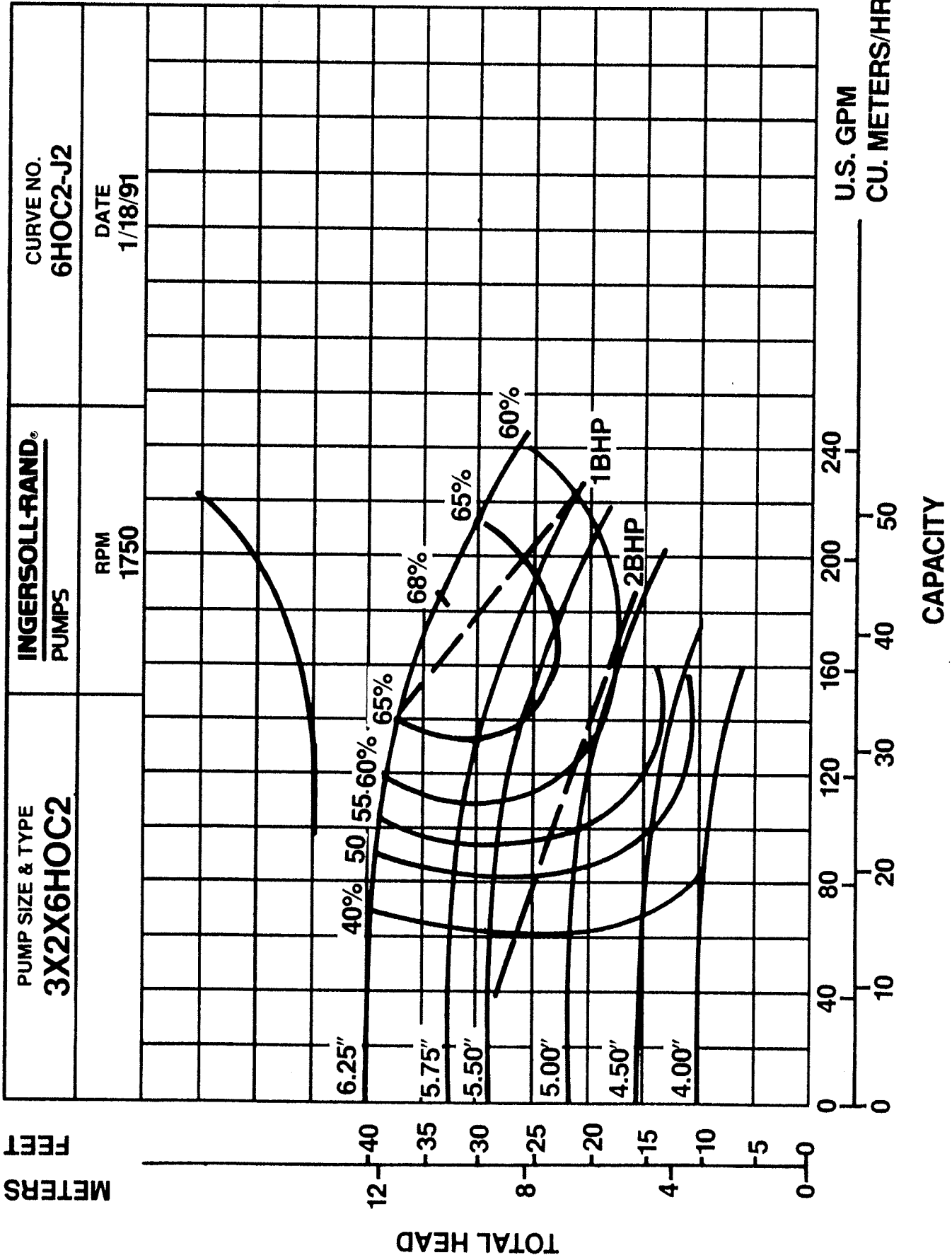
0  
5  
10  
15

0  
25  
50  
75  
100  
125  
150  
175  
200  
225

U.S. GPM  
CU. METERS/HR.

0  
10  
20  
30  
40  
50

CAPACITY



METERS  
 FEET

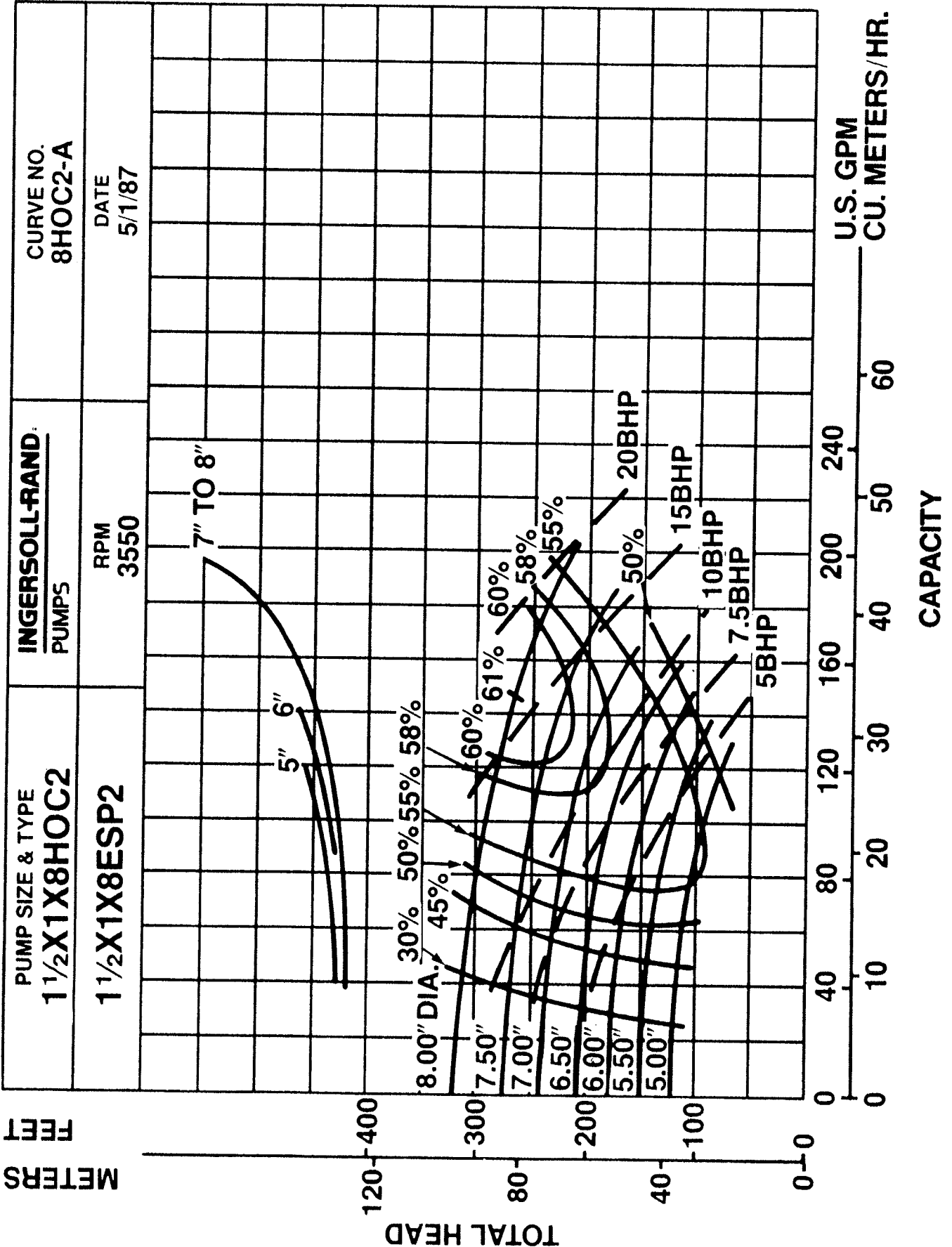
10-3  
 7.5-2  
 5-1  
 2.5-0  
 0-0

NPSHR

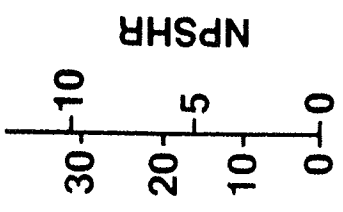
U.S. GPM  
 CU. METERS/HR.

CAPACITY





METERS  
FEET



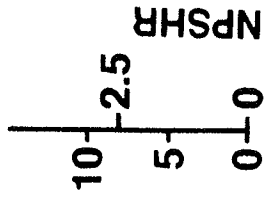
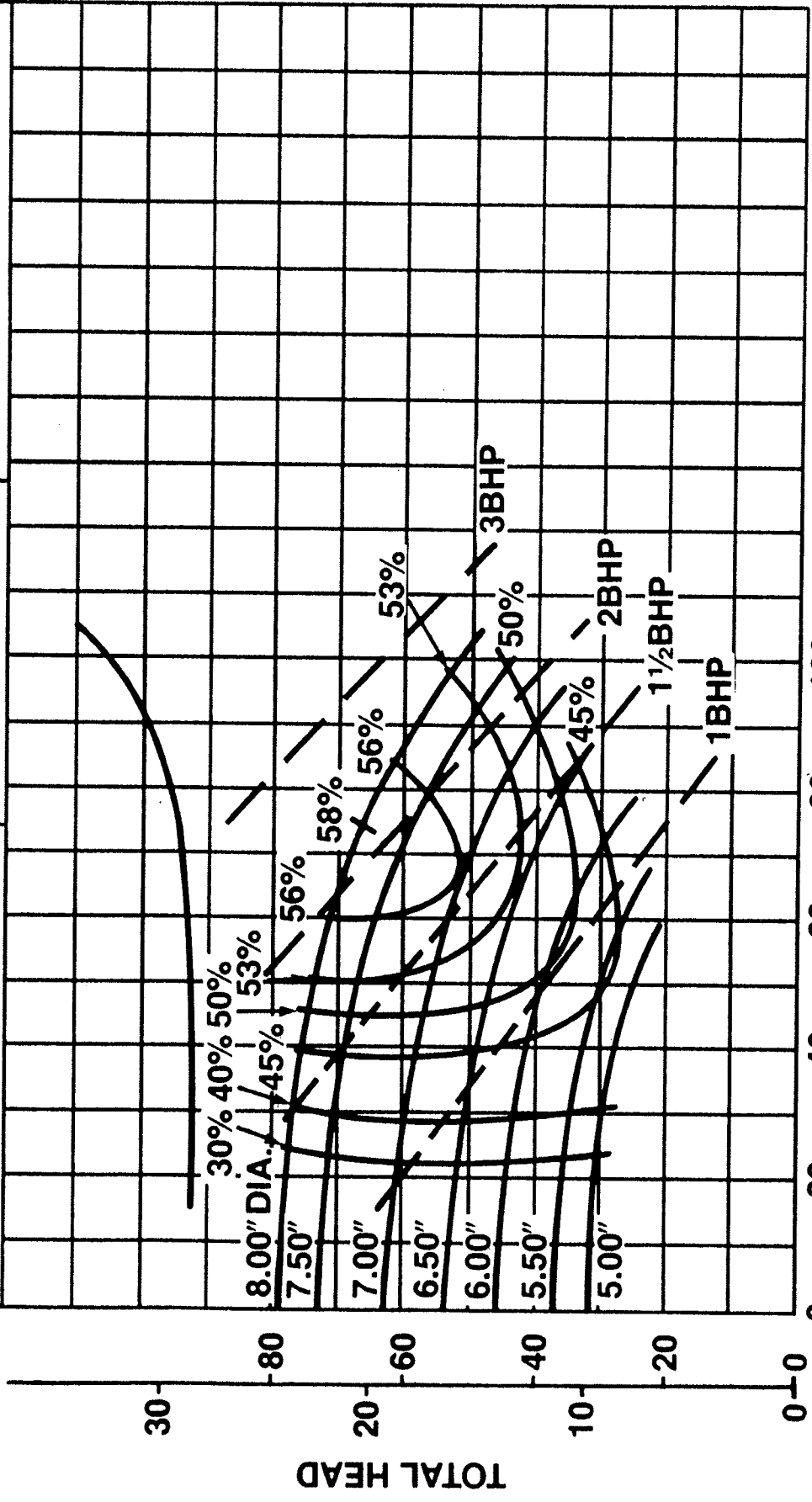
METERS  
FEET

PUMP SIZE & TYPE  
**1 1/2 X 1 X 8 HOC 2**  
**1 1/2 X 1 X 8 ESP 2**

**INGERSOLL-RAND\***  
PUMPS  
RPM  
**1750**

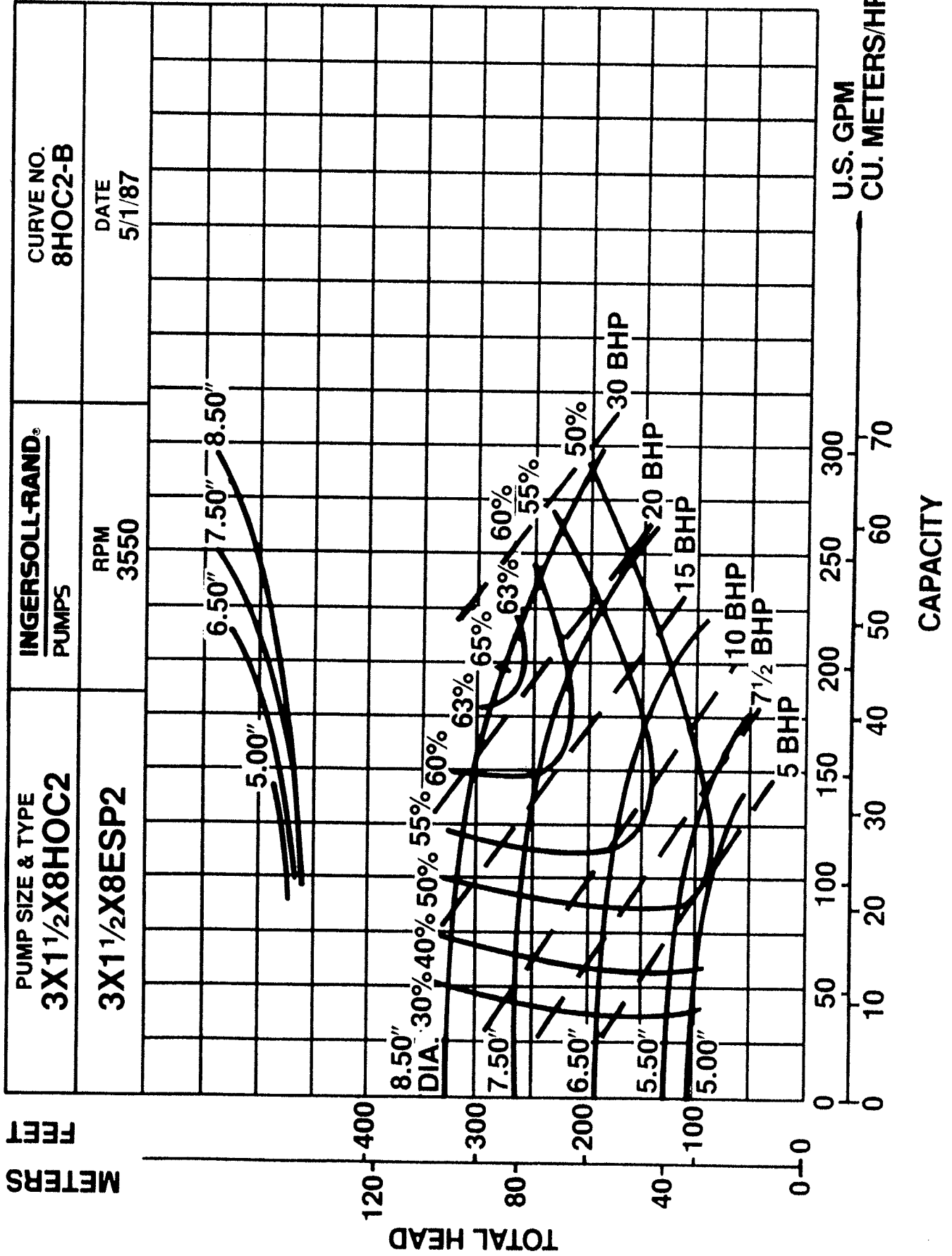
CURVE NO.  
**8HOC2-J**  
DATE  
**5/1/87**

METERS  
FEET

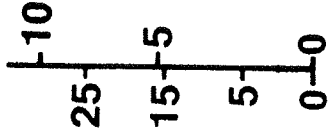


U.S. GPM  
CU. METERS/HR.

CAPACITY



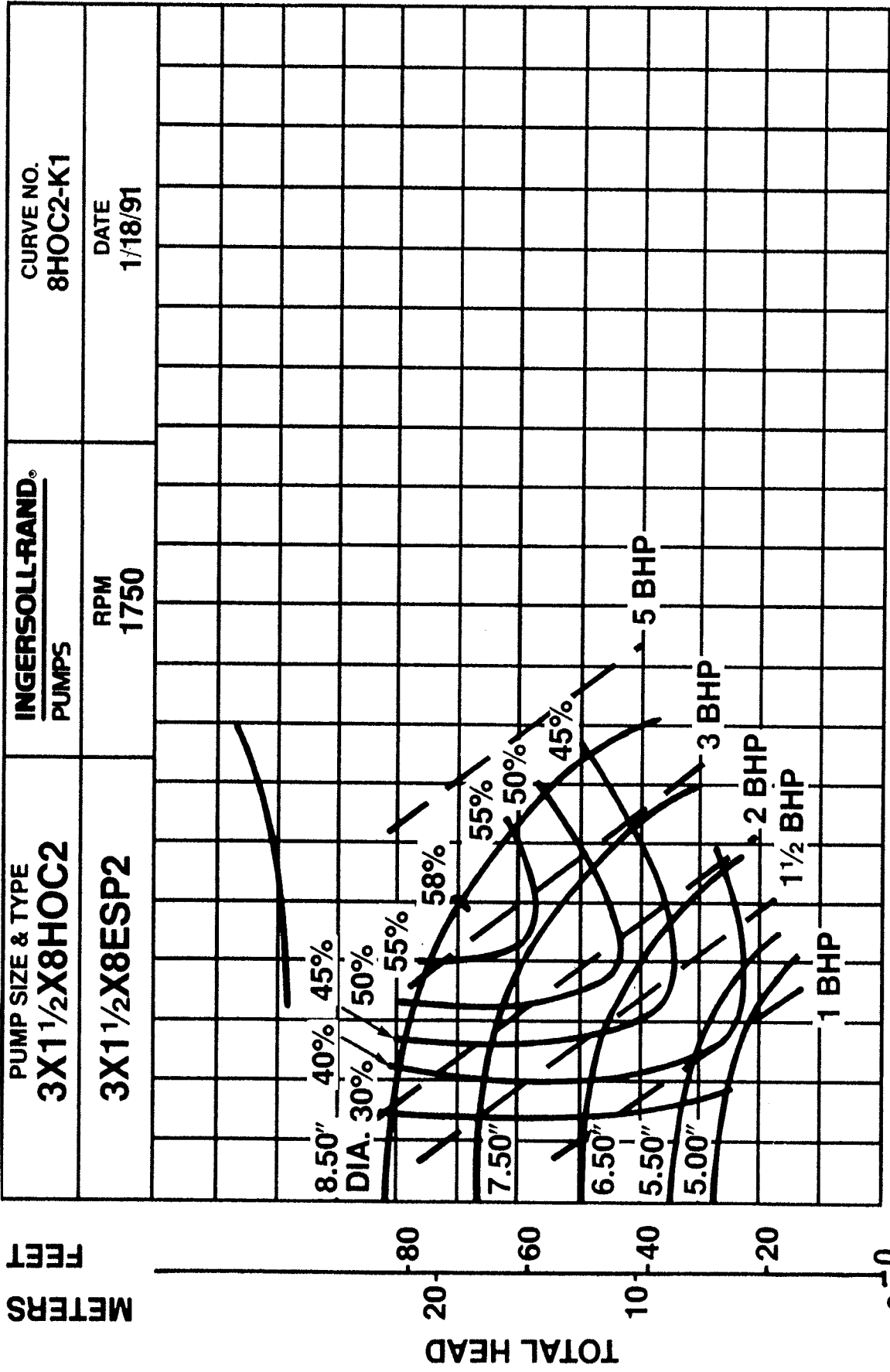
**METERS**  
**FEET**



NPSHR

**U.S. GPM**  
**CU. METERS/HR.**

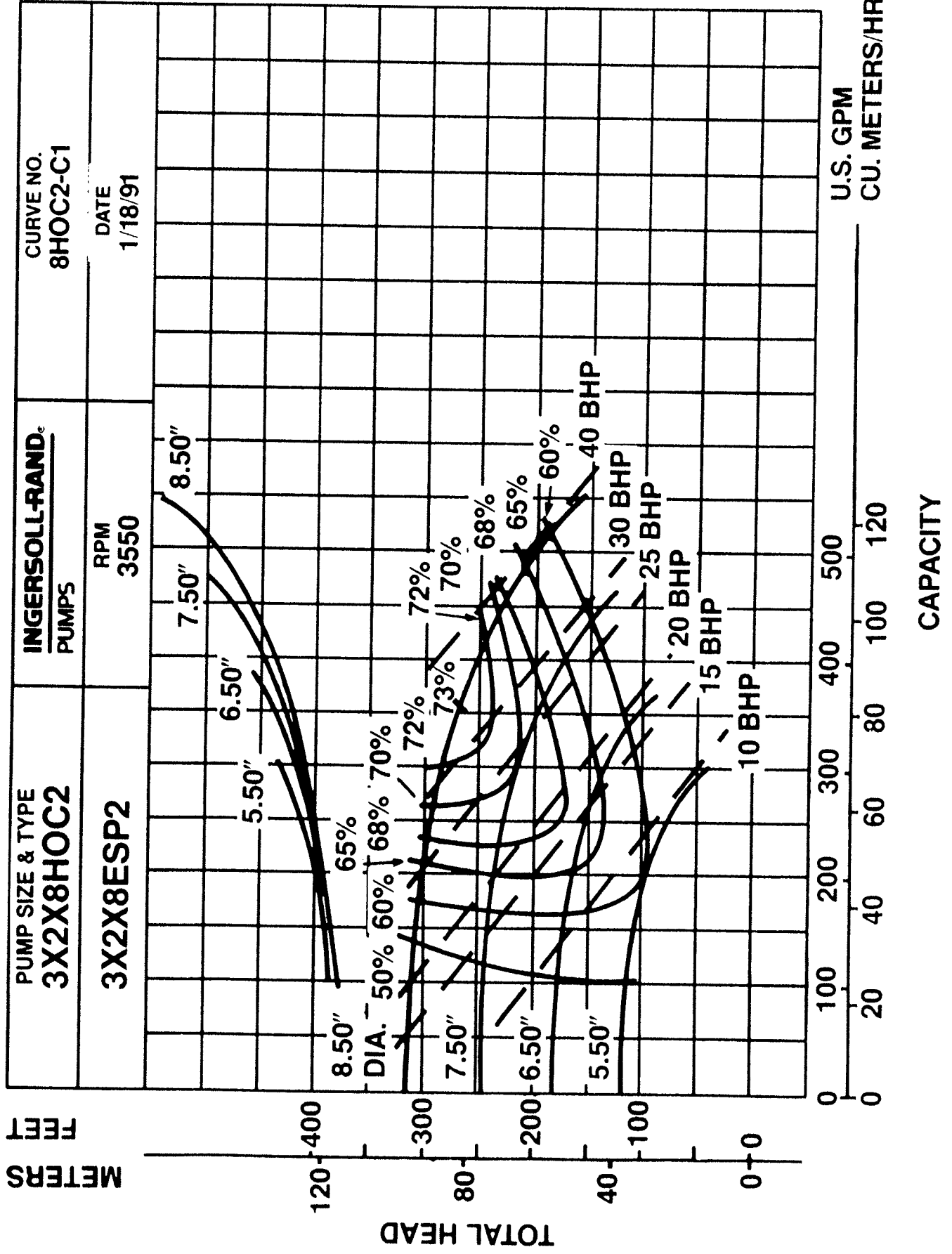
CAPACITY



FEET  
METERS

0-10  
0-2.5

NPSHR



NPSHR

METERS

FEET

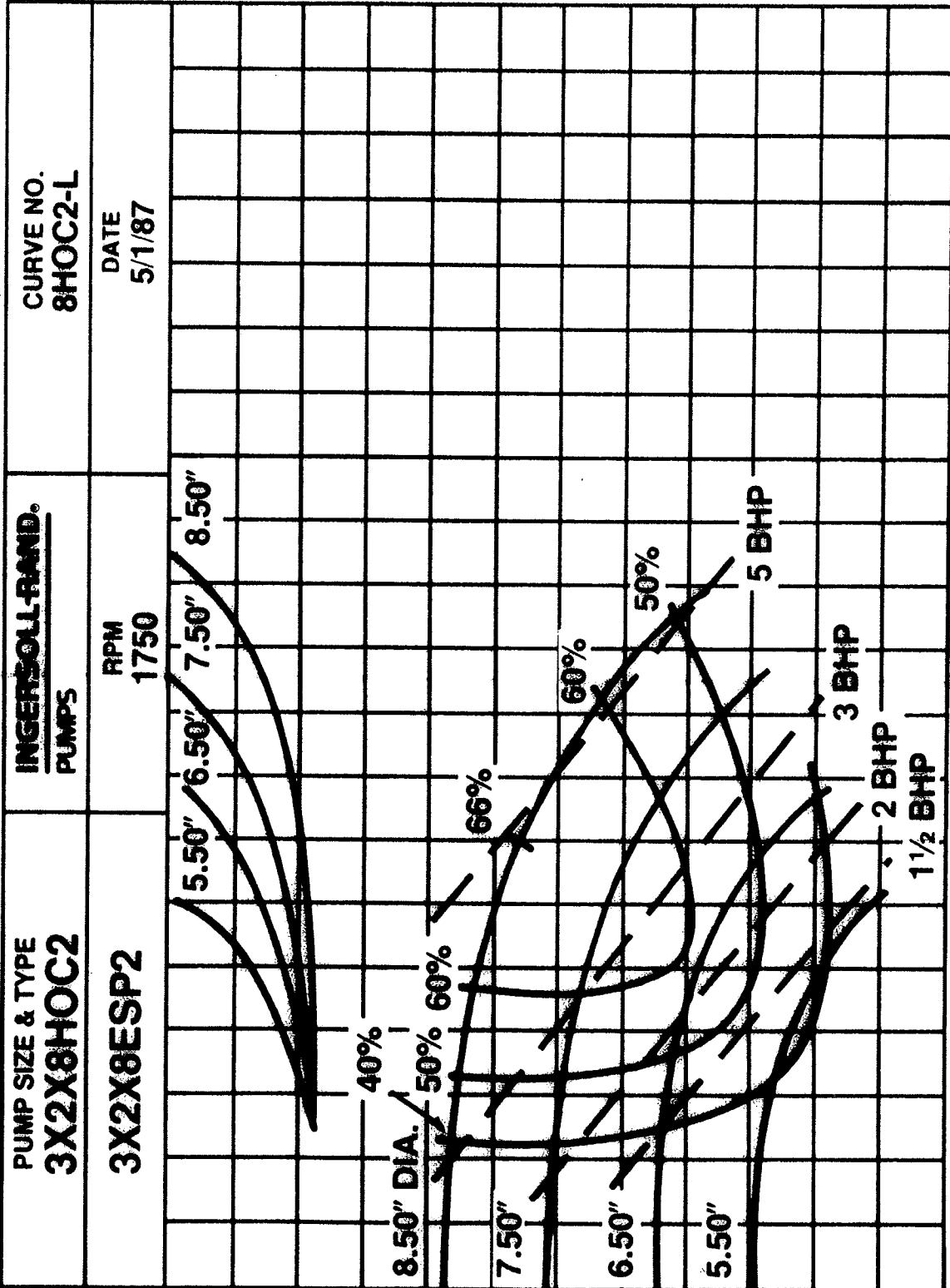
0-0  
10-5  
20-10  
30-15  
40-20

U.S. GPM

CU. METERS/HR.

0 100 200 300 400 500 600 700 800 900 1000

CAPACITY



**METERS**  
**FEET**

**TOTAL HEAD**

**U.S. GPM**  
**CU. METERS/HR.**

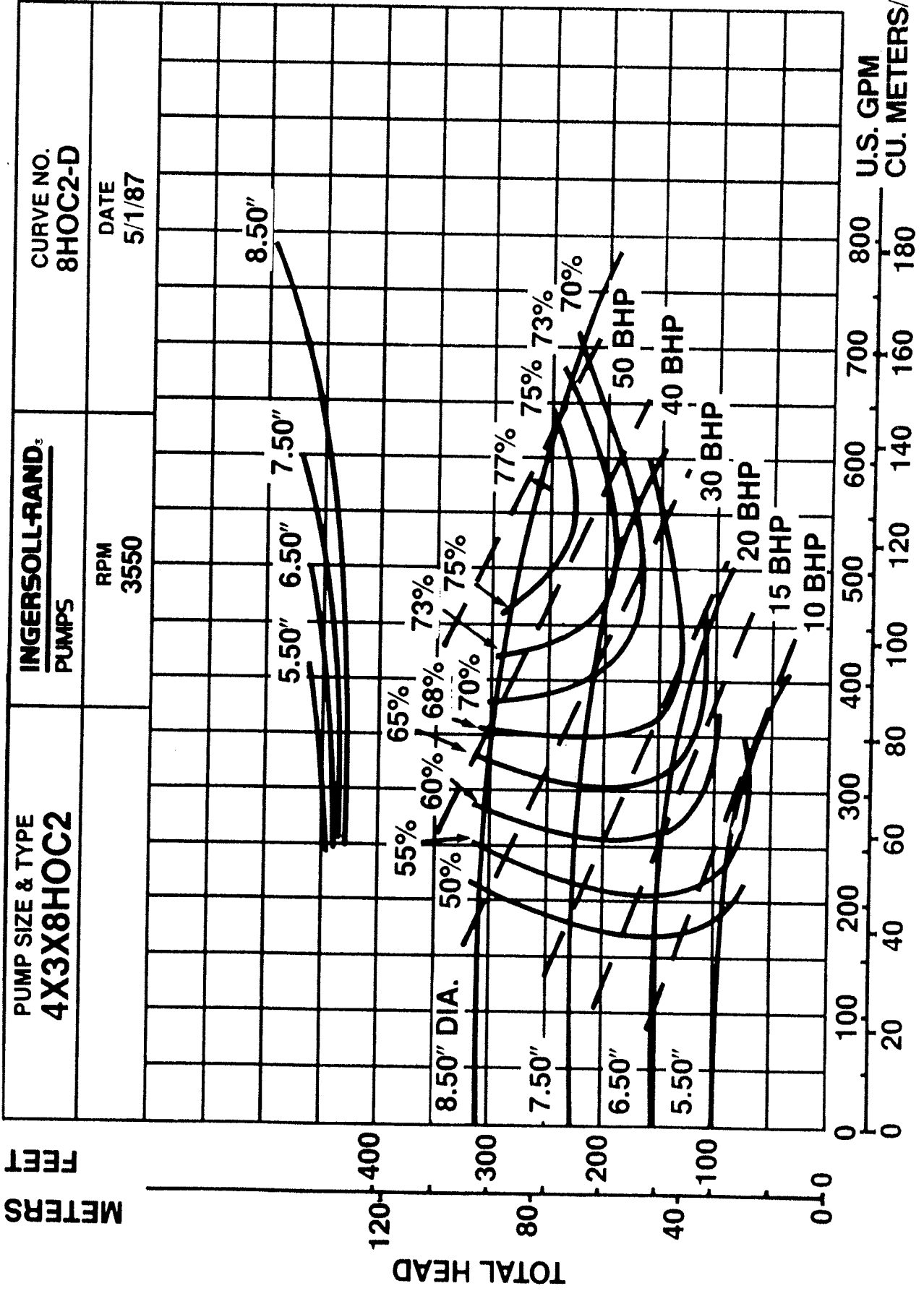
**CAPACITY**

**FEET**  
**METERS**

**15**  
**10**  
**5**  
**0-0**

**2.5**  
**0-0**

**NPSHR**



METERS  
FEET

PUMP SIZE & TYPE  
4X3X8HOC2

INGERSOLL-RAND  
PUMPS

RPM  
3550

CURVE NO.  
8HOC2-D

DATE  
5/1/87

FEET  
METERS

0-10  
25  
50  
NPSHR

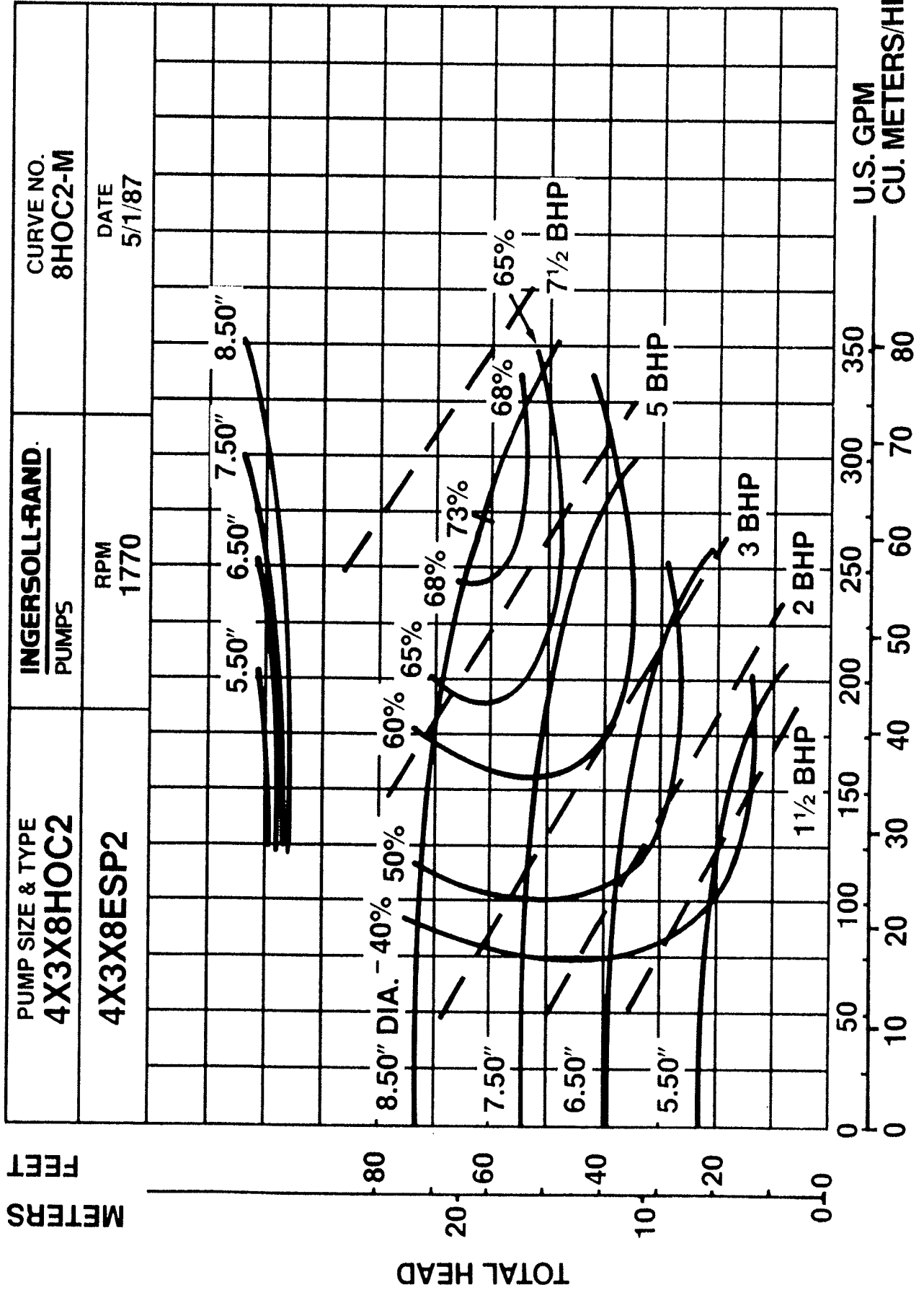
0  
40  
80  
120  
160  
200  
240  
280  
320  
360  
400

0  
20  
40  
60  
80  
100  
120  
140  
160  
180  
0  
20  
40  
60  
80  
100  
120  
140  
160  
180  
U.S. GPM  
CU. METERS/HR.

CAPACITY

TOTAL HEAD

NPSHR



PUMP SIZE & TYPE  
**4X3X8HOC2**

INGERSOLL-RAND.  
PUMPS

CURVE NO.  
**8HOC2-M**

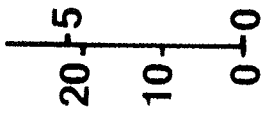
4X3X8ESP2

RPM  
**1770**

DATE  
**5/1/87**

METERS  
FEET

FEET  
METERS



NPSHR

U.S. GPM  
CU. METERS/HR.

CAPACITY



METERS  
FEET

PUMP SIZE & TYPE  
**4X3X8L HOC2**

**INGERSOLL-RAND**  
PUMPS

CURVE NO.  
**8HOC2-S1**

**4X3X8L ESP2**

RPM  
1750

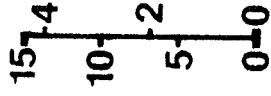
DATE  
1/18/91

TOTAL HEAD  
25-80  
20-70  
15-60  
10-50  
5-40  
0-30  
0-20  
0-10  
0-0

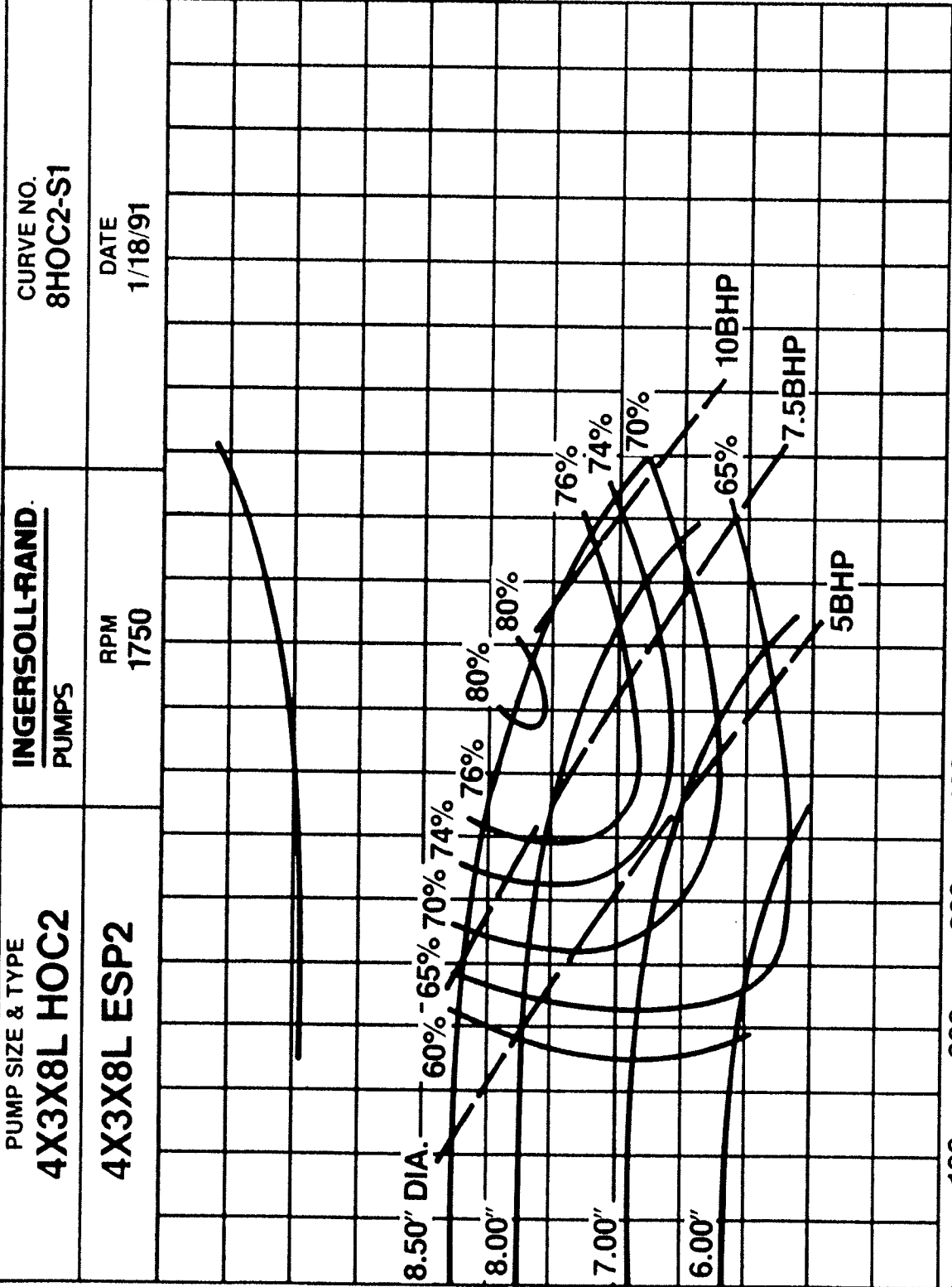
U.S. GPM  
CU. METERS/HR.  
0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420 440 460 480 500 520 540 560 580 600 620 640 660 680 700 720 740 760 780 800 820 840 860 880 900 920 940 960 980 1000 1020 1040 1060 1080 1100 1120 1140 1160 1180 1200 1220 1240 1260 1280 1300 1320 1340 1360 1380 1400 1420 1440 1460 1480 1500 1520 1540 1560 1580 1600 1620 1640 1660 1680 1700 1720 1740 1760 1780 1800 1820 1840 1860 1880 1900 1920 1940 1960 1980 2000 2020 2040 2060 2080 2100 2120 2140 2160 2180 2200 2220 2240 2260 2280 2300 2320 2340 2360 2380 2400 2420 2440 2460 2480 2500 2520 2540 2560 2580 2600 2620 2640 2660 2680 2700 2720 2740 2760 2780 2800 2820 2840 2860 2880 2900 2920 2940 2960 2980 3000 3020 3040 3060 3080 3100 3120 3140 3160 3180 3200 3220 3240 3260 3280 3300 3320 3340 3360 3380 3400 3420 3440 3460 3480 3500 3520 3540 3560 3580 3600 3620 3640 3660 3680 3700 3720 3740 3760 3780 3800 3820 3840 3860 3880 3900 3920 3940 3960 3980 4000 4020 4040 4060 4080 4100 4120 4140 4160 4180 4200 4220 4240 4260 4280 4300 4320 4340 4360 4380 4400 4420 4440 4460 4480 4500 4520 4540 4560 4580 4600 4620 4640 4660 4680 4700 4720 4740 4760 4780 4800 4820 4840 4860 4880 4900 4920 4940 4960 4980 5000 5020 5040 5060 5080 5100 5120 5140 5160 5180 5200 5220 5240 5260 5280 5300 5320 5340 5360 5380 5400 5420 5440 5460 5480 5500 5520 5540 5560 5580 5600 5620 5640 5660 5680 5700 5720 5740 5760 5780 5800 5820 5840 5860 5880 5900 5920 5940 5960 5980 6000 6020 6040 6060 6080 6100 6120 6140 6160 6180 6200 6220 6240 6260 6280 6300 6320 6340 6360 6380 6400 6420 6440 6460 6480 6500 6520 6540 6560 6580 6600 6620 6640 6660 6680 6700 6720 6740 6760 6780 6800 6820 6840 6860 6880 6900 6920 6940 6960 6980 7000 7020 7040 7060 7080 7100 7120 7140 7160 7180 7200 7220 7240 7260 7280 7300 7320 7340 7360 7380 7400 7420 7440 7460 7480 7500 7520 7540 7560 7580 7600 7620 7640 7660 7680 7700 7720 7740 7760 7780 7800 7820 7840 7860 7880 7900 7920 7940 7960 7980 8000 8020 8040 8060 8080 8100 8120 8140 8160 8180 8200 8220 8240 8260 8280 8300 8320 8340 8360 8380 8400 8420 8440 8460 8480 8500 8520 8540 8560 8580 8600 8620 8640 8660 8680 8700 8720 8740 8760 8780 8800 8820 8840 8860 8880 8900 8920 8940 8960 8980 9000 9020 9040 9060 9080 9100 9120 9140 9160 9180 9200 9220 9240 9260 9280 9300 9320 9340 9360 9380 9400 9420 9440 9460 9480 9500 9520 9540 9560 9580 9600 9620 9640 9660 9680 9700 9720 9740 9760 9780 9800 9820 9840 9860 9880 9900 9920 9940 9960 9980 10000

CAPACITY

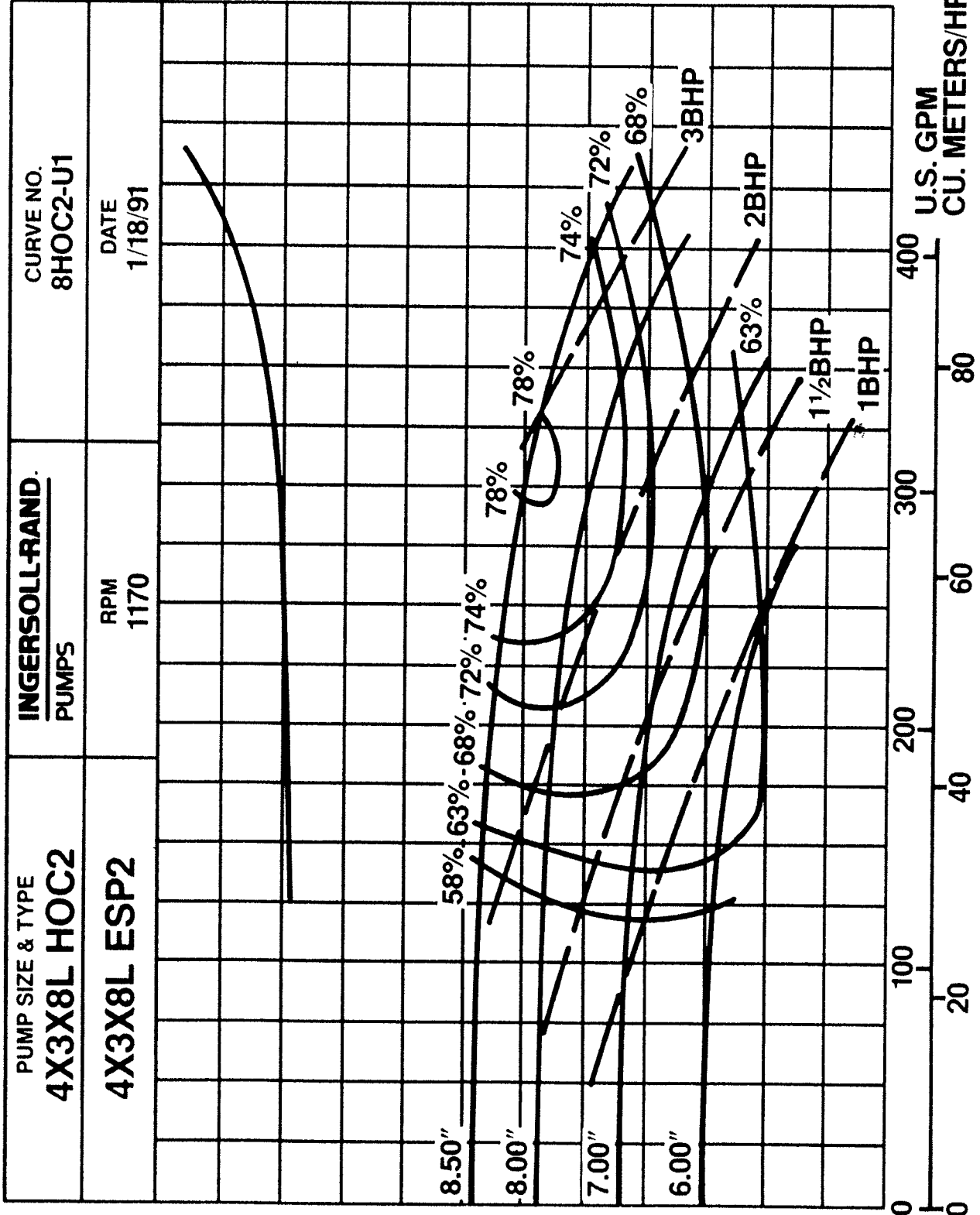
FEET  
METERS



NPSHR



METERS  
FEET



PUMP SIZE & TYPE  
**4X3X8L HOC2**

INGERSOLL-RAND.  
PUMPS

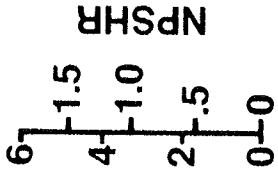
CURVE NO.  
**8HOC2-U1**

DATE  
**1/18/91**

RPM  
**1170**

PUMP SIZE & TYPE  
**4X3X8L ESP2**

FEET  
METERS



NPSHR

TOTAL HEAD

CAPACITY

U.S. GPM  
CU. METERS/HR.

METERS  
FEET

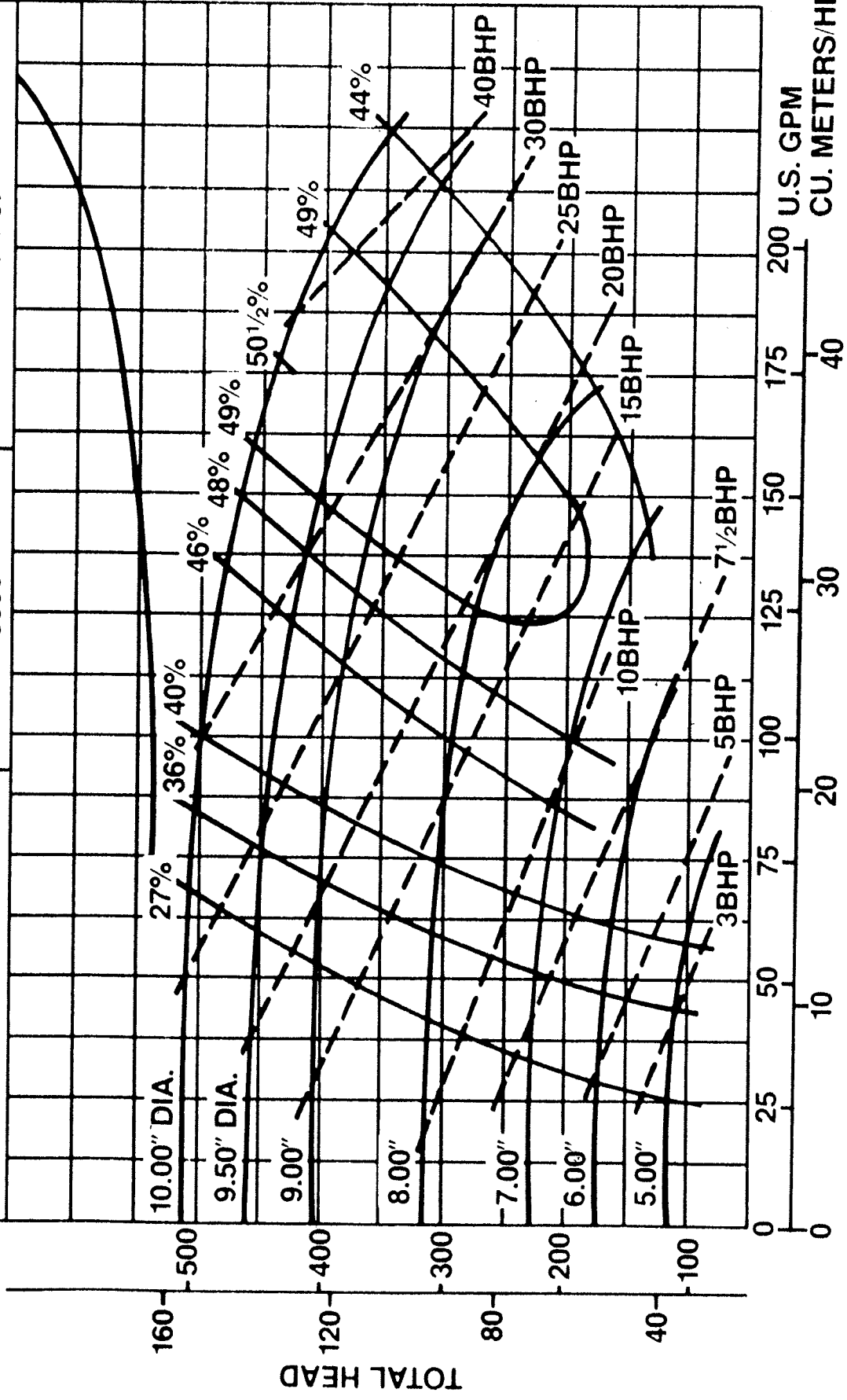
PUMP SIZE & TYPE  
**2X1X10HOC2**

**INGERSOLL-RAND**  
PUMPS

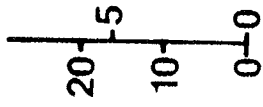
CURVE NO.  
**10HOC2-A1**

RPM  
**3550**

DATE  
**5/1/87**

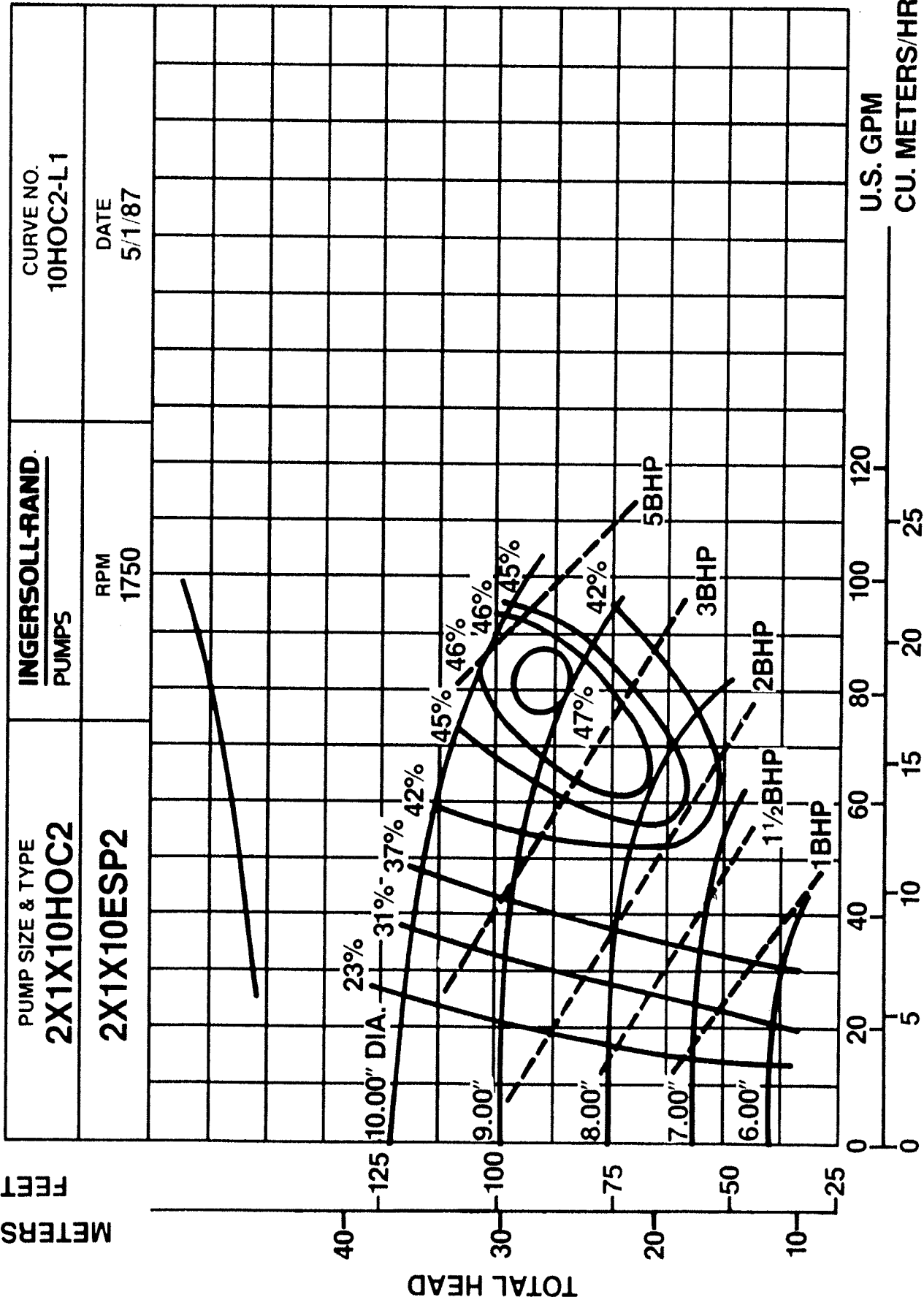


FEET  
METERS

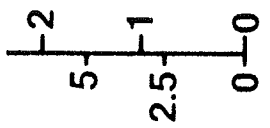


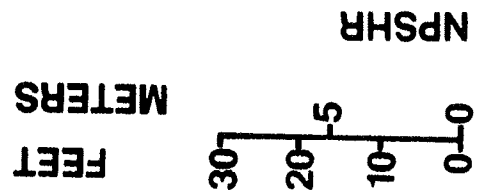
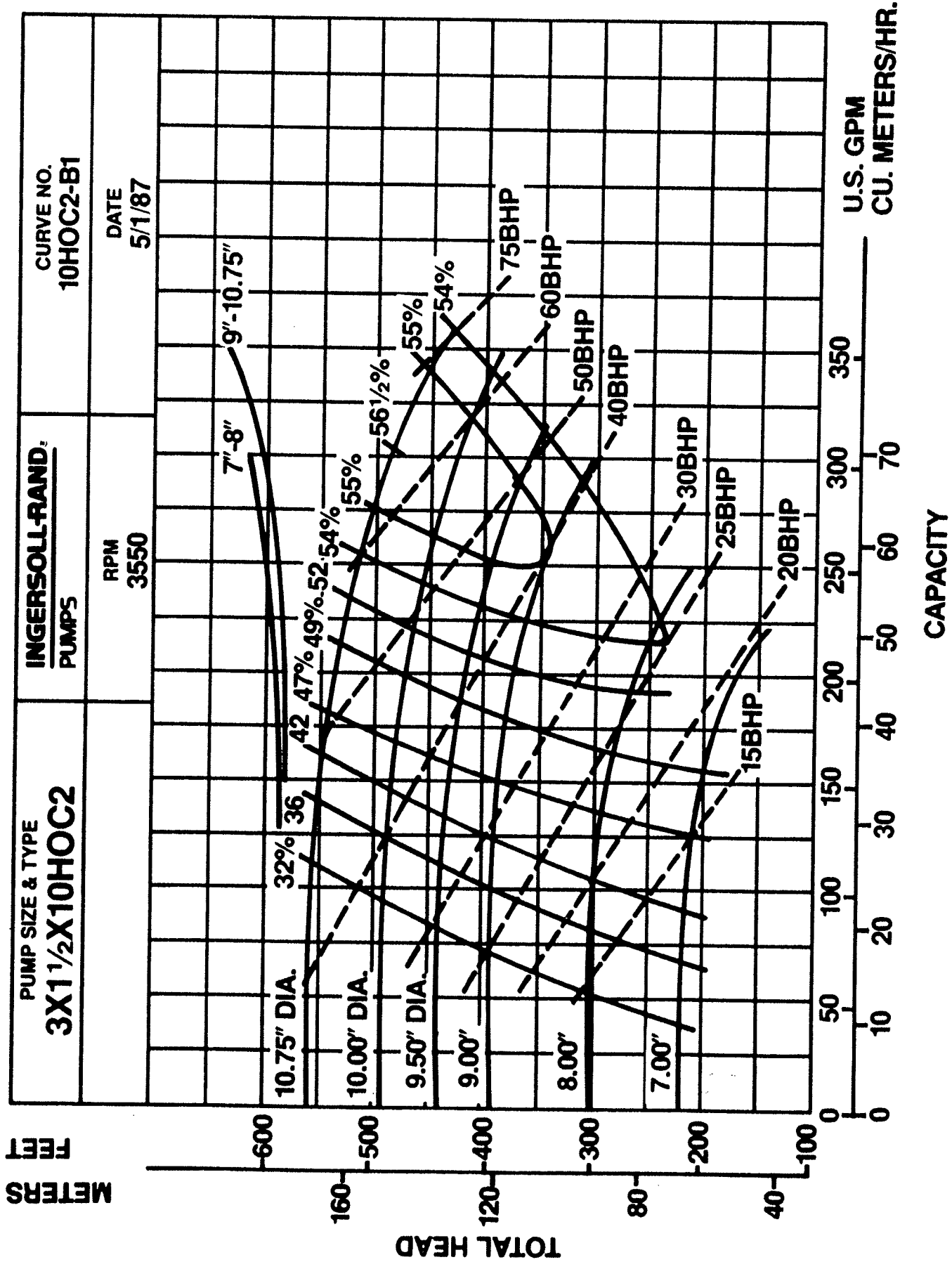
NPSHR

CAPACITY

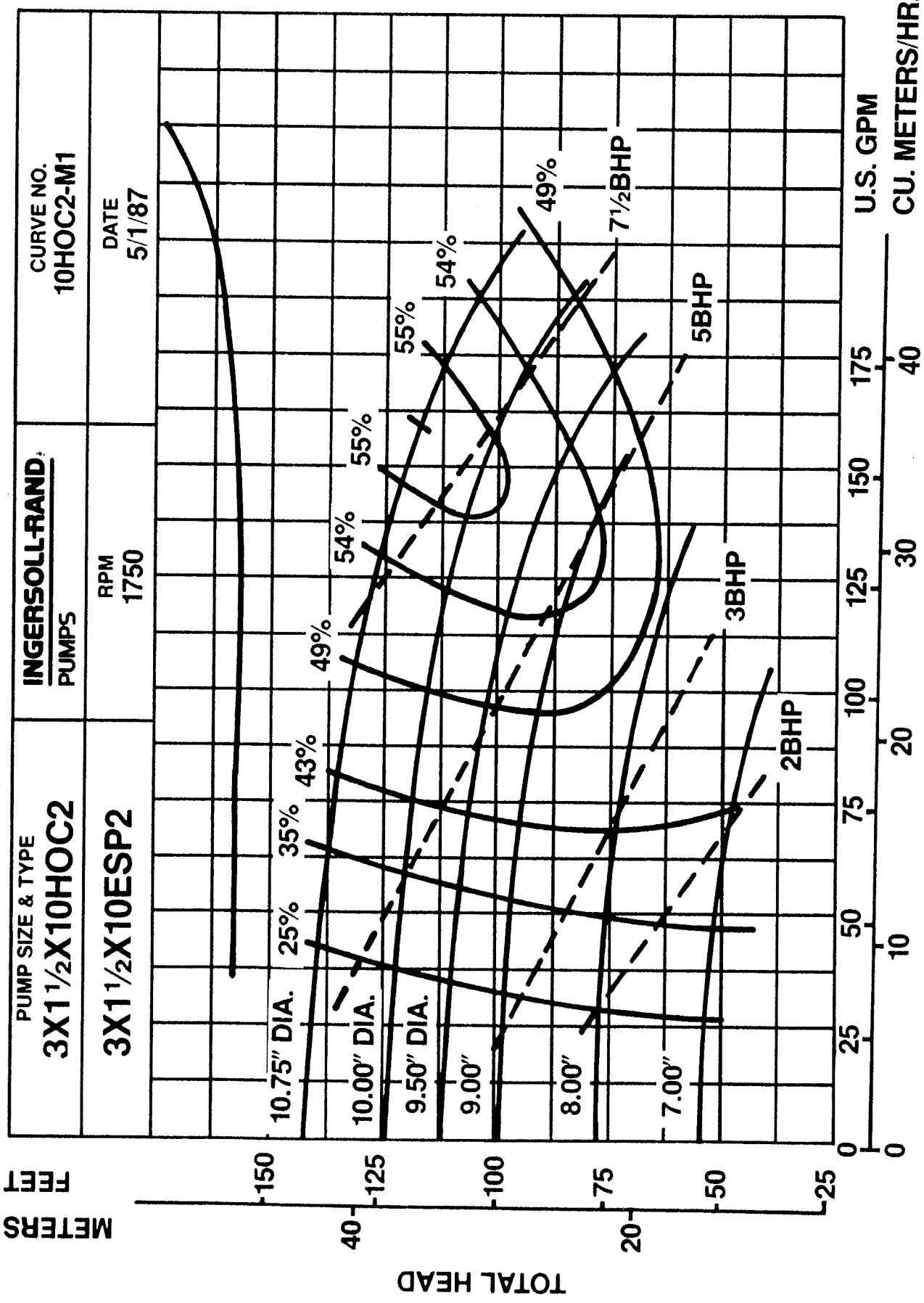


FEET  
METERS

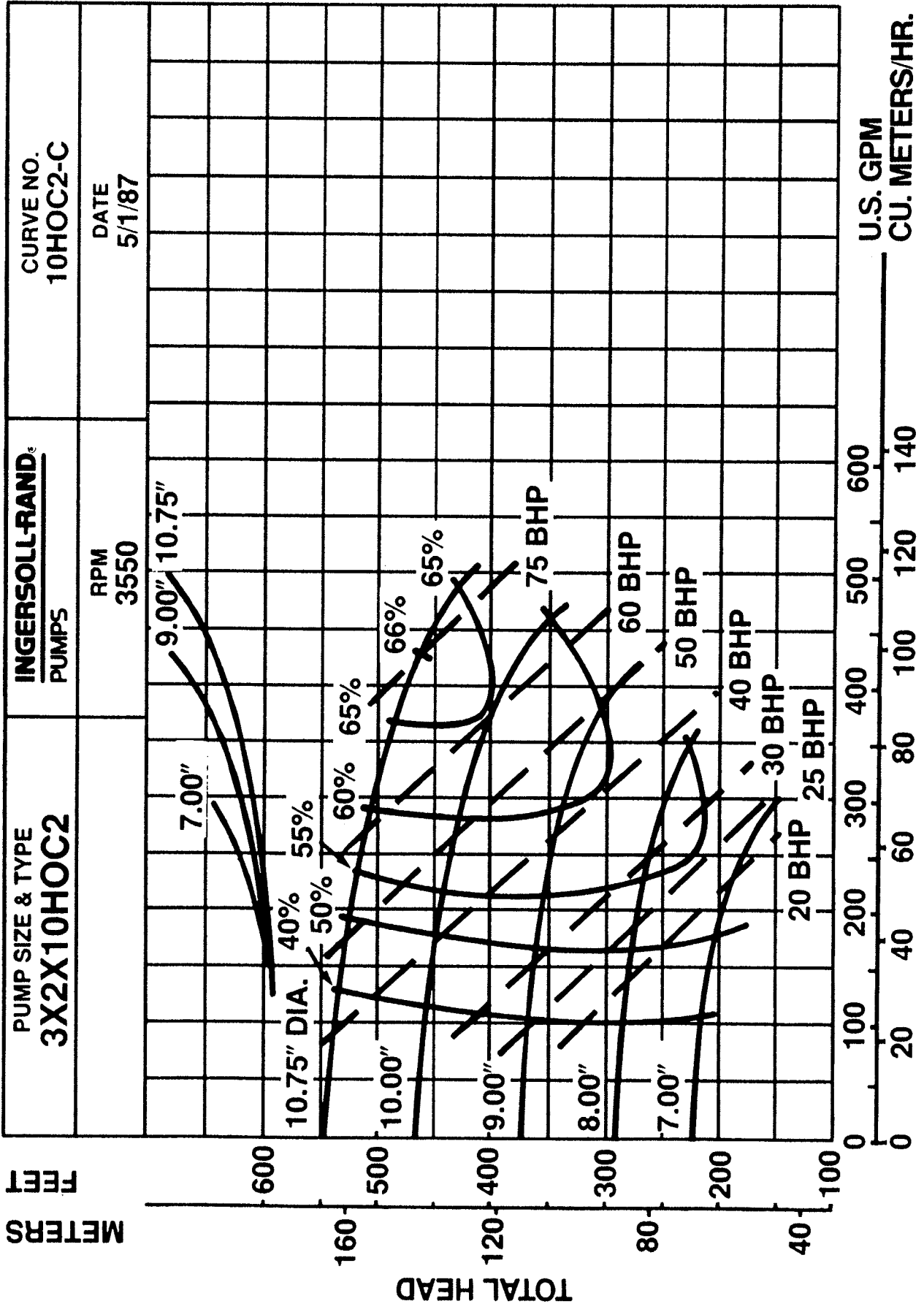




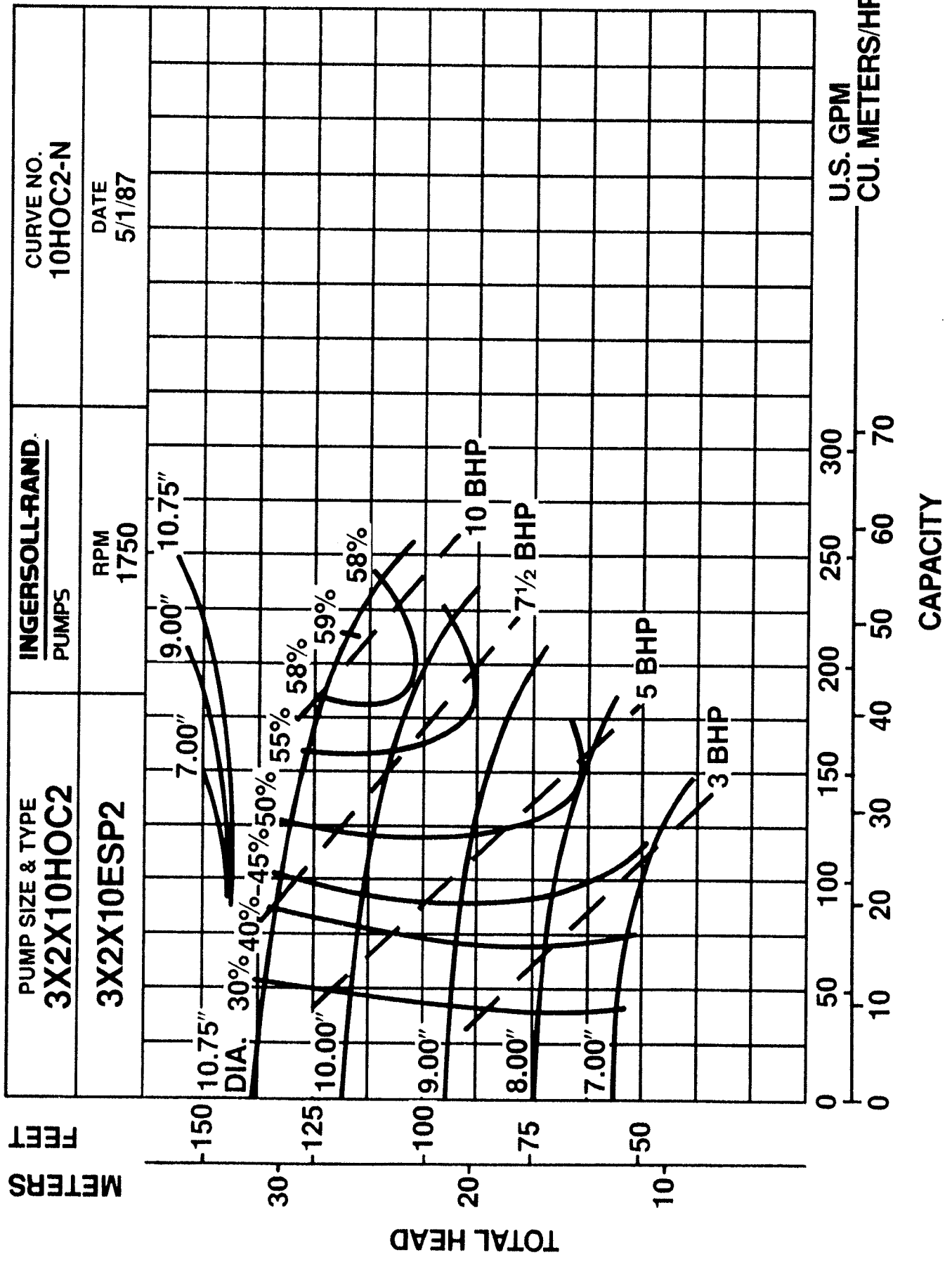
NPSHR



METERS  
 FEET  
 NPSHR  
 2.5  
 0-10



METERS  
 FEET  
 NPSHR  
 0-0  
 10  
 20  
 30  
 5



**FEET**  
10  
5  
0

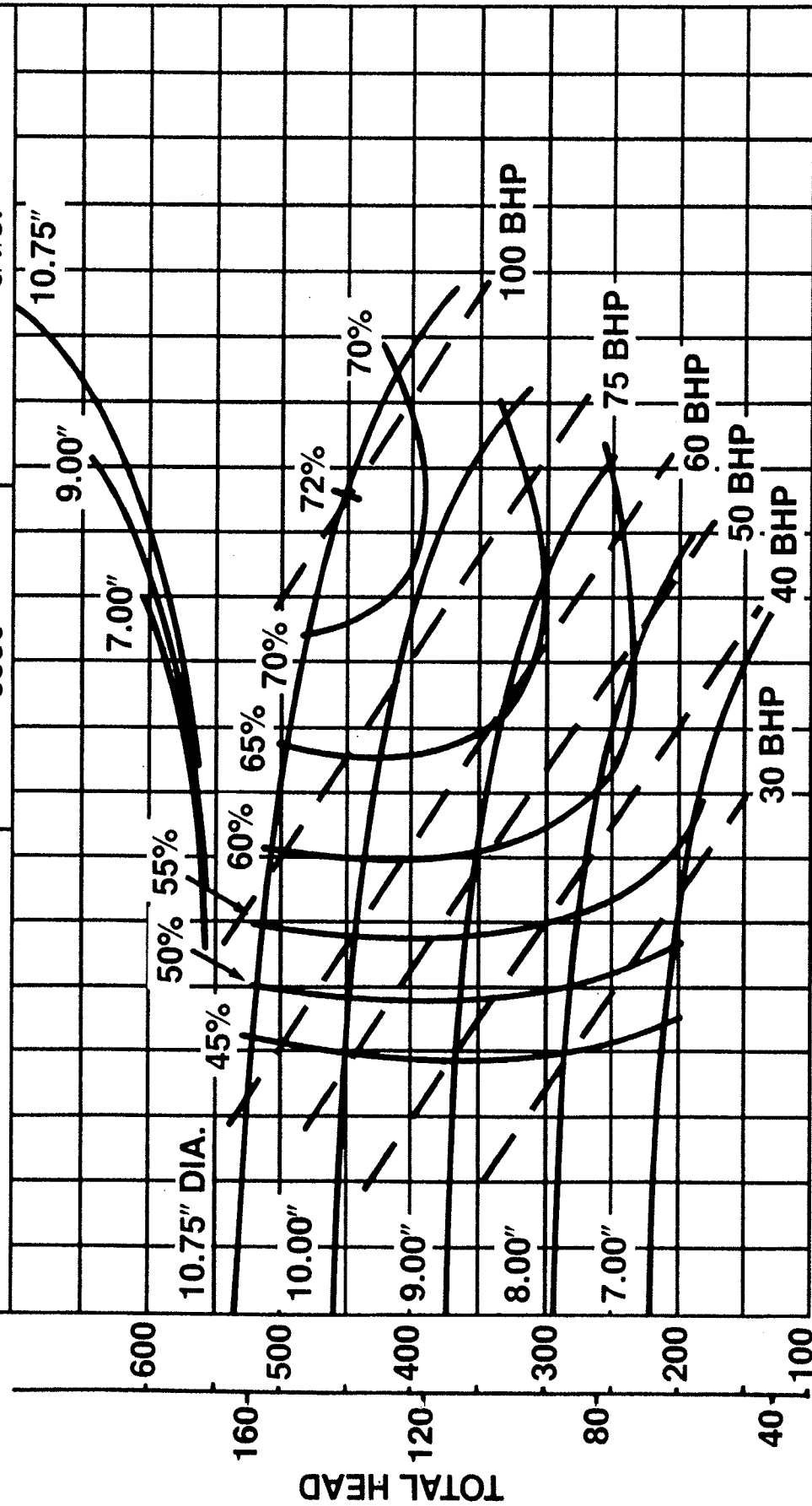
**METERS**  
3  
2.5  
0

**NPSHR**



|                                       |                          |                              |
|---------------------------------------|--------------------------|------------------------------|
| PUMP SIZE & TYPE<br><b>4X3X10HOC2</b> | INGERSOLL-RAND.<br>PUMPS | CURVE NO.<br><b>10HOC2-D</b> |
|                                       | RPM<br><b>3550</b>       | DATE<br><b>5/1/87</b>        |

METERS  
FEET

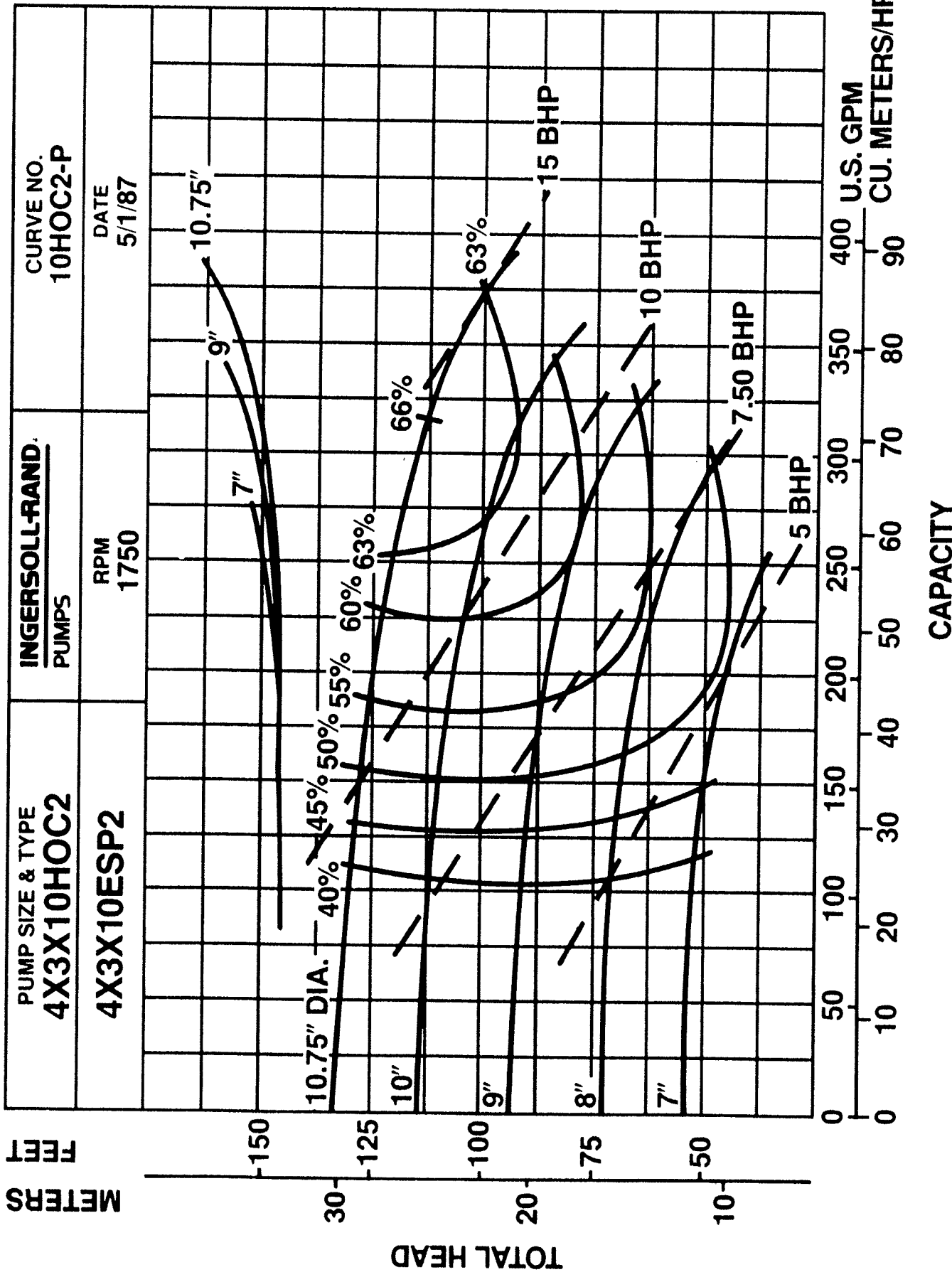


TOTAL HEAD

0 100 200 300 400 500 600 700 800 U.S. GPM  
0 20 40 60 80 100 120 140 160 180 CU. METERS/HR.  
CAPACITY

FEET  
METERS

0 10 20 30 40  
0 5 10 20 30 40  
NPSHR



METERS  
FEET

FEET  
METERS

15  
10  
5  
0-0  
NPSHR

METERS  
FEET

PUMP SIZE & TYPE  
**4X3X10L HOC2**

**INGERSOLL-RAND**  
PUMPS

CURVE NO.  
**10HOC2-X1**

**4X3X10L ESP2**

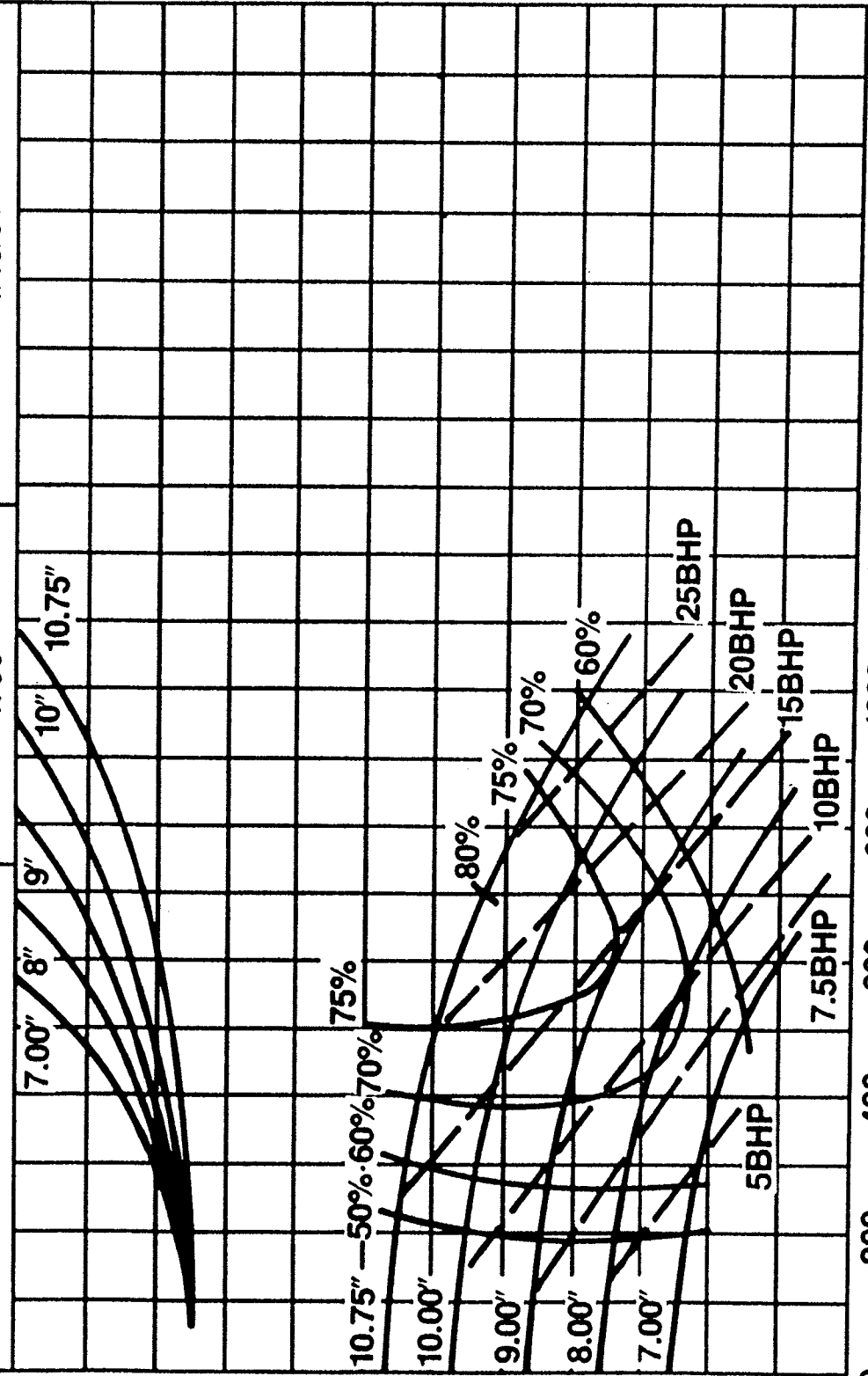
RPM  
**1750**

DATE  
**1/18/91**

FEET  
METERS

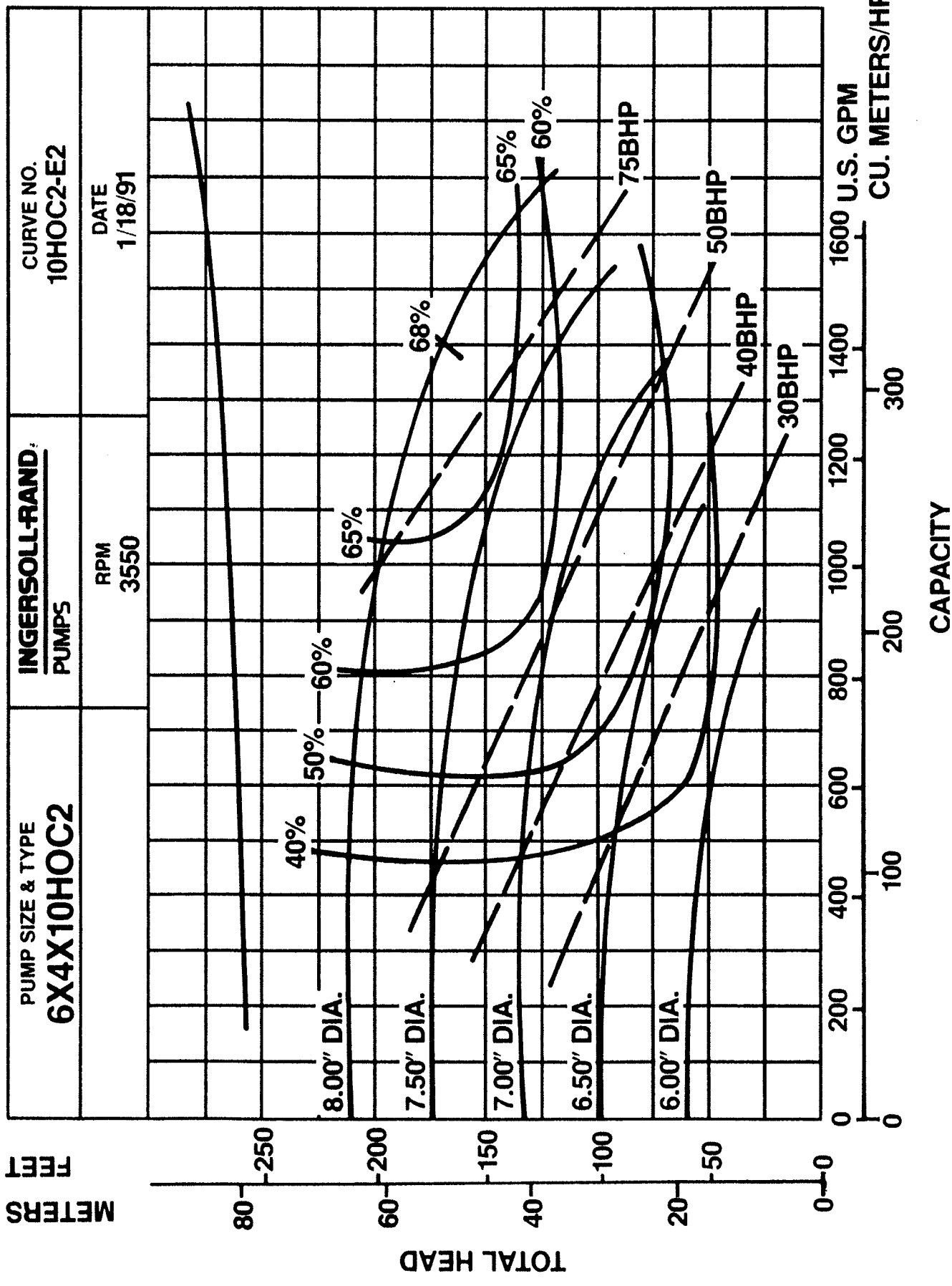
30-9  
20-6  
10-3  
0-0

NPSHR

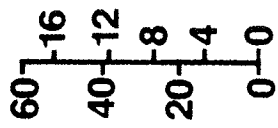


U.S. GPM  
CU. METERS/HR.

CAPACITY



METERS  
 FEET



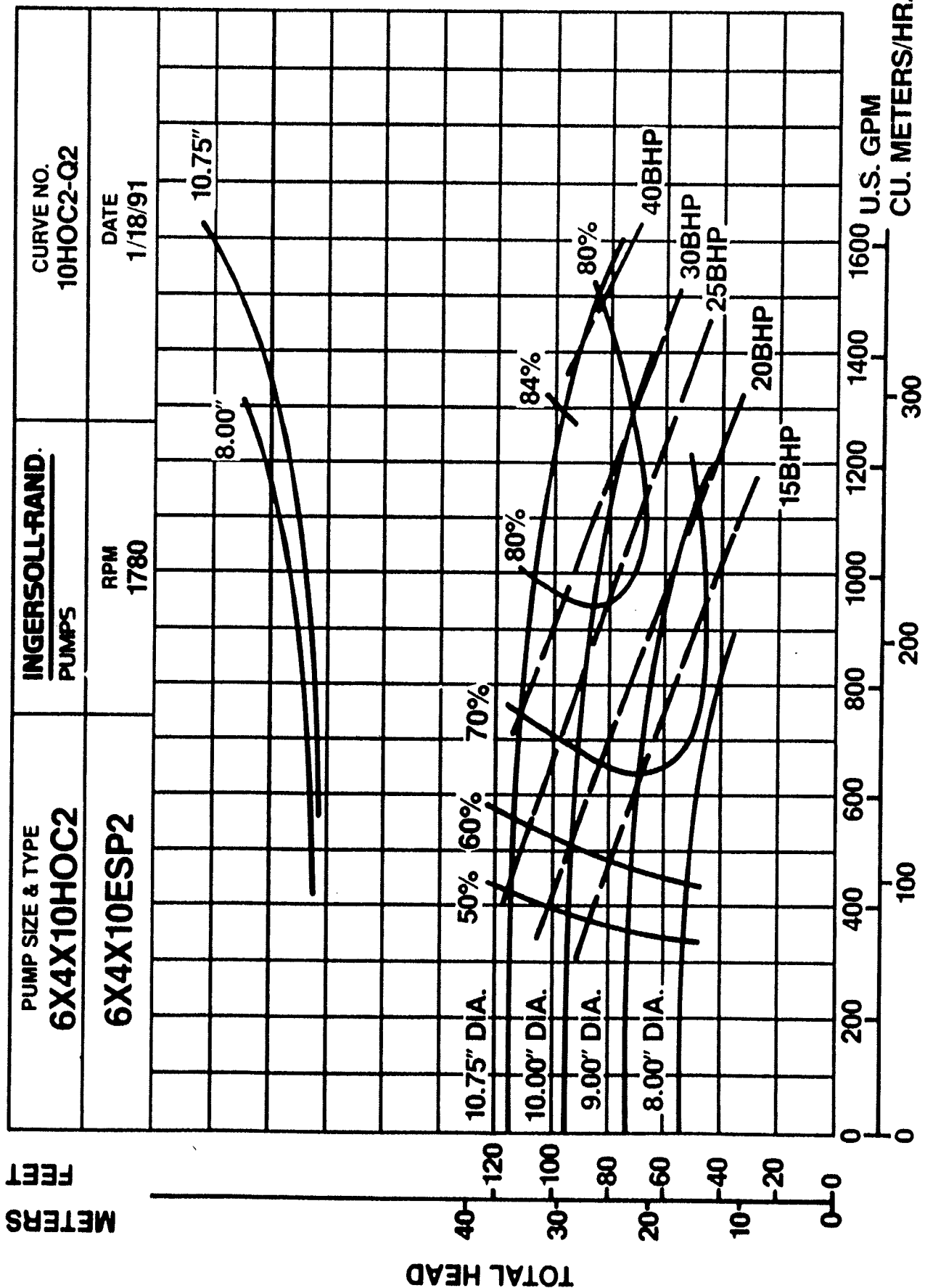
NPSHR

U.S. GPM  
 CU. METERS/HR.

CAPACITY

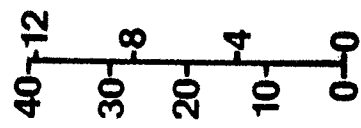
METERS  
 FEET

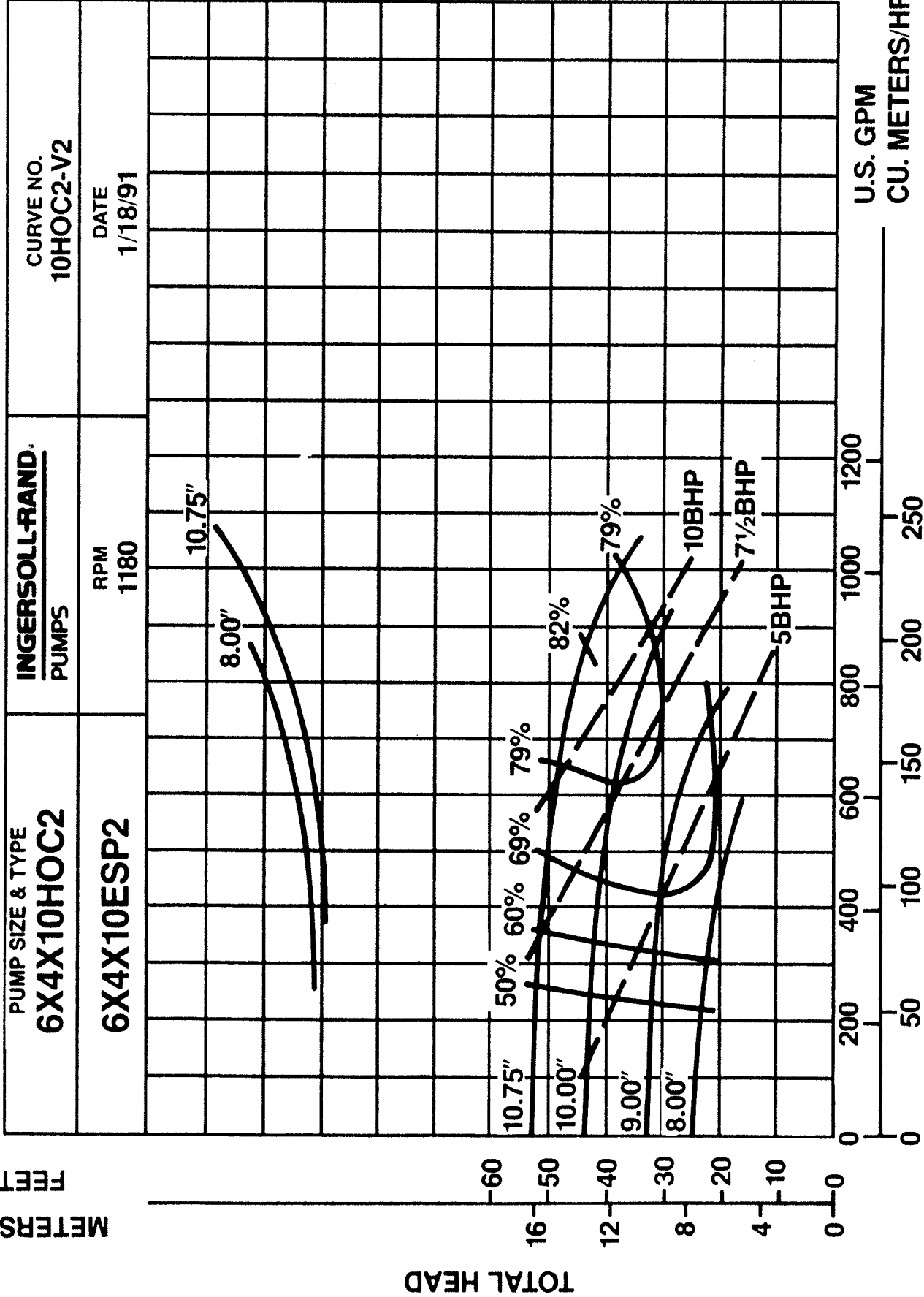
TOTAL HEAD



METERS  
FEET

METERS  
FEET





METERS

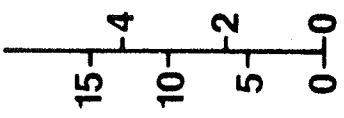
FEET

TOTAL HEAD

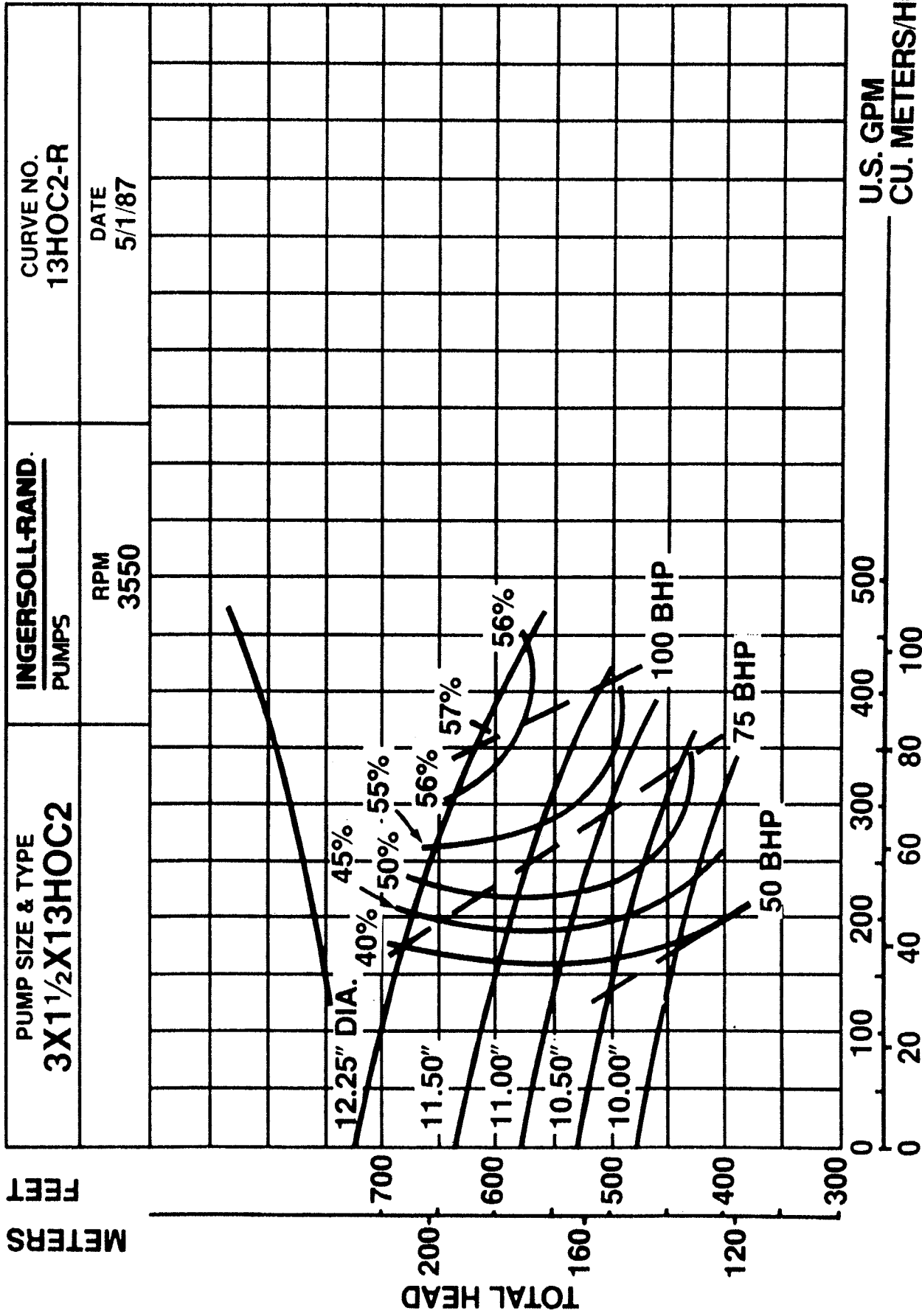
U.S. GPM  
CU. METERS/HR.

CAPACITY

FEET  
METERS



NPSHR

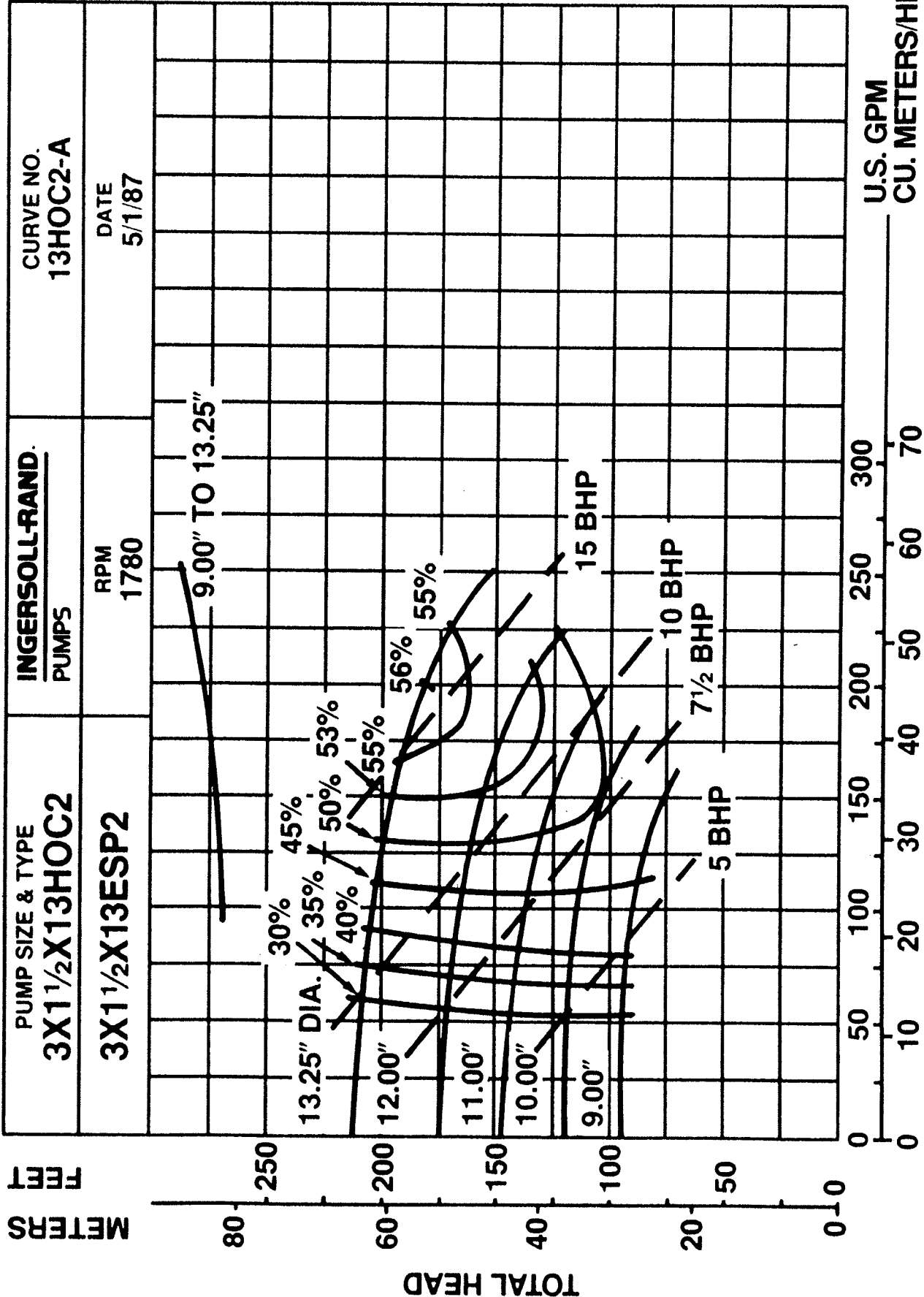


FEET  
METERS

NPSHR  
20  
10  
0-0

CAPACITY

U.S. GPM  
CU. METERS/HR.



METERS  
FEET

10  
5  
0

2.5  
0

NPSHR



**PUMP SIZE & TYPE**  
**3X2X13HOC2**

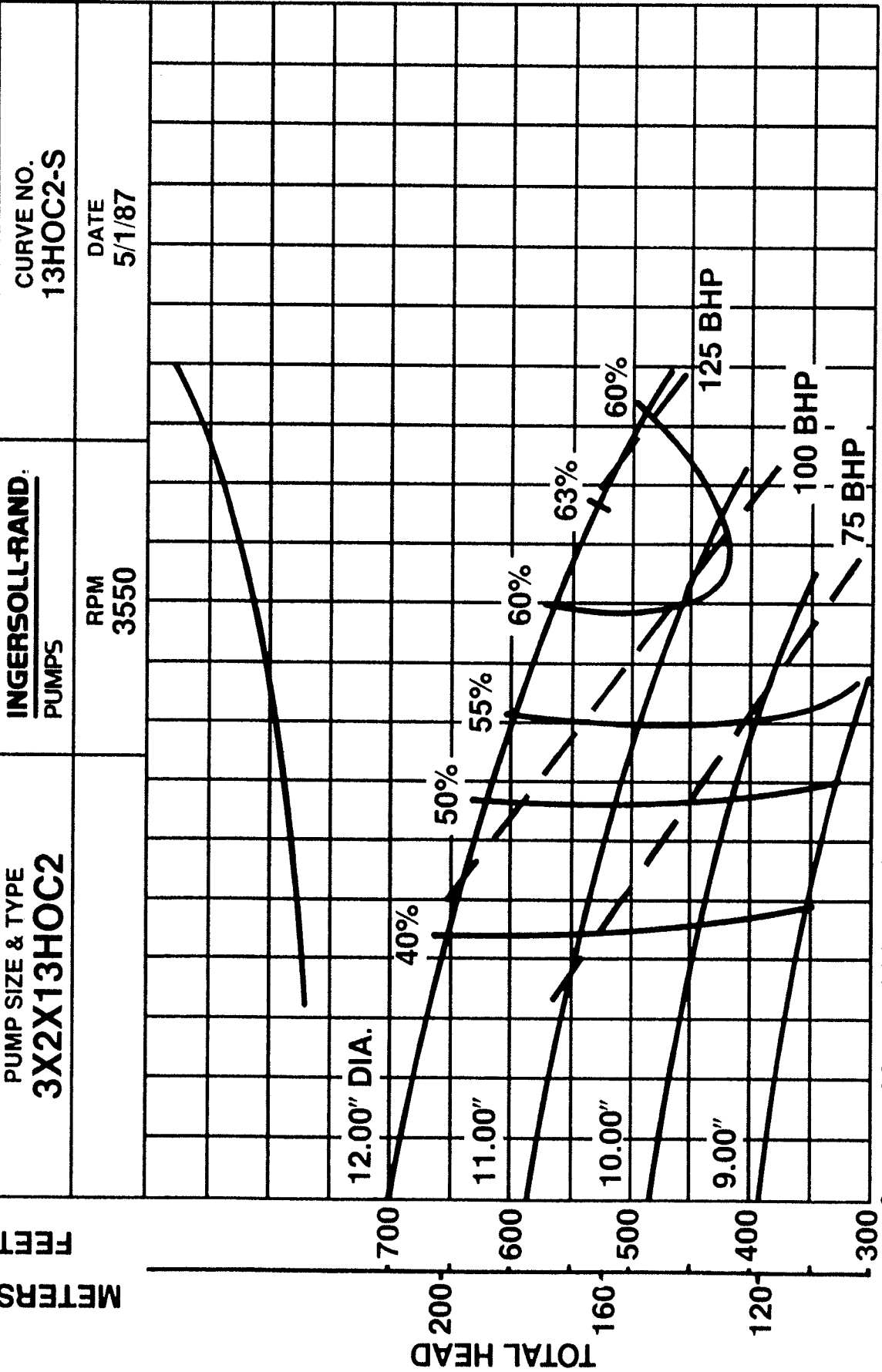
**CURVE NO.**  
**13HOC2-S**

**DATE**  
**5/1/87**

**INGERSOLL-RAND**  
**PUMPS**

**RPM**  
**3550**

**METERS**  
**FEET**



**40**  
**20**  
**0**

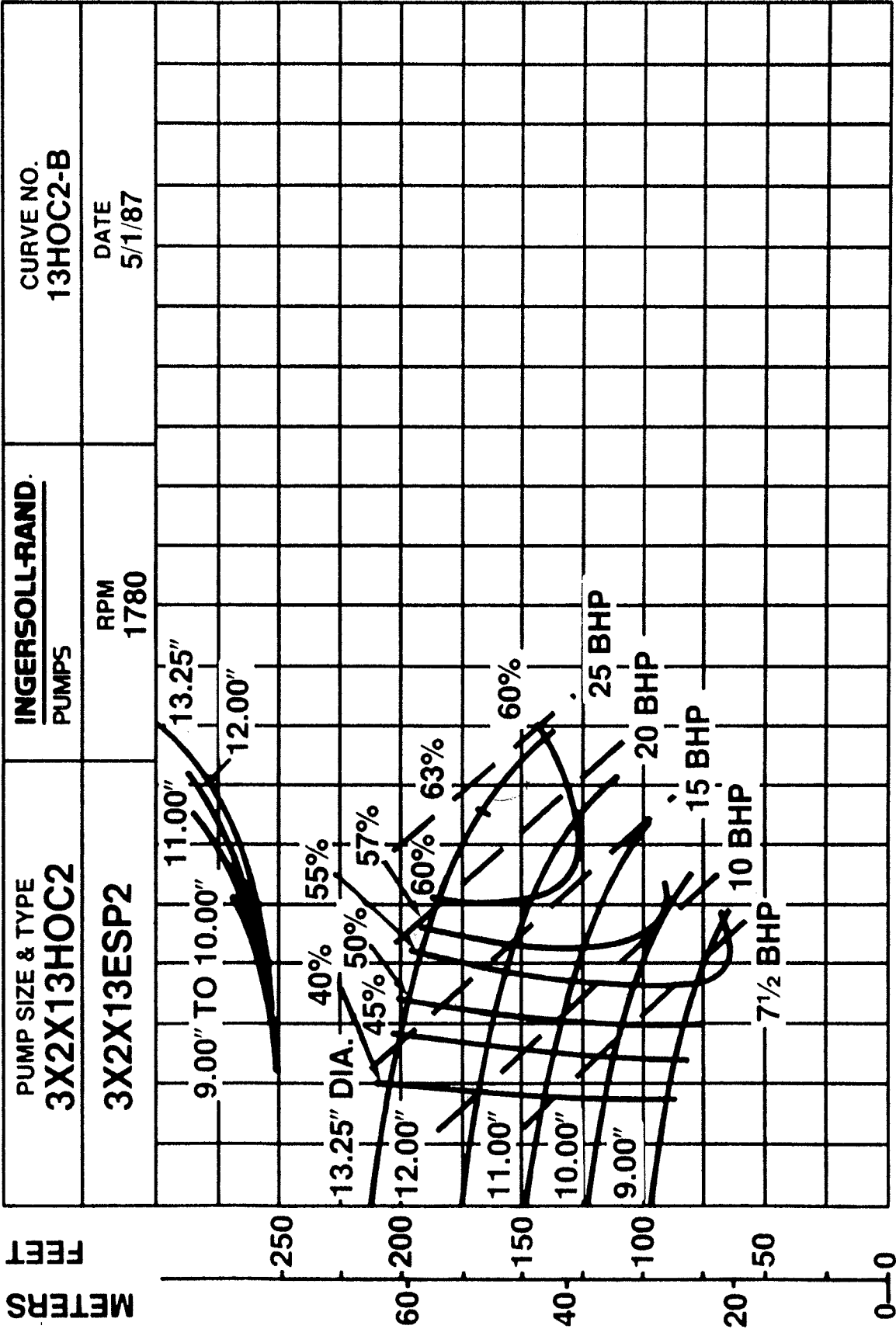
**10**  
**0**

**NPSHR**

**FEET**  
**METERS**

**U.S. GPM**  
**CU. METERS/HR.**

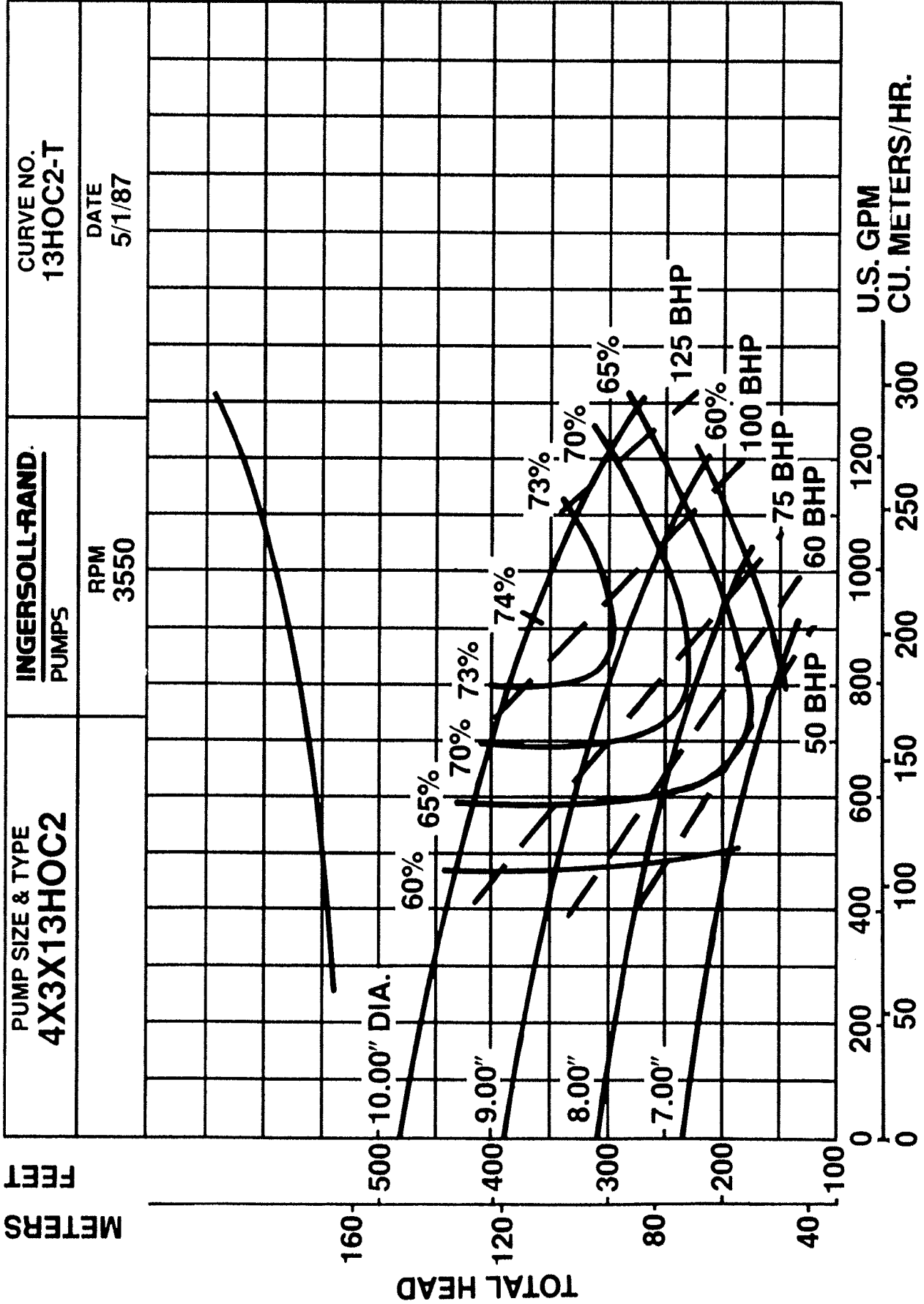
**CAPACITY**



**FEET**  
15  
10  
5  
0

**METERS**  
2.5  
0

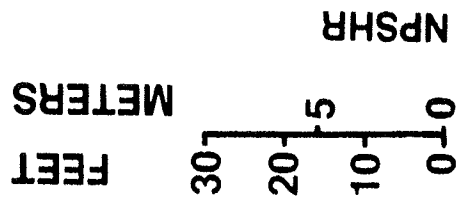
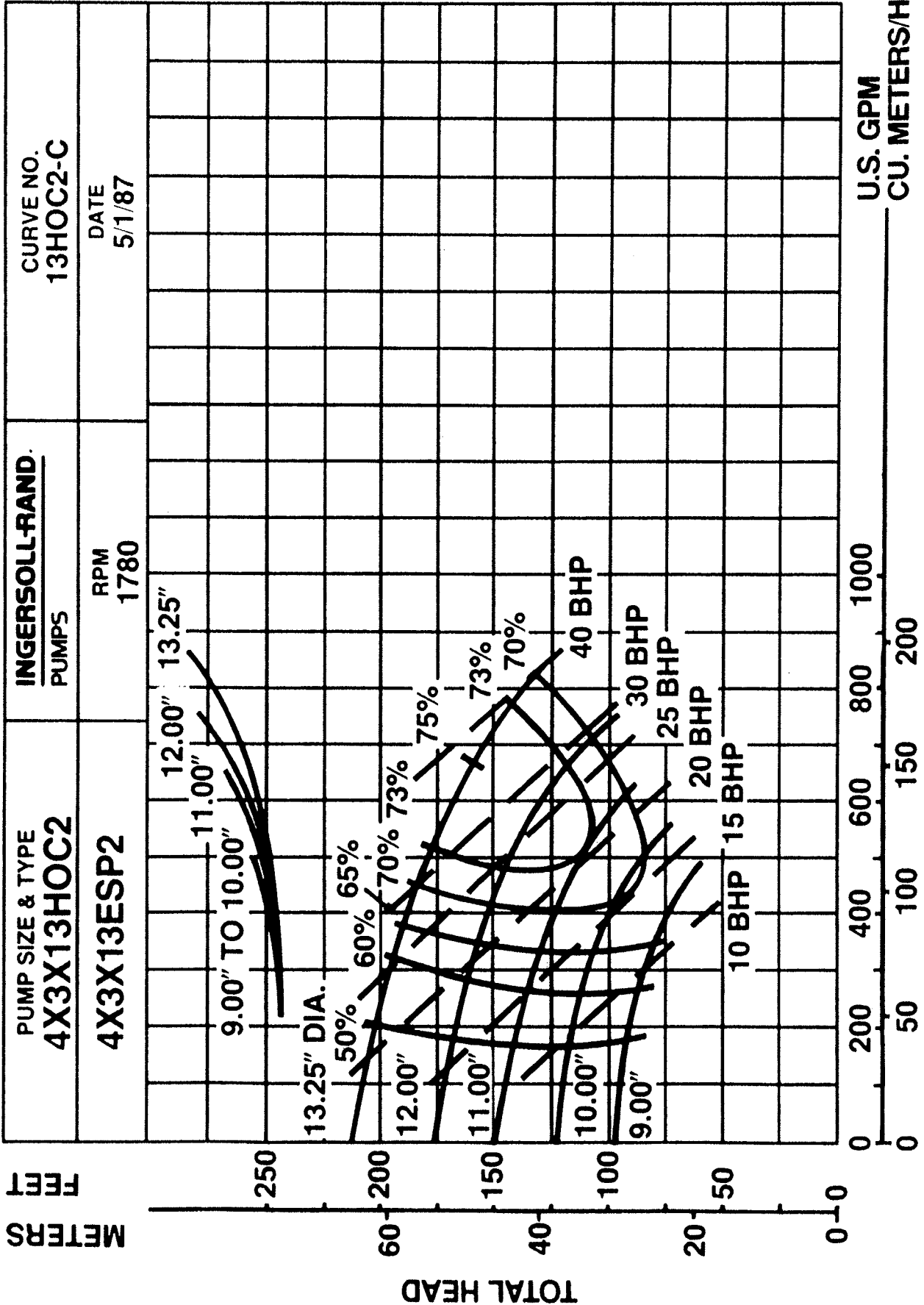
**NPSHR**

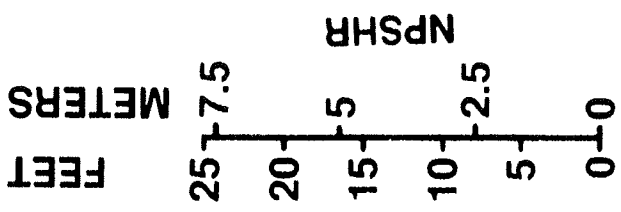
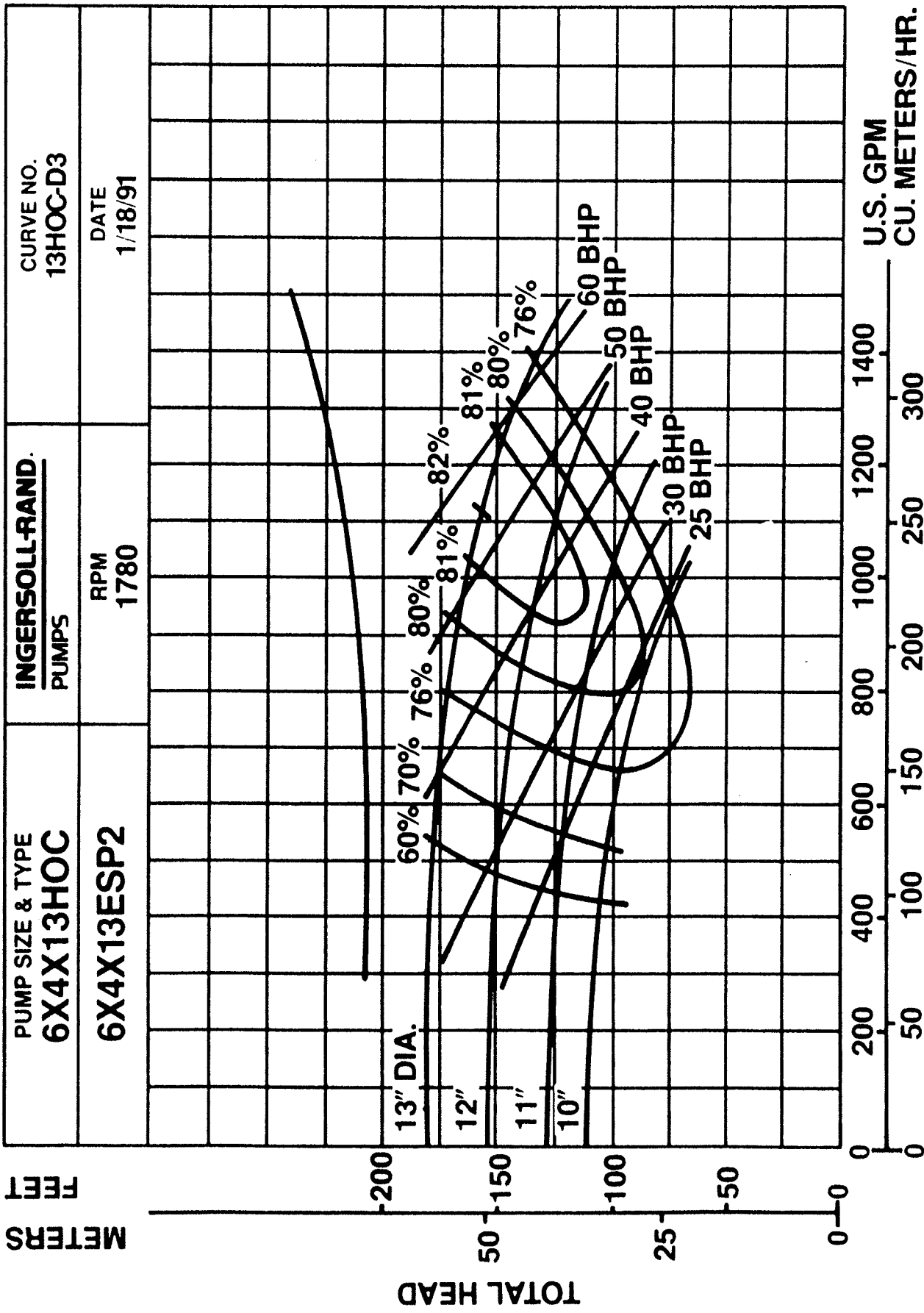


METERS  
 FEET  
 NPSHR  
 60  
 40  
 20  
 0-0-10

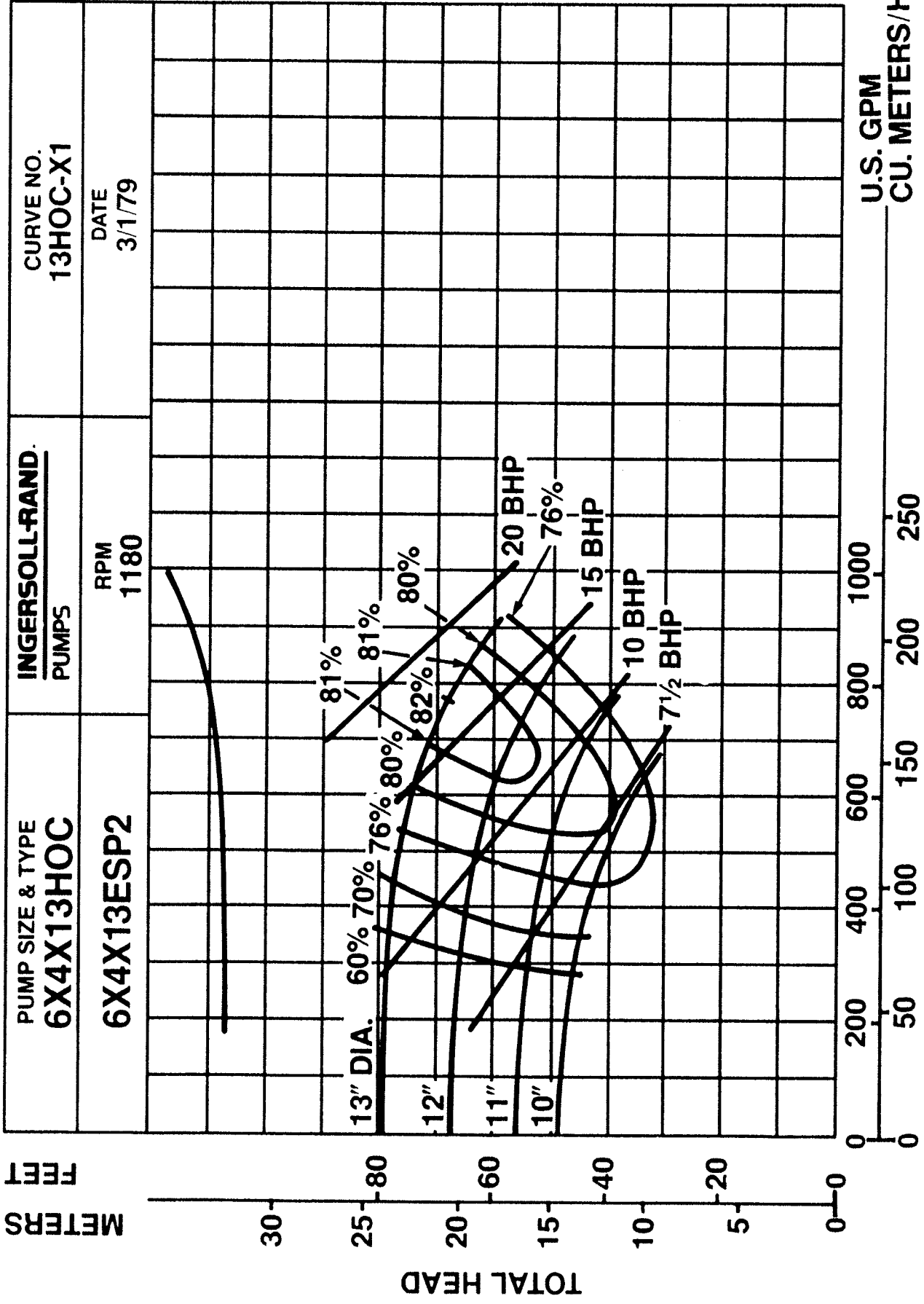
CAPACITY

U.S. GPM  
 CU. METERS/HR.





CAPACITY



METERS  
FEET

0-1.5  
0-2  
0-4  
0-6

NPSHR

METERS  
FEET

PUMP SIZE & TYPE  
**8X6X13HOC**

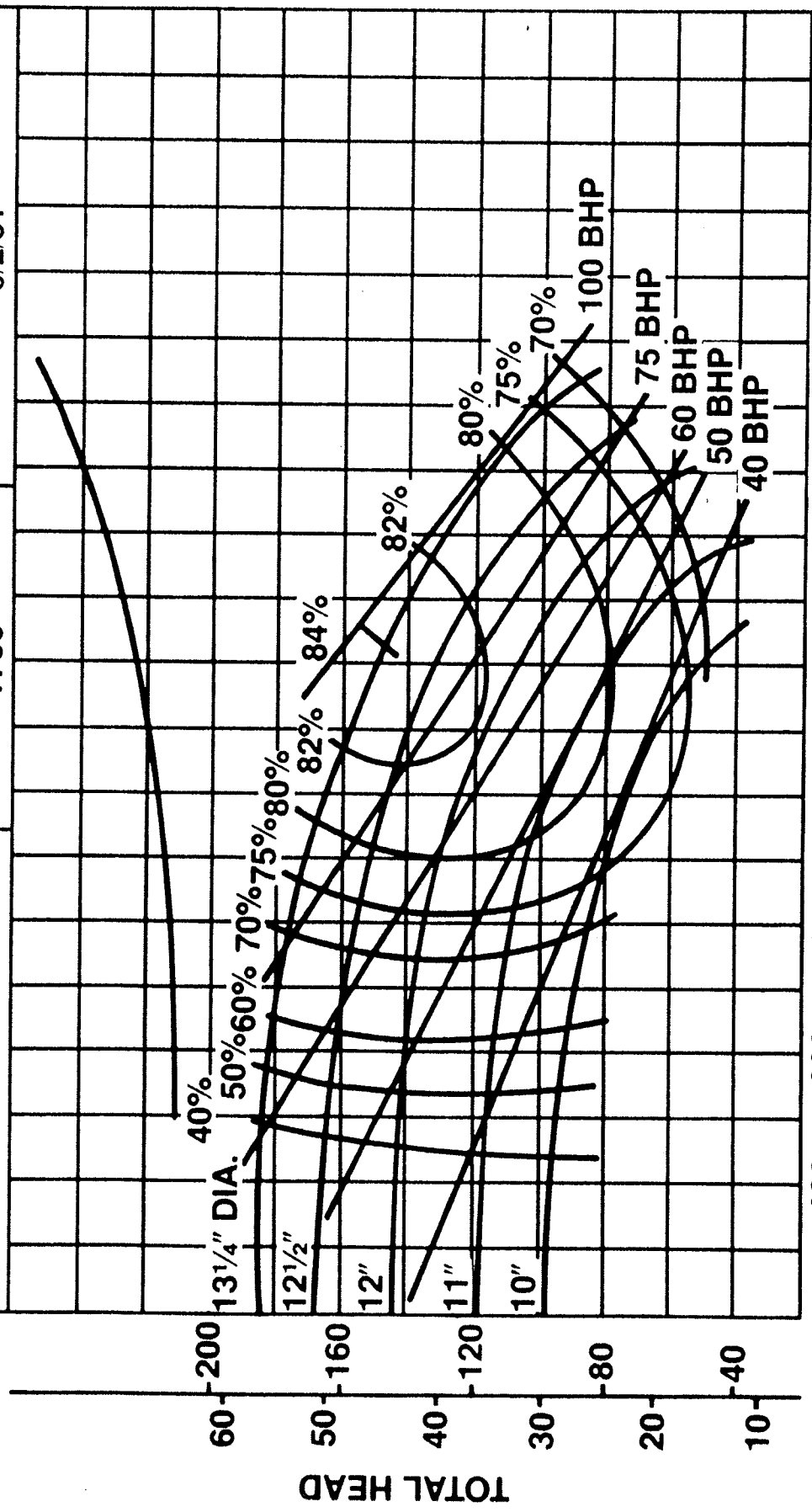
INGERSOLL-RAND.  
PUMPS

CURVE NO.  
**13HOC-E2**

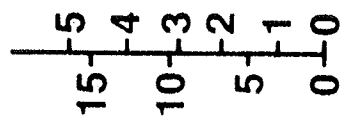
**8X6X13ESP2**

RPM  
**1780**

DATE  
**9/2/81**



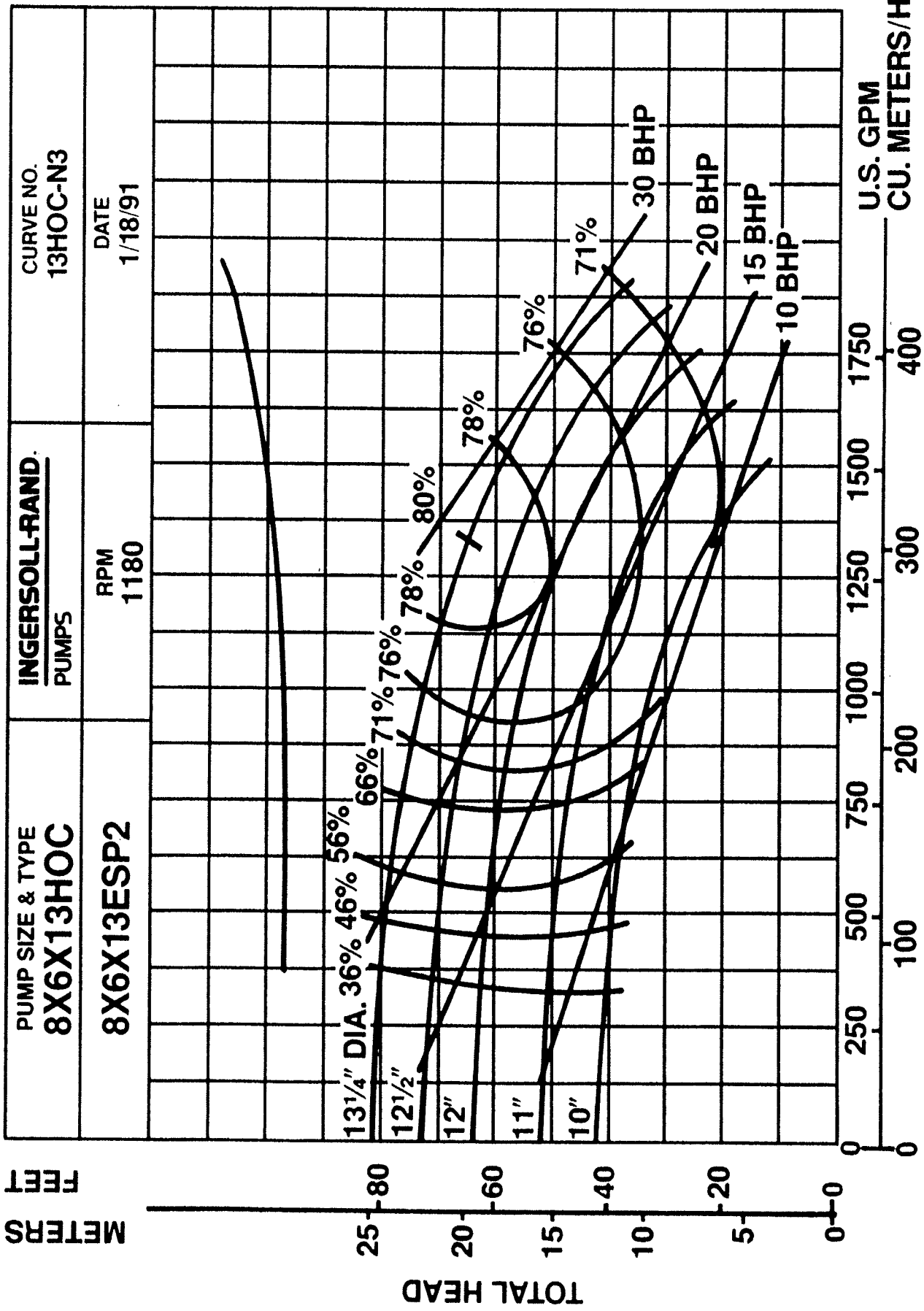
FEET  
METERS



NPSHR

U.S. GPM  
CU. METERS/HR.

CAPACITY



PUMP SIZE & TYPE  
**8X6X13HOC**

**INGERSOLL-RAND**  
PUMPS

CURVE NO.  
**13HOC-N3**

8X6X13ESP2

RPM  
**1180**

DATE  
**1/18/91**

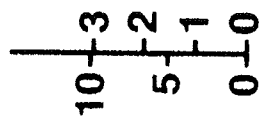
METERS  
FEET

TOTAL HEAD

U.S. GPM  
CU. METERS/HR.

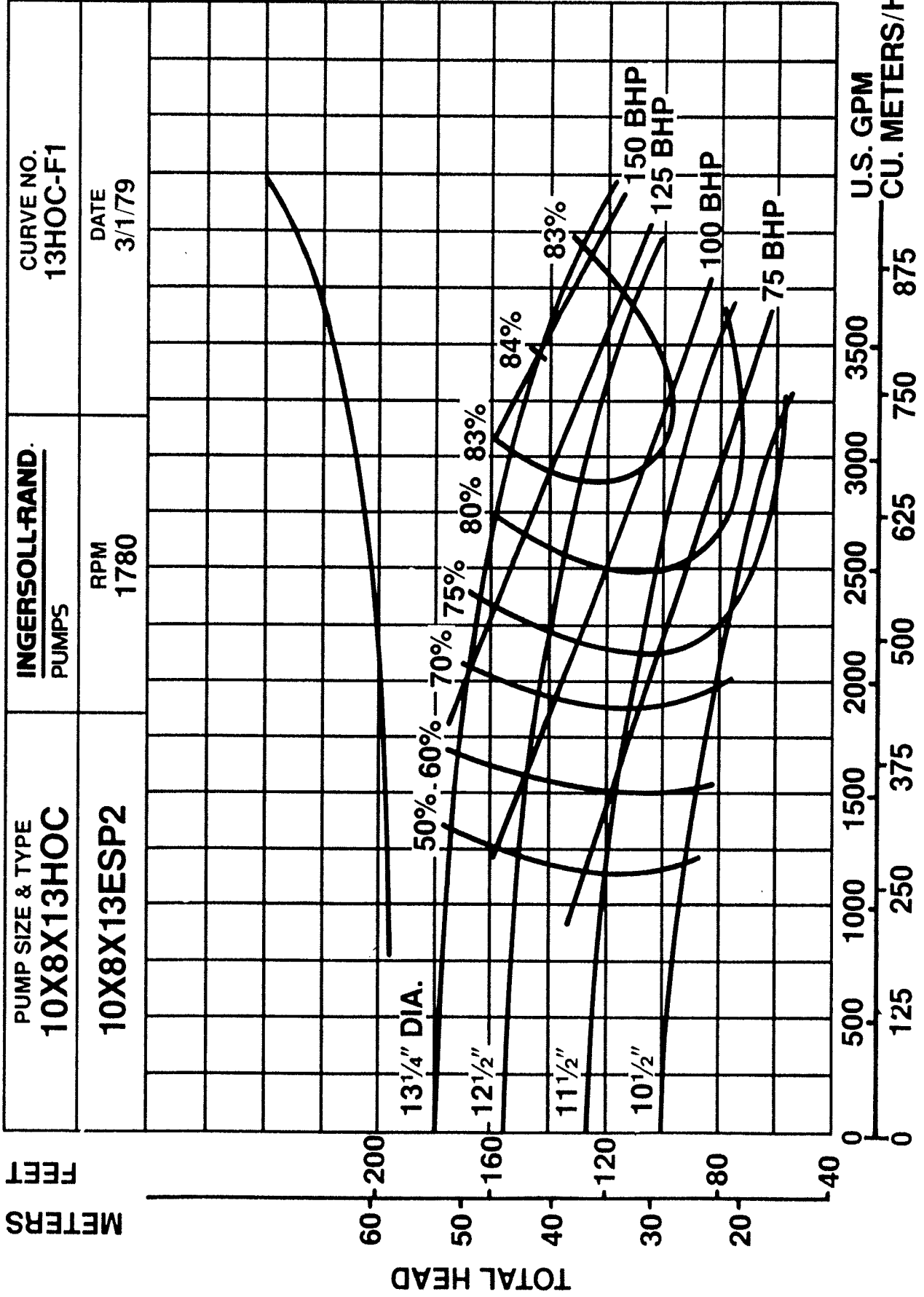
CAPACITY

FEET  
METERS



NPSHR





METERS  
FEET

METERS  
FEET

NPSHR

0 5 10 20 30 40

TOTAL HEAD

60 200  
50 160  
40 120  
30 80  
20 40

U.S. GPM  
CU. METERS/HR.

0 125 250 375 500 625 750 875

CAPACITY

PUMP SIZE & TYPE  
10X8X13HOC

INGERSOLL-RAND  
PUMPS

CURVE NO.  
13HOC-F1

DATE  
3/1/79

RPM  
1780

10X8X13ESP2

13 1/4" DIA.

12 1/2"

11 1/2"

10 1/2"

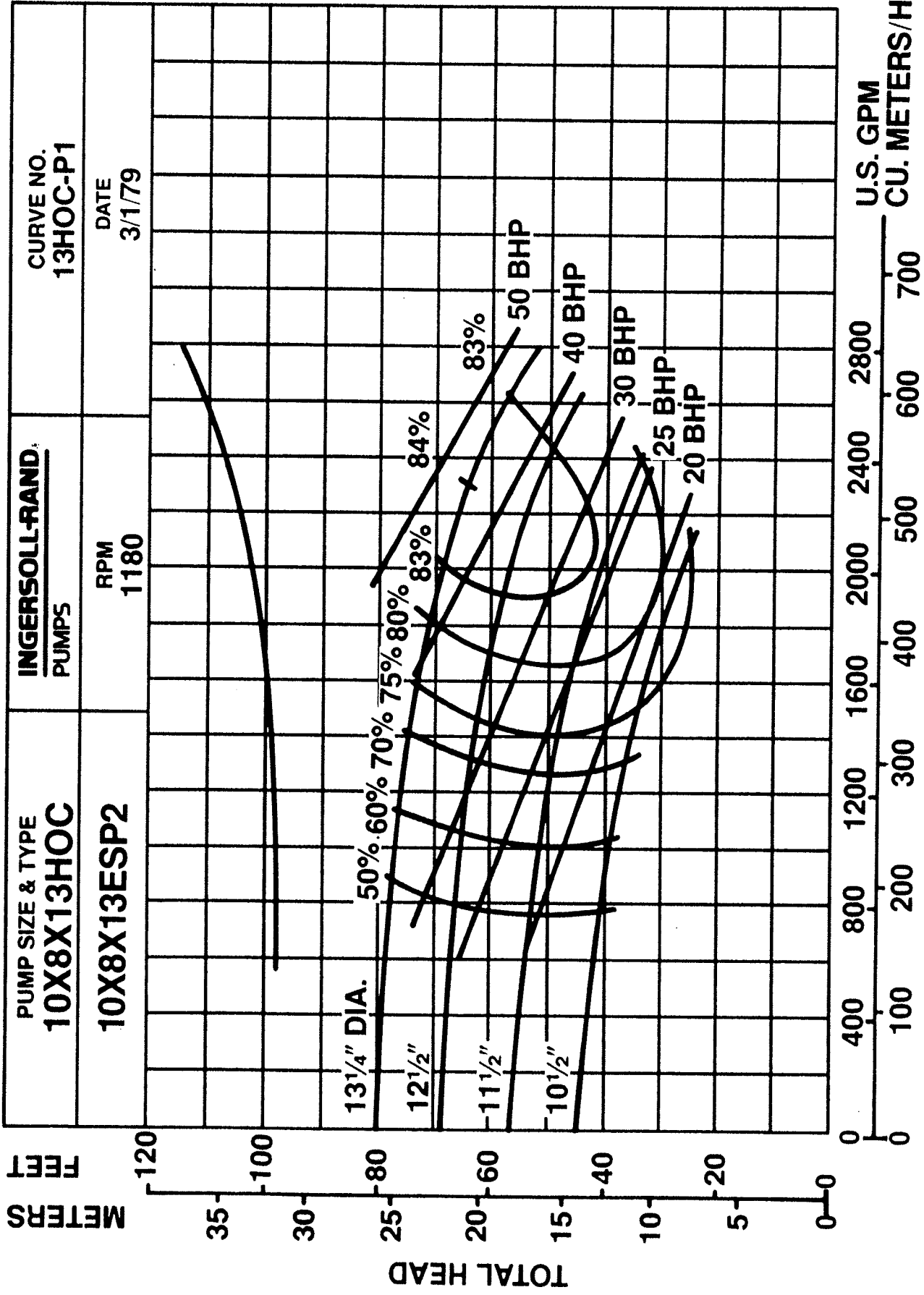
50% - 60% - 70% - 75% - 80% - 83% - 84%

150 BHP

125 BHP

100 BHP

75 BHP



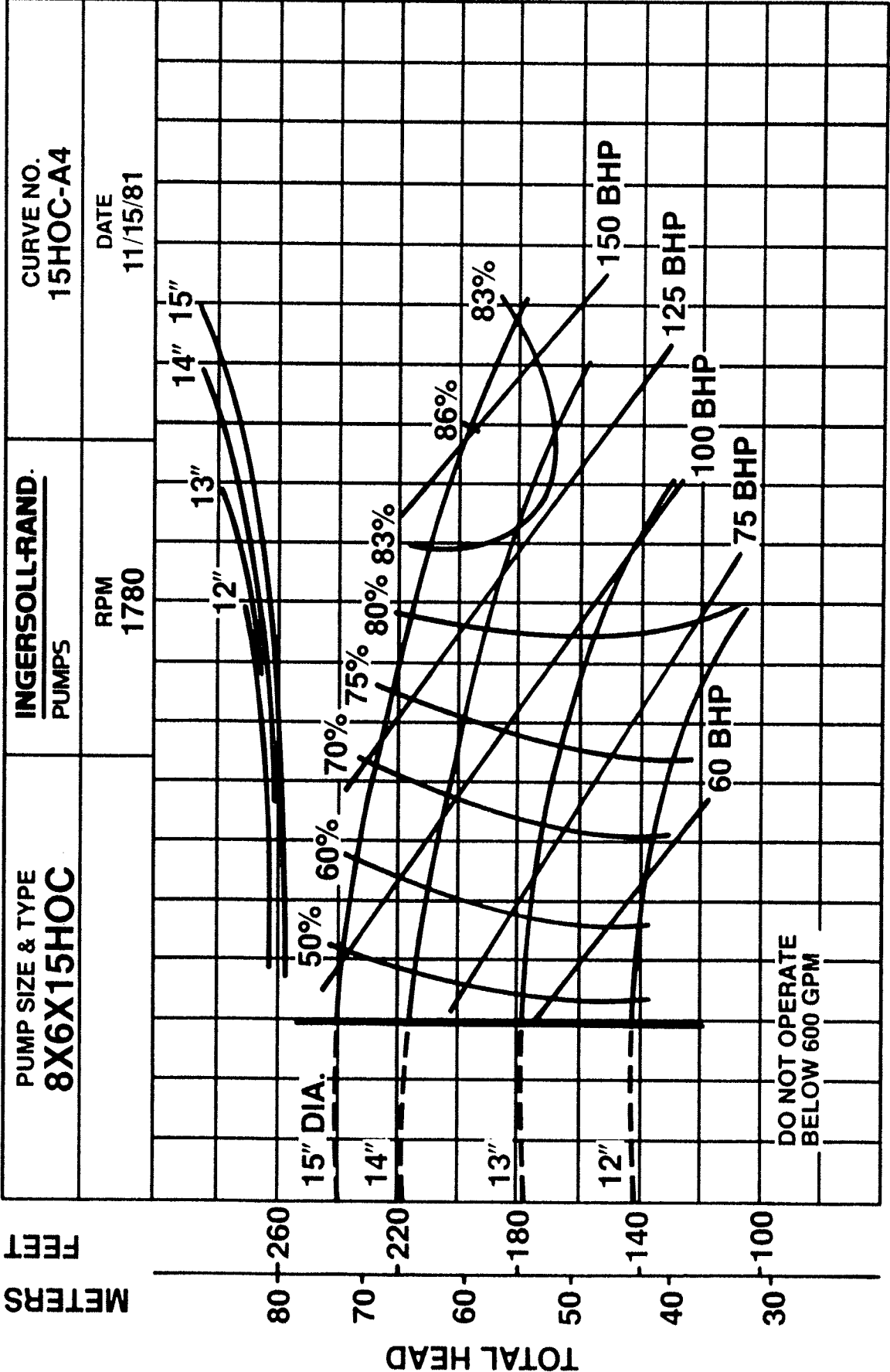
**METERS**  
 0 5 10 15

**FEET**  
 0 2.5 5 10 15

**NPSHR**

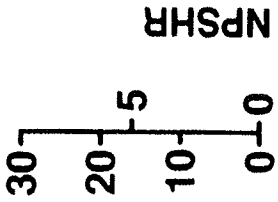
CAPACITY

**U.S. GPM**  
**CU. METERS/HR.**

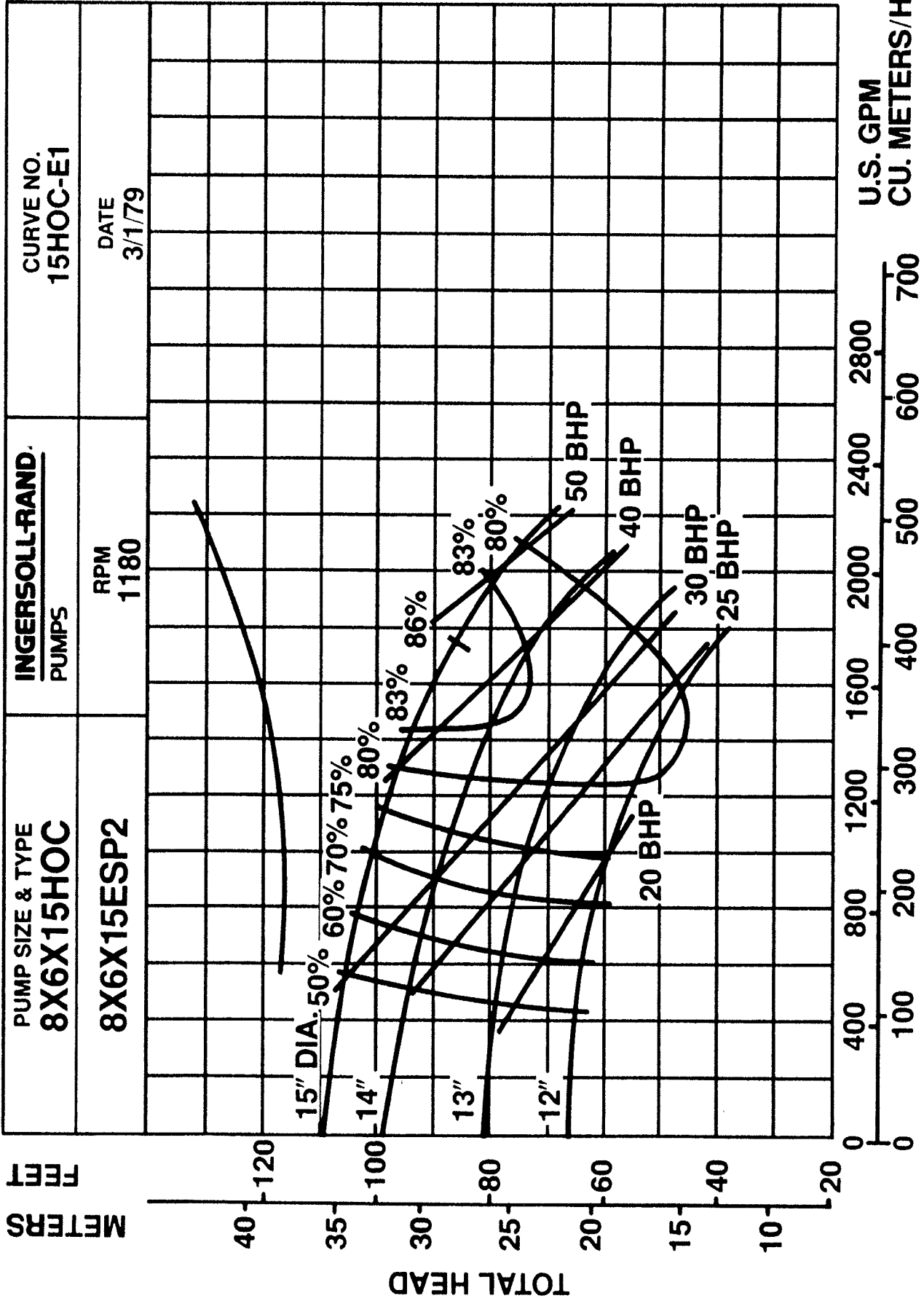


METERS  
FEET

METERS  
FEET



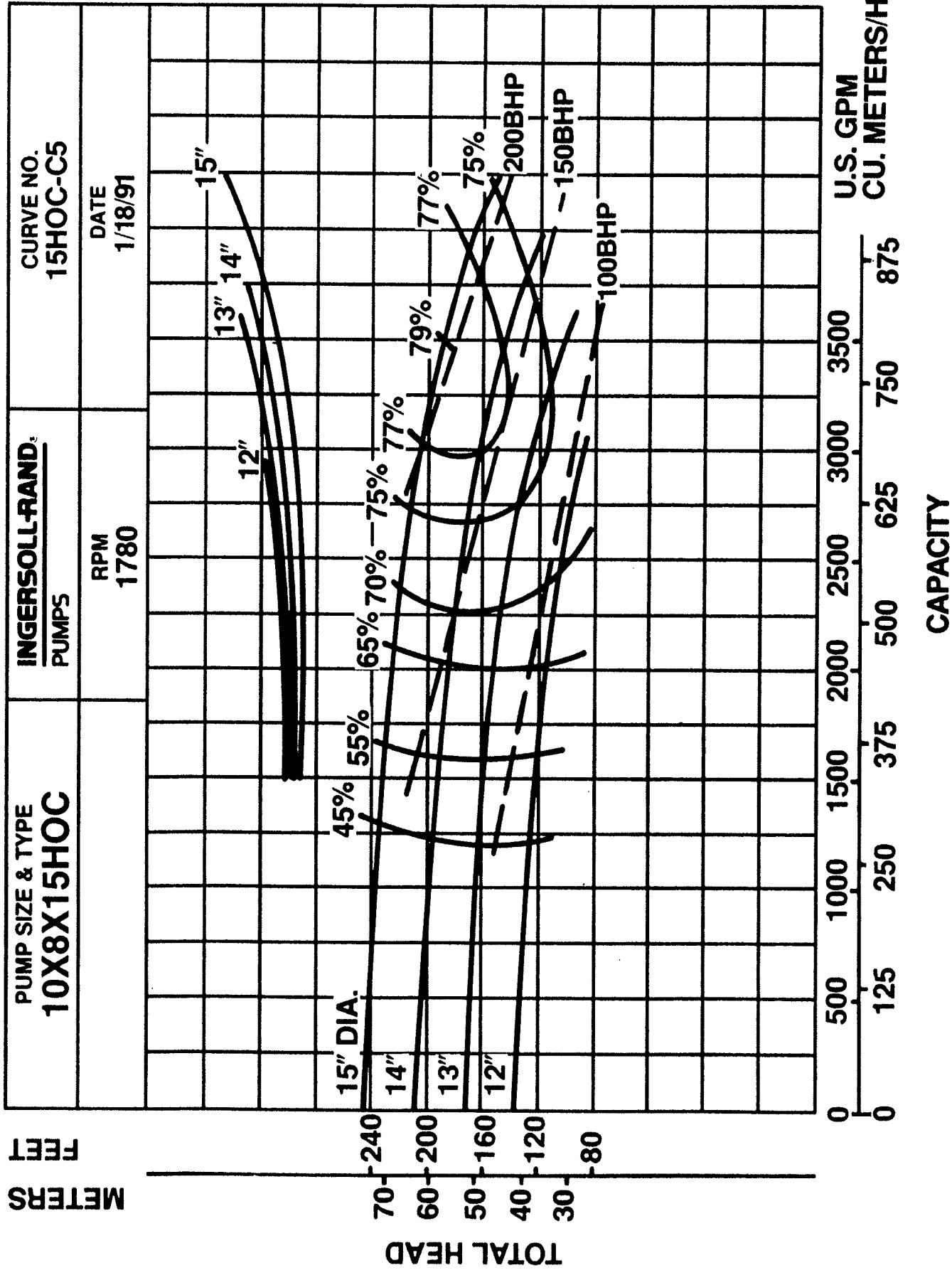
U.S. GPM  
CU. METERS/HR.  
CAPACITY



METERS  
 FEET  
 NPSHR  
 15  
 10  
 5  
 0-0  
 2.5

CAPACITY

U.S. GPM  
 CU. METERS/HR.



**METERS**  
**FEET**

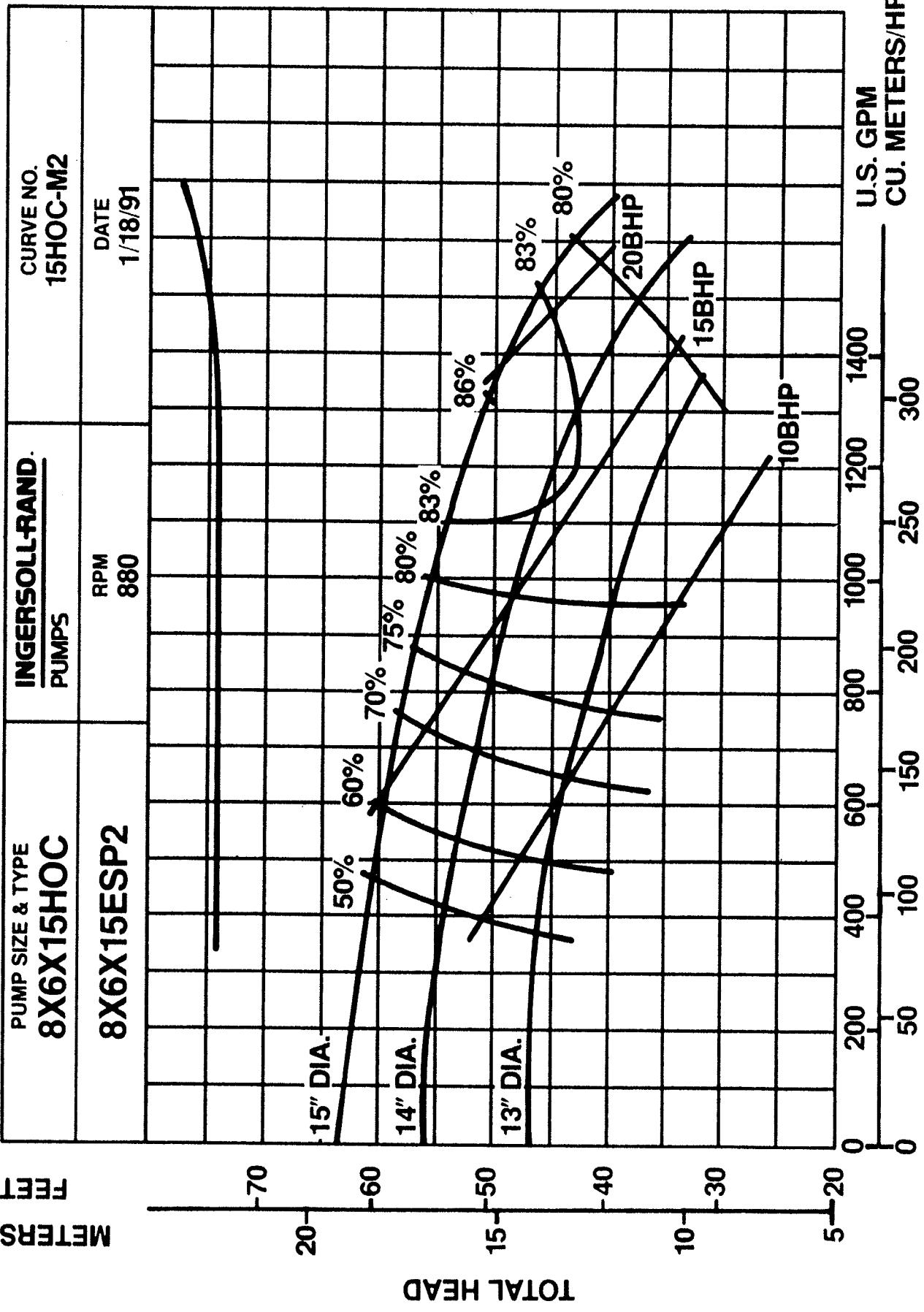
**TOTAL HEAD**  
70-240  
60-200  
50-160  
40-120  
30-80

**U.S. GPM**  
**CU. METERS/HR.**  
0 125 250 375 500 625 750 875

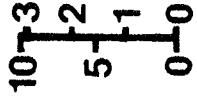
**CAPACITY**

**FEET**  
**METERS**

**NPSHR**  
0-0  
10-5  
20-5  
30-5



**FEET**  
**METERS**



**NPSHR**

**CAPACITY**

**U.S. GPM**  
**CU. METERS/HR.**

**METERS**  
**FEET**

**TOTAL HEAD**

**PUMP SIZE & TYPE**  
**10X8X15HOC**

**10X8X15ESP2**

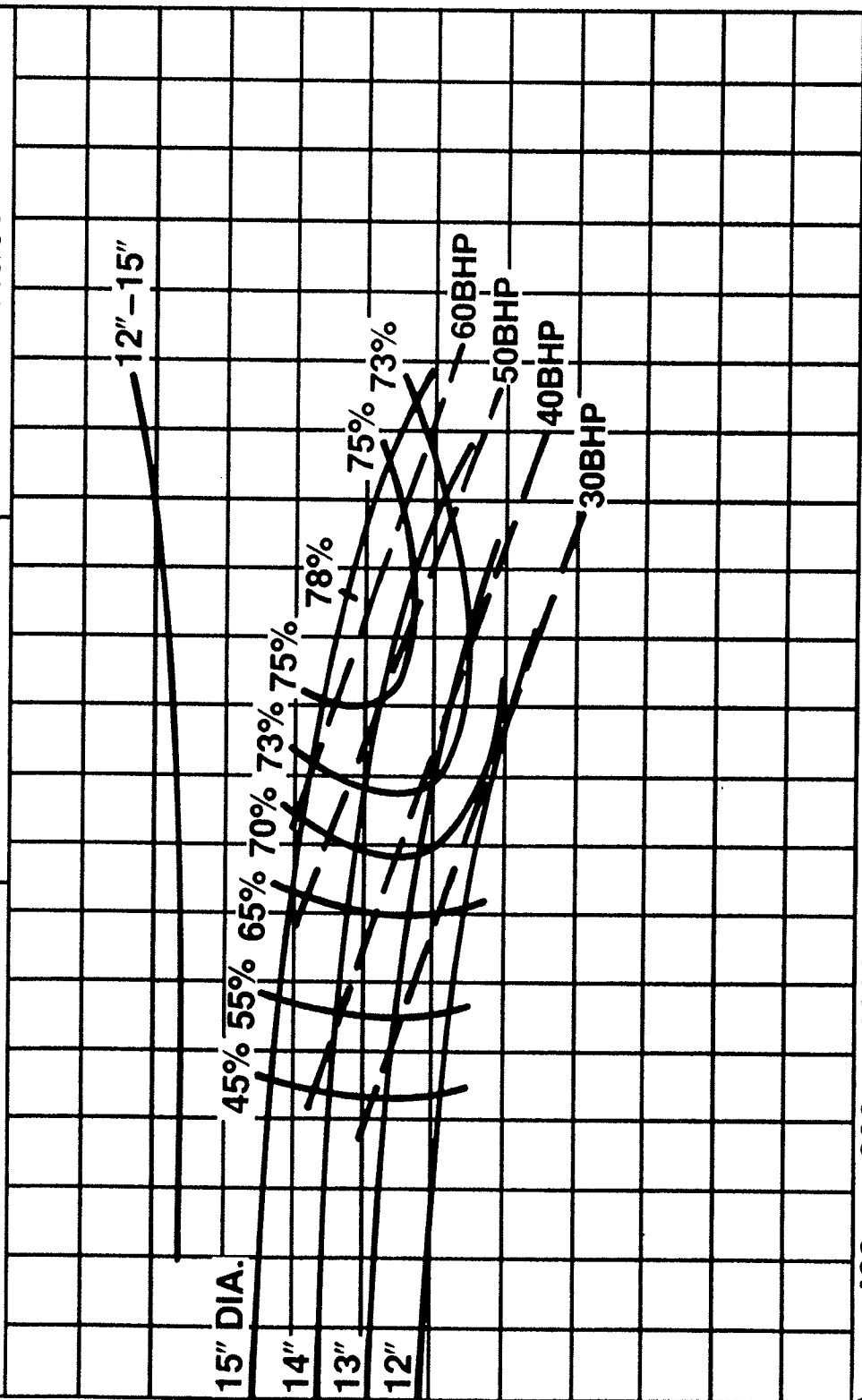
**INGERSOLL-RAND**  
**PUMPS**

**RPM**  
**1180**

**CURVE NO.**  
**15HOC-K3**

**DATE**  
**1/18/91**

**METERS**  
**FEET**

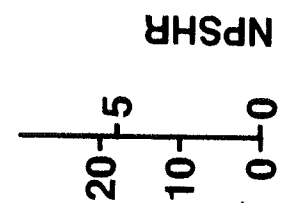


**TOTAL HEAD**

**U.S. GPM**  
**CU. METERS/HR.**

**CAPACITY**

**FEET**  
**METERS**



**NPSHR**

METERS  
FEET

PUMP SIZE & TYPE  
**10X8X15HOC**

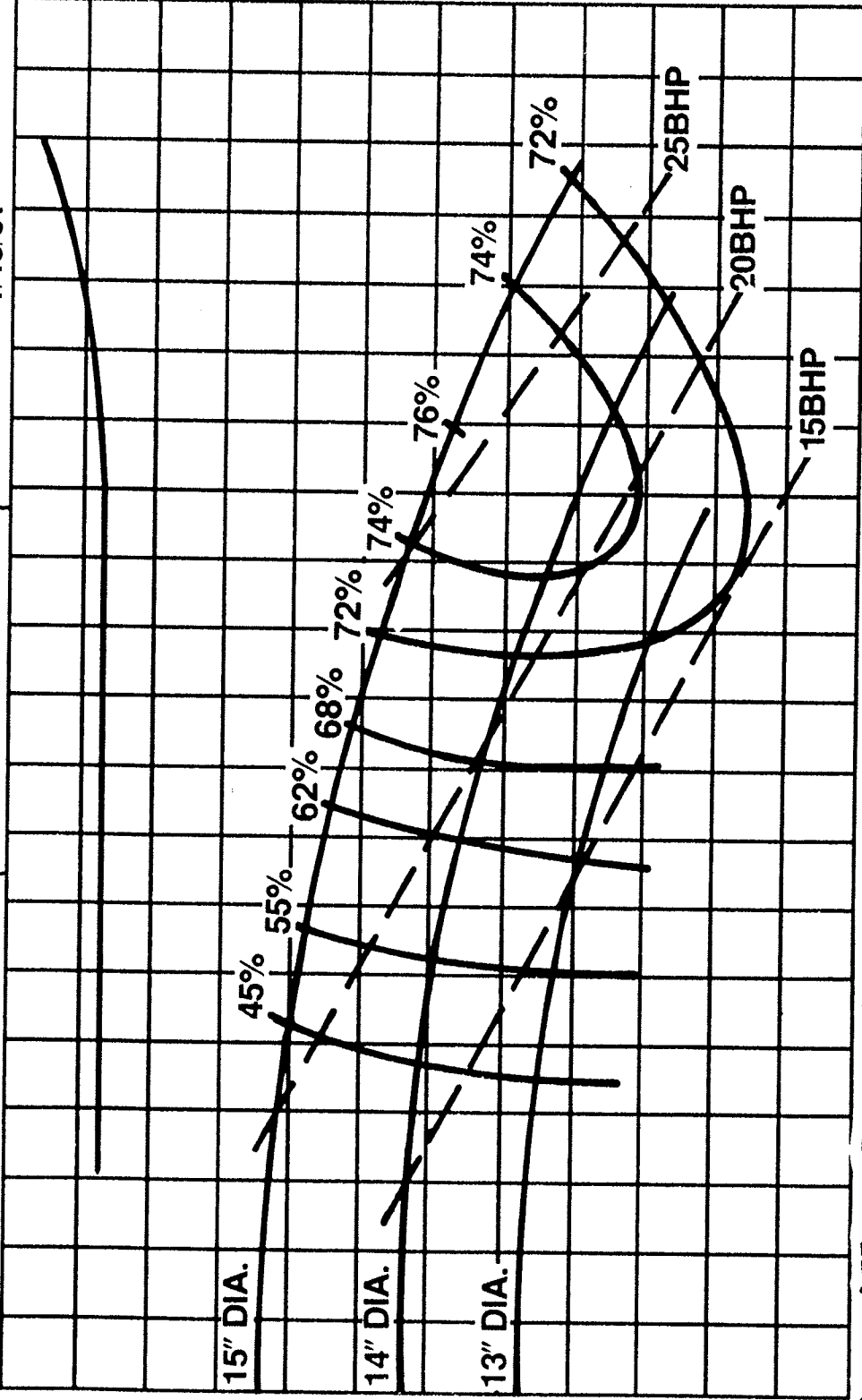
**INGERSOLL-RAND**  
PUMPS

CURVE NO.  
15HOC-N2

10X8X15ESP2

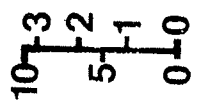
RPM  
880

DATE  
1/18/91



U.S. GPM  
CU. METERS/HR.  
CAPACITY

FEET  
METERS



NPSHR