

# 1590 Series Single Stage Vertical Inline Pumps Performance

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1-1/2" 1591B (444R227/180A203).....	014
2" 1591 (444A223/180A428) .....	014
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5" 1591 (444A315/180A431) .....	023
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#### 1760 RPM

4" 1595 (444A261/180A433) .....	024
4" 1596 (444A016/180A437) .....	025
5" 1592 (444R262/180A434) .....	025
5" 1593 (444A017/180A438) .....	026
6" 1592 (444A263/180A435) .....	026
6" 1593 (444A018/180A439) .....	027
8" 1591 (444A263/180A436) .....	027
8" 1592 (444R371/180A436) .....	028

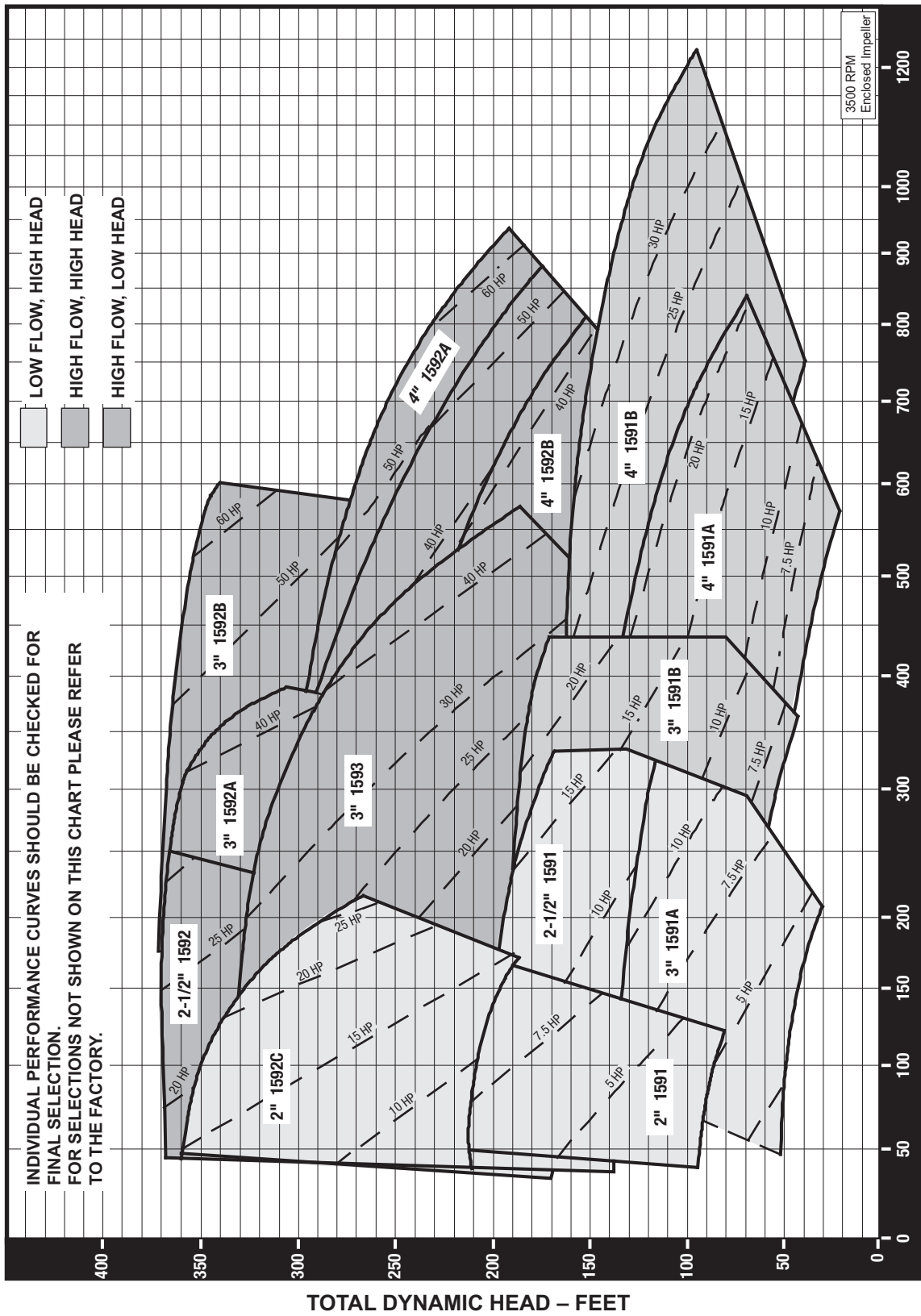
#### 1775 RPM

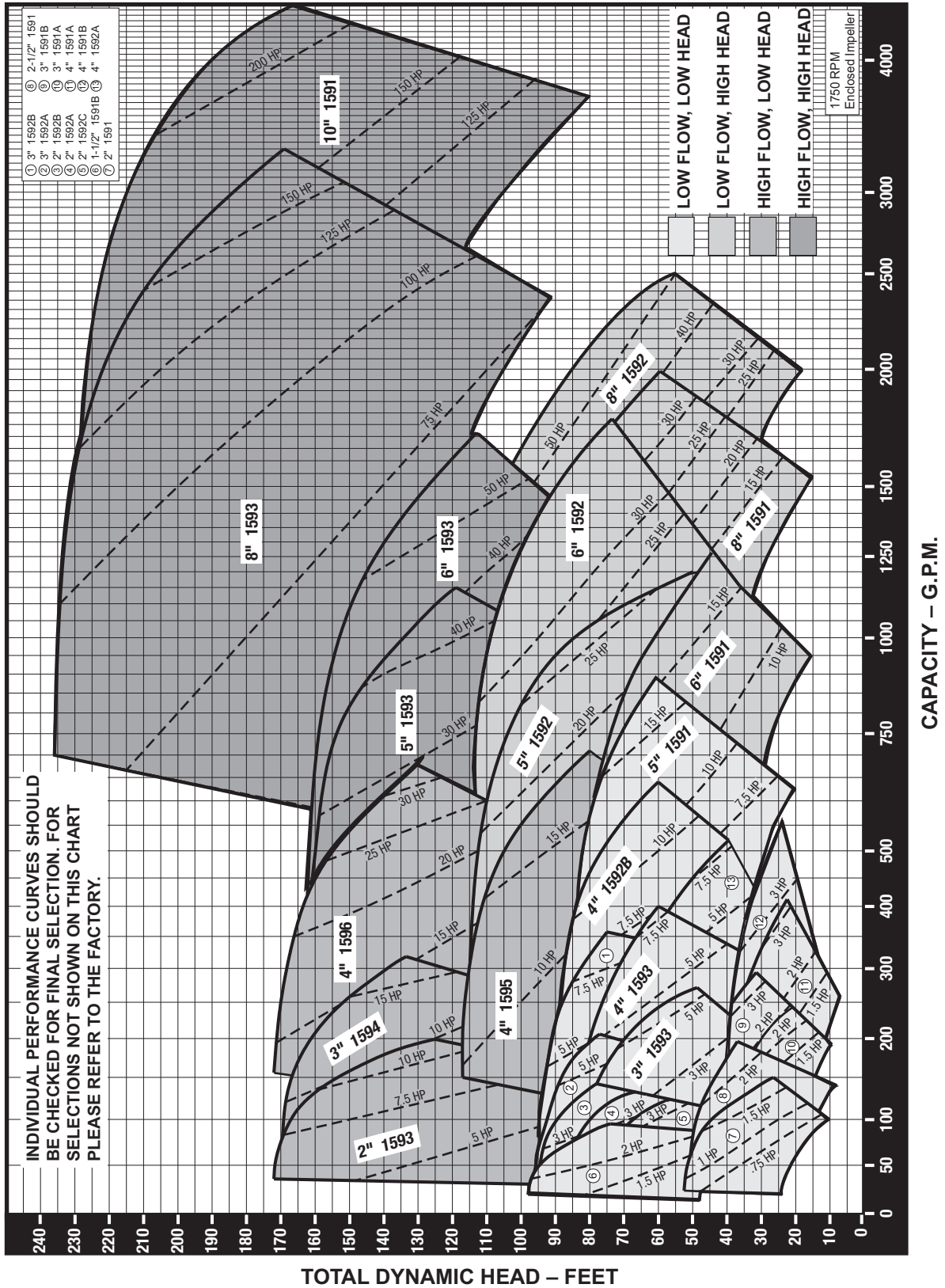
8" 1593 (444A272/180A445) .....	028
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2" 1593 (444R013/180A205) .....	029
3" 1594 (444R014/180A209) .....	030
4" 1595 (444R261/180A433) .....	030
4" 1596 (444A016/180A437) .....	031
5" 1591 (444A315/180A431) .....	031
5" 1592 (444R262/180A434) .....	032
5" 1593 (444A017/180A438) .....	032
6" 1591 (444A234/180A432) .....	033
6" 1592 (444A263/180A435) .....	033
6" 1593 (444A018/180A439) .....	034
8" 1591 (444A263/180A436) .....	034
8" 1592 (444R371/180A436) .....	035
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# 1590 Series Single Stage Vertical Inline Pumps Performance

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### 50 Hertz

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#### 2880 RPM

2" 1591 (444A223/180A428) .....	037
2-1/2" 1591 (444A224/180A429) .....	037
2-1/2" 1592 (444230/180A430) .....	038
3" 1591A (444A039/180A206) .....	038
3" 1591B (444A226/180A206) .....	039
3" 1592A (444R230/180A207) .....	039
4" 1591A (444R314/180A210) .....	040
4" 1591B (444R282/180A210)	
Bronze Impellers Only .....	040
4" 1591B (444A282/180A210) .....	041

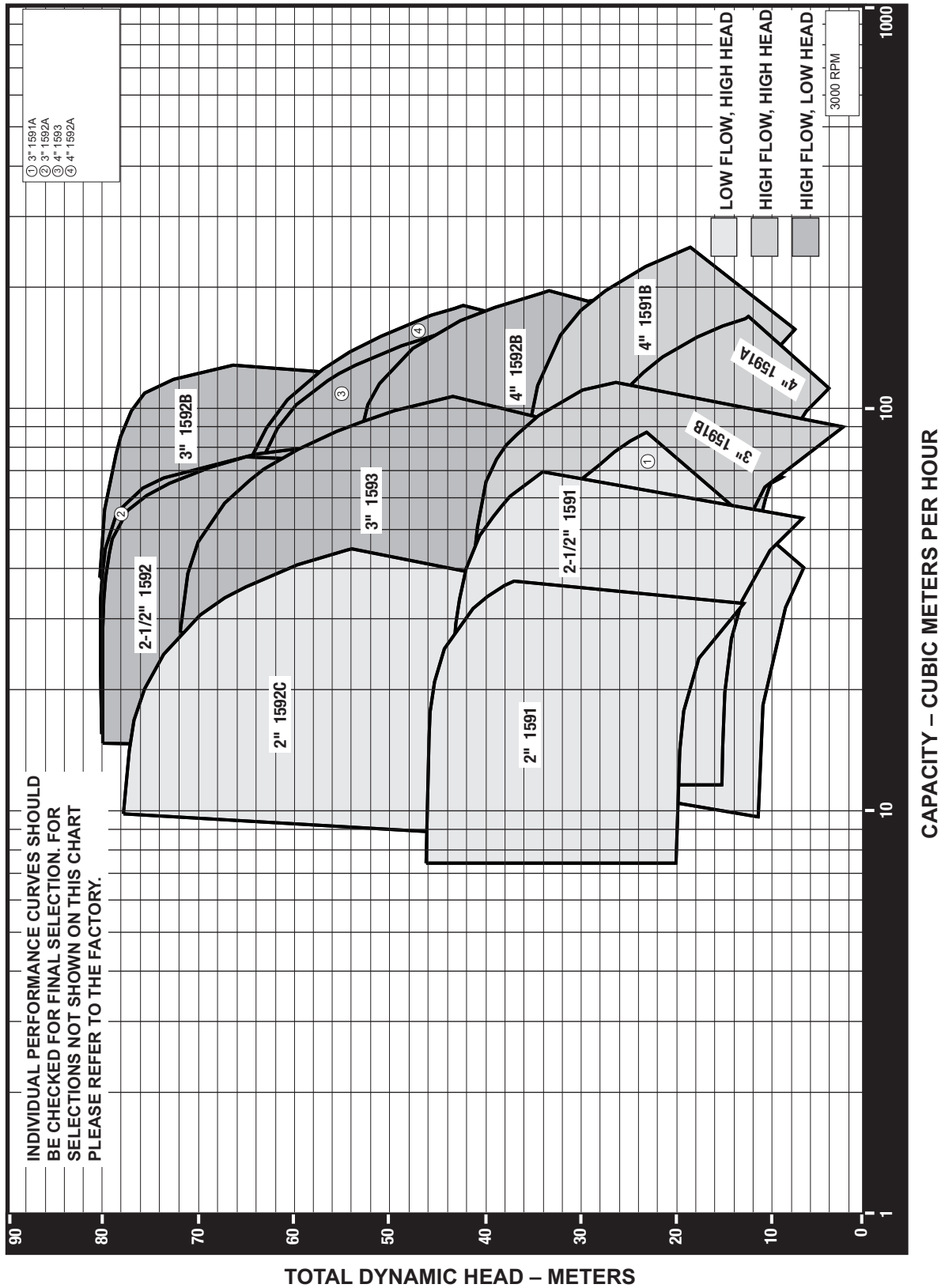
#### 1440 RPM

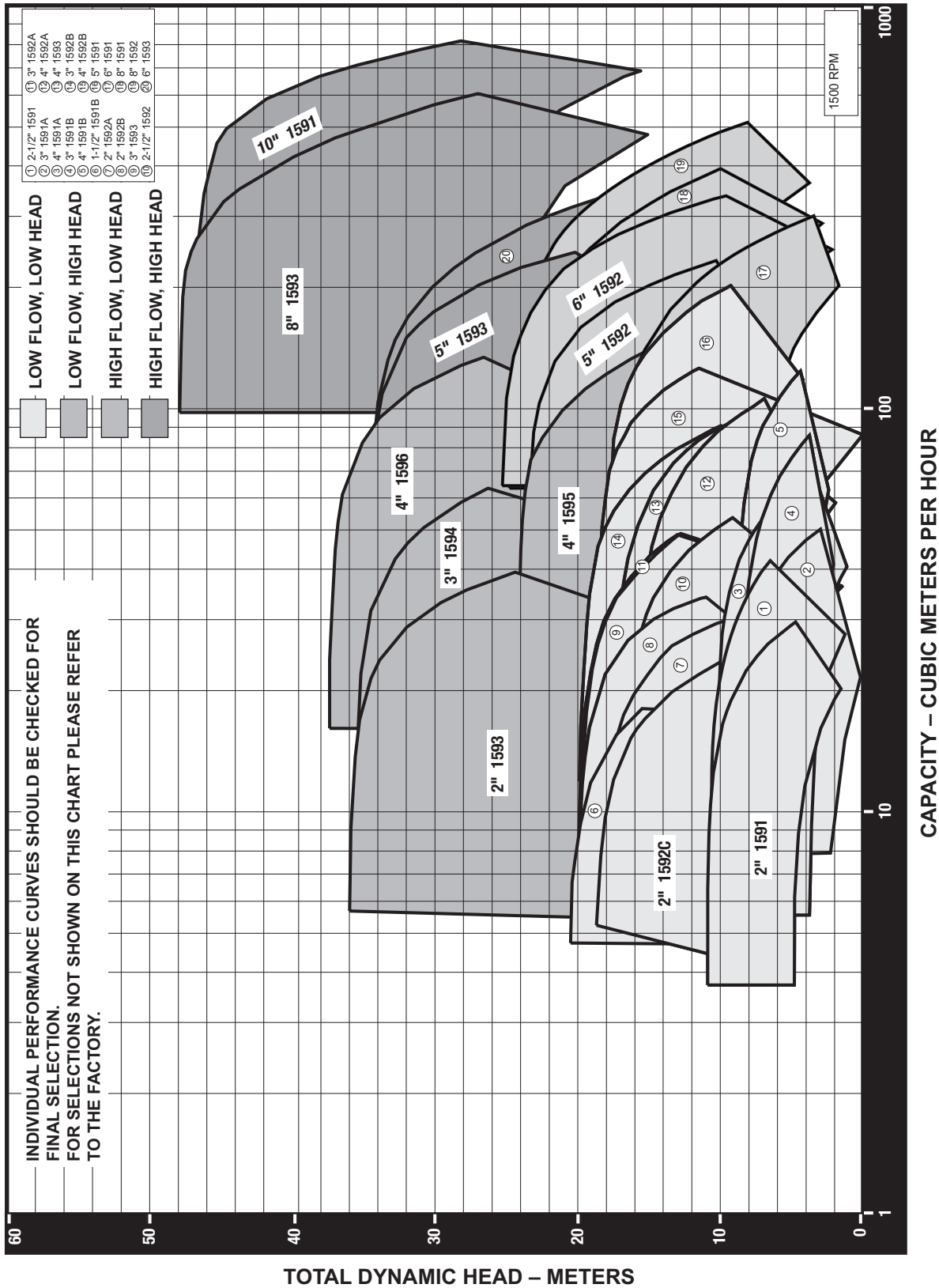
1-1/2" 1591B (444A227/180A203) .....	041
2" 1591 (444A223/180A428) .....	042
2" 1592A (444R228/180A204) .....	042
2" 1592B (3389/180A204) .....	043
2" 1593 (444R013/180A205) .....	043
2-1/2" 1591 (444A224/180A429) .....	044
2-1/2" 1592 (444A230/180A430) .....	044
3" 1591A (444R039/180A206) .....	045
3" 1591B (444A226/180A206) .....	045
3" 1592A (444R230/180A207) .....	046
3" 1592B (3-7-245/180A208) .....	046
3" 1594 (444A014/180A208) .....	047
4" 1591A (444R314/180A210) .....	047
4" 1591B (444A282/180A210)	
Bronze Impellers Only .....	048
4" 1591B (444A282/180A210) .....	048
4" 1592A (3-7-253/180A211) .....	049
4" 1592B (3-7-249/180A211) .....	049
4" 1595 (444A261/180A433) .....	050
4" 1596 (444A261/180A433) .....	050
5" 1591 (444A315/180A431) .....	051
5" 1592 (444R262/180A434) .....	051
5" 1593 (444A017/180A438) .....	052
6" 1591 (444A234/180A432) .....	052

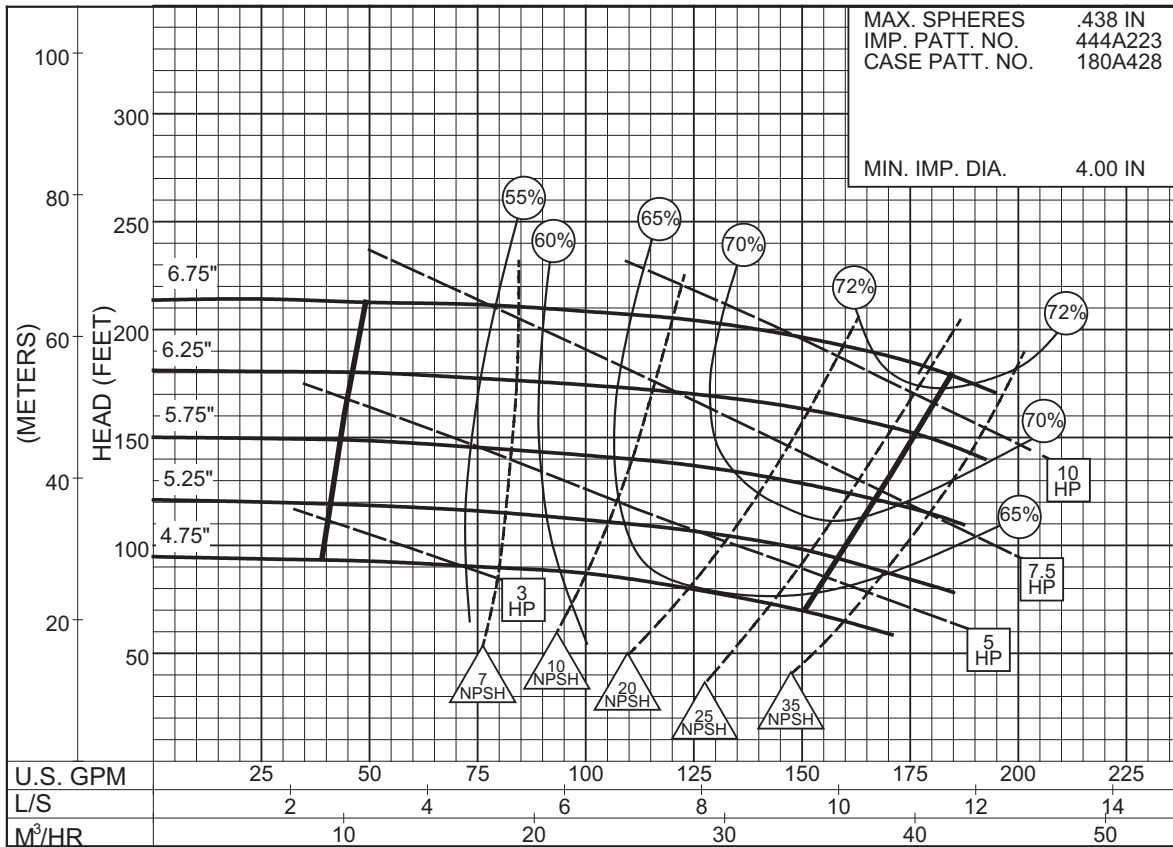
6" 1592 (444A263/180A435) .....	053
6" 1593 (444A018/180A439) .....	053
8" 1591 (444A263/180A436) .....	054
8" 1592 (444R371/180A436) .....	054

#### 960 RPM

4" 1595 (444A261/180A433) .....	055
4" 1596 (444A016/180A437) .....	055
5" 1592 (444R262/180A434) .....	056
5" 1593 (444A014/180A438) .....	056
6" 1592 (444A263/180A435) .....	057
6" 1593 (444A018/180A439) .....	057
8" 1591 (444A263/180A436) .....	058
8" 1592 (444R371/180A436) .....	058







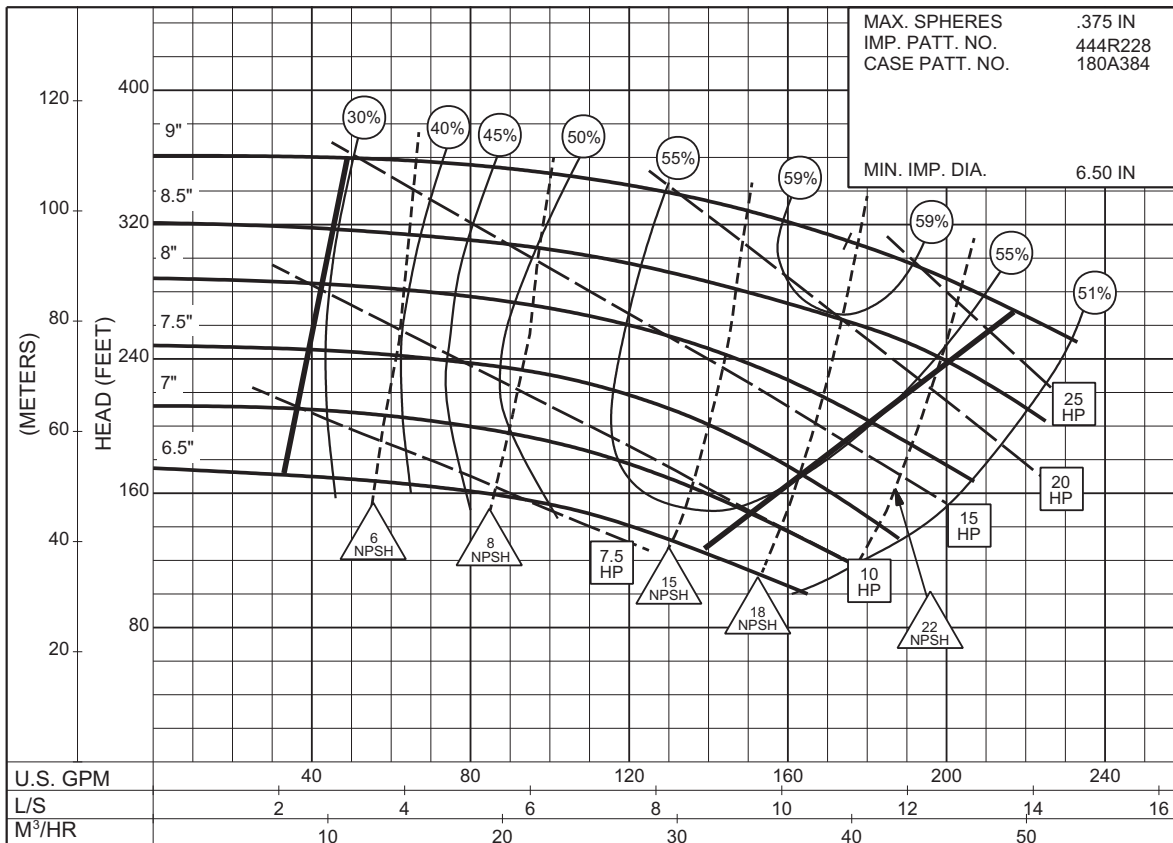
2"

1591

3500 RPM

Impeller  
444A223

PC-177171



2"

1592C

3500 RPM

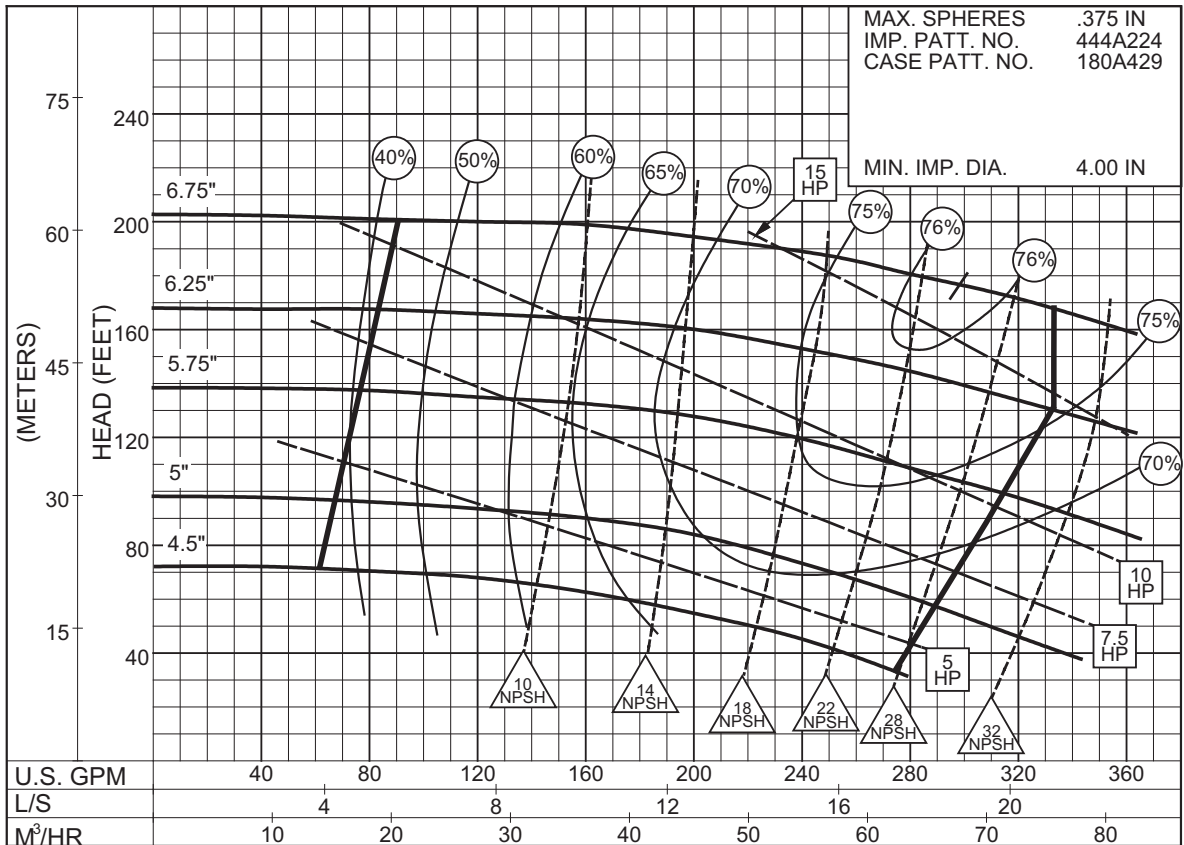
Impeller  
444R228

3PC-159191



**2-1/2"**  
**1591**  
**3500 RPM**

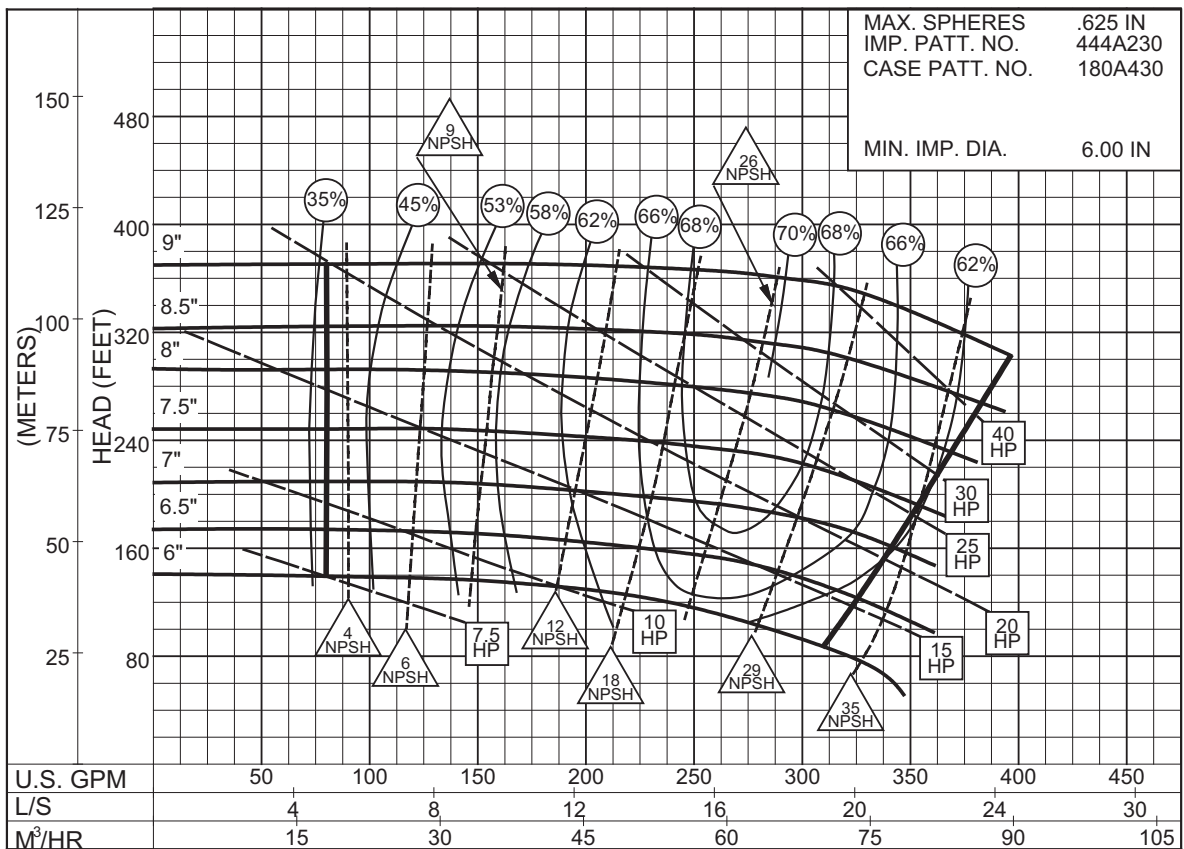
Impeller  
444A224



**PC-177175**

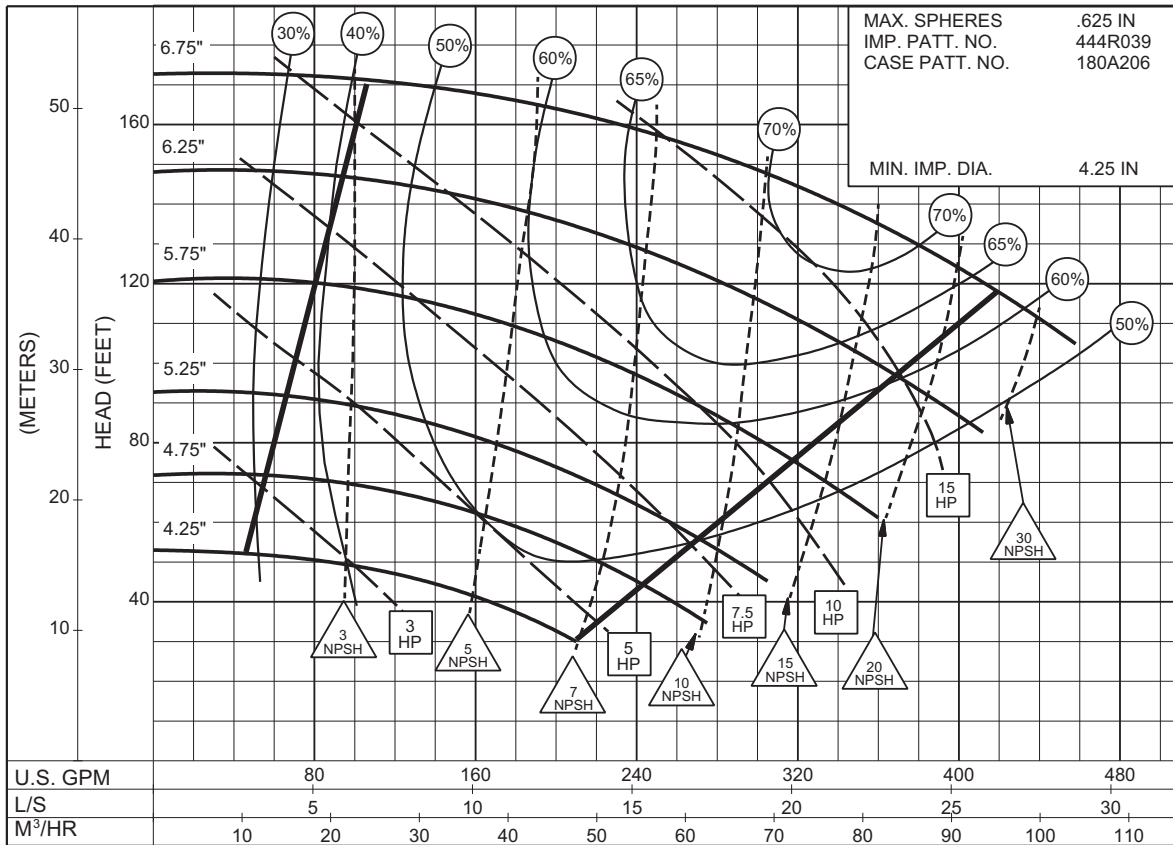
**2-1/2"**  
**1592**  
**3500 RPM**

Impeller  
444A230



**3PC-177179**





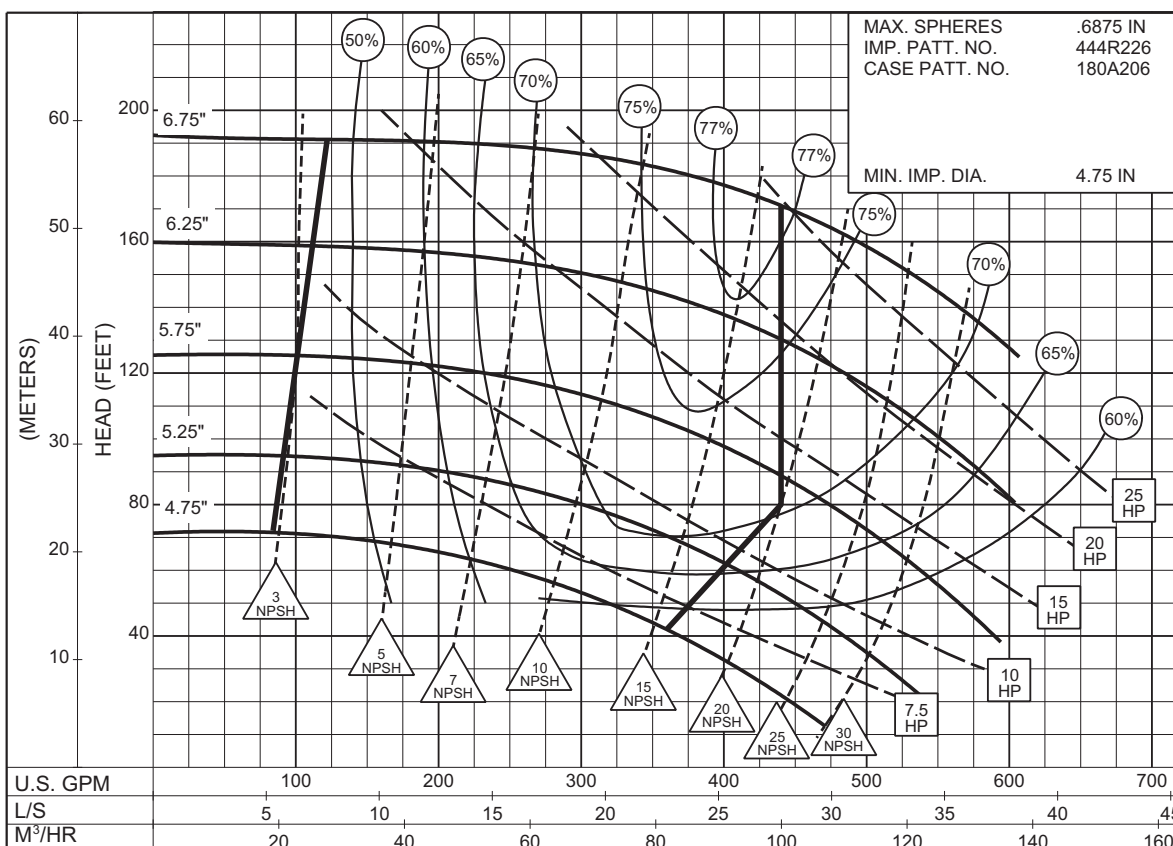
3"

1591A

3500 RPM

Impeller  
444R039

3PC-116290



3"

1591B

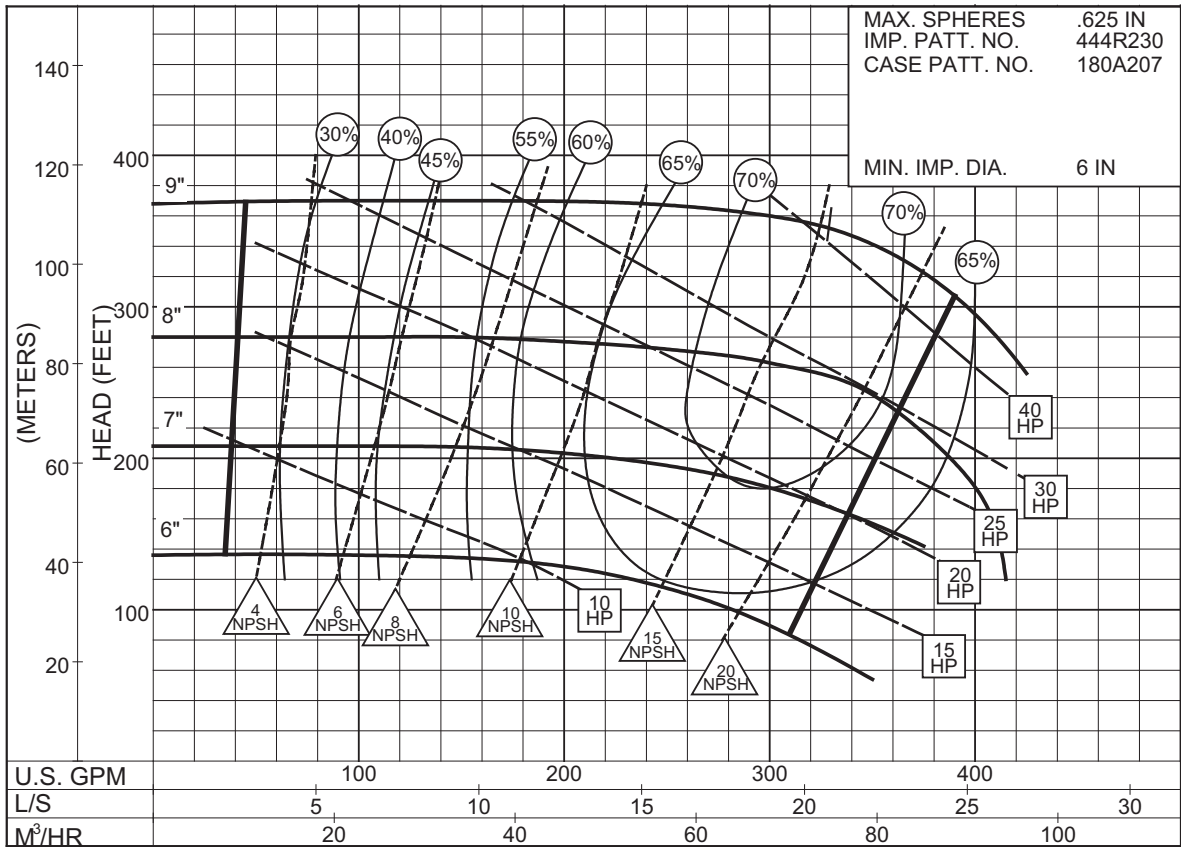
3500 RPM

Impeller  
444R226

3PC-116292

**3"**  
**1592A**  
**3500 RPM**

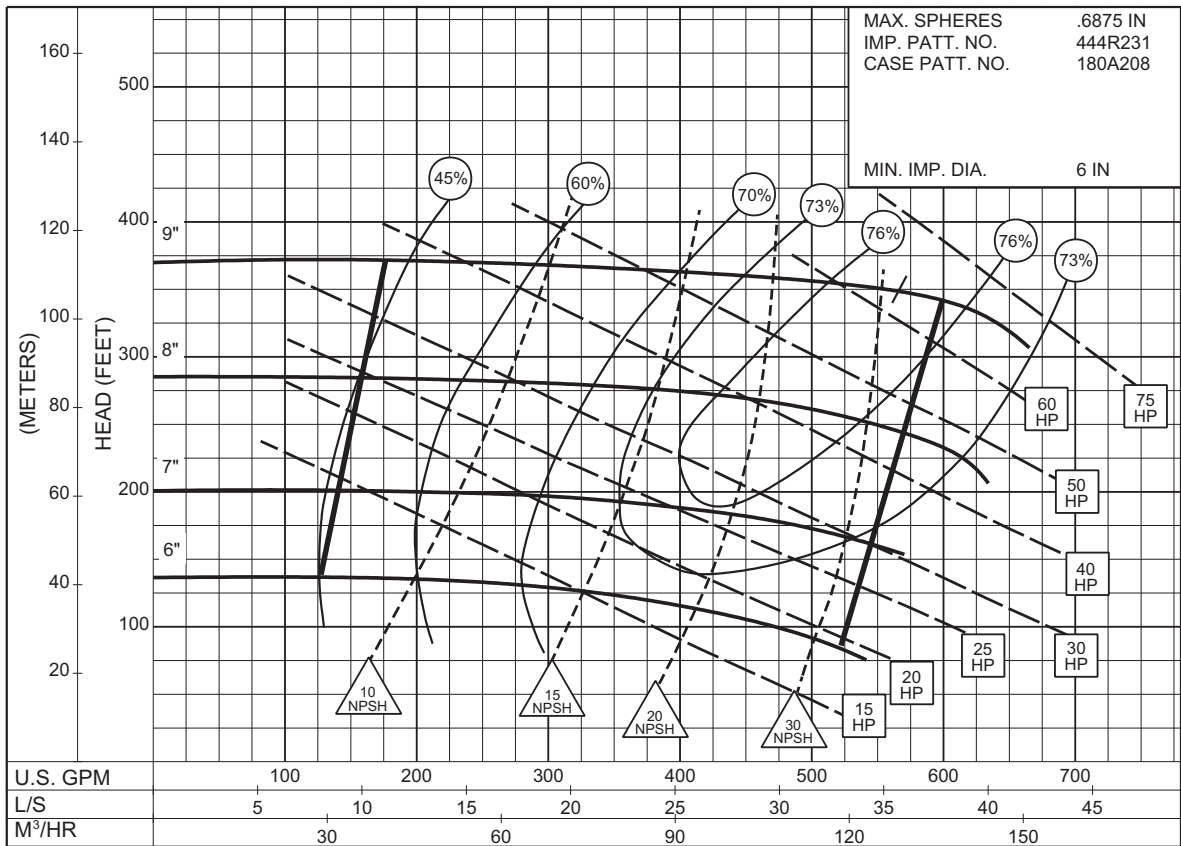
Impeller  
444R230



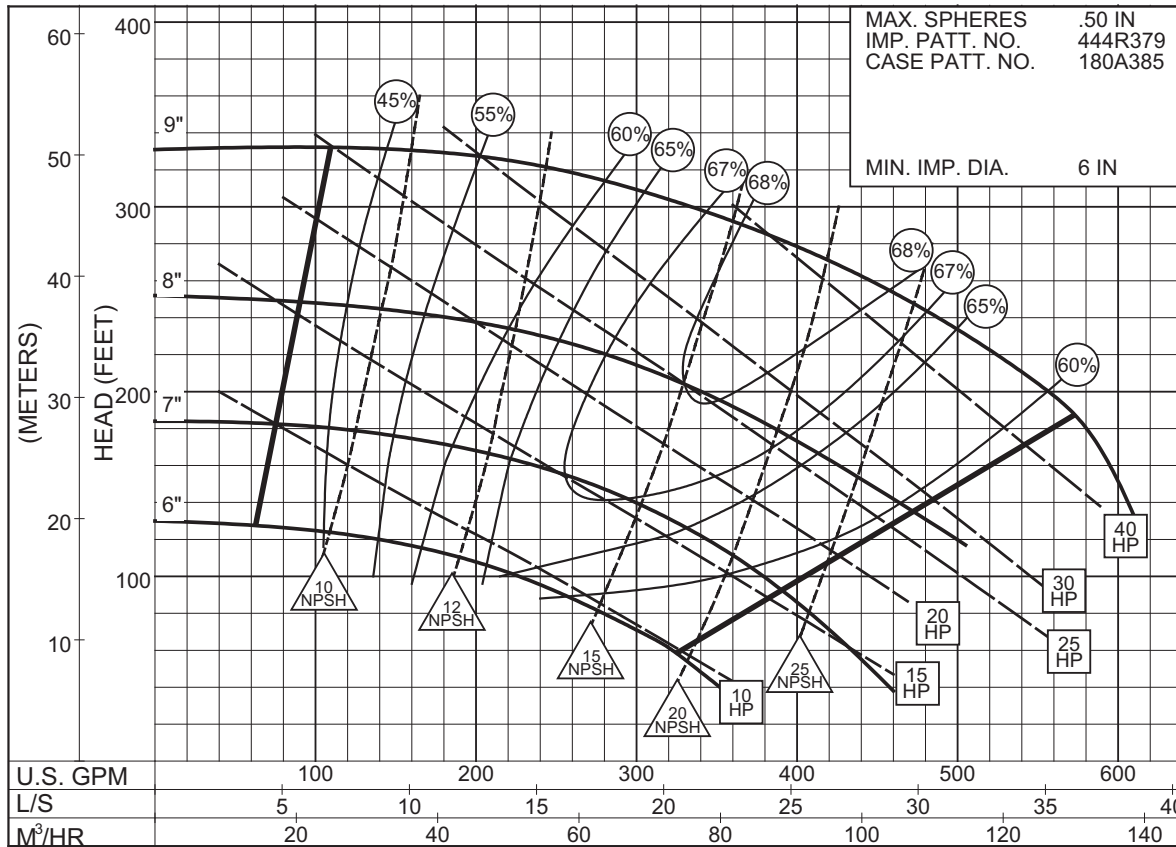
**3PC-159192**

**3"**  
**1592B**  
**3500 RPM**

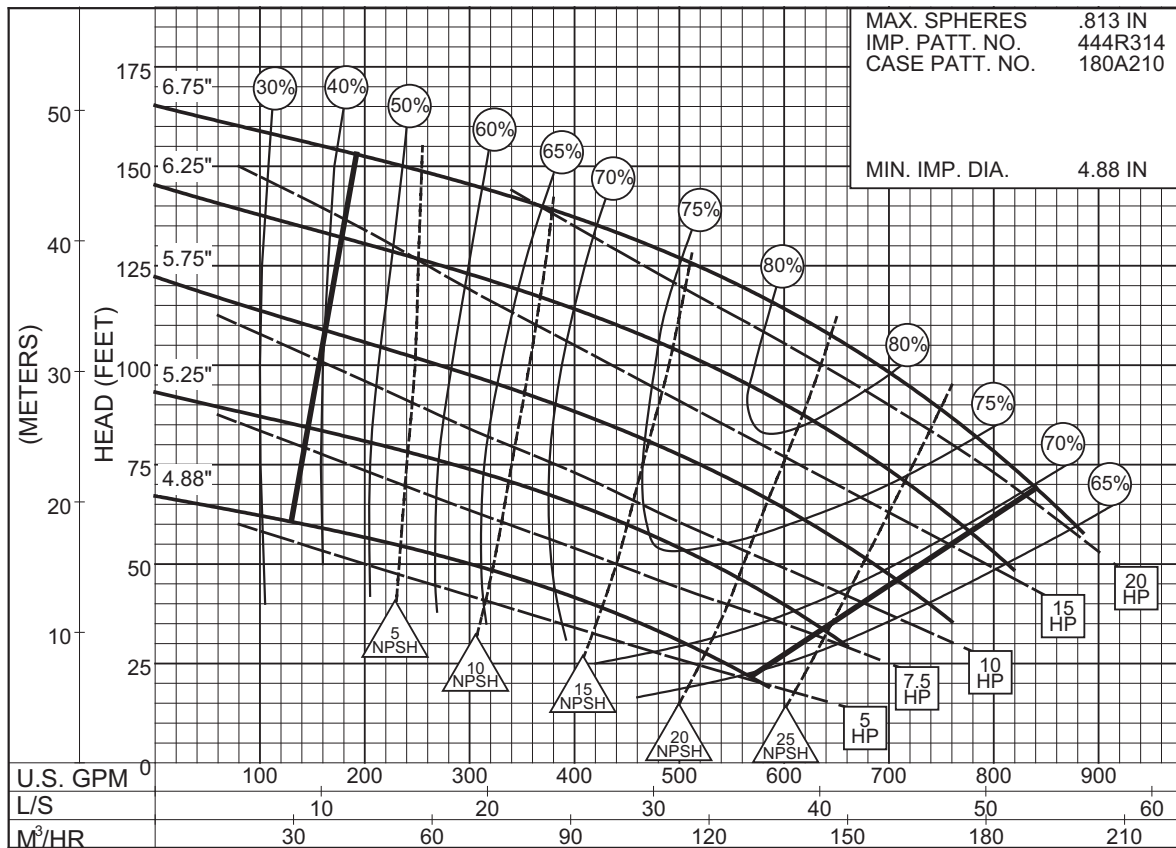
Impeller  
444R231



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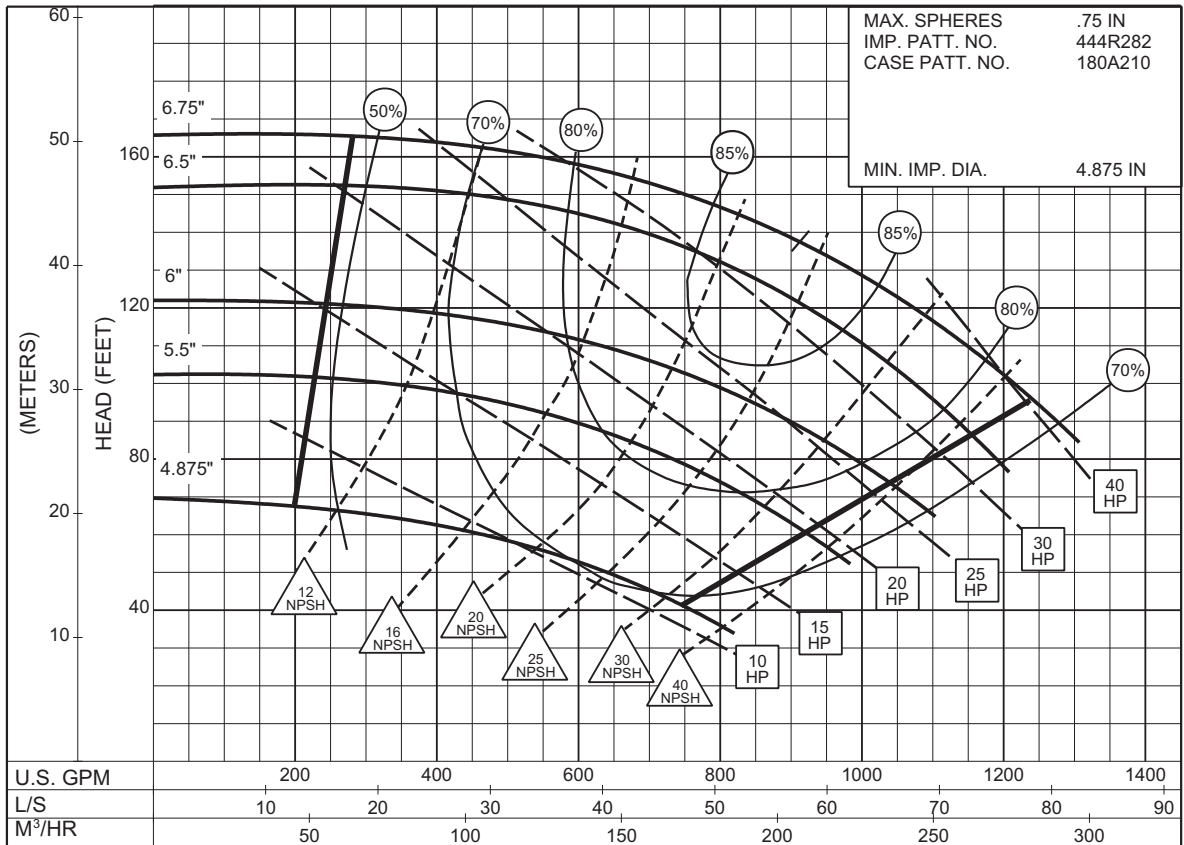


3PC-159193



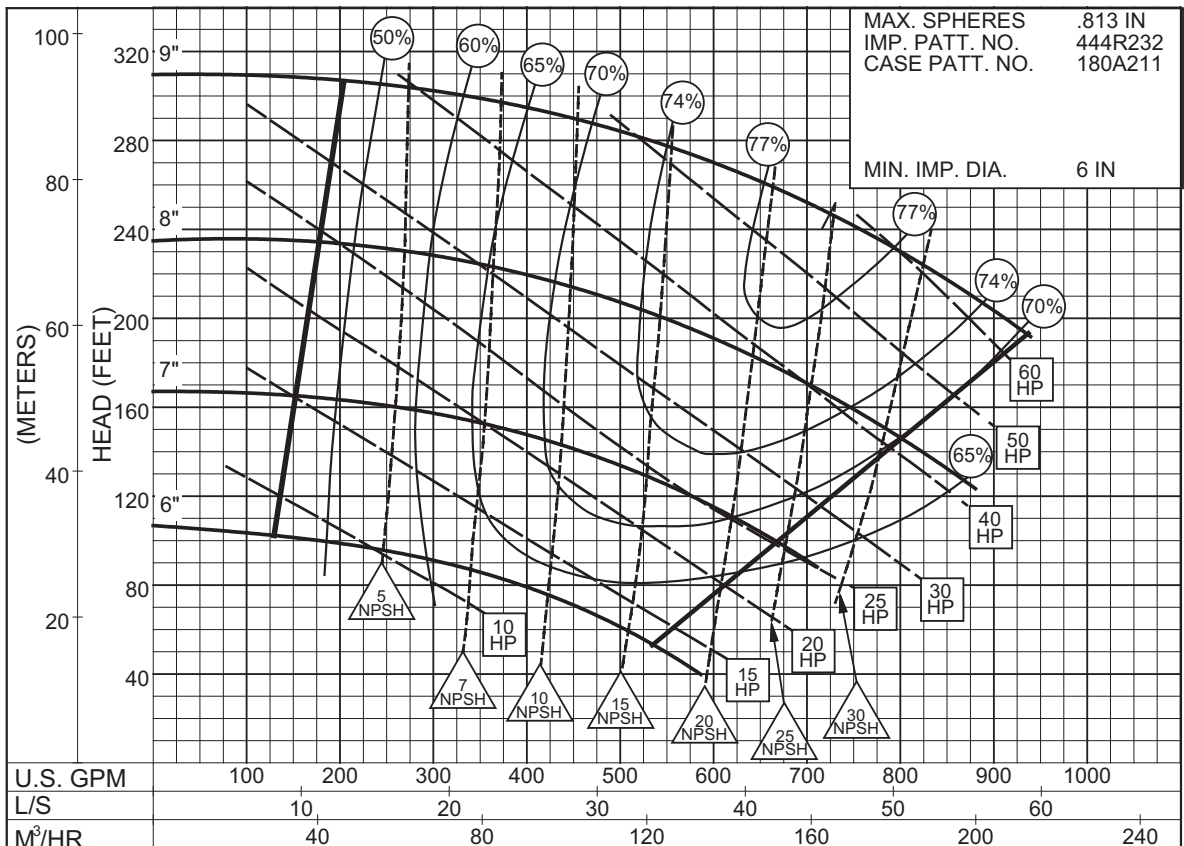
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**4"**  
**1591B**  
**3500 RPM**  
Impeller  
444R282

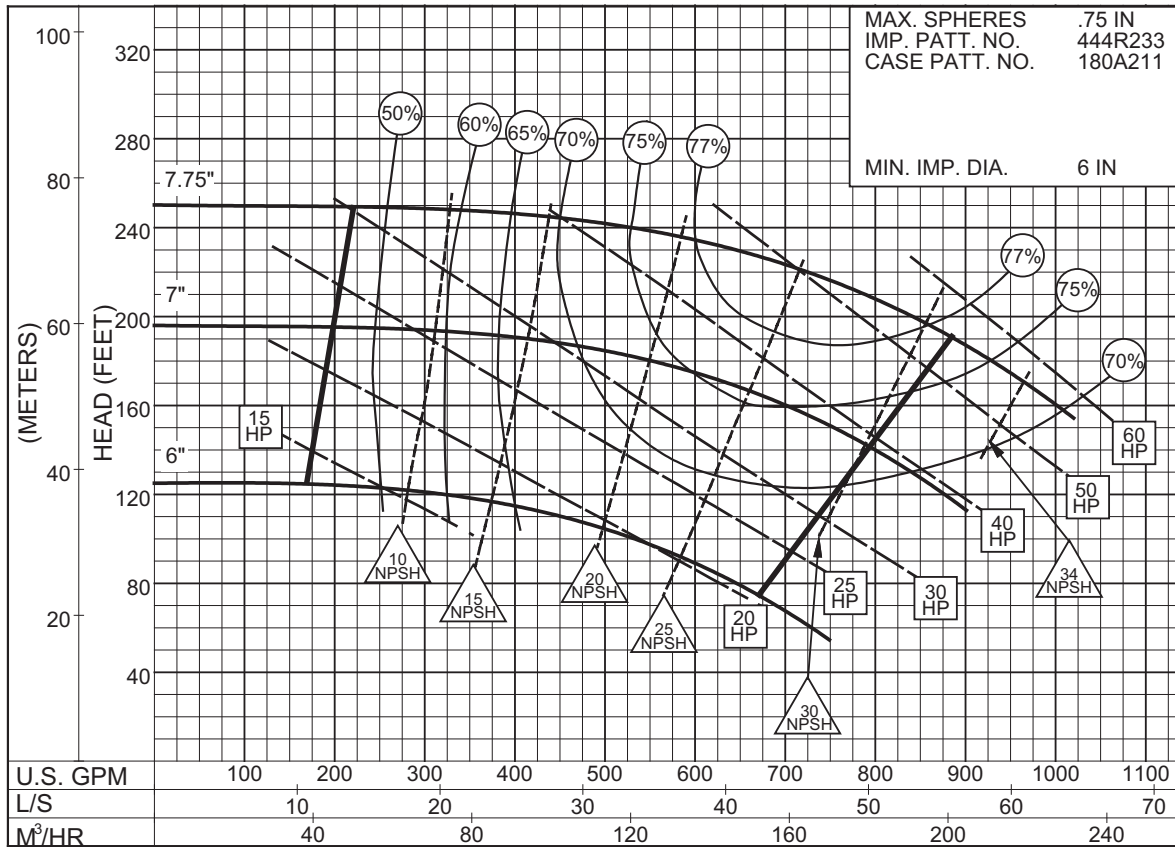


**3PC-116307A**

**4"**  
**1592A**  
**3500 RPM**  
Impeller  
444R232



**3PC-142439**



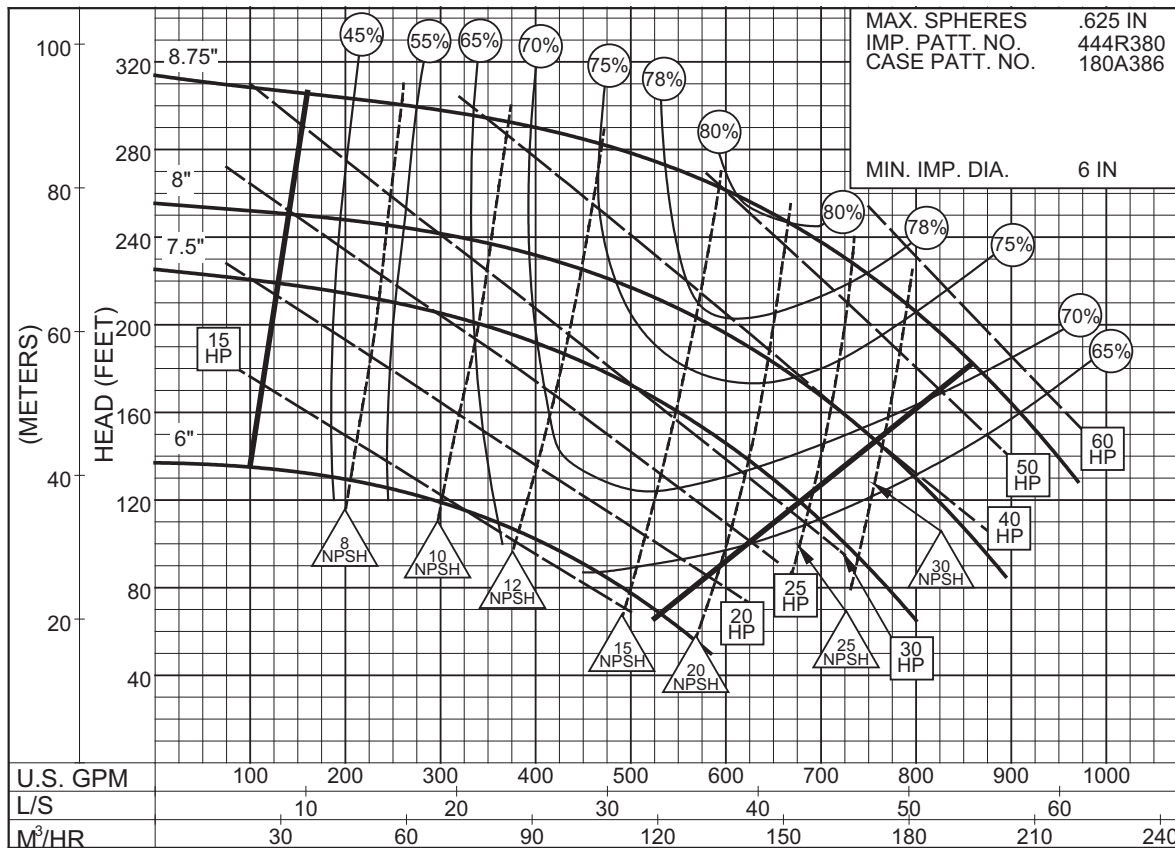
4"

1592B

3500 RPM

Impeller  
444R233

3PC-142441A



4"

1593

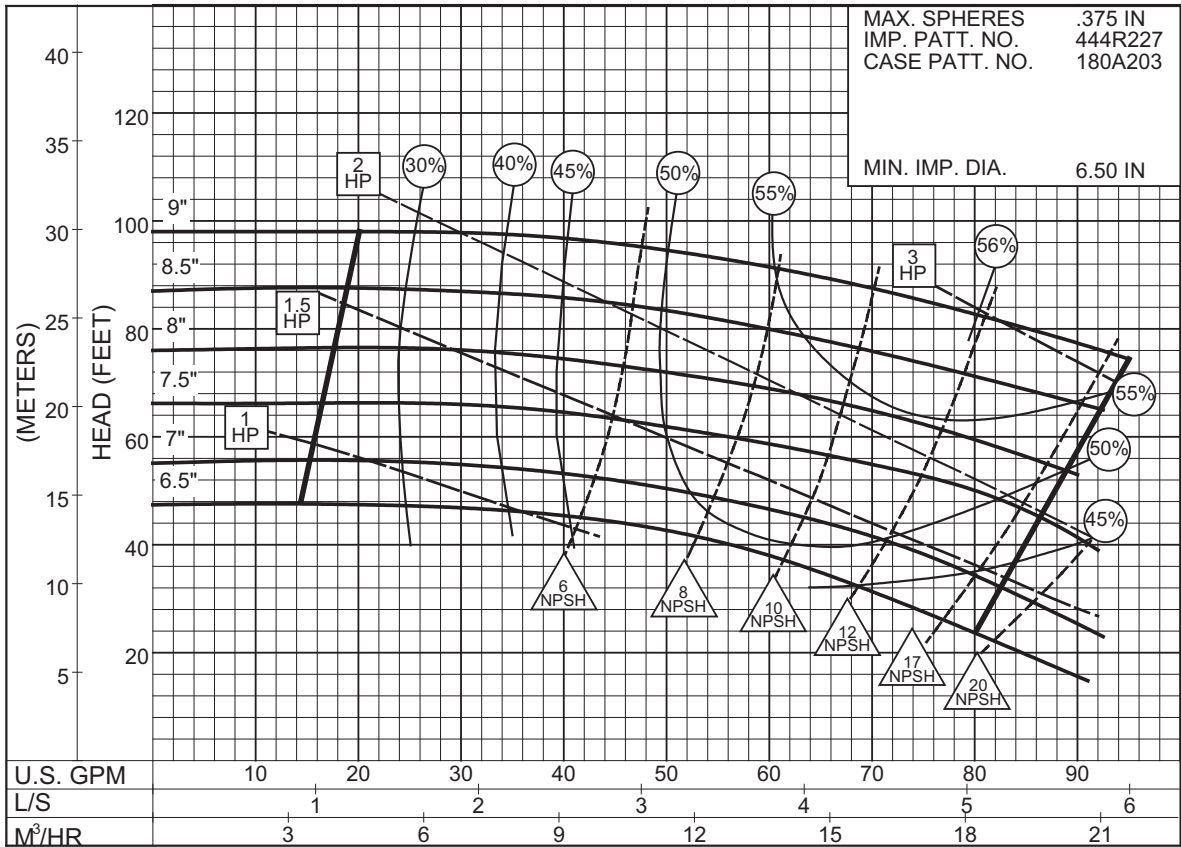
3500 RPM

Impeller  
444R380

3PC-159195A

**1-1/2"**  
**1591B**  
**1750 RPM**

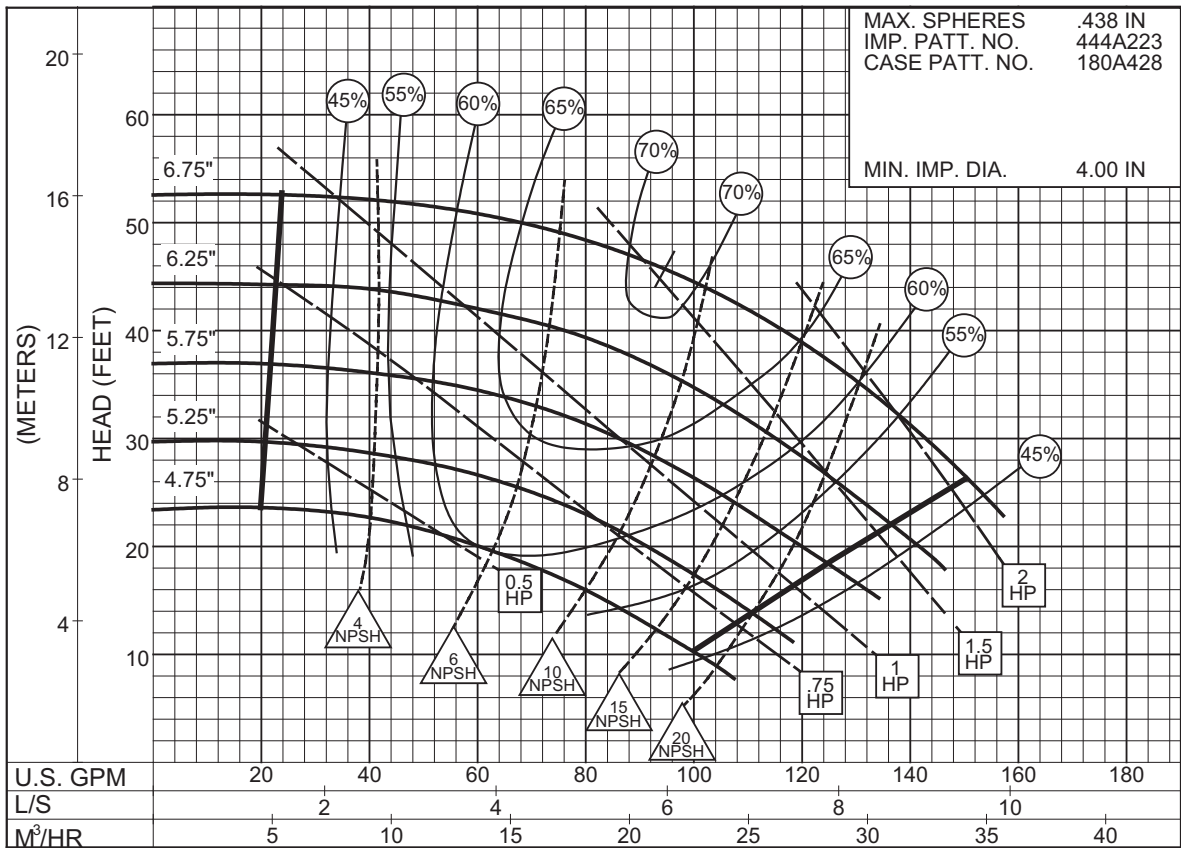
Impeller  
444R227



**3PC-116274A**

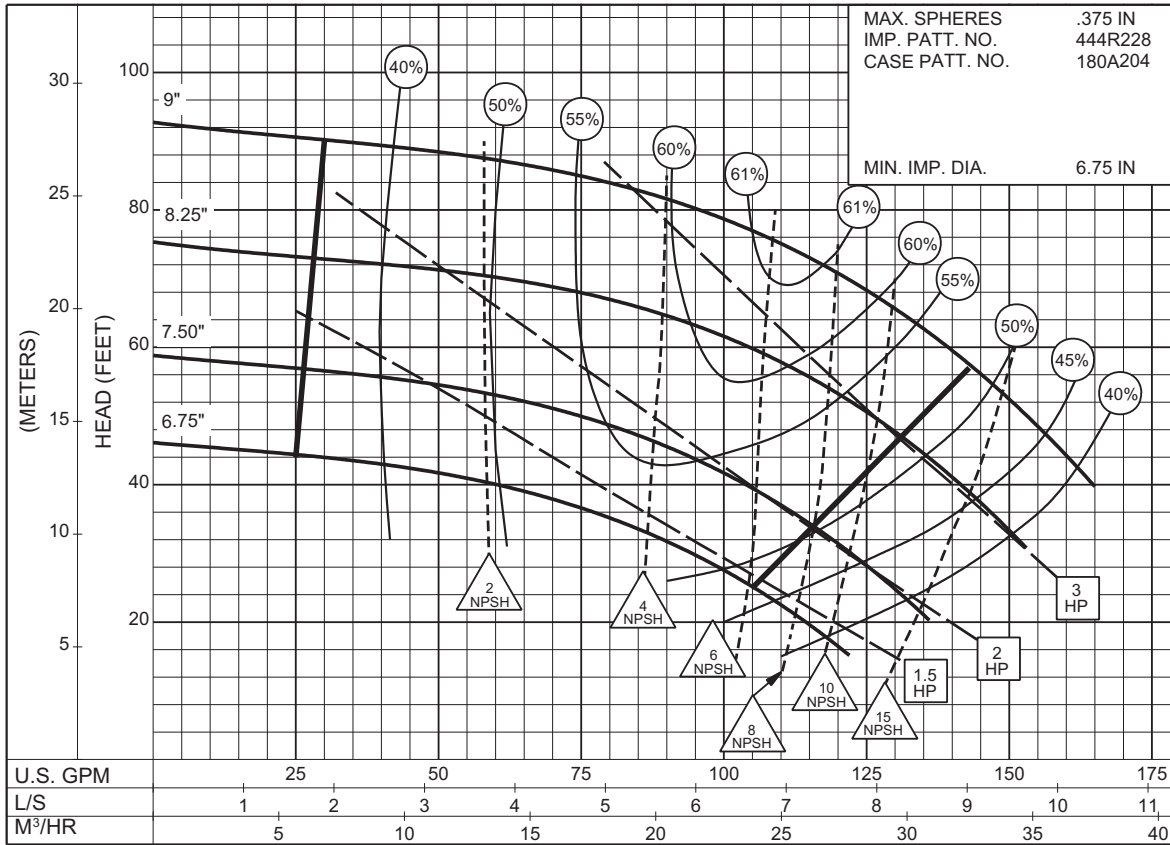
**2"**  
**1591**  
**1750 RPM**

Impeller  
444A223



**PC-177172**





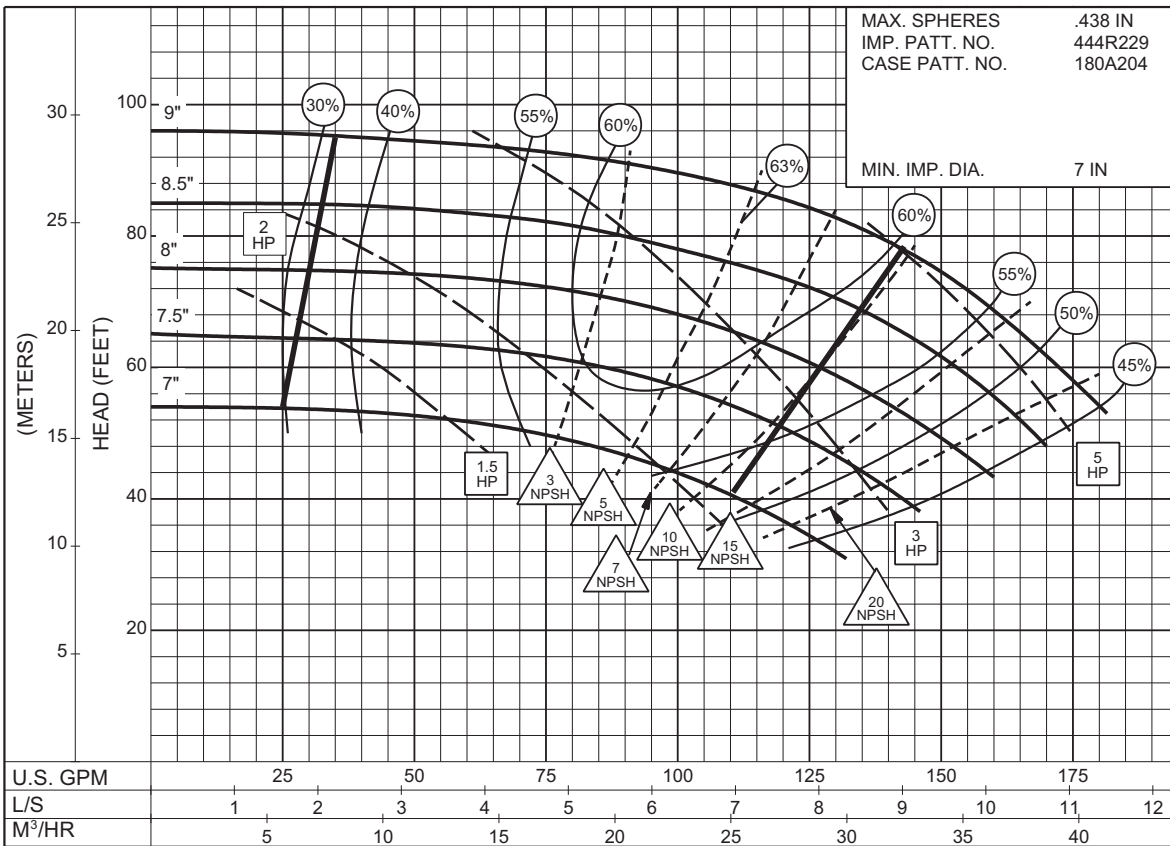
2"

1592A

1750 RPM

Impeller  
444R228

3PC-116331



2"

1592B

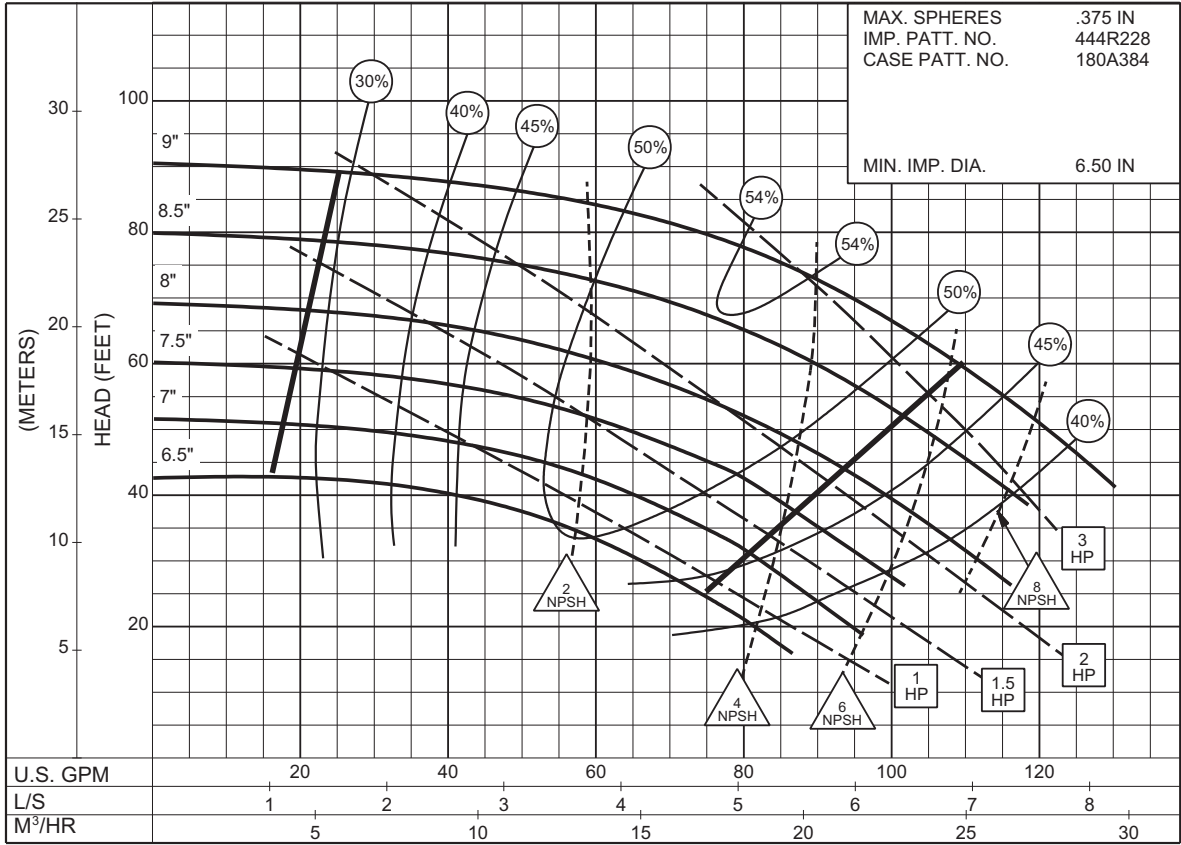
1750 RPM

Impeller  
444R229

3PC-116277

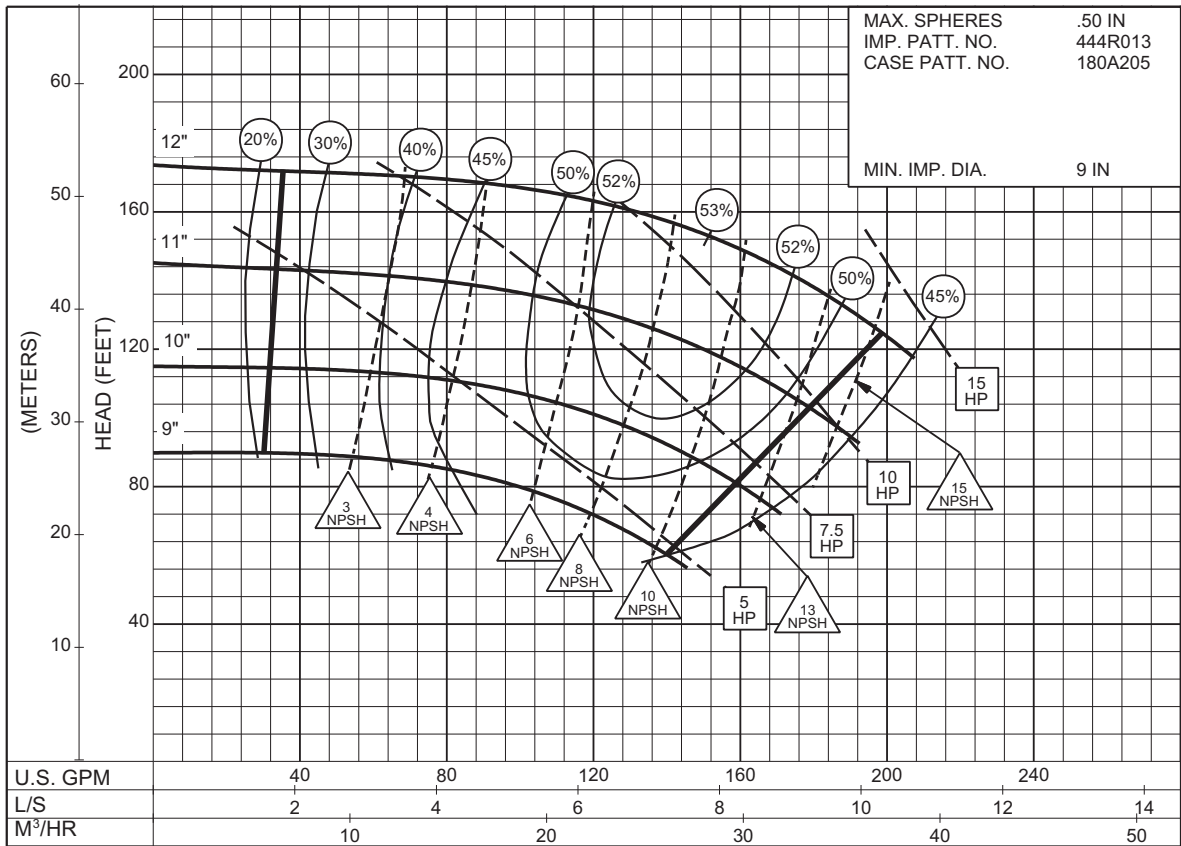


**2"**  
**1592C**  
**1750 RPM**  
  
Impeller  
444R228

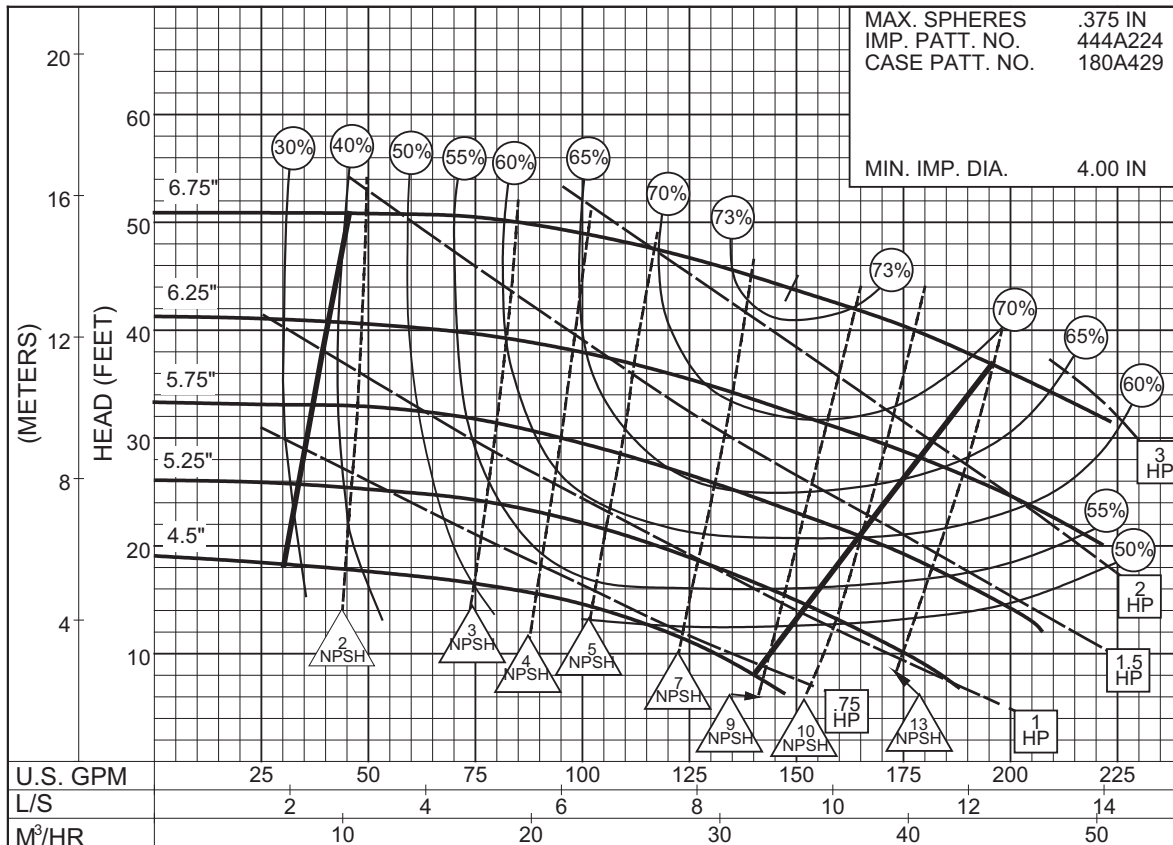


**3PC-116279**

**2"**  
**1593**  
**1750 RPM**  
  
Impeller  
444R013



**3PC-116280A**



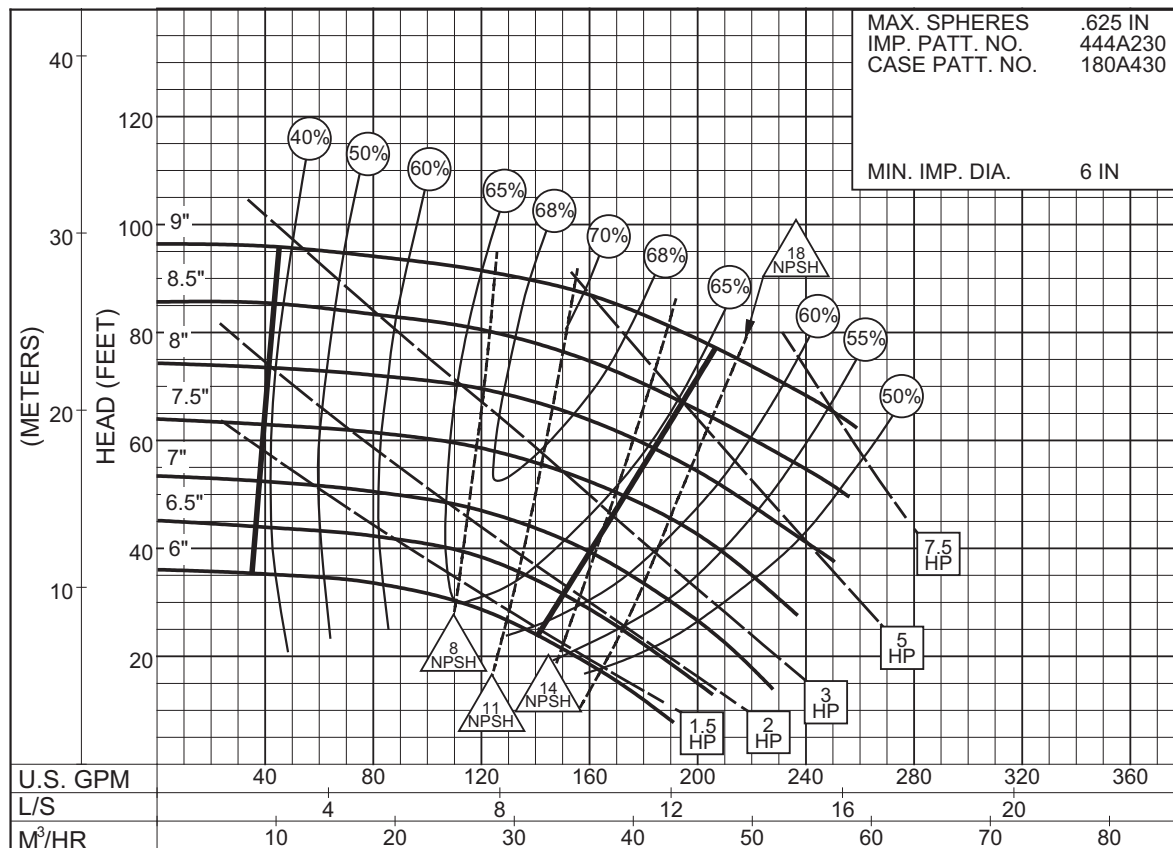
**3PC-177176**

**2-1/2"**

**1591**

**1750 RPM**

Impeller  
444A224



**3PC-177180**

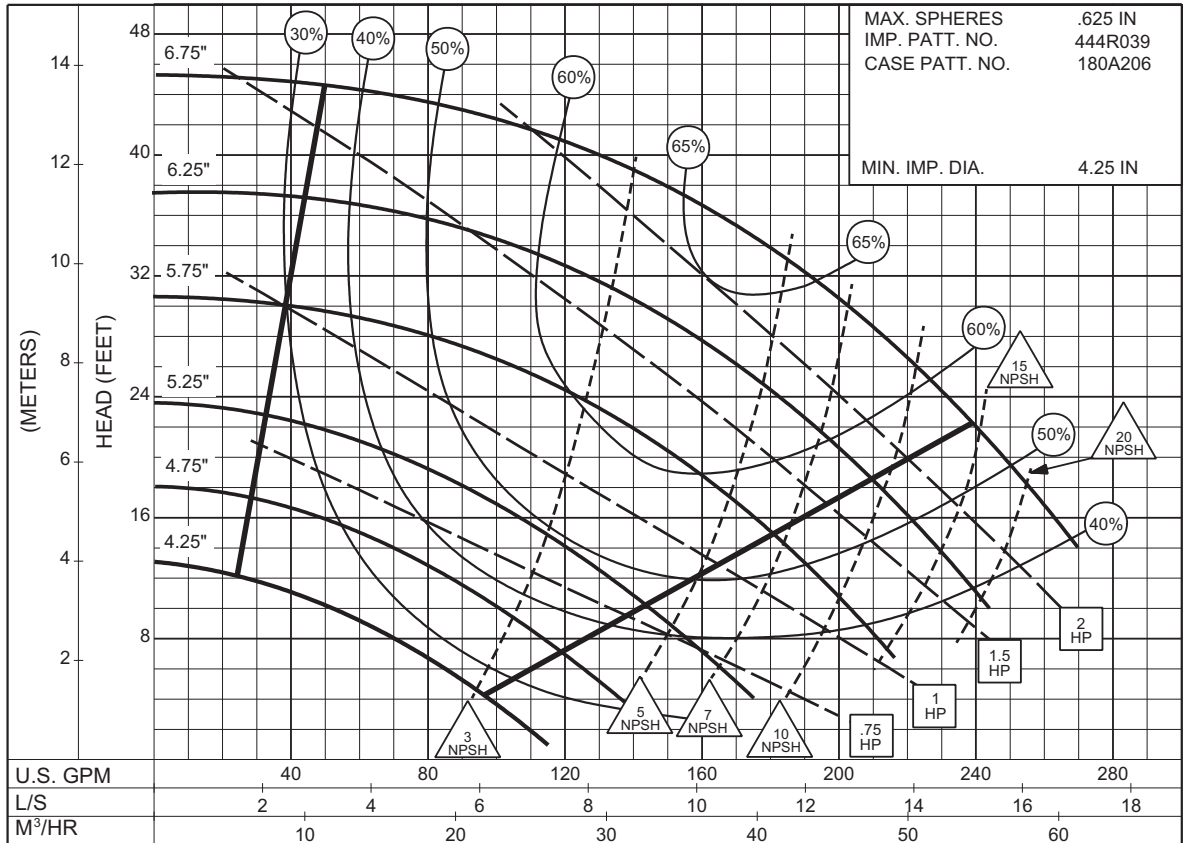
**2-1/2"**

**1592**

**1750 RPM**

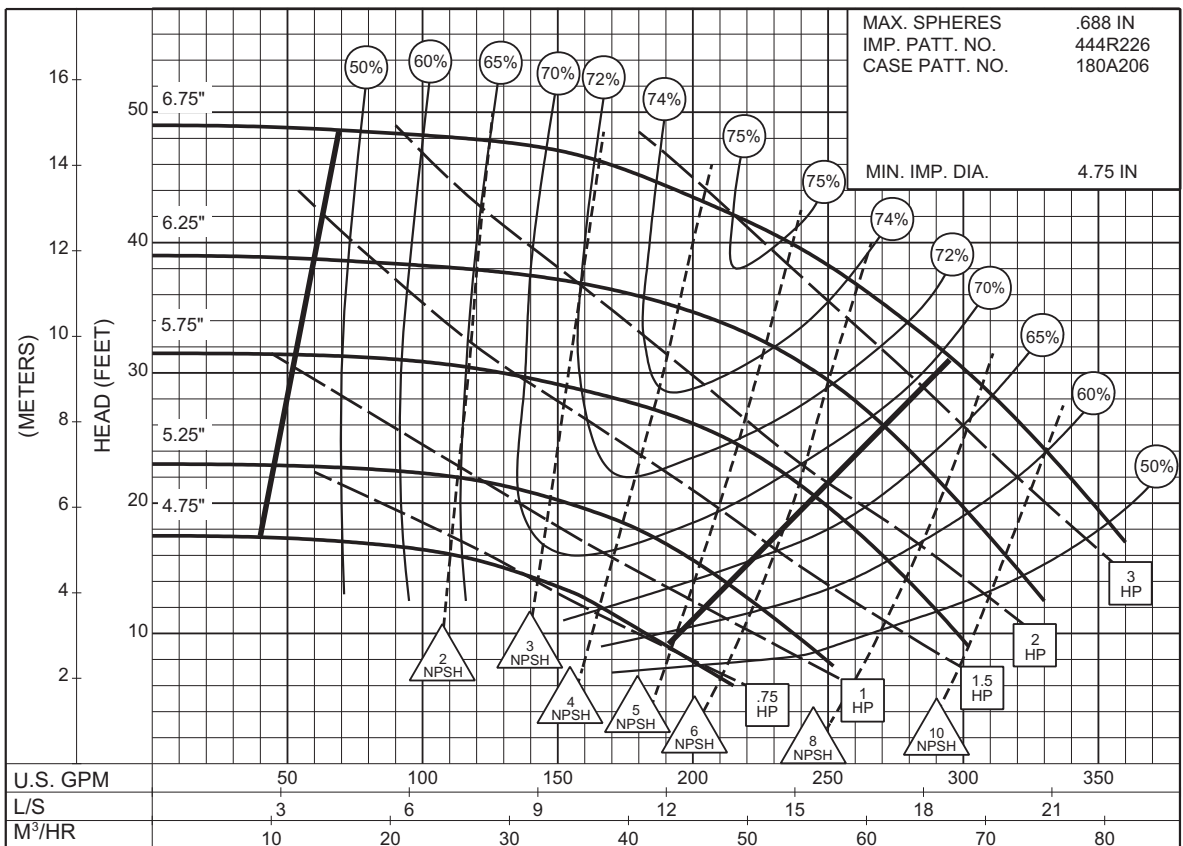
Impeller  
444A230

**3"**  
**1591A**  
**1750 RPM**  
  
Impeller  
444R039

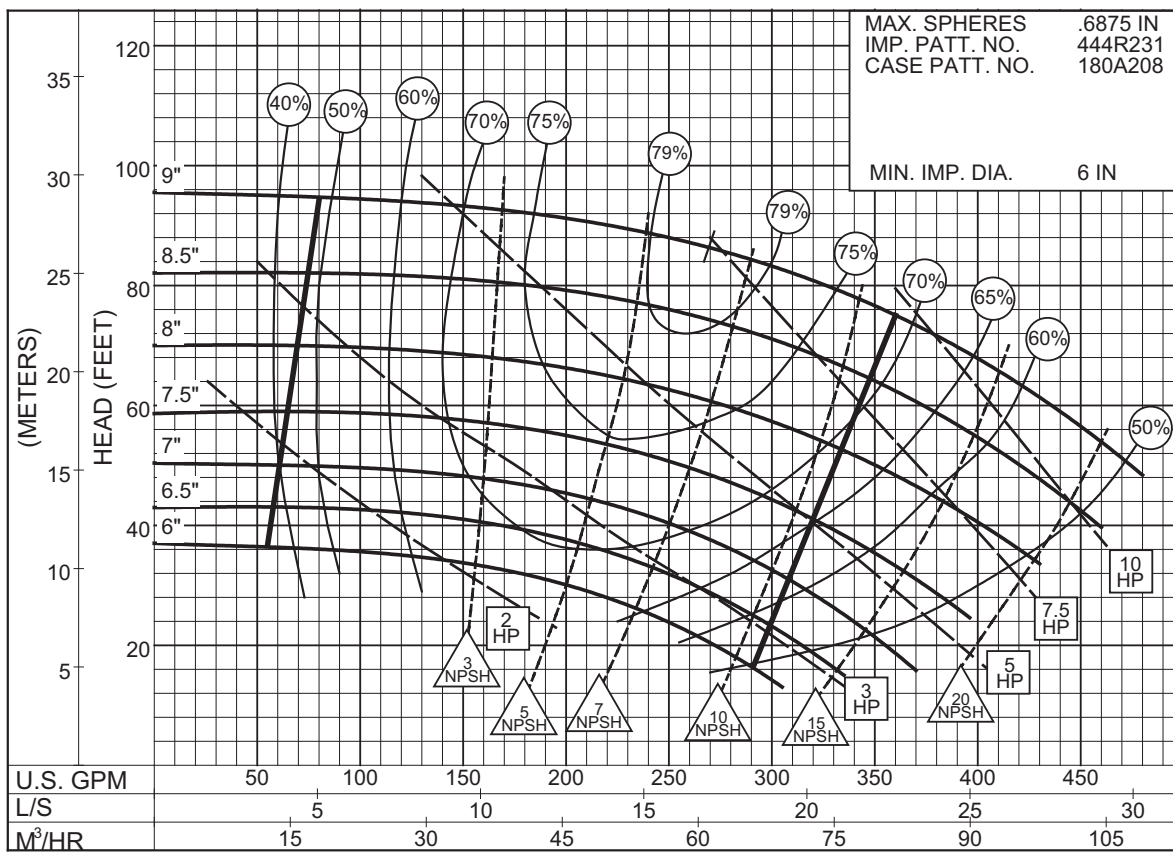
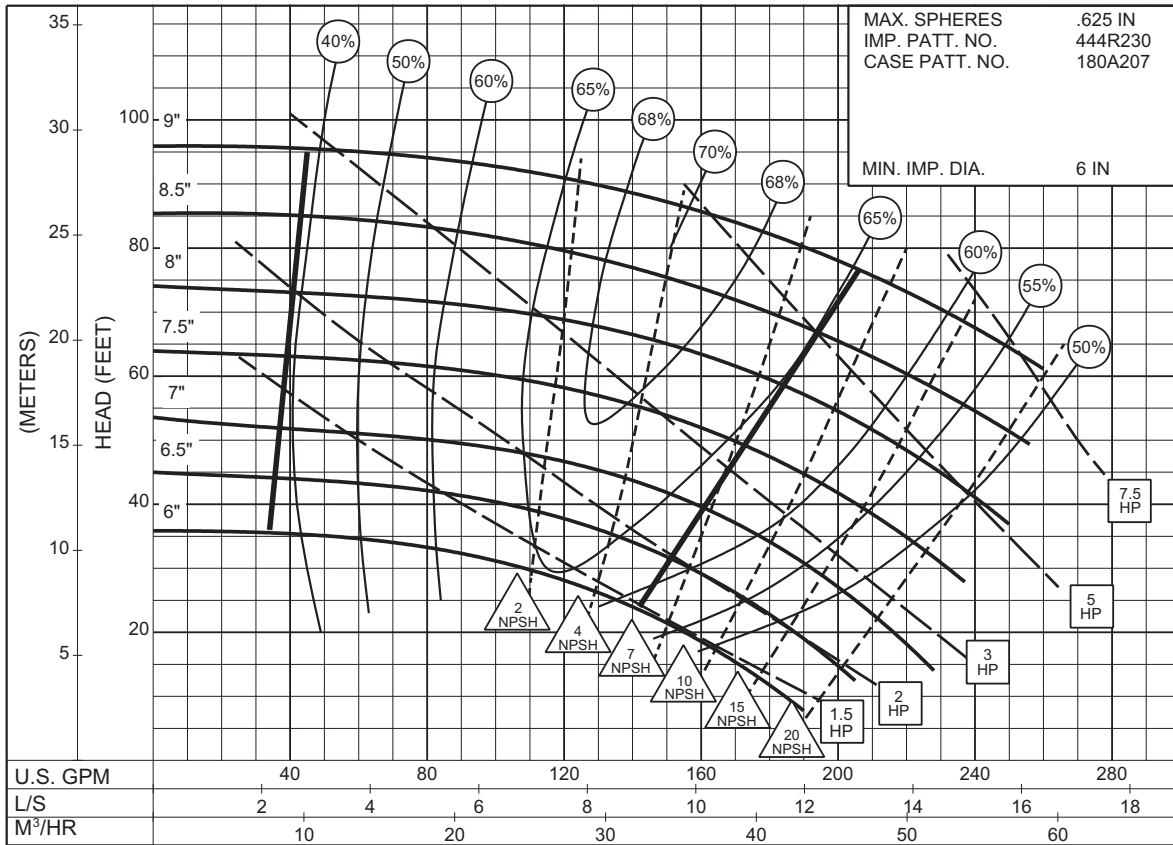


**3PC-116291**

**3"**  
**1591B**  
**1750 RPM**  
  
Impeller  
444R226

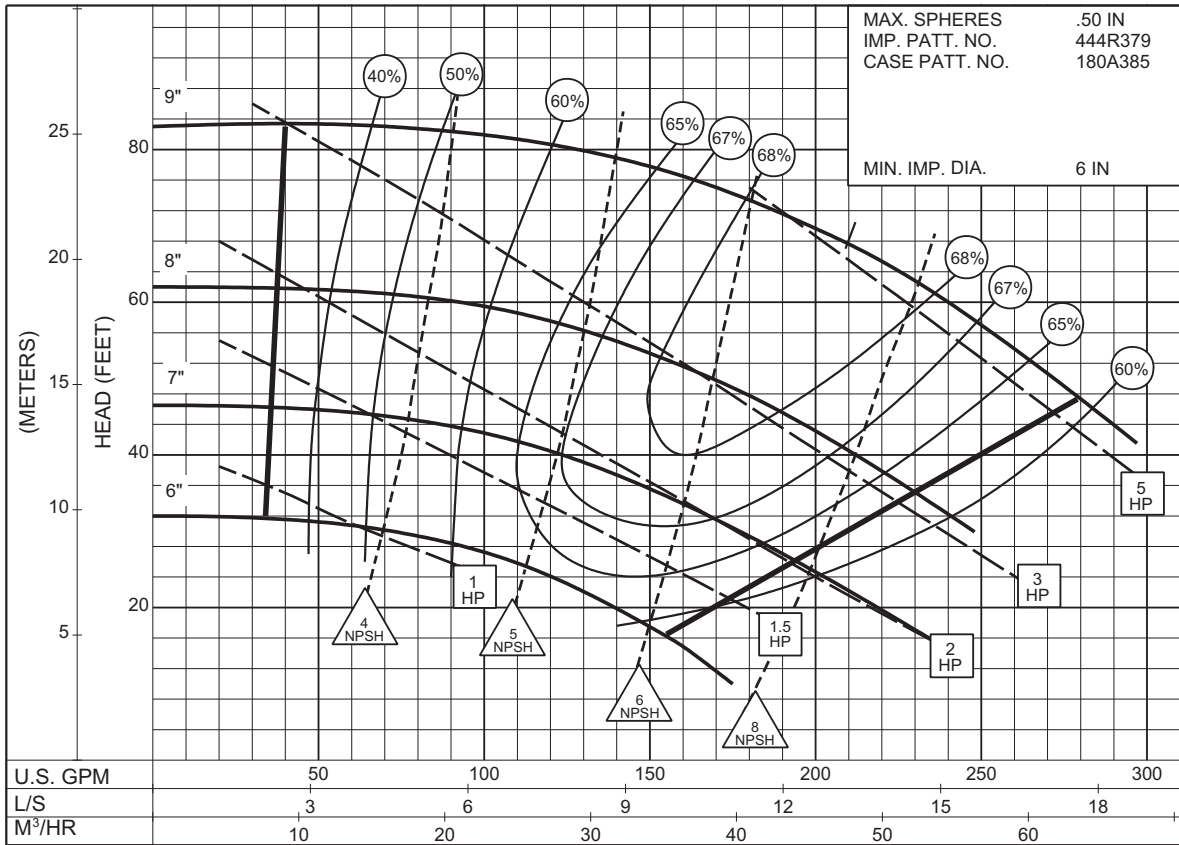


**3PC-116293**



**3"**  
**1593**  
**1750 RPM**

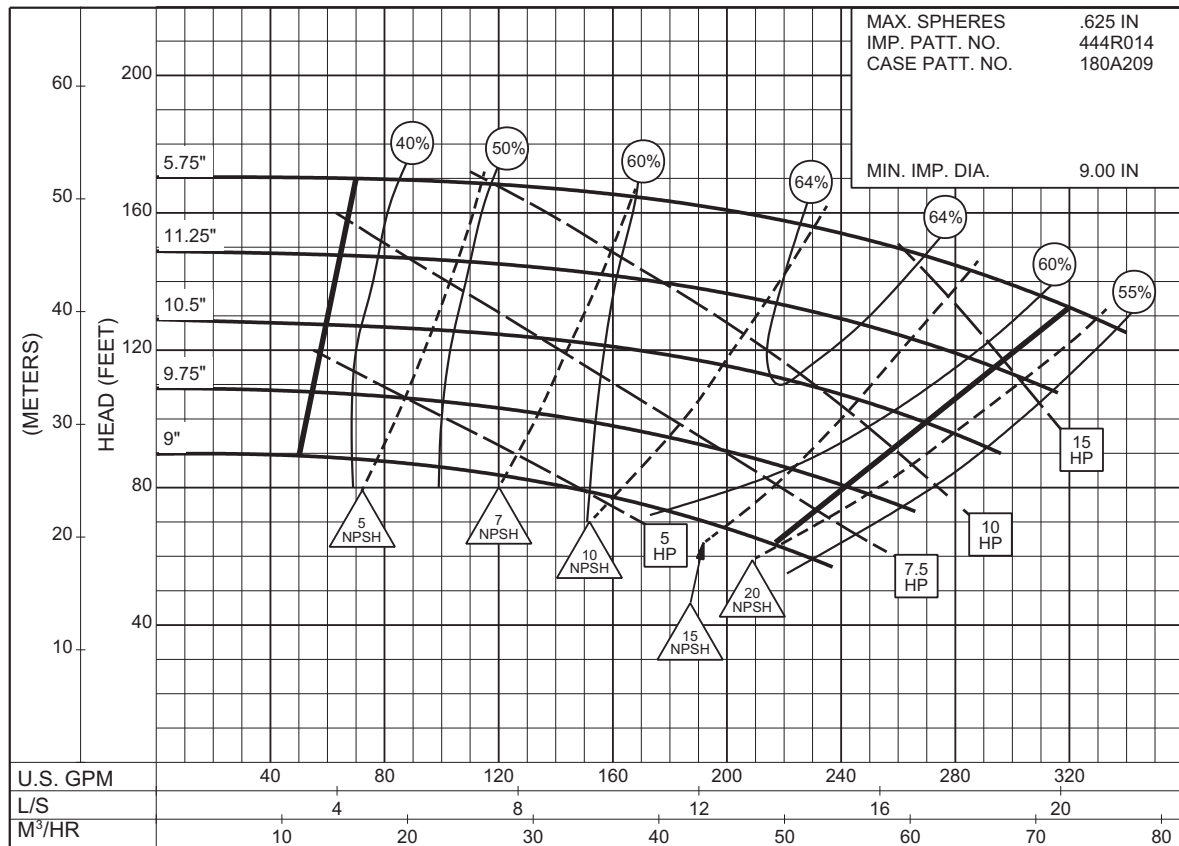
Impeller  
444R379



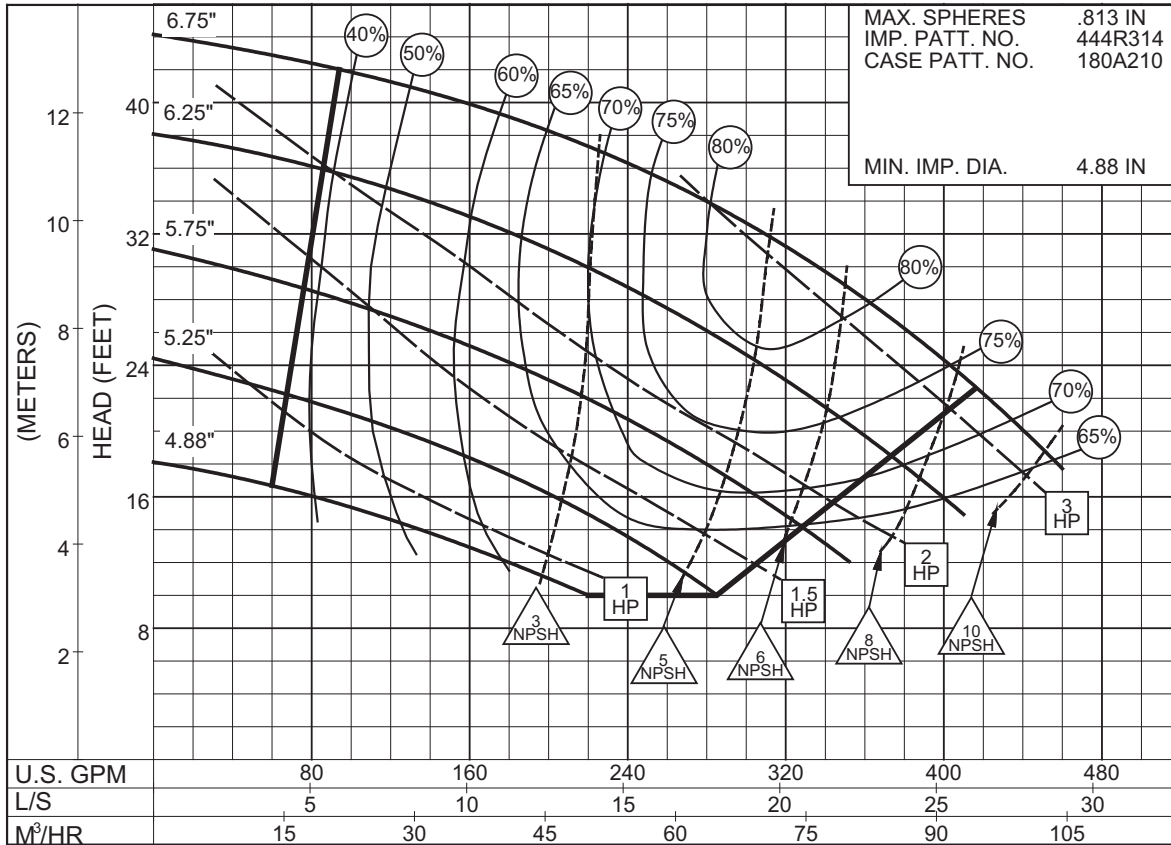
**3PC-159194**

**3"**  
**1594**  
**1750 RPM**

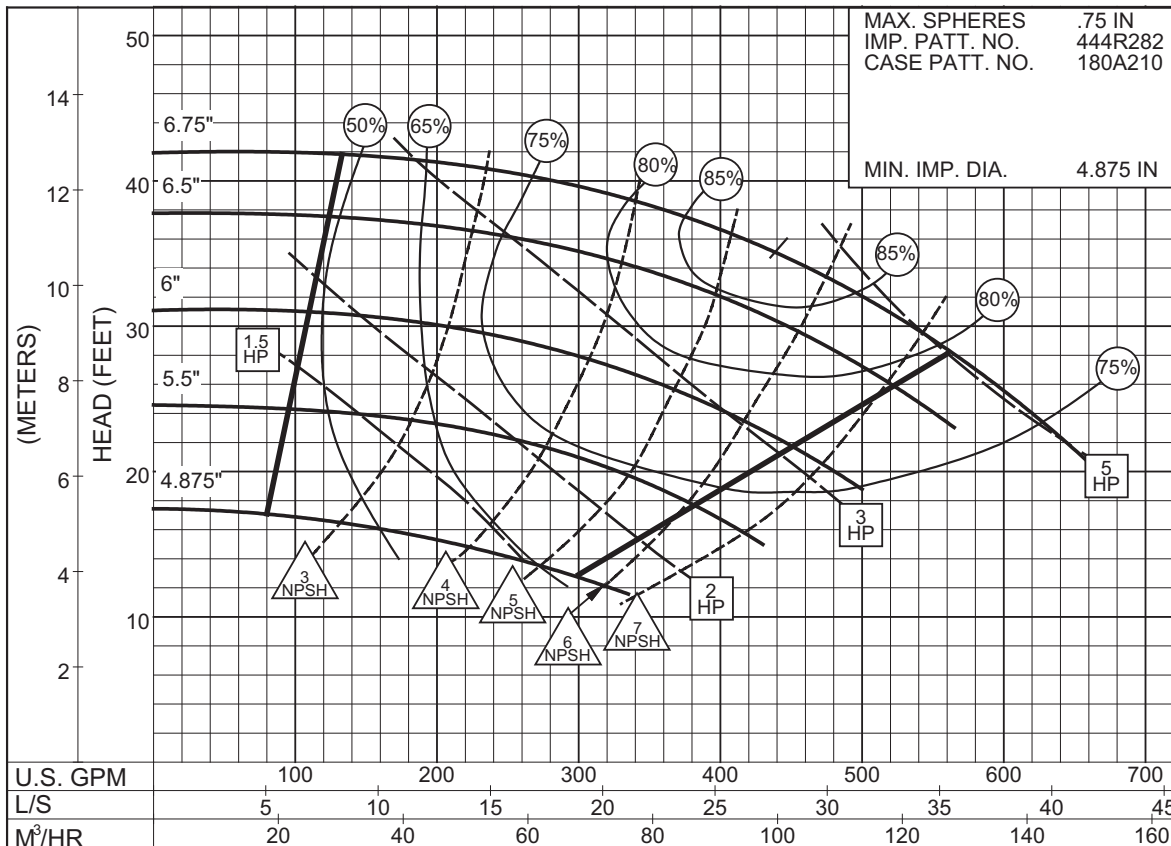
Impeller  
444R014



**3PC-116288**



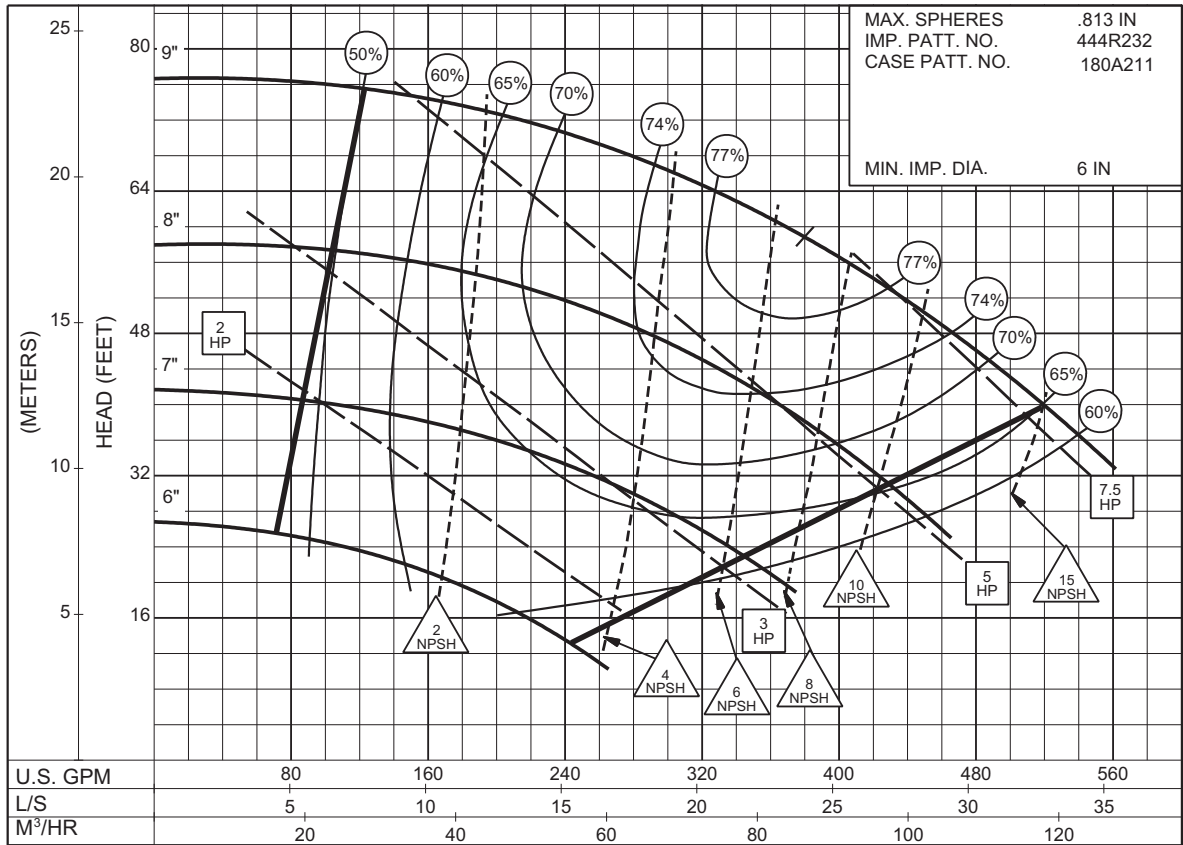
PC-116306



3PC-116308A

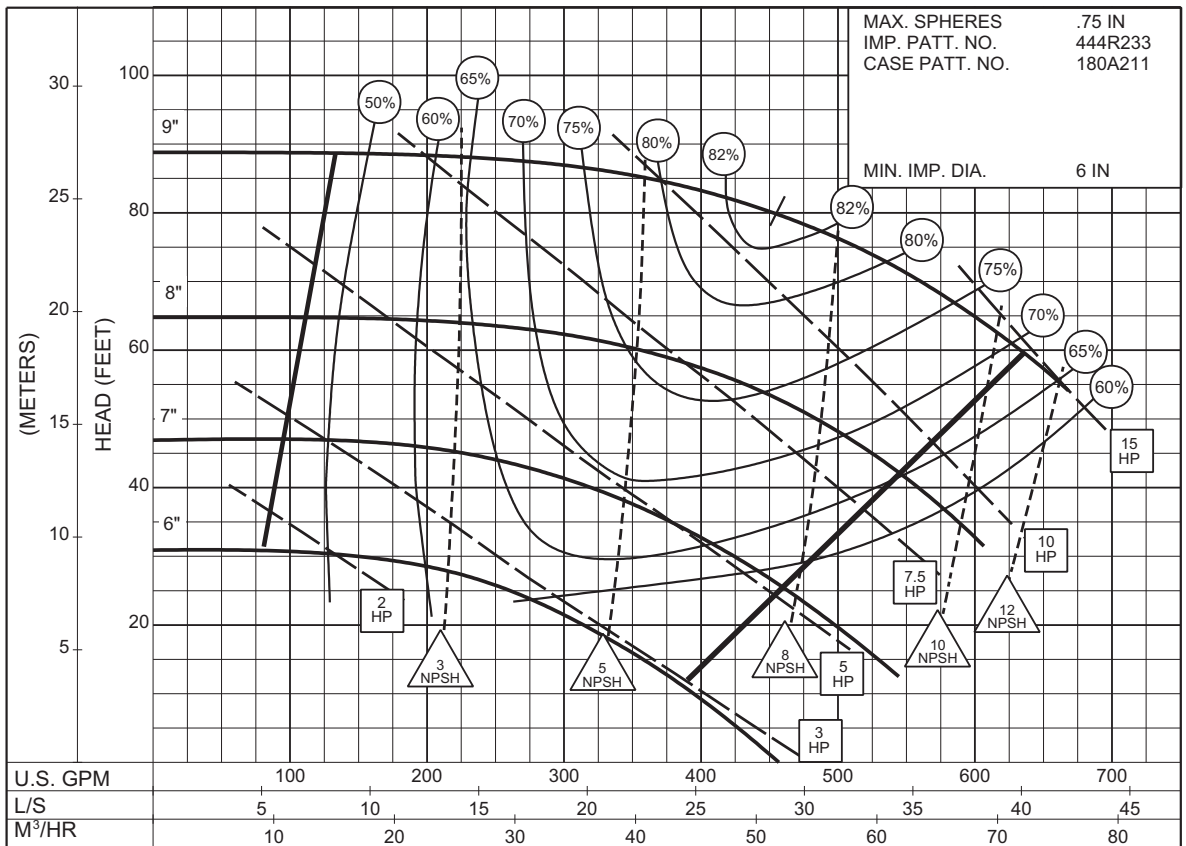


**4"**  
**1592A**  
**1750 RPM**  
  
Impeller  
444R232



**PC-142438**

**4"**  
**1592B**  
**1750 RPM**  
  
Impeller  
444R233

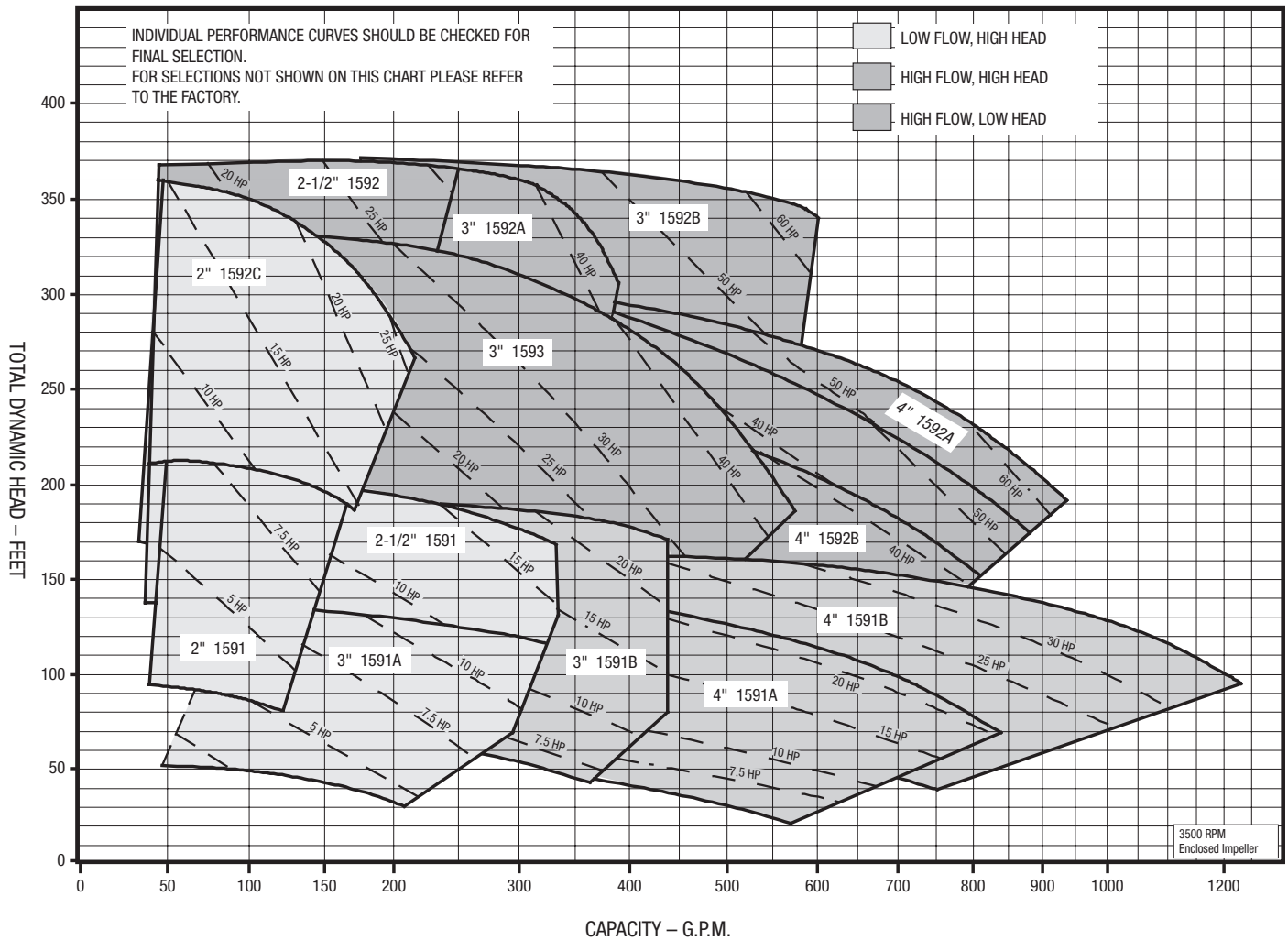


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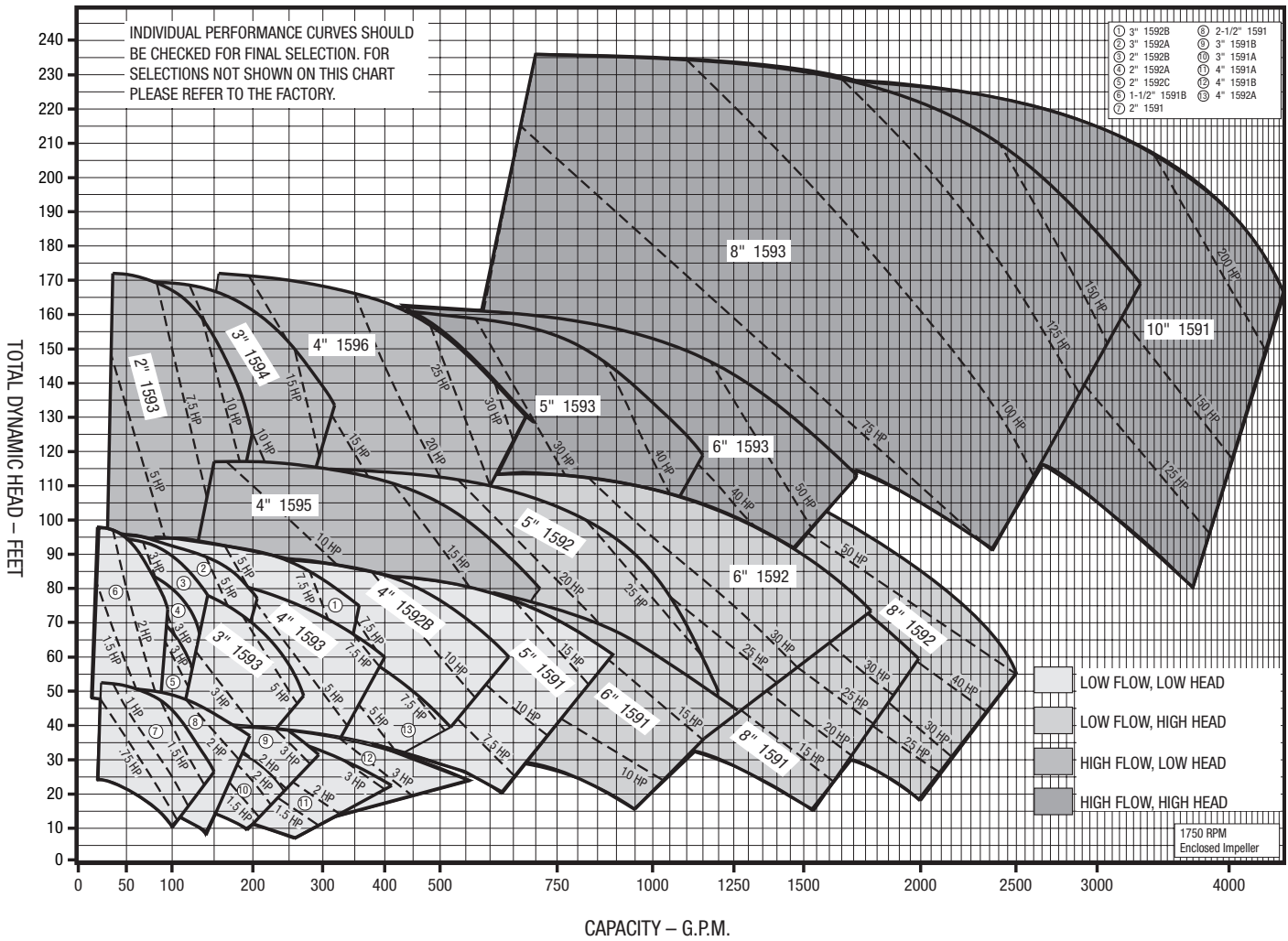
# Hydraulic Coverage Chart – 1590 Series Single Stage Vertical Inline Pump

## 1590 Series Coverage Chart 3500 RPM

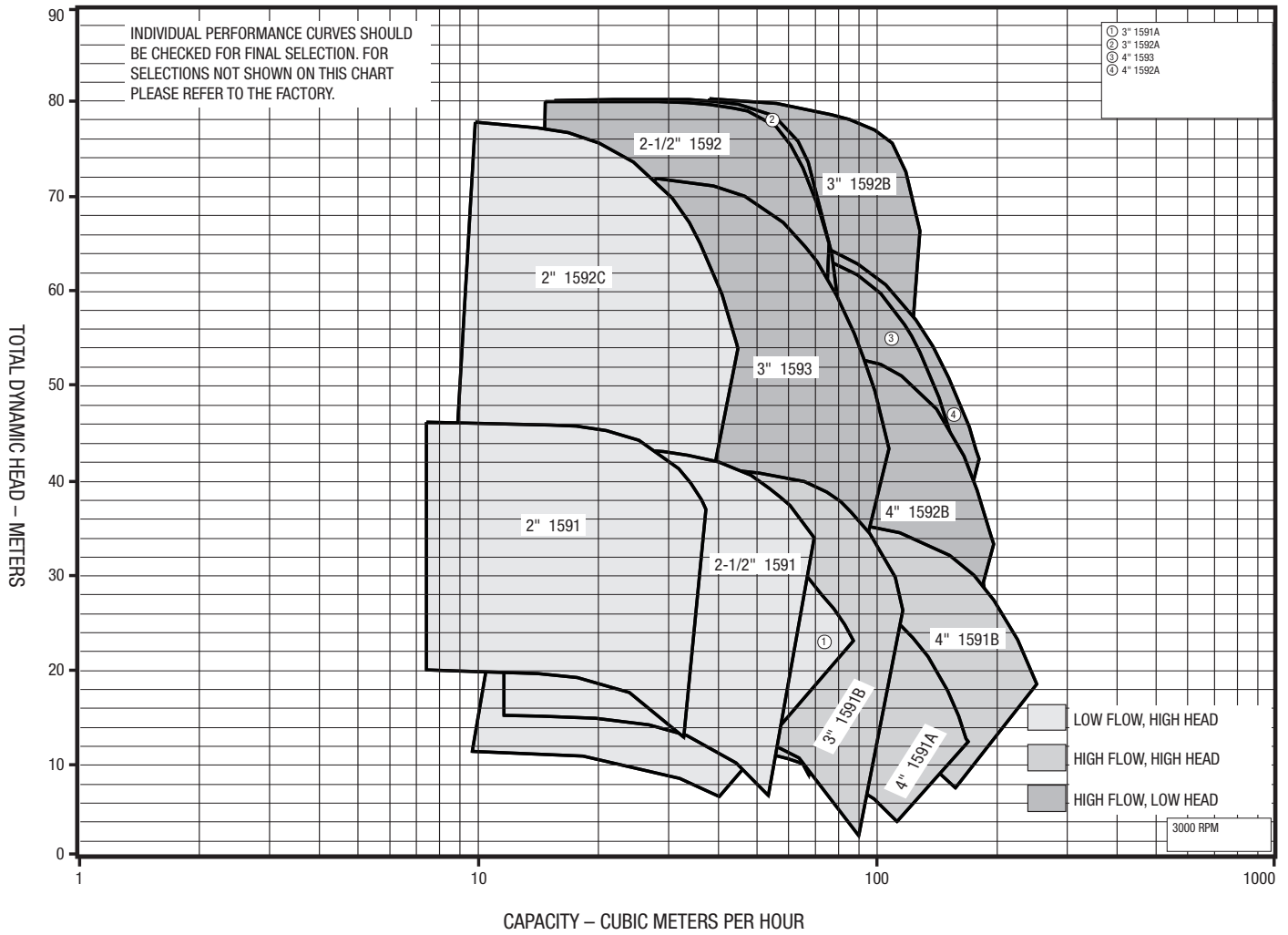


# Hydraulic Coverage Chart – 1590 Series Single Stage Vertical Inline Pump

## 1590 Series Coverage Chart 1750 RPM

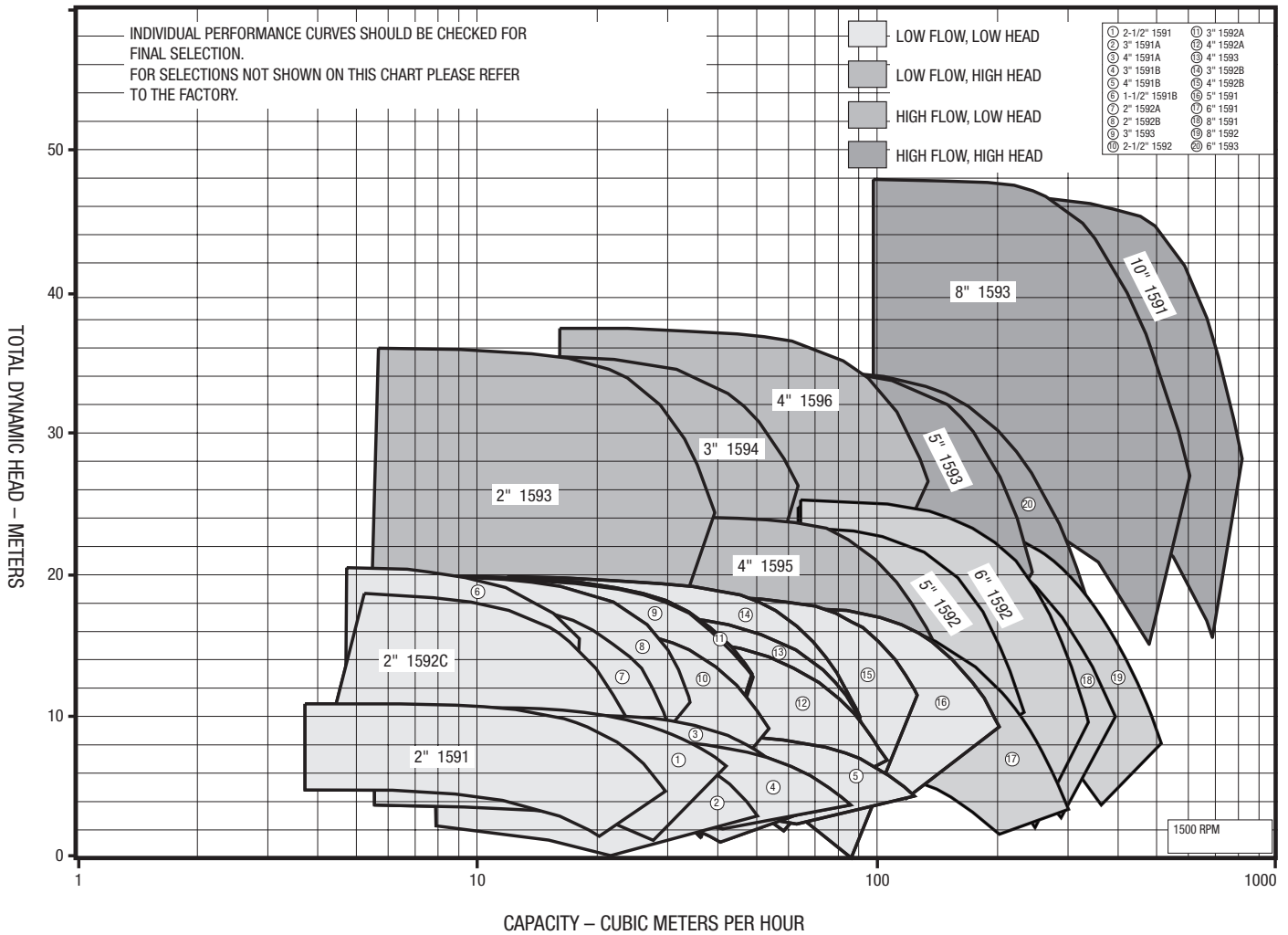


# Hydraulic Coverage Chart – 1590 Series Single Stage Vertical Inline Pump 1590 Series Coverage Chart 3000 RPM



# Hydraulic Coverage Chart – 1590 Series Single Stage Vertical Inline Pump

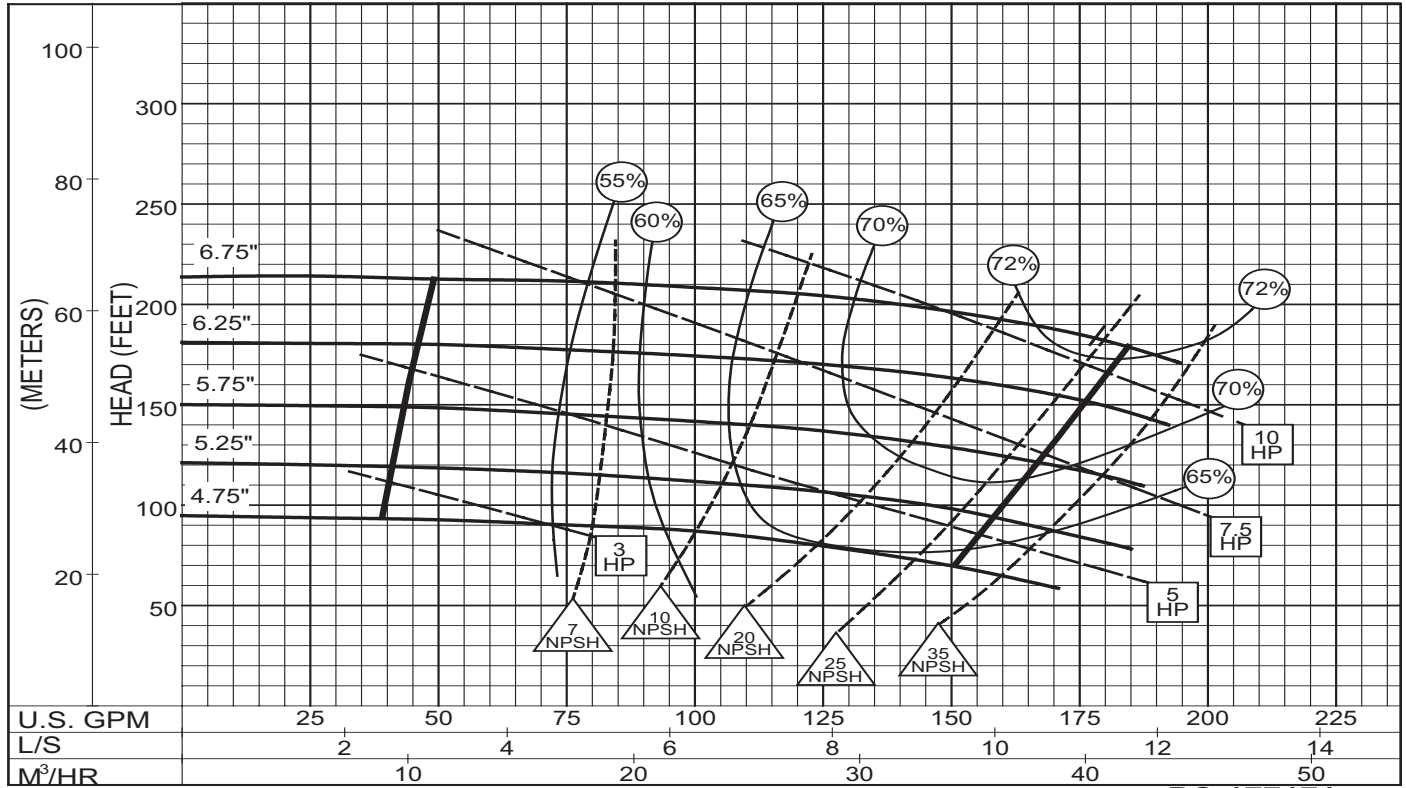
## 1590 Series Coverage Chart 1500 RPM



# Performance Curve – 2" 1591

IMPELLER: 444A223

RPM: 3500 SOLIDS: .438"

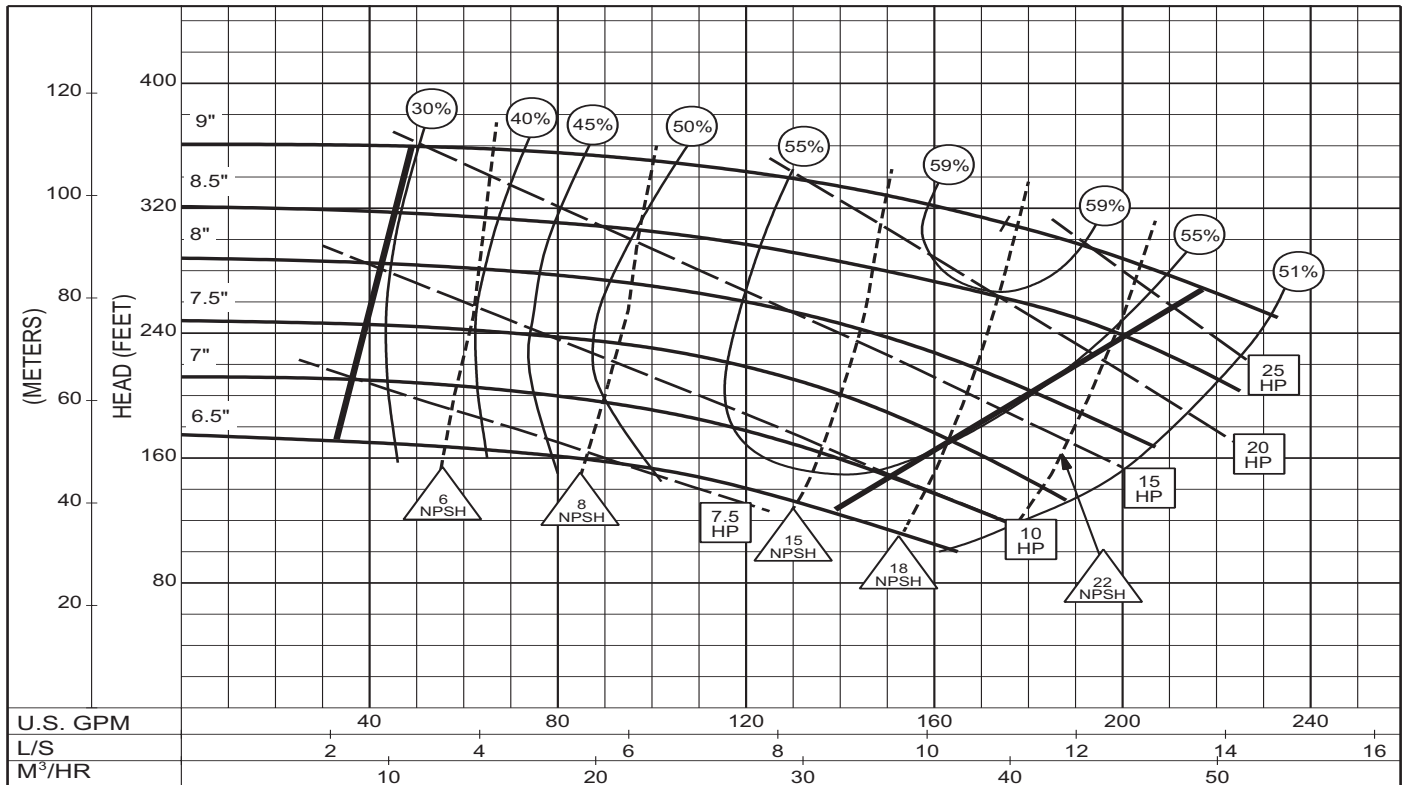


PC-177171

# Performance Curve – 2" 1592C

IMPELLER: 444R228

RPM: 1592C SOLIDS: .375"

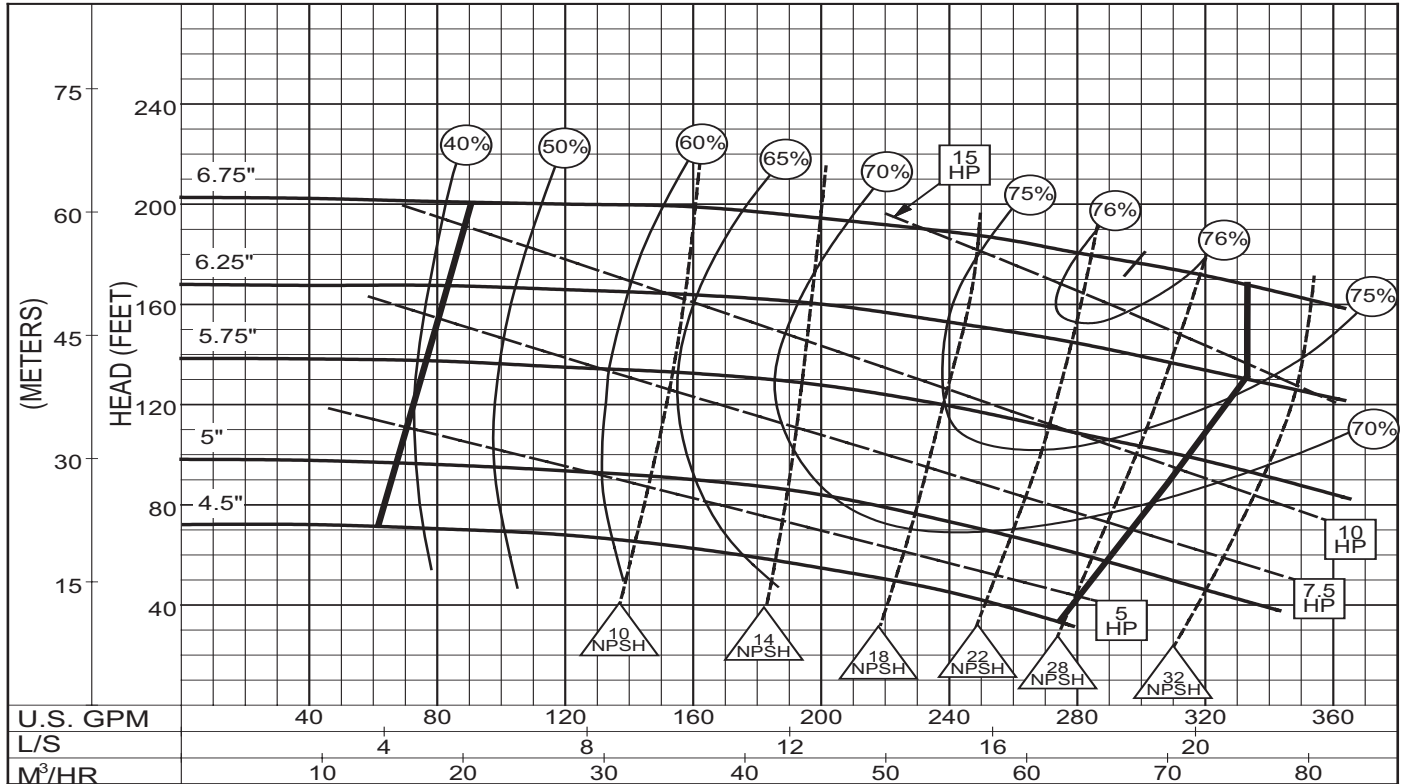


3PC-159191

# Performance Curve - 2-1/2" 1591

RPM: **3500** SOLIDS: **.375"**

IMPELLER: **444A224**

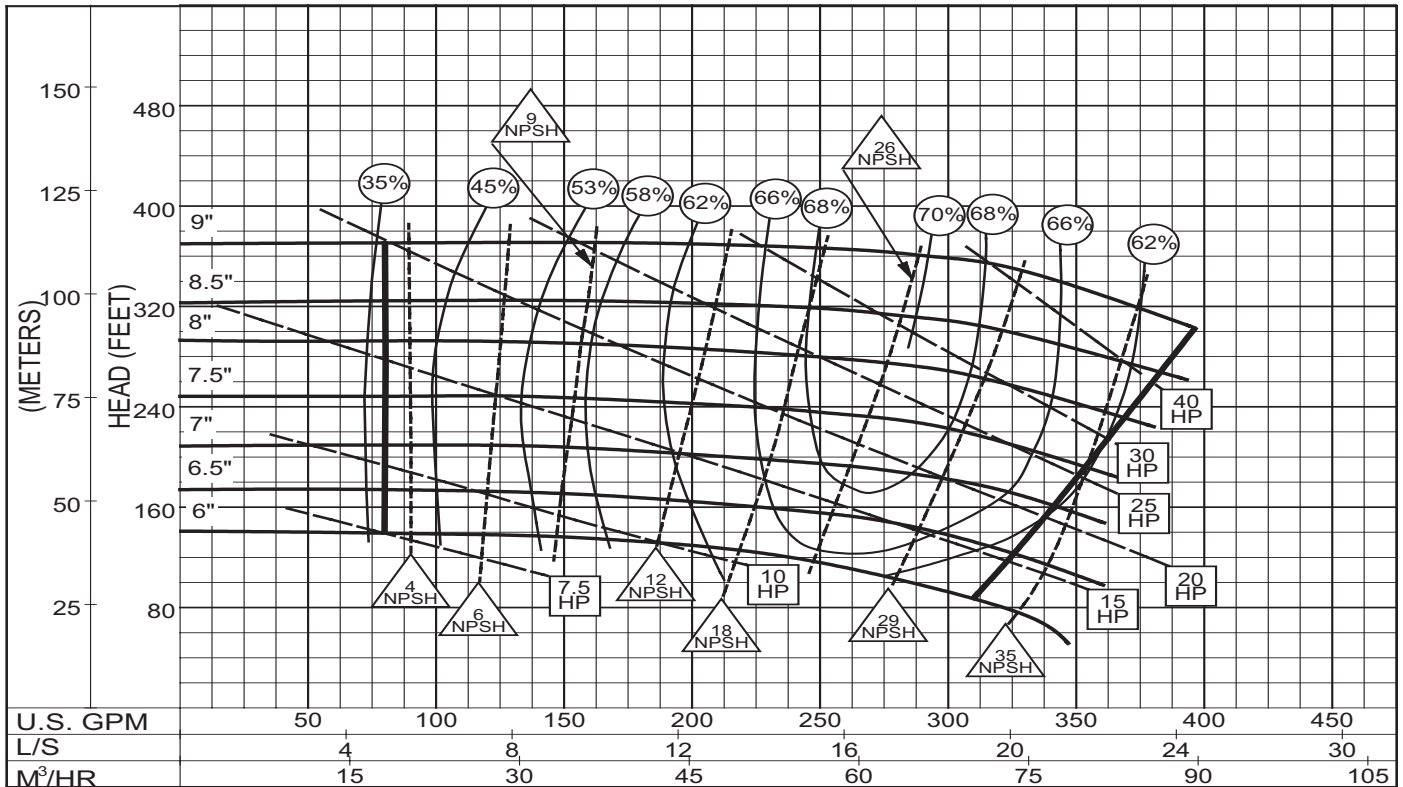


**PC-177175**

# Performance Curve - 2-1/2" 1592

RPM: **3500** SOLIDS: **.625"**

IMPELLER: **444A230**

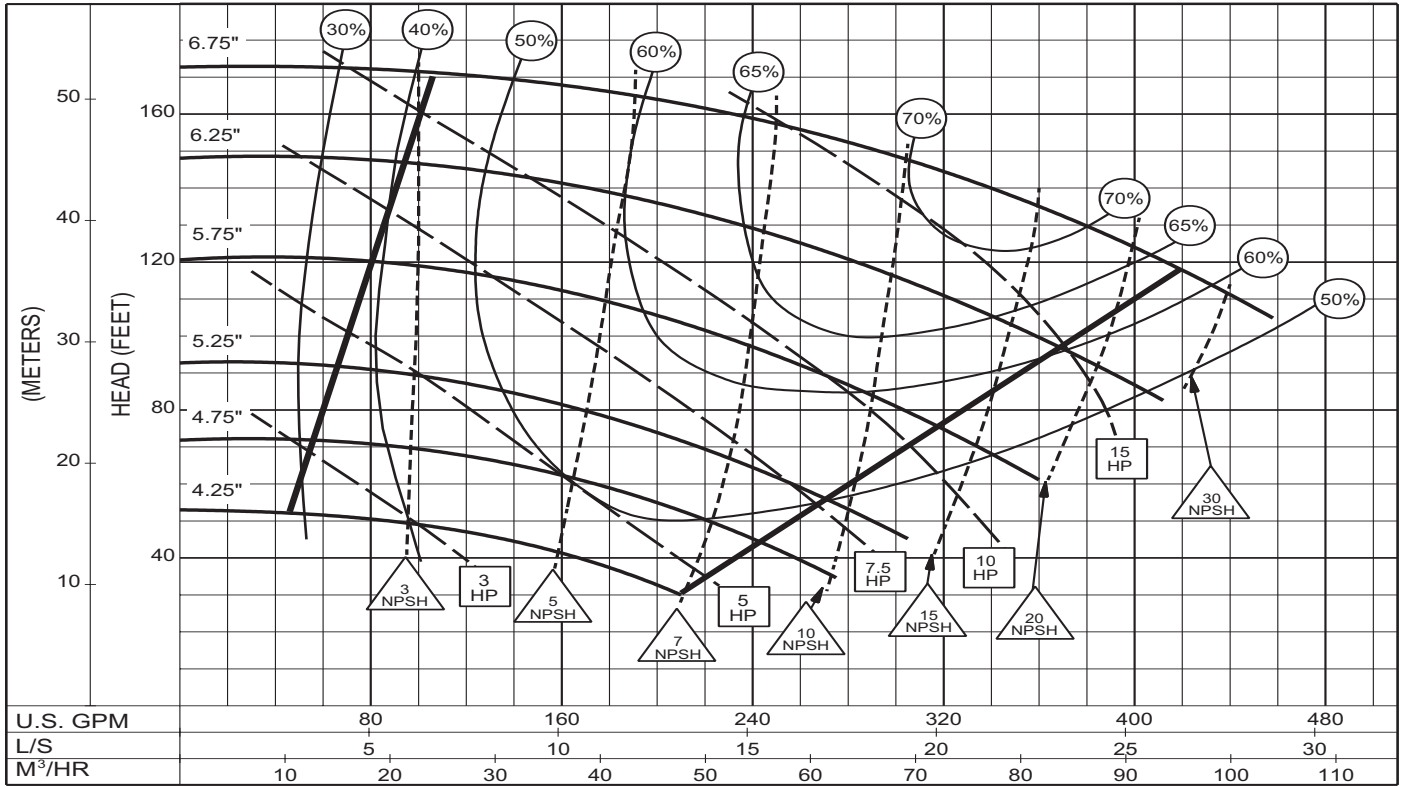


**3PC-177179**

# Performance Curve – 3" 1591A

IMPELLER: 444R039

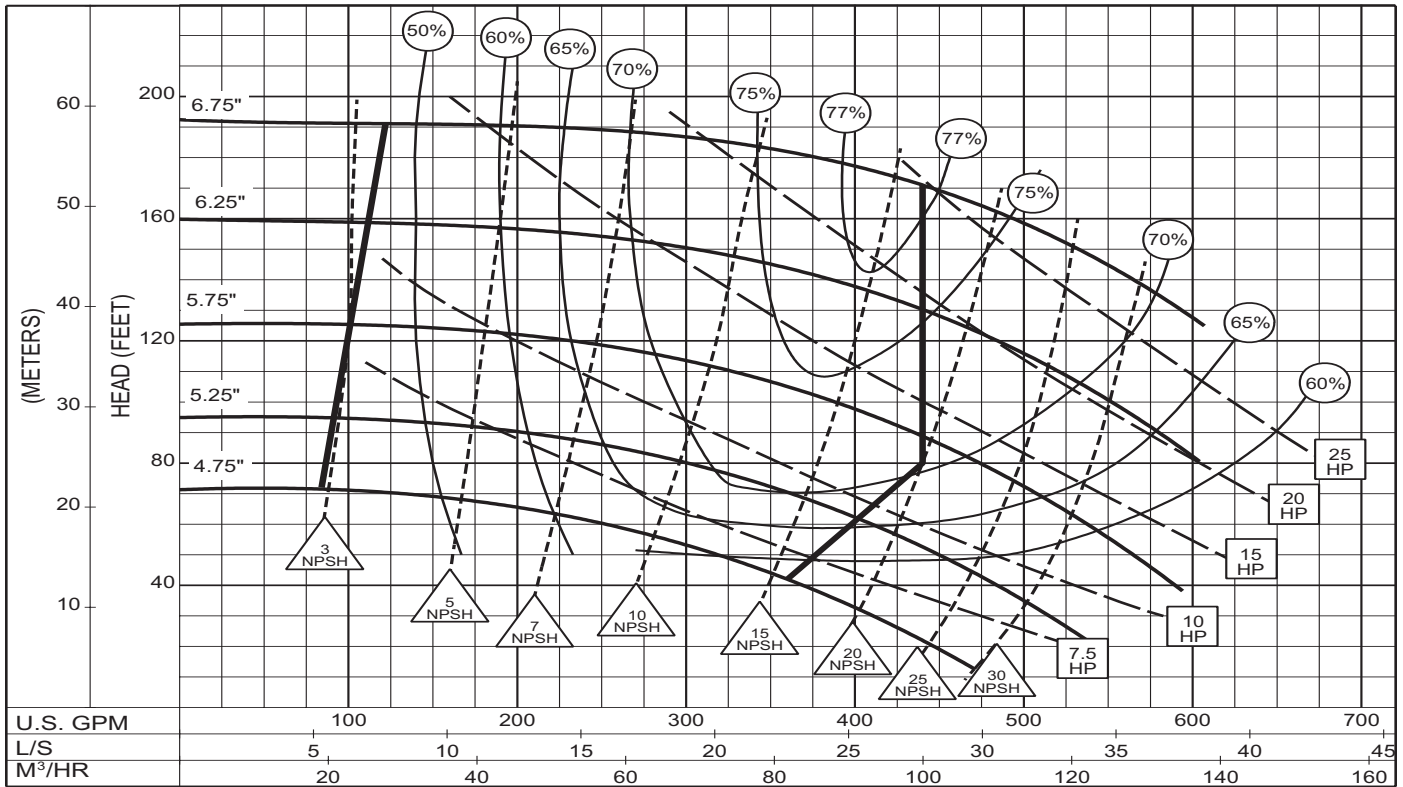
RPM: 3500 SOLIDS: .625"



# Performance Curve – 3" 1591B

IMPELLER: 444R226

RPM: 1591B SOLIDS: .6875"

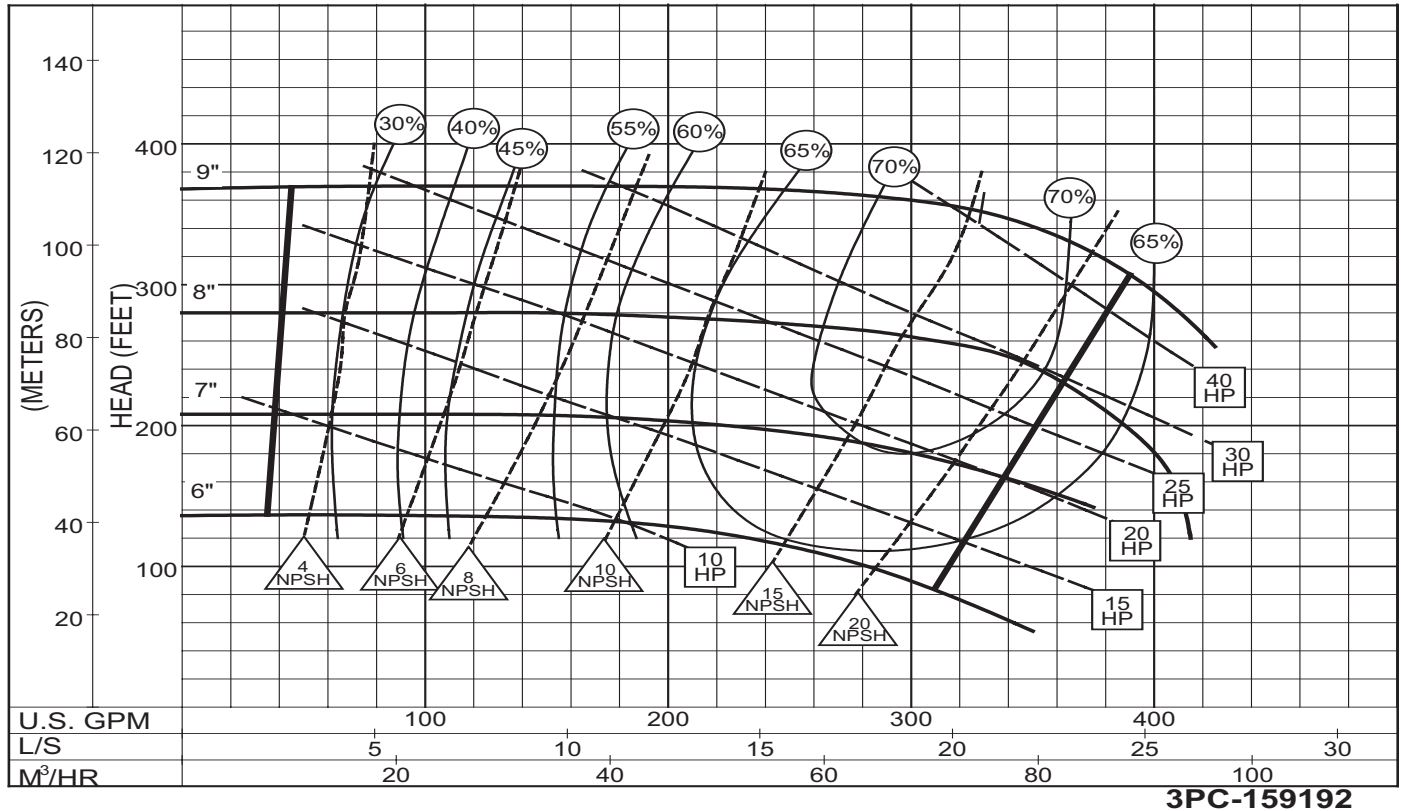




# Performance Curve - 3" 1592A

IMPELLER: 444R230

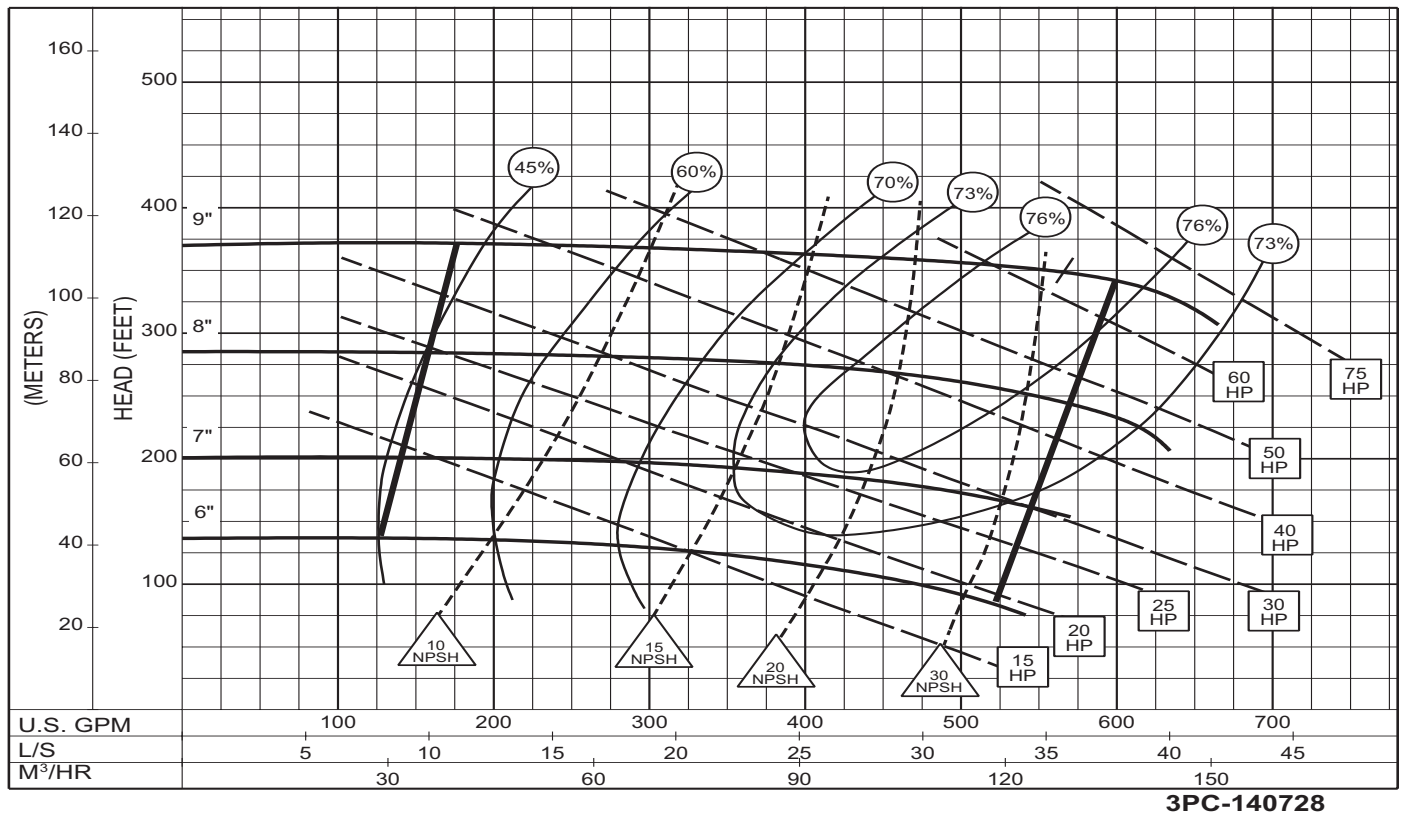
RPM: 3500 SOLIDS: .625"



# Performance Curve - 3" 1592B

IMPELLER: 444R231

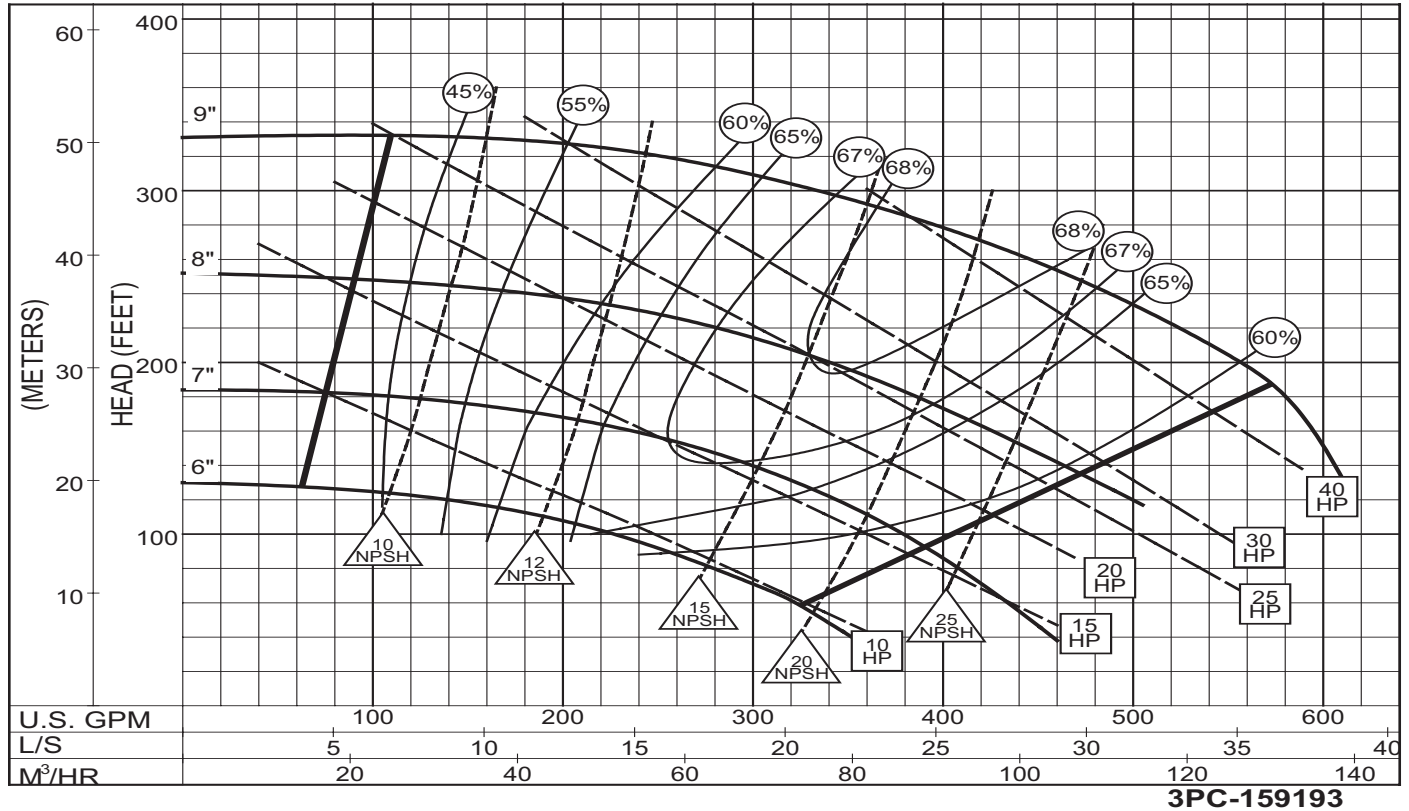
RPM: 3500 SOLIDS: .6875"



# Performance Curve - 3" 1593

IMPELLER: 444R379

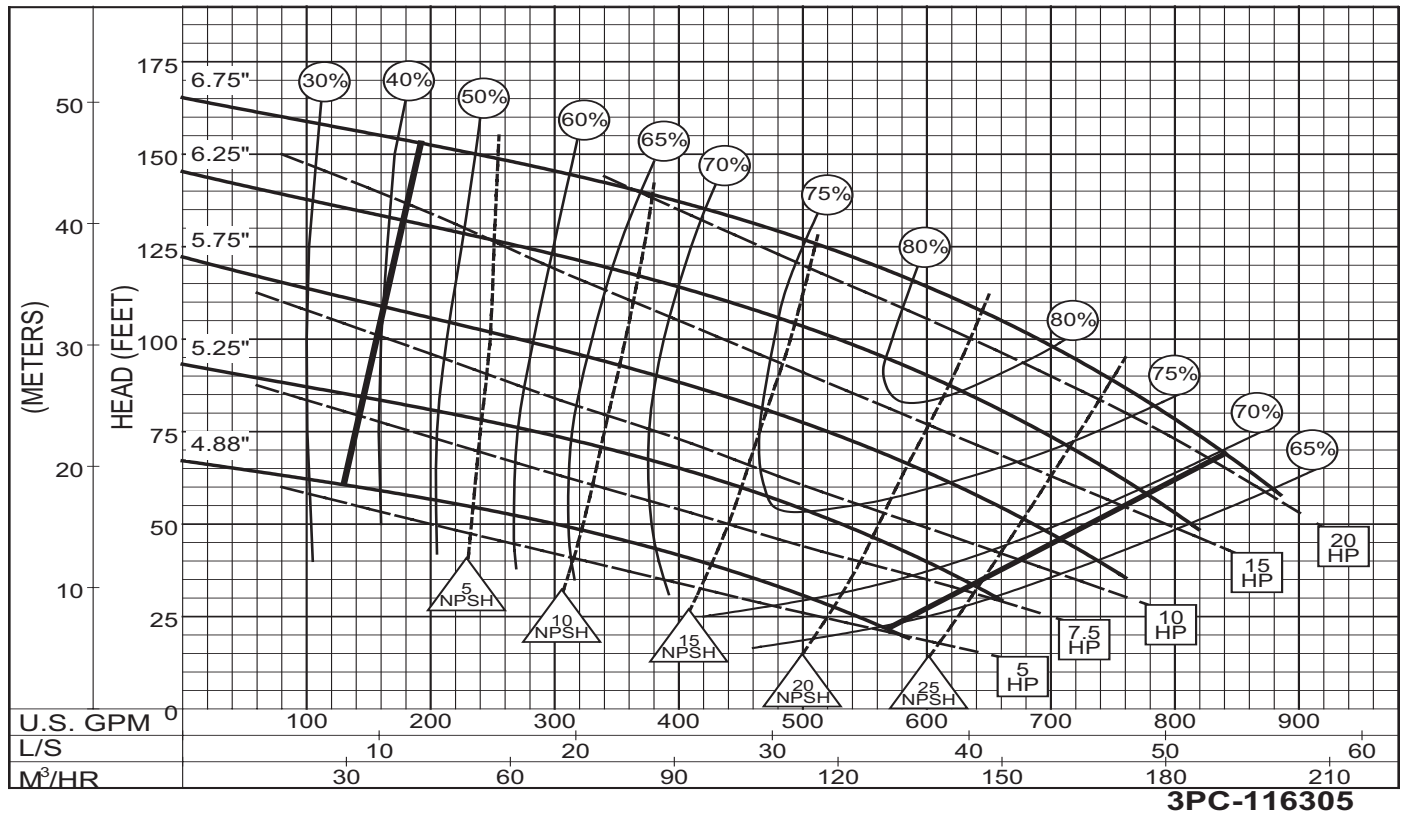
RPM: 3500 SOLIDS: .50"



# Performance Curve - 4" 1591A

IMPELLER: 444R314

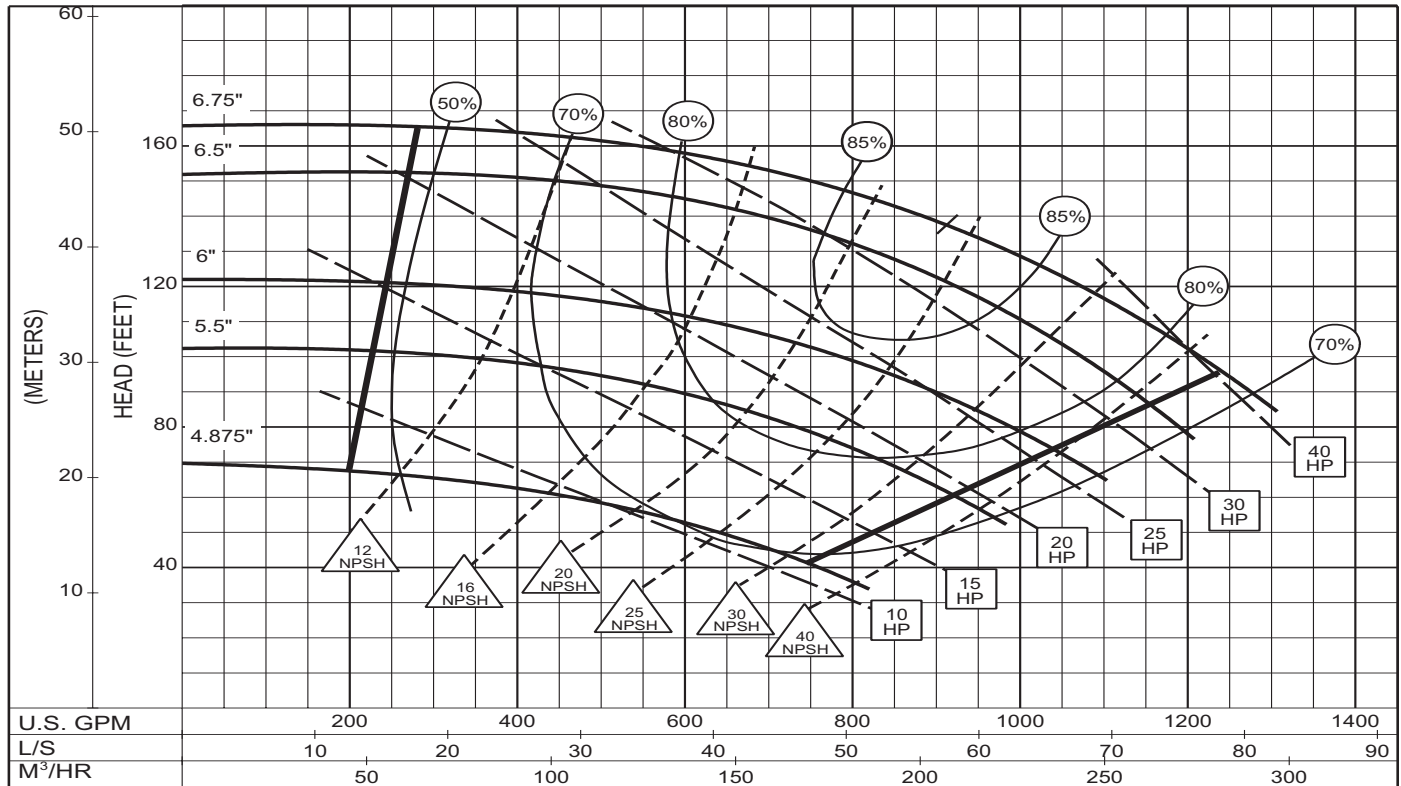
RPM: 3500 SOLIDS: .813"



# Performance Curve - 4" 1591B

RPM: **3500** SOLIDS: **.75"**

IMPELLER: **444R282**

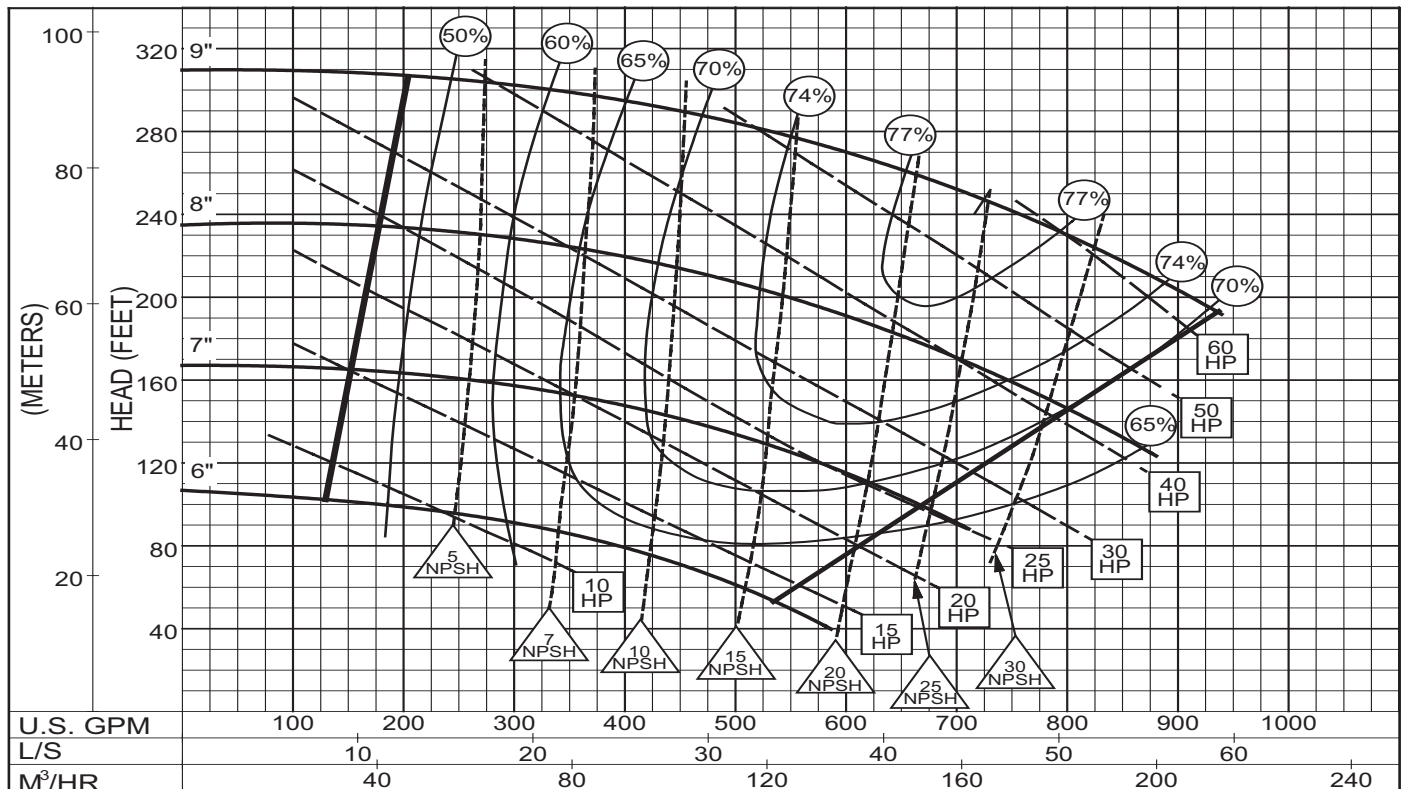


**3PC-116307A**

# Performance Curve - 4" 1592A

RPM: **3500** SOLIDS: **.813"**

IMPELLER: **444R232**

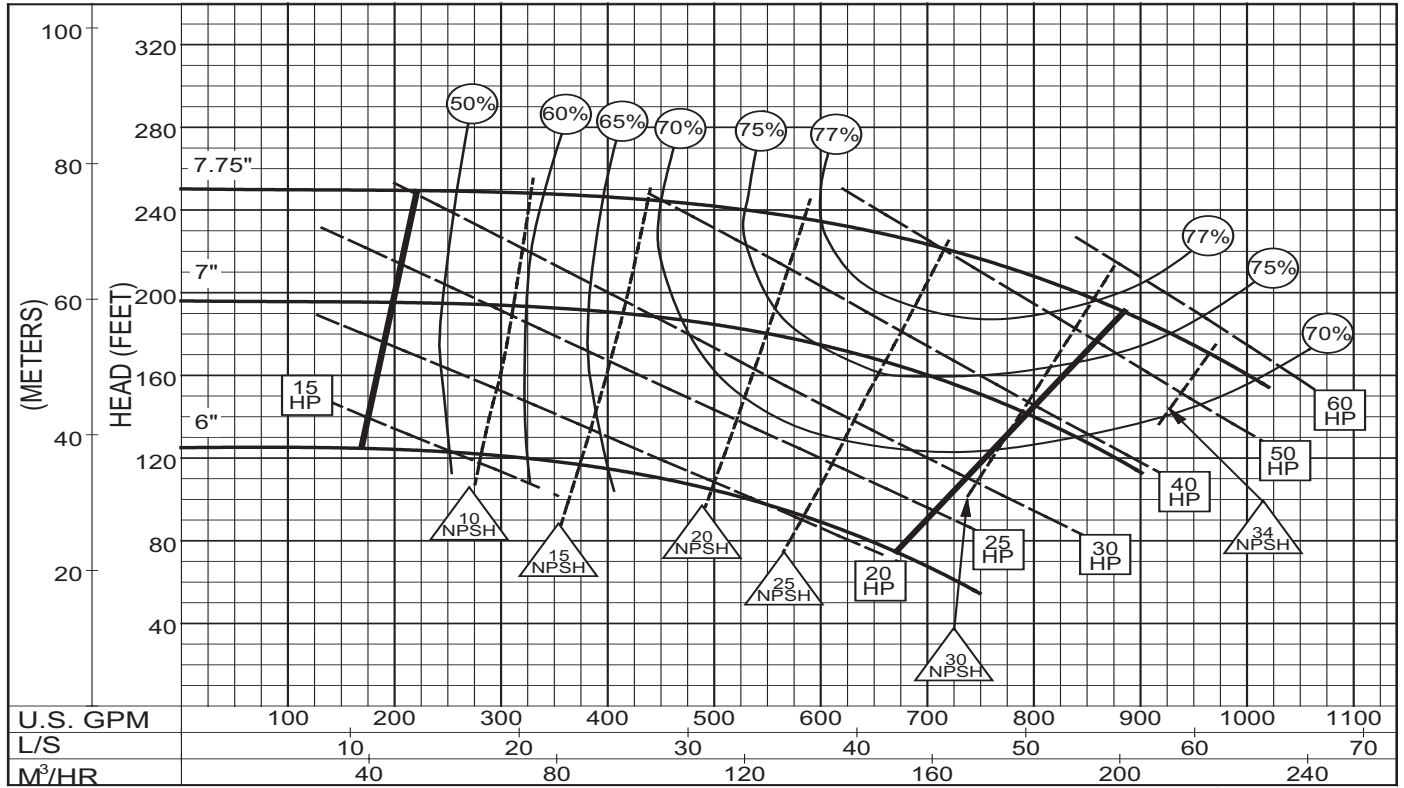


**3PC-142439**

# Performance Curve - 4" 1592B

RPM: **3500** SOLIDS: **.75"**

IMPELLER: **444R232**

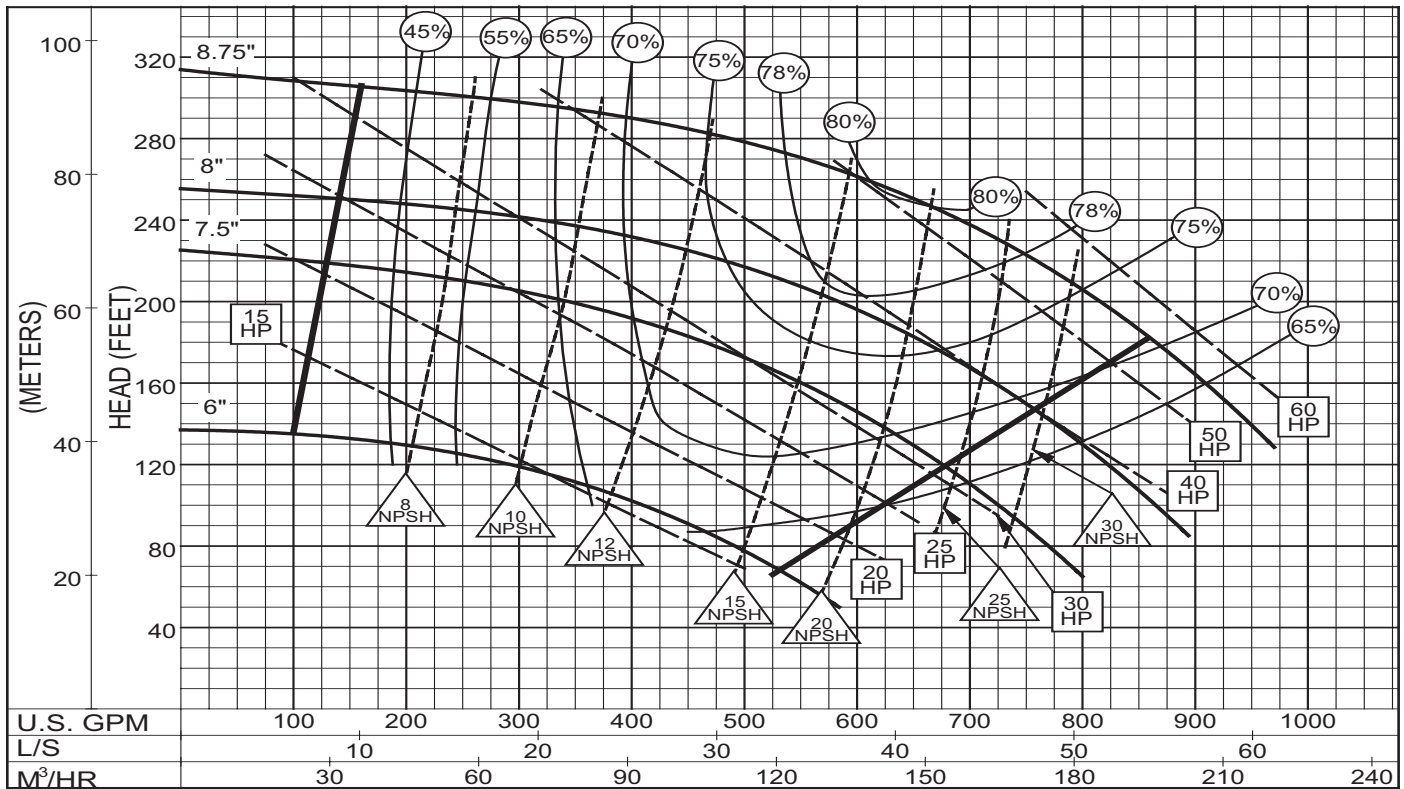


**3PC-14241A**

# Performance Curve - 4" 1593

RPM: **3500** SOLIDS: **.625"**

IMPELLER: **444R380**

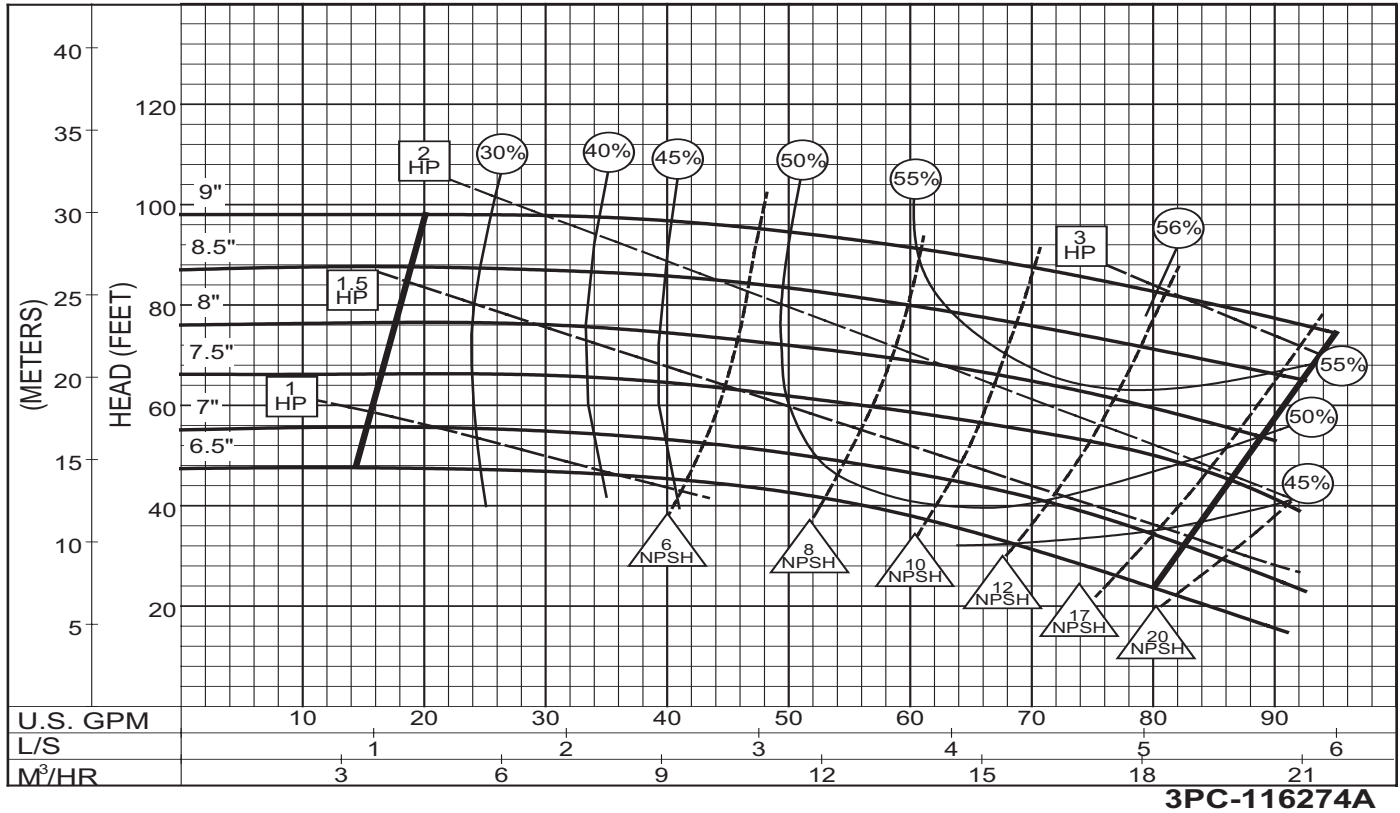


**3PC-159195A**

# Performance Curve - 1-1/2" 1591B

RPM: 1750 SOLIDS: .375"

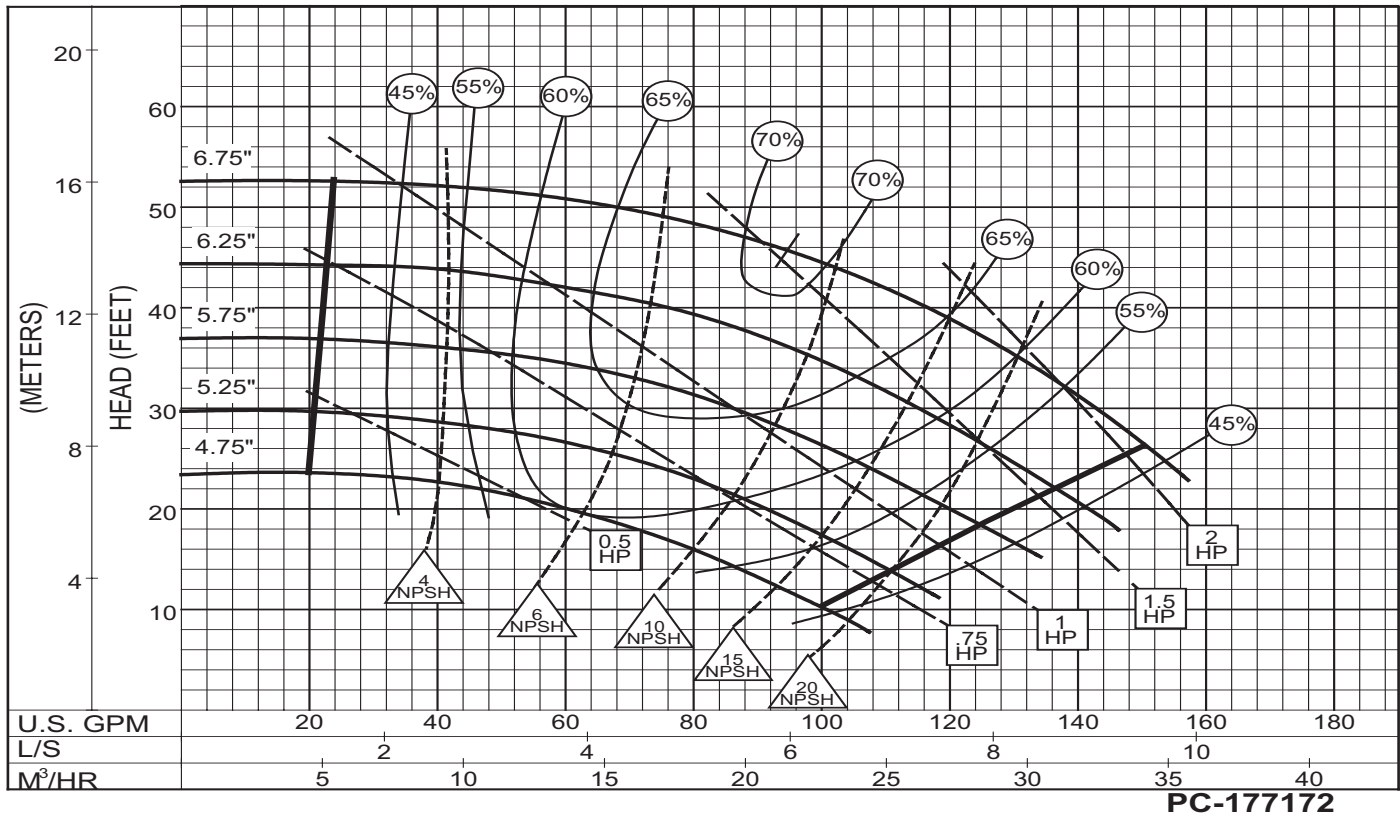
IMPELLER: 444R227



# Performance Curve - 2" 1591

RPM: 1750 SOLIDS: .438"

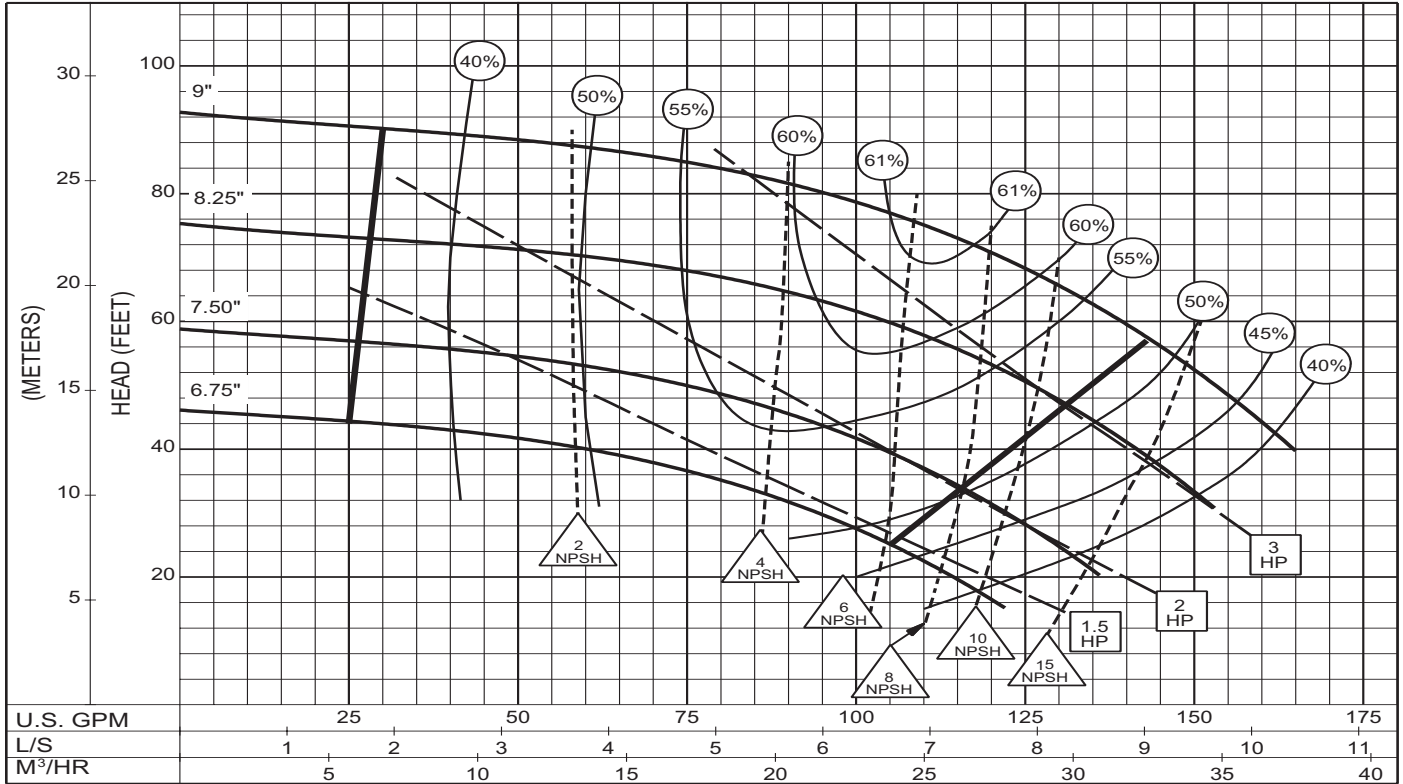
IMPELLER: 444A223



# Performance Curve – 2" 1592A

IMPELLER: 444R228

RPM: 1750 SOLIDS: .375"

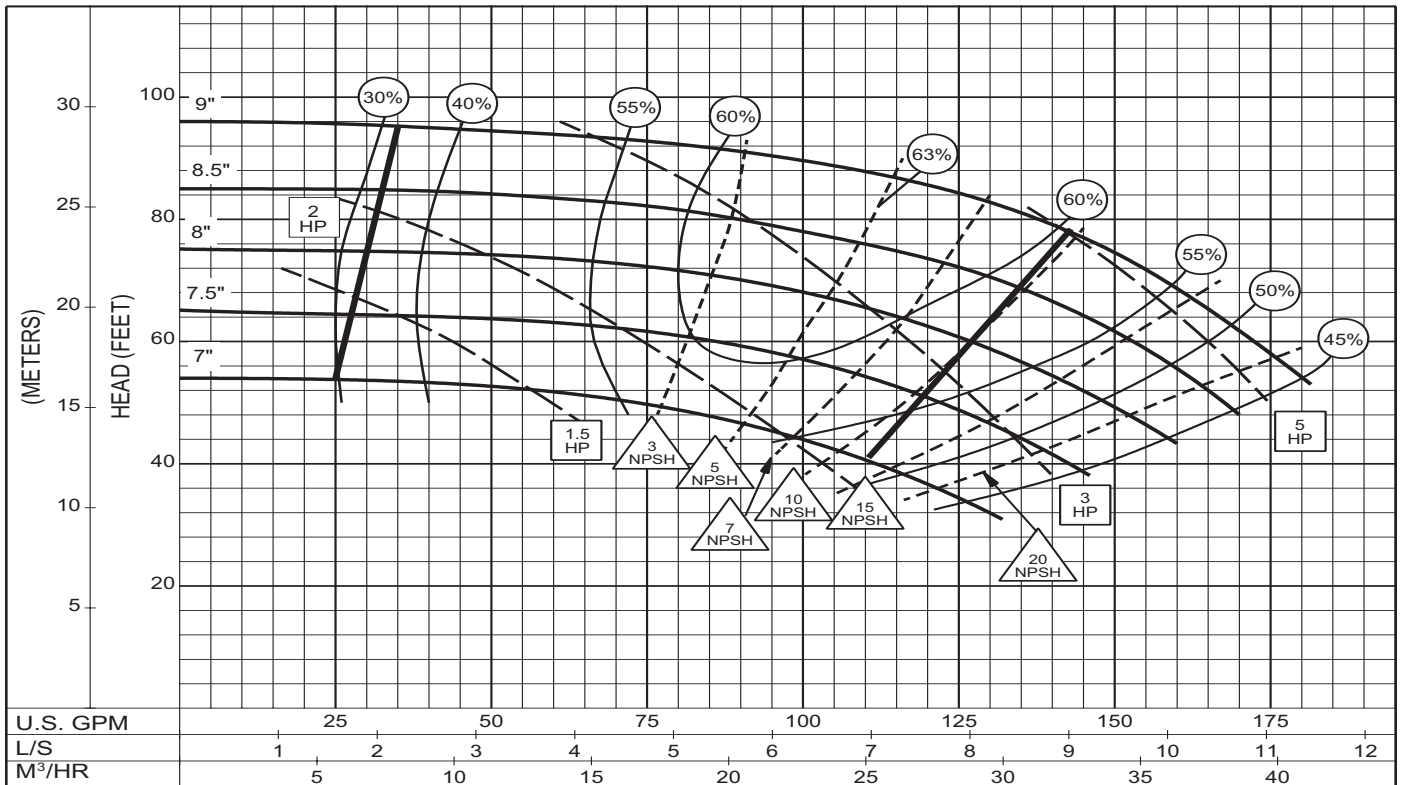


3PC-116331

# Performance Curve – 2" 1592B

IMPELLER: 444R229

RPM: 1750 SOLIDS: .438"



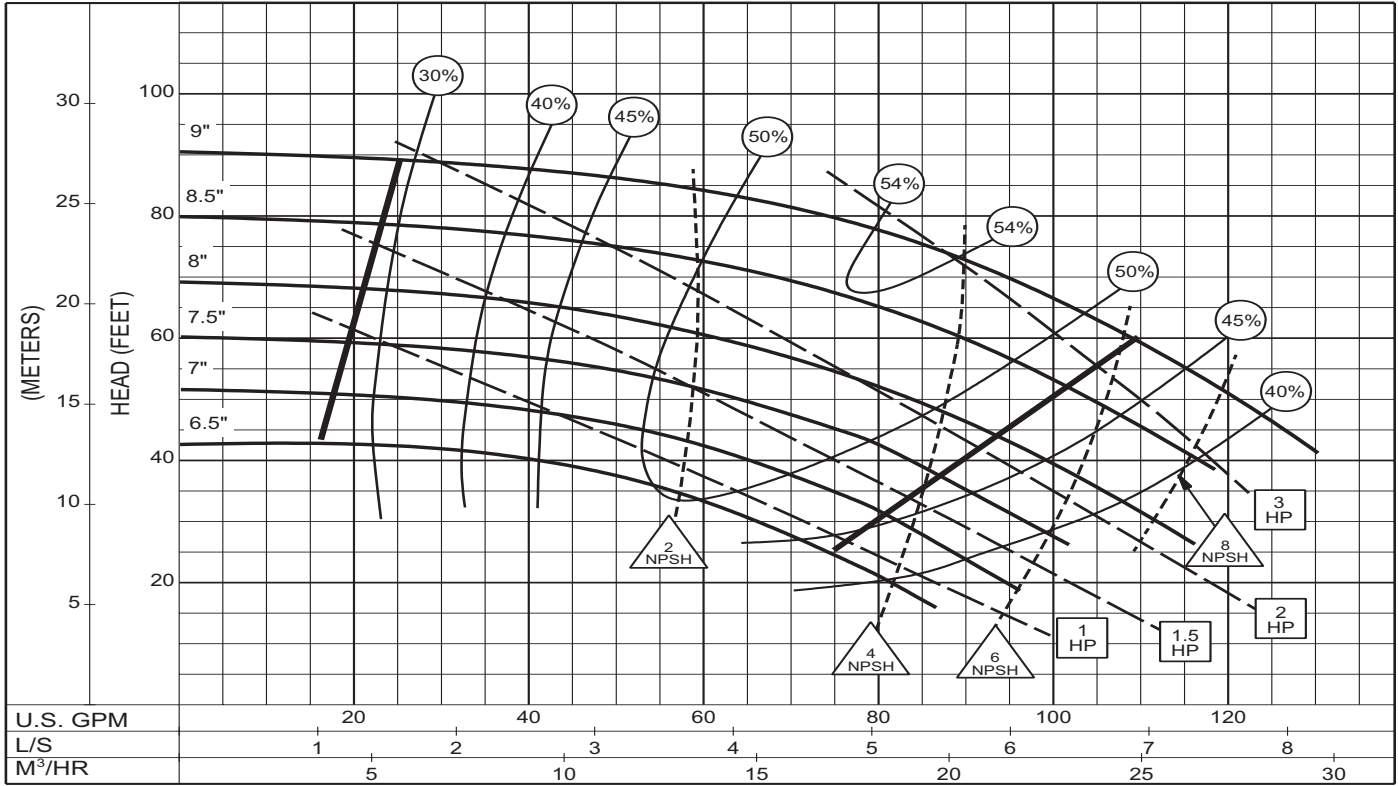
3PC-116277



# Performance Curve - 2" 1592C

IMPELLER: 444R228

RPM: 1750 SOLIDS: .375"

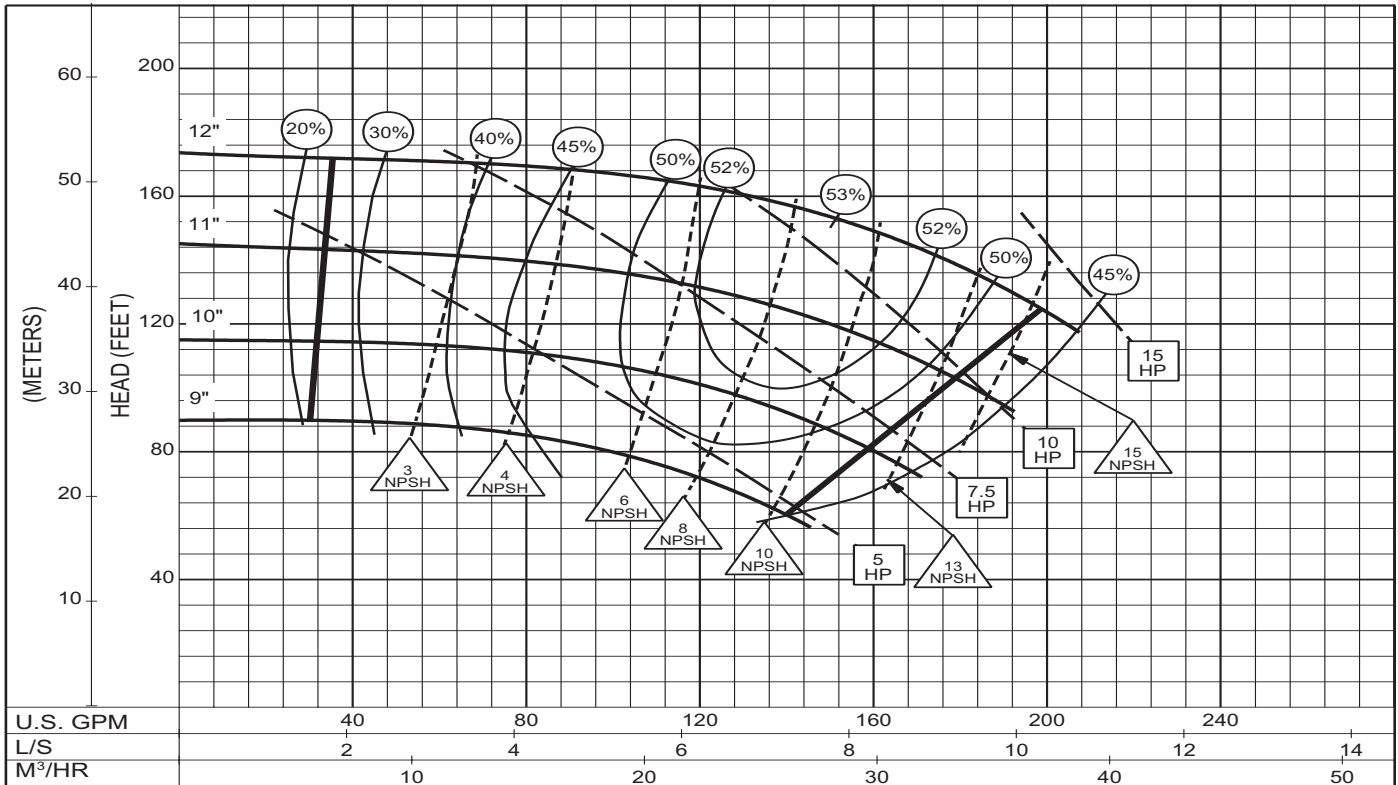


3PC-116279

# Performance Curve - 2" 1593

IMPELLER: 444R013

RPM: 1750 SOLIDS: .50"



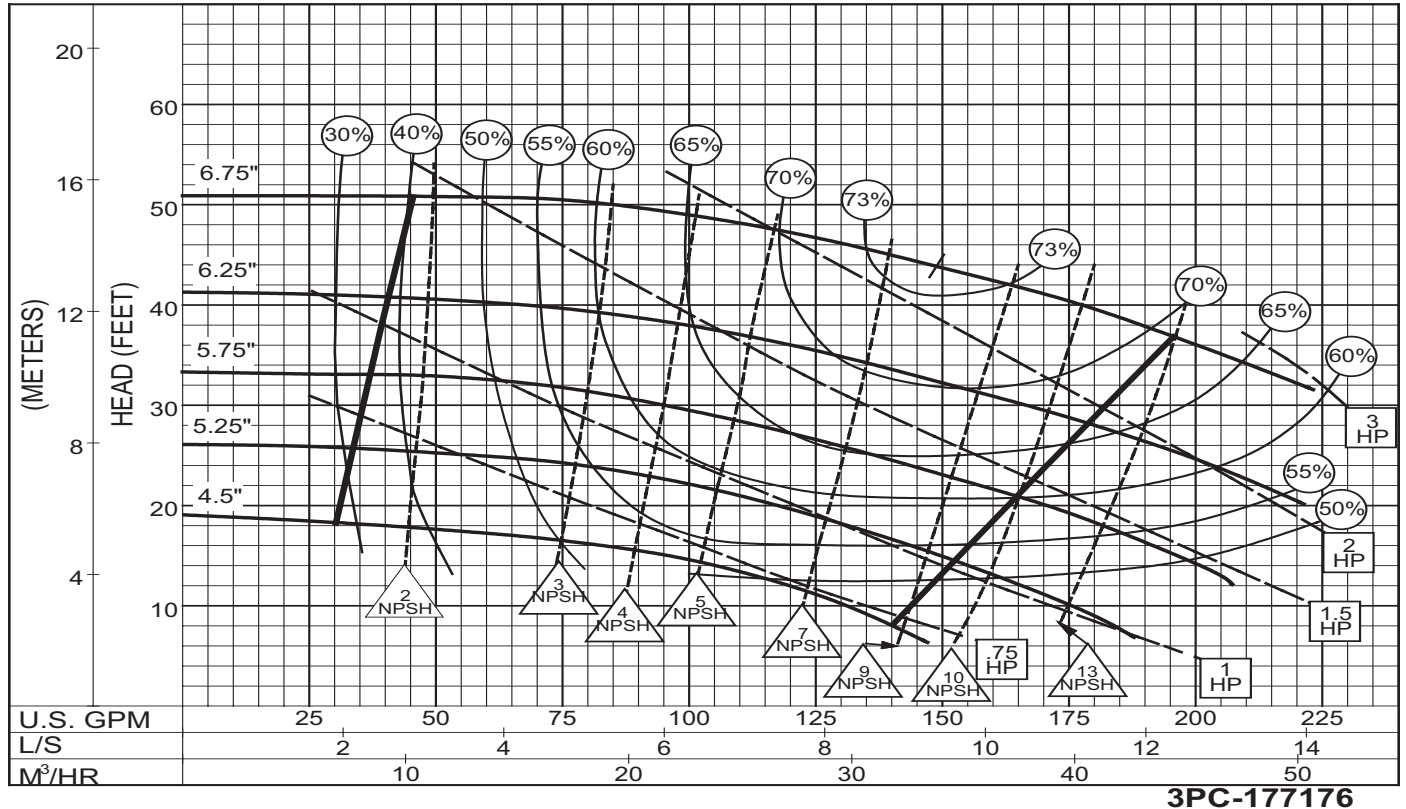
3PC-116280A



# Performance Curve – 2-1/2" 1591

IMPELLER: 444A224

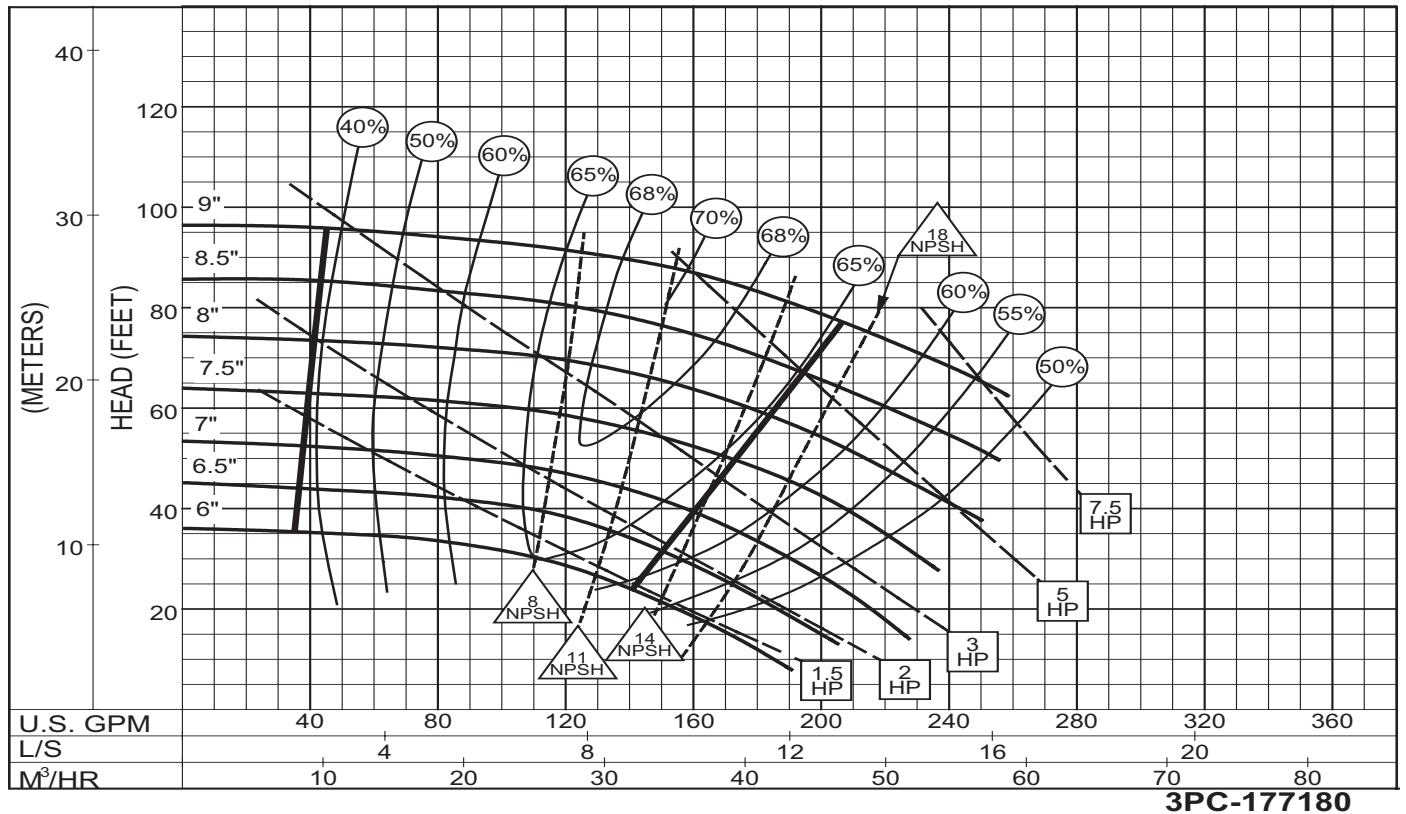
RPM: 1750 SOLIDS: .375"



# Performance Curve – 2-1/2" 1592

IMPELLER: 444A230

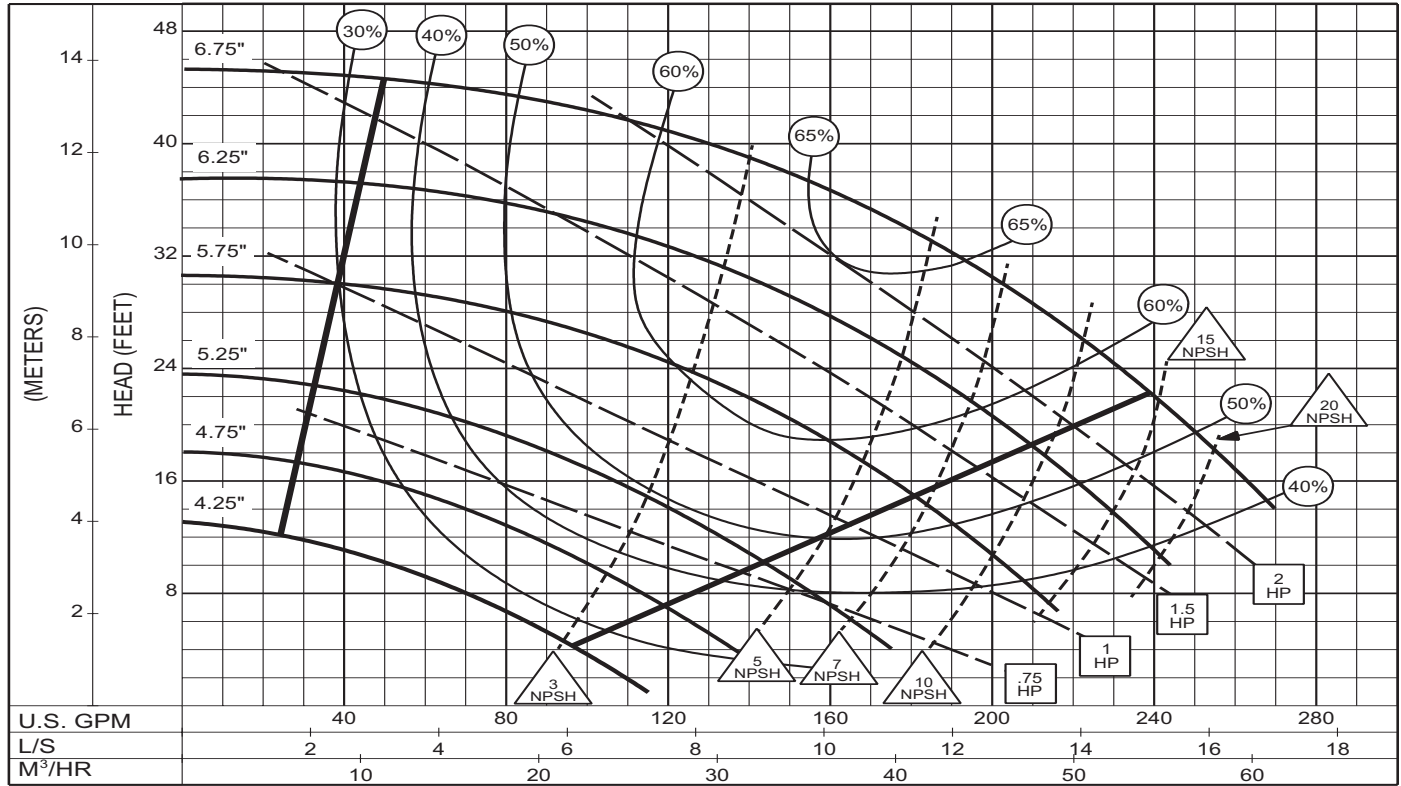
RPM: 1750 SOLIDS: .625"



# Performance Curve - 3" 1591A

RPM: 1750 SOLIDS: .625"

IMPELLER: 444R039

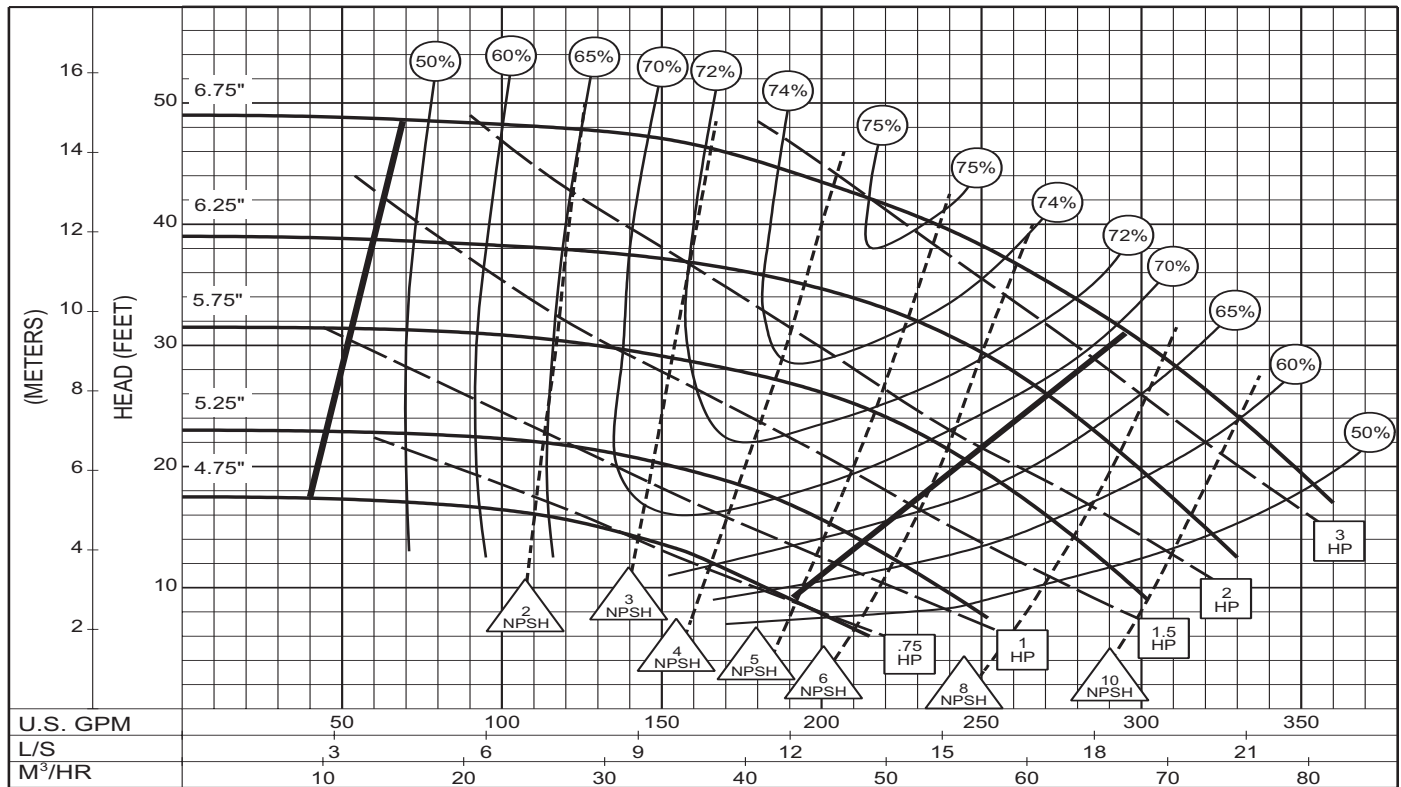


3PC-116291

# Performance Curve - 3" 1591B

RPM: 1750 SOLIDS: .688"

IMPELLER: 444R226

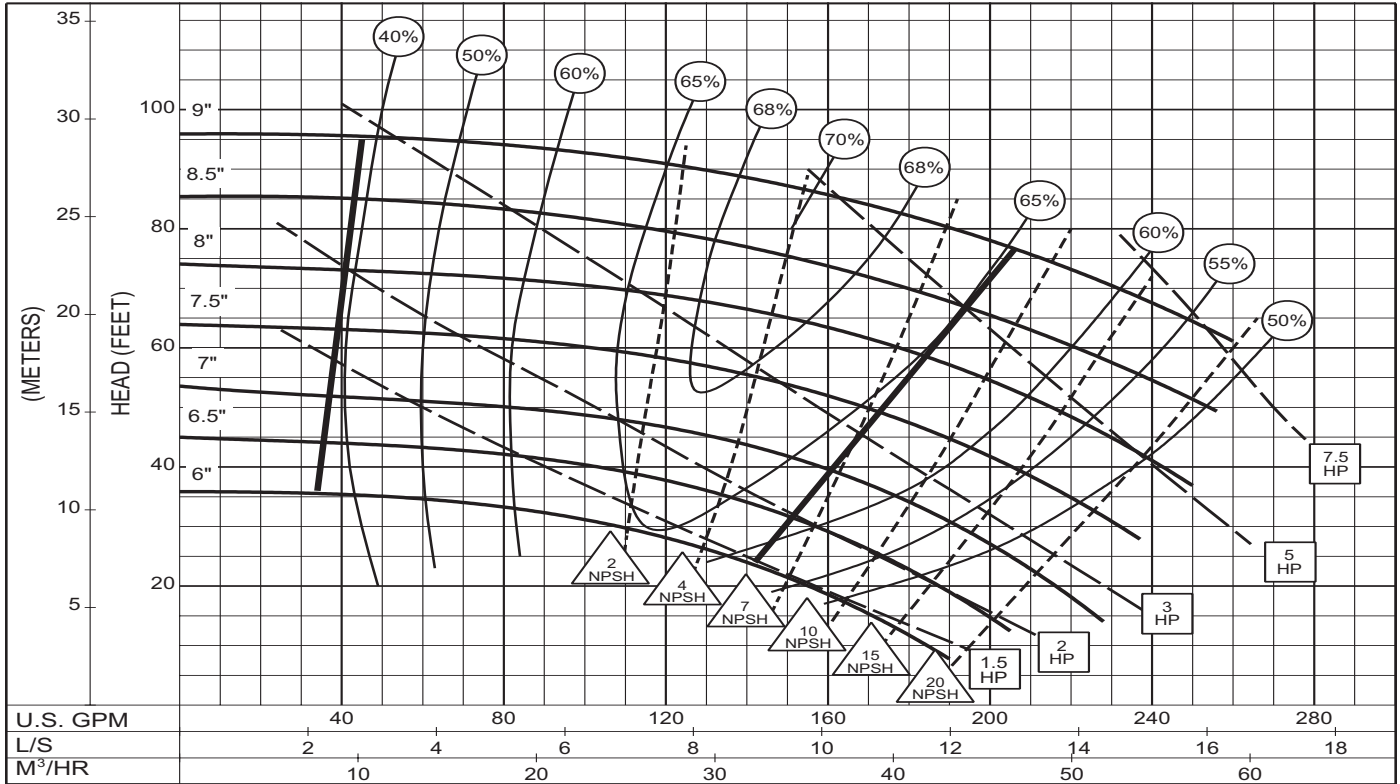


3PC-116293

# Performance Curve – 3" 1592A

IMPELLER: 444R230

RPM: 1750 SOLIDS: .625"

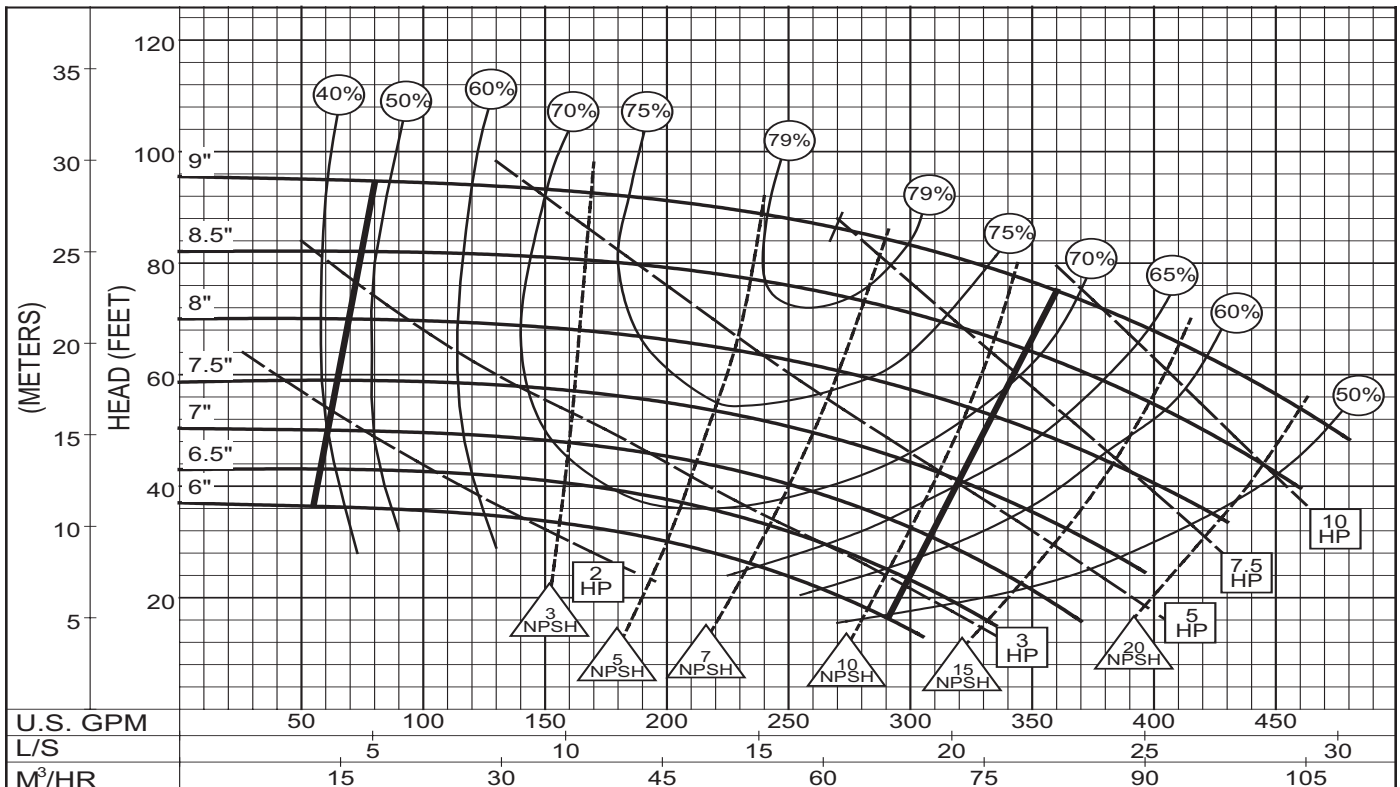


3PC-116287

# Performance Curve – 3" 1592B

IMPELLER: 444R231

RPM: 1750 SOLIDS: .6875"

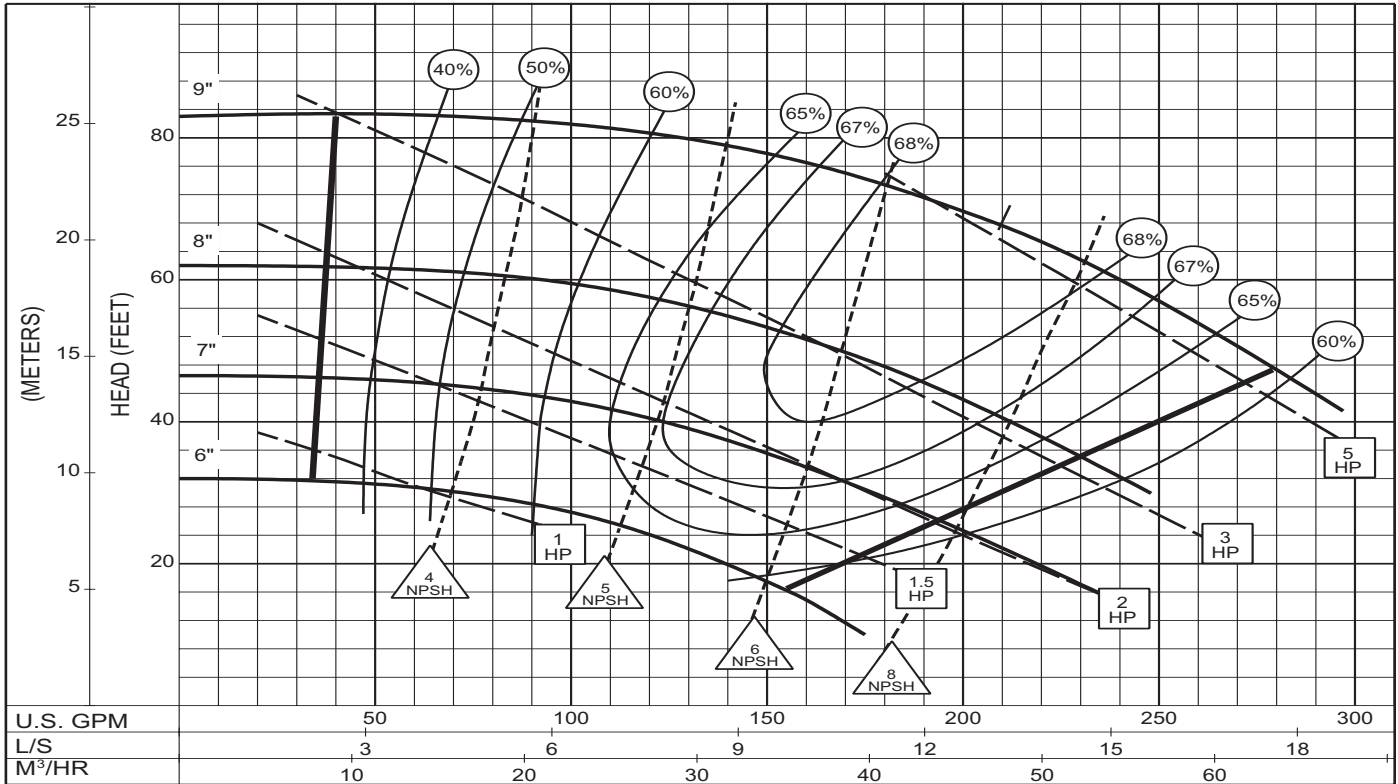


3PC-116295

# Performance Curve - 3" 1593

IMPELLER: 444R379

RPM: 1750 SOLIDS: .50"

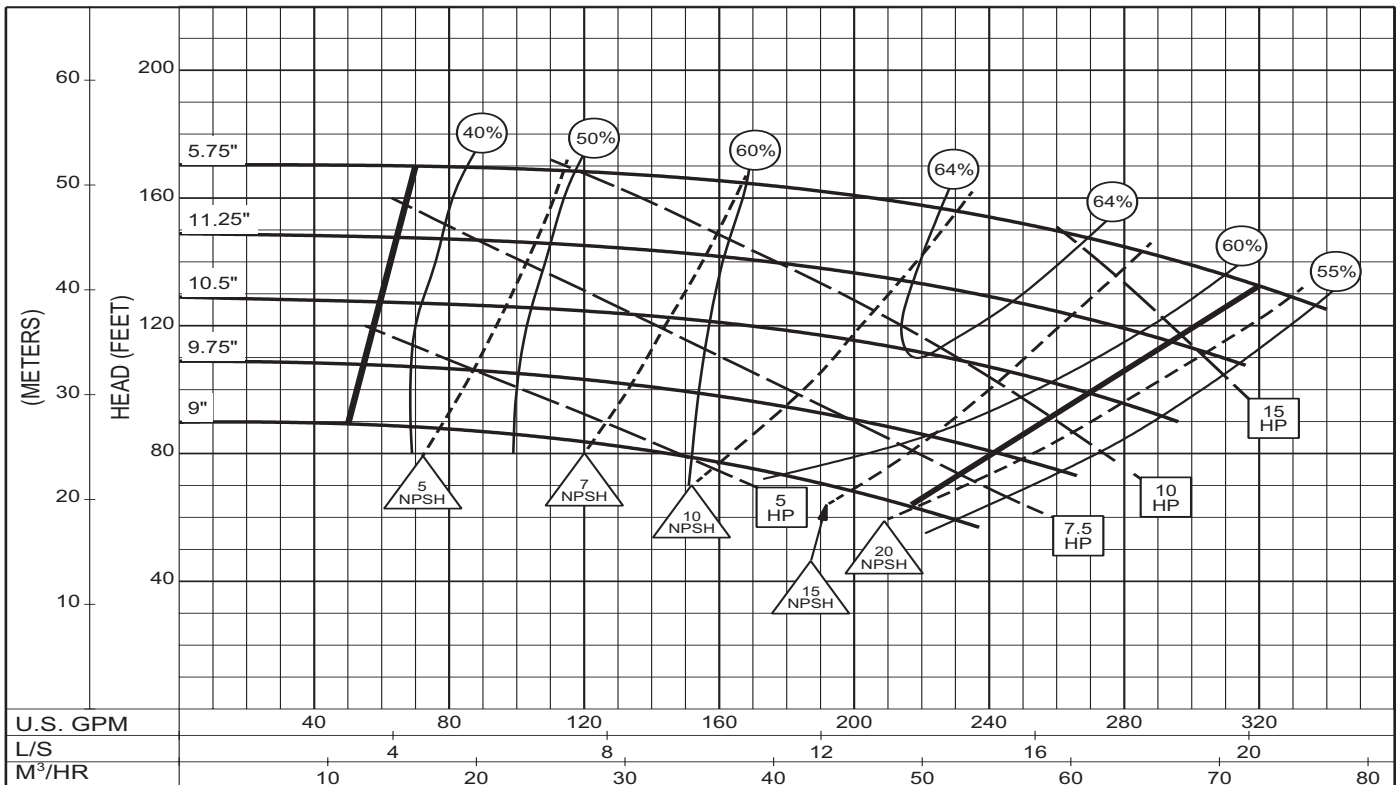


3PC-159194

# Performance Curve - 3" 1594

IMPELLER: 444R014

RPM: 1750 SOLIDS: .625"

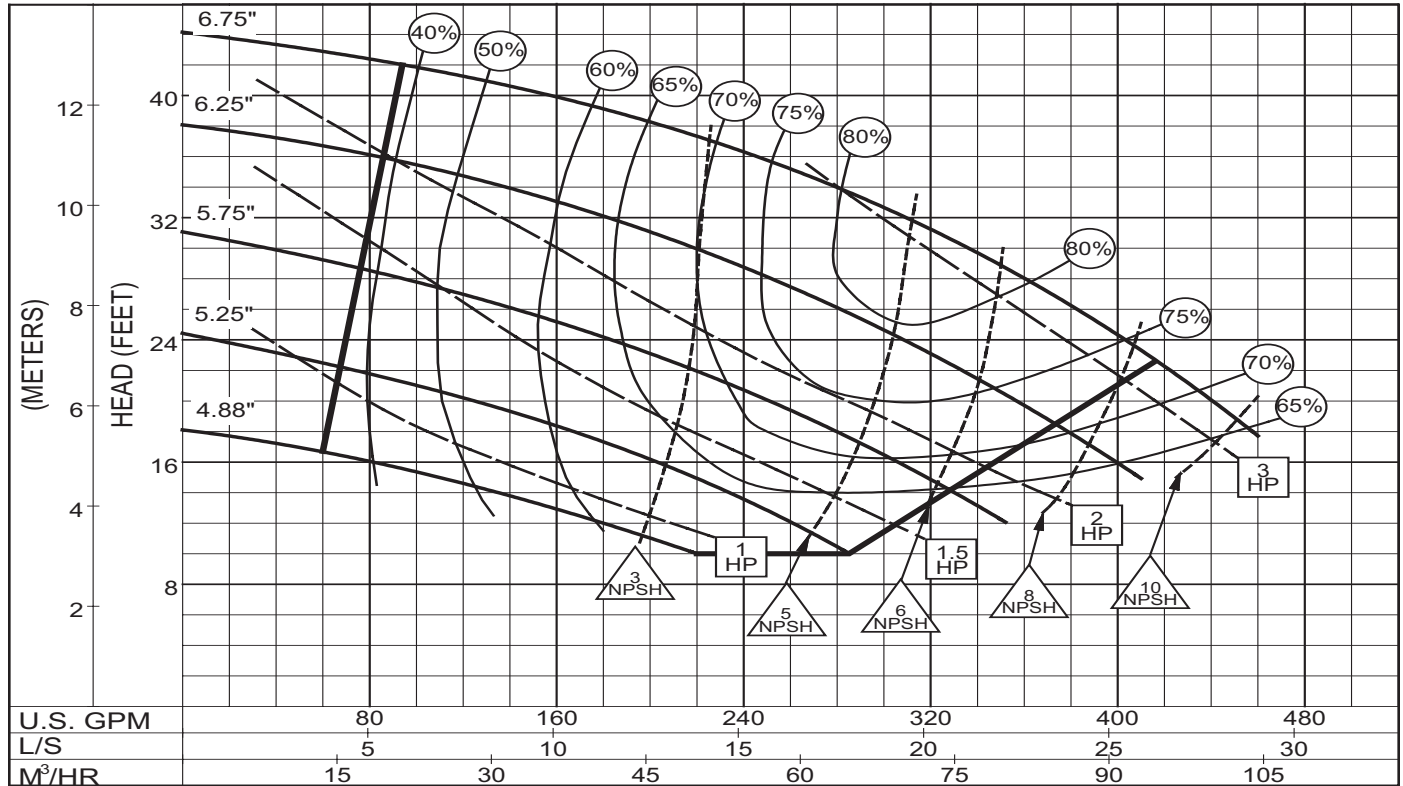


3PC-116288

# Performance Curve - 4" 1591A

RPM: 1750 SOLIDS: .813"

IMPELLER: 444R314

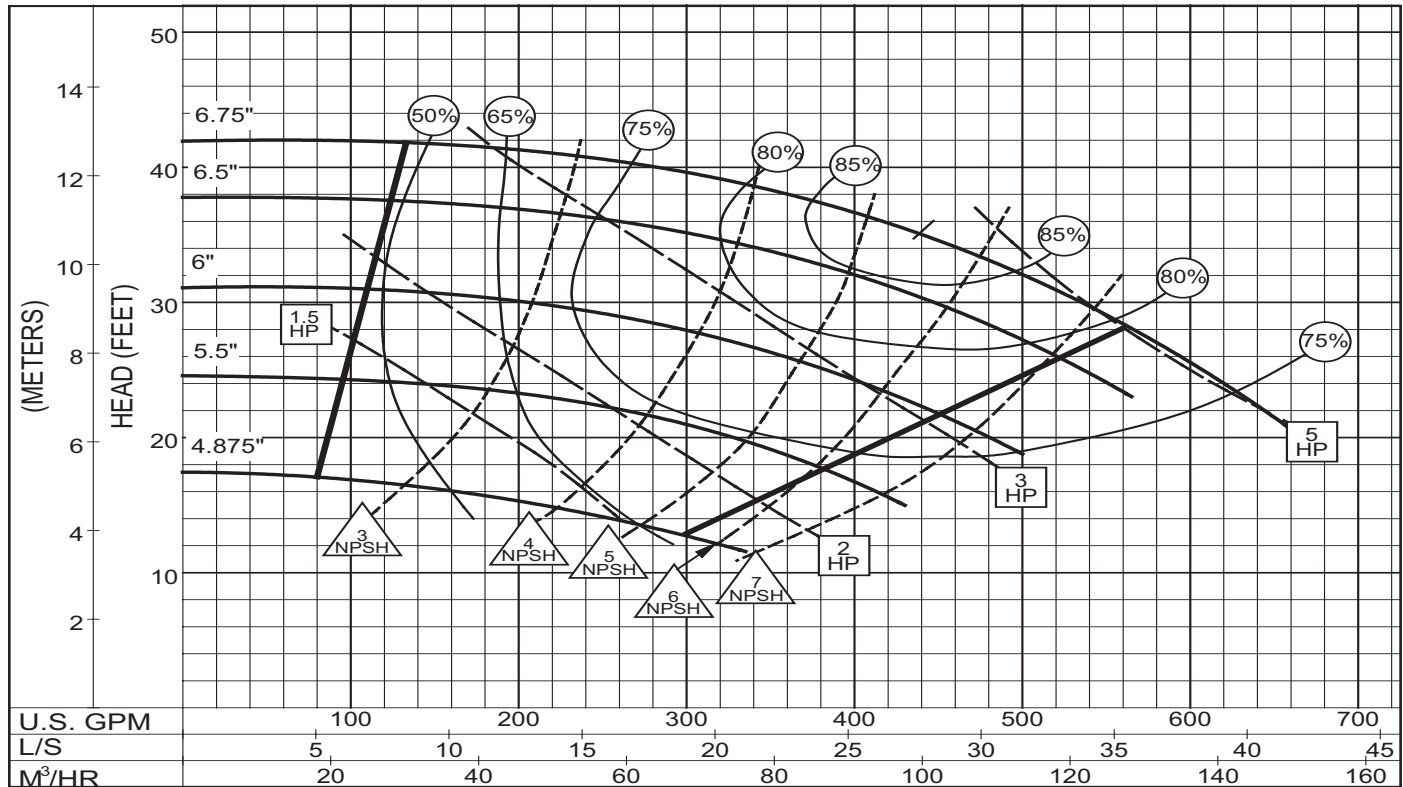


**PC-116306**

# Performance Curve - 4" 1591B

RPM: 1750 SOLIDS: .75"

IMPELLER: 444R282

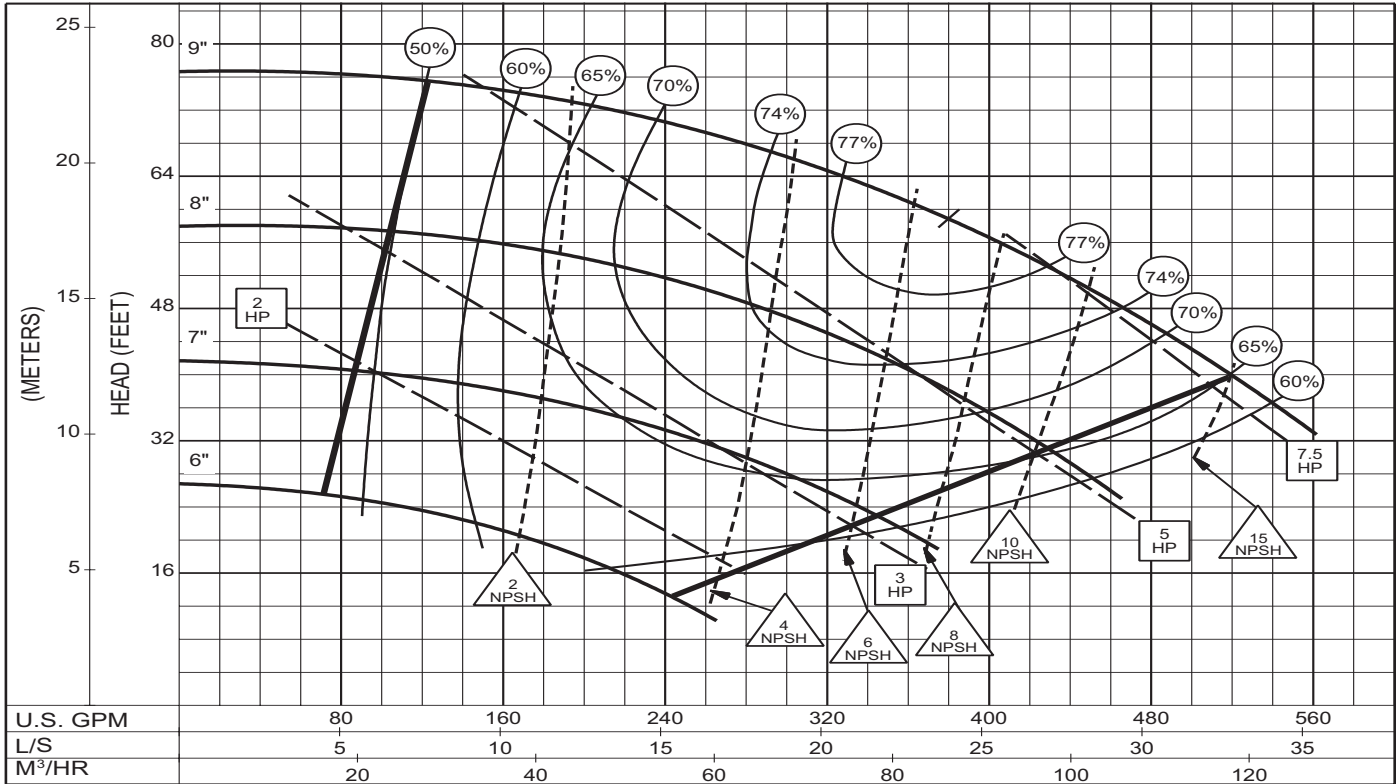


**3PC-116308A**

# Performance Curve - 4" 1592A

RPM: 1750 SOLIDS: .813"

IMPELLER: 444R232

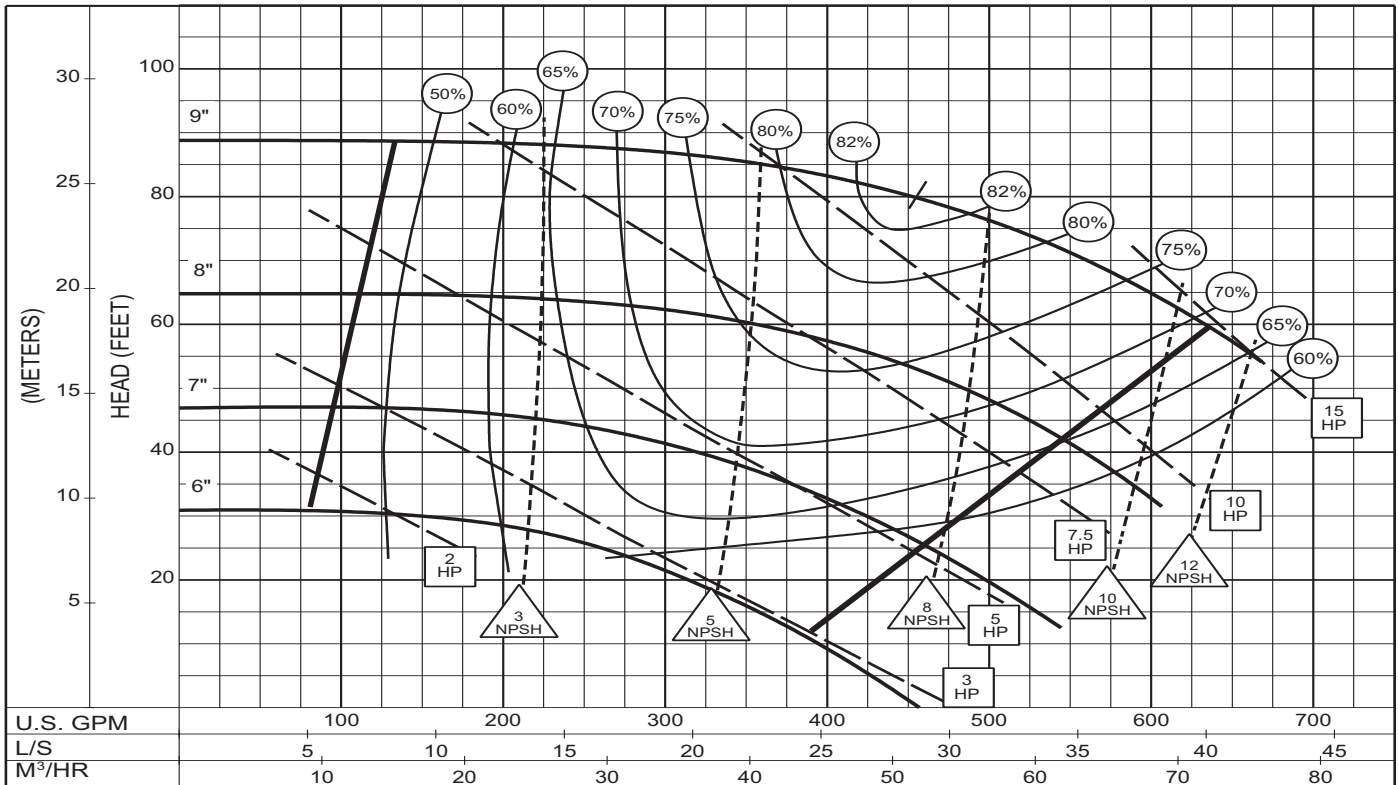


PC-142438

# Performance Curve - 4" 1592B

RPM: 1750 SOLIDS: .75"

IMPELLER: 444R233



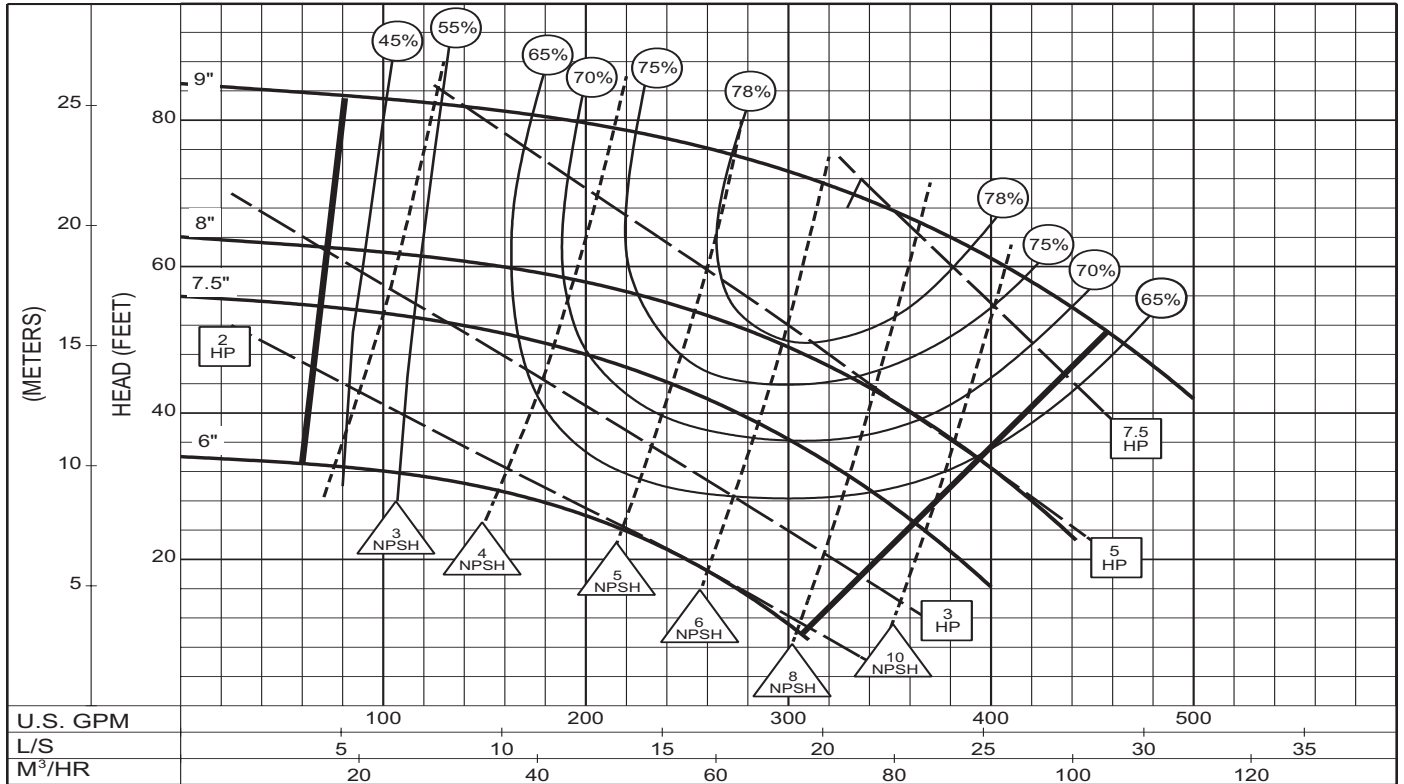
3PC-142440



# Performance Curve - 4" 1593

IMPELLER: 444R380

RPM: 1750 SOLIDS: .625"

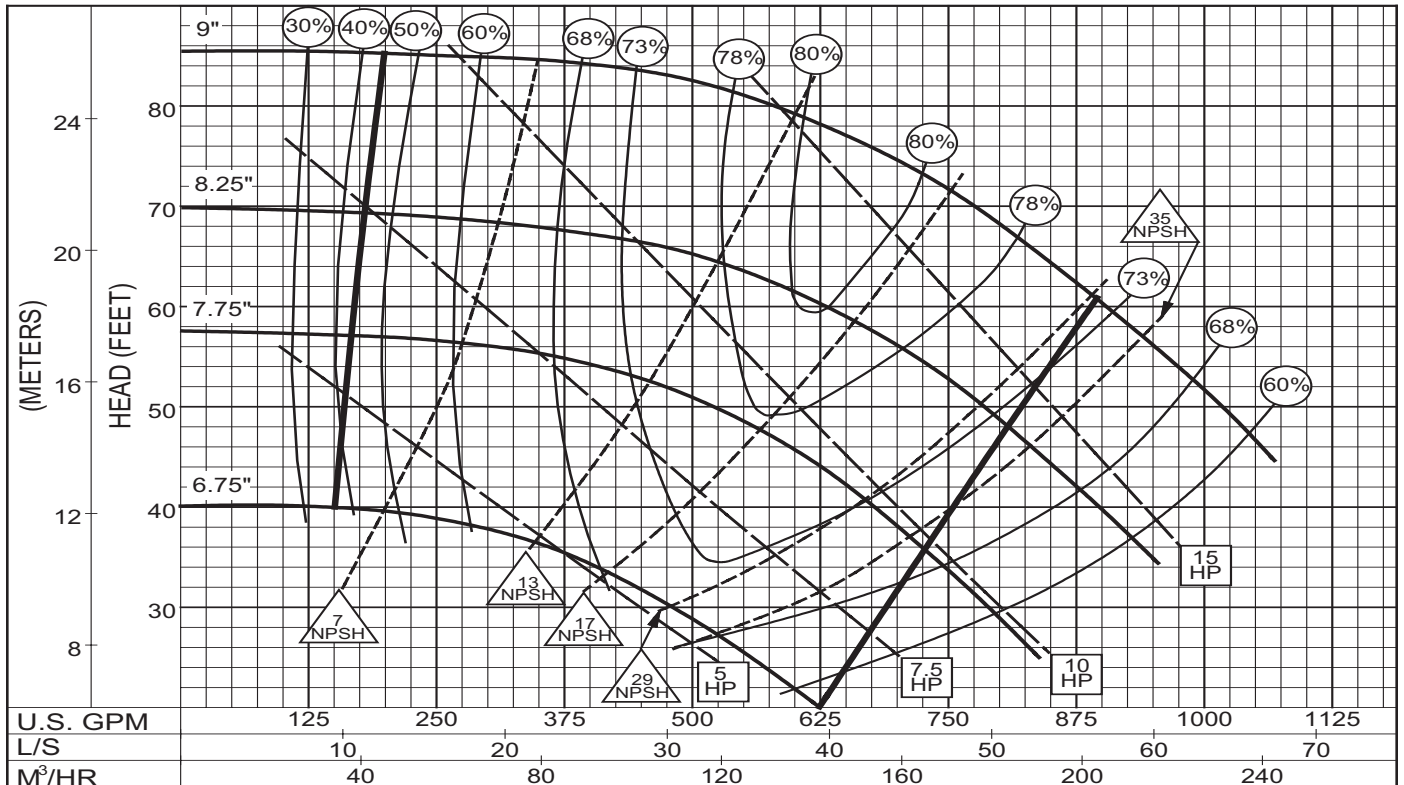


3PC-159196

# Performance Curve - 5" 1591

IMPELLER: 444A315

RPM: 1750 SOLIDS: .563"



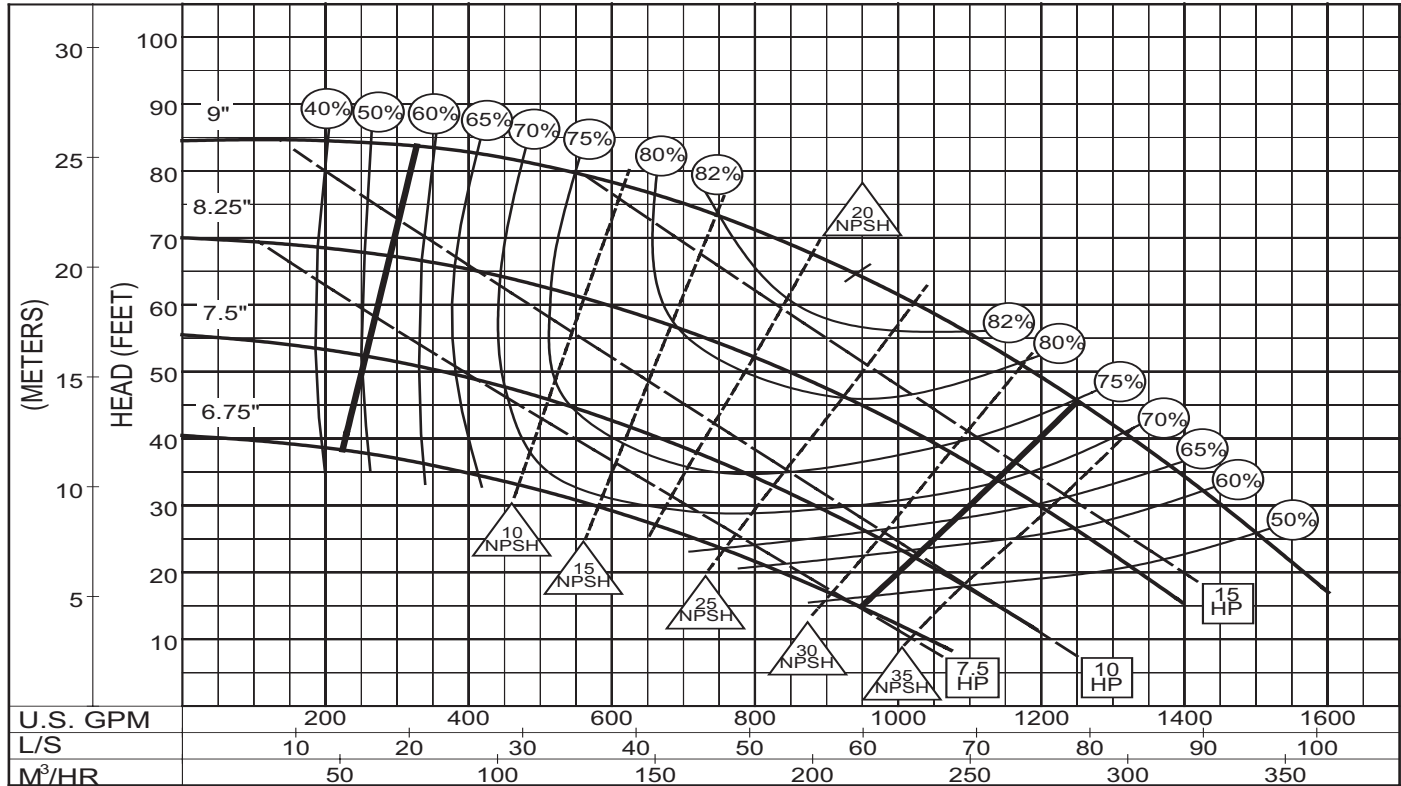
PC-177183



# Performance Curve - 6" 1591

RPM: 1750 SOLIDS: 1.25"

IMPELLER: 444A234

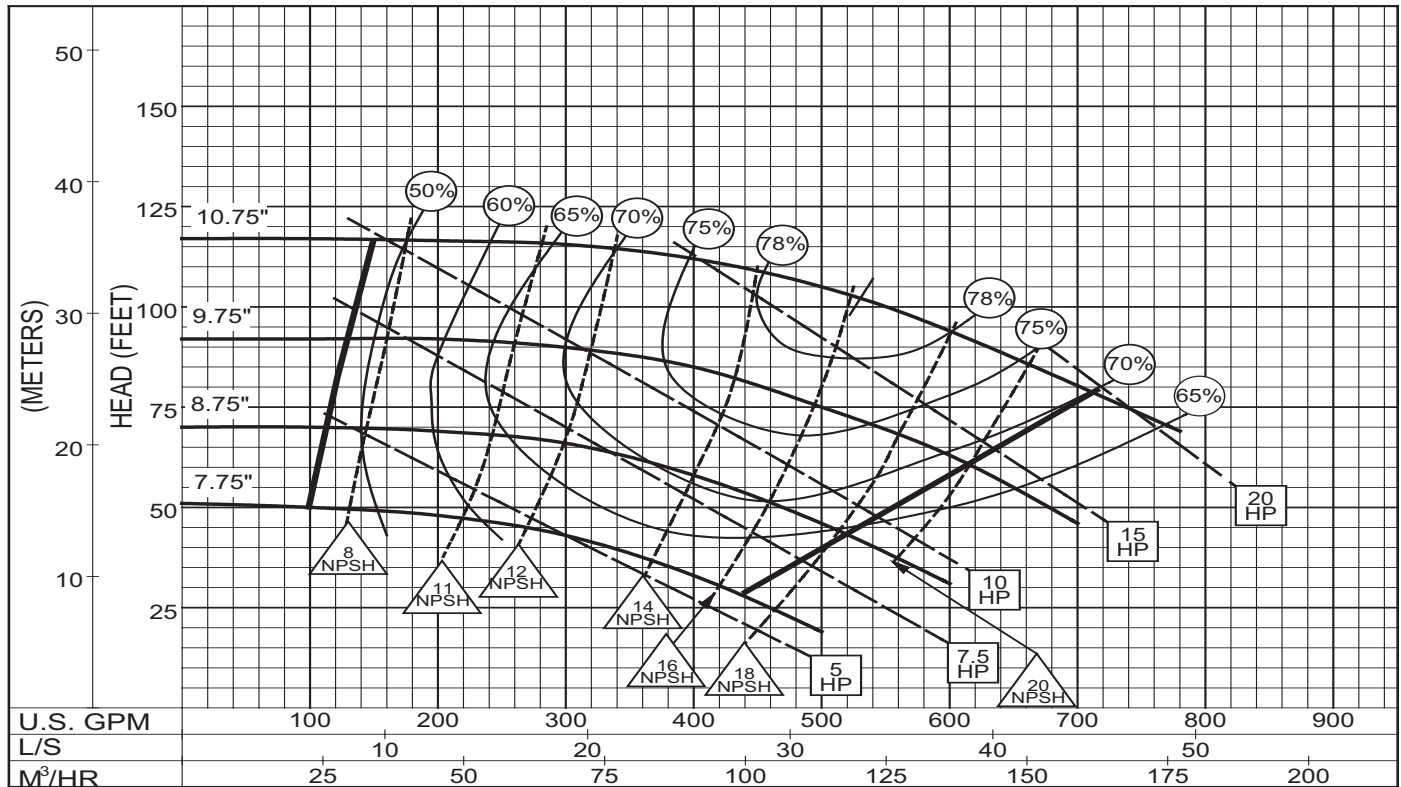


PC-177186

# Performance Curve - 4" 1595

RPM: 1760 SOLIDS: .875"

IMPELLER: 444A261

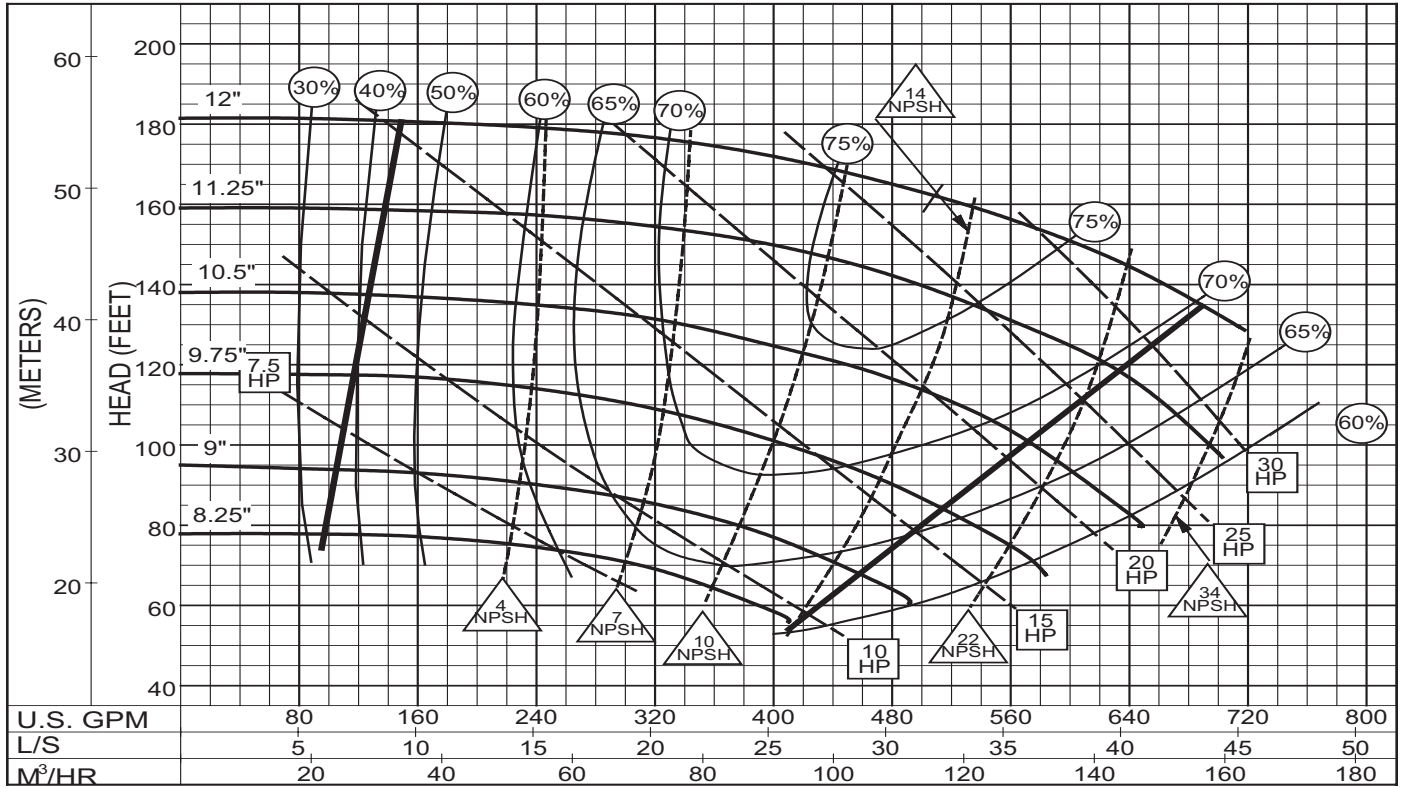


PC-177189

# Performance Curve - 4" 1596

IMPELLER: 444A016

RPM: 1760 SOLIDS: .750"

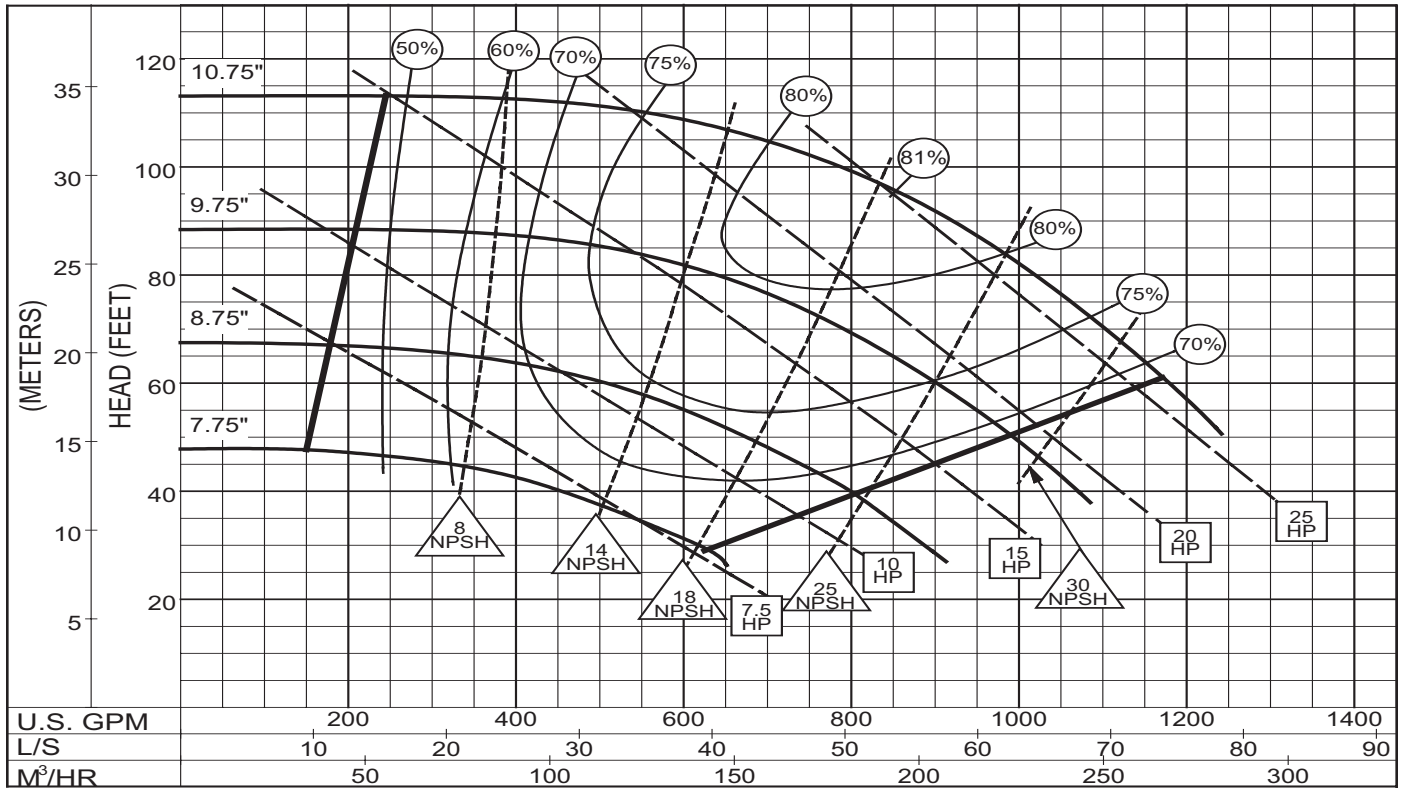


**PC-177201**

# Performance Curve - 5" 1592

IMPELLER: 444R262

RPM: 1592 SOLIDS: 1.063"

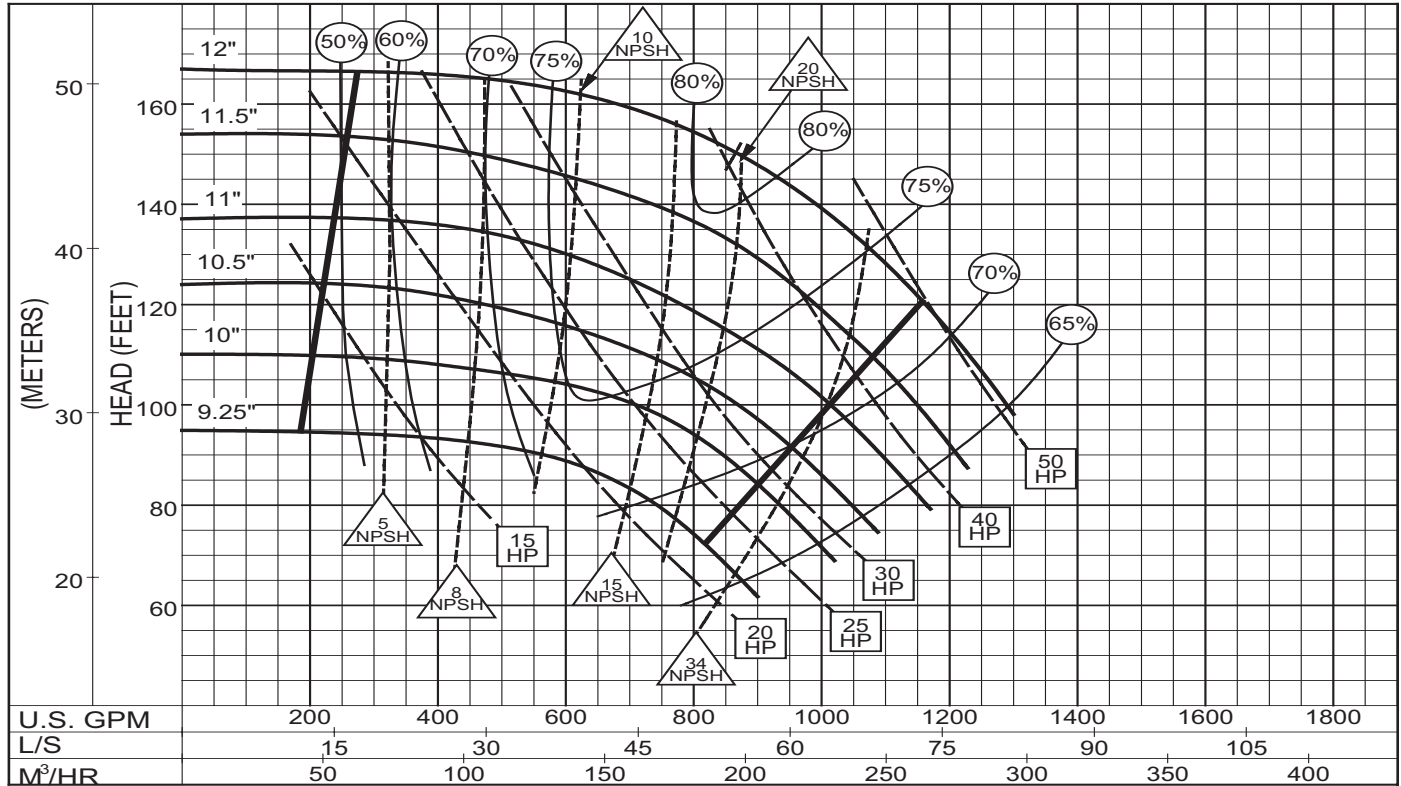


**3PC-177192**

# Performance Curve - 5" 1593

RPM: 1760 SOLIDS: .438"

IMPELLER: 444A017

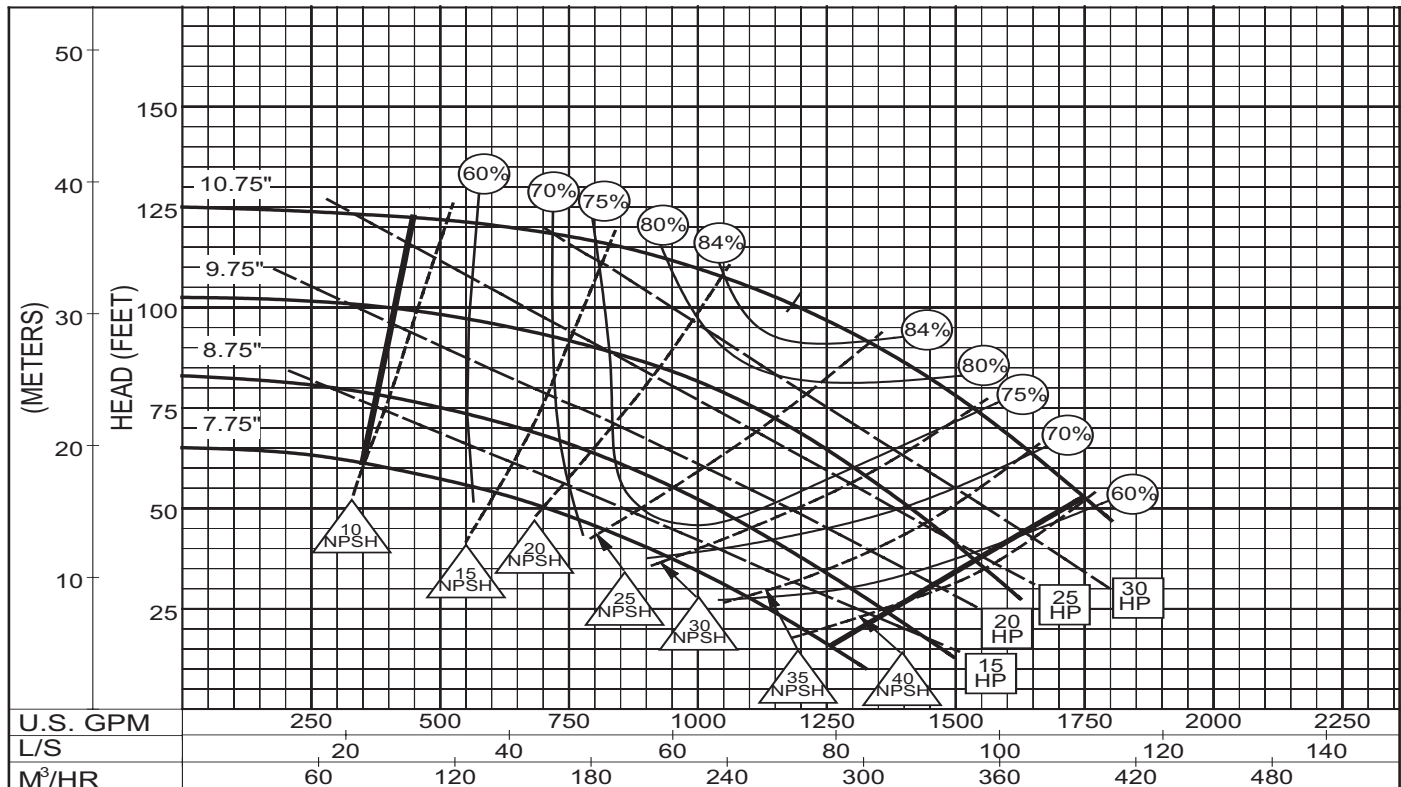


PC-177204

# Performance Curve - 6" 1592

RPM: 1760 SOLIDS: 1.00"

IMPELLER: 444A263

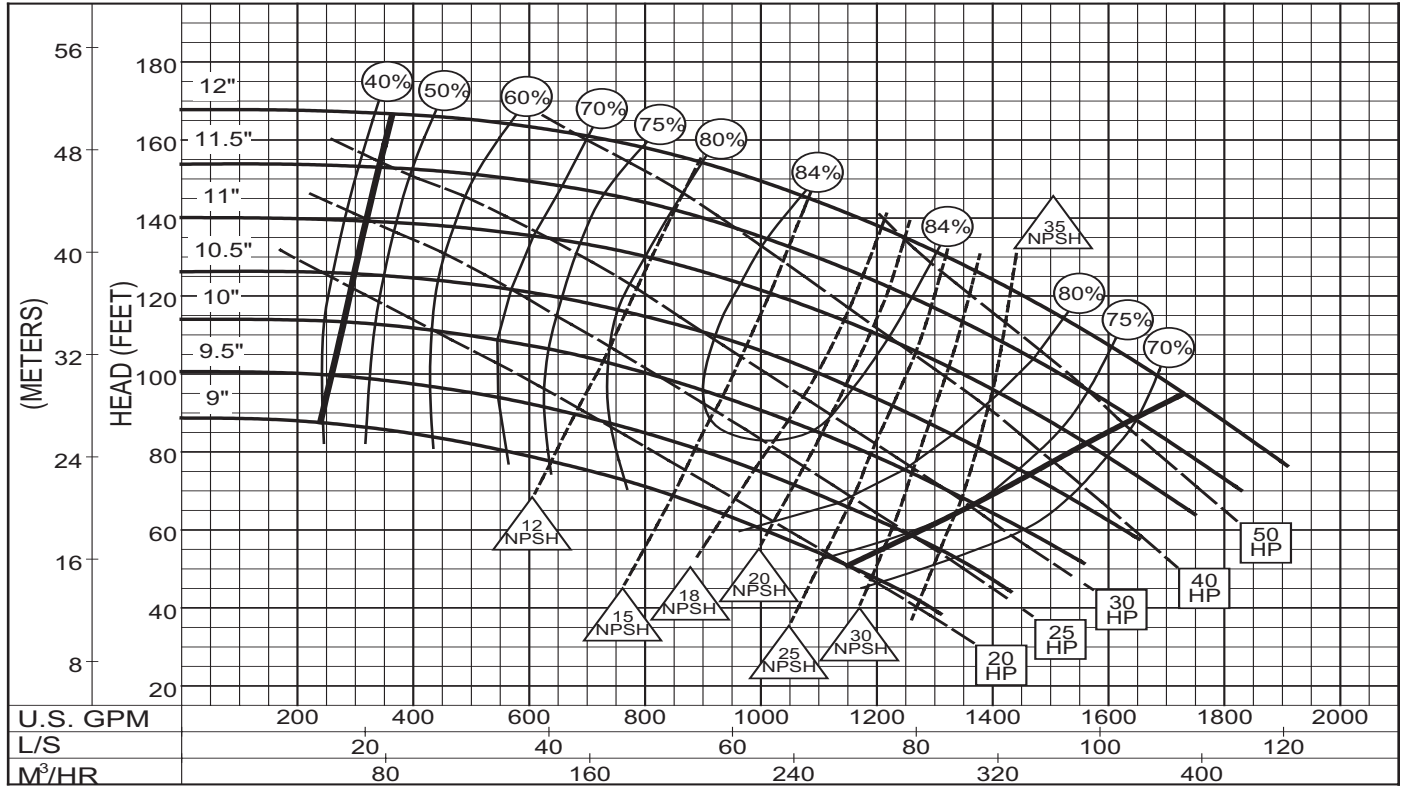


PC - 177195

# Performance Curve - 6" 1593

IMPELLER: 444A018

RPM: 1760 SOLIDS: .938"

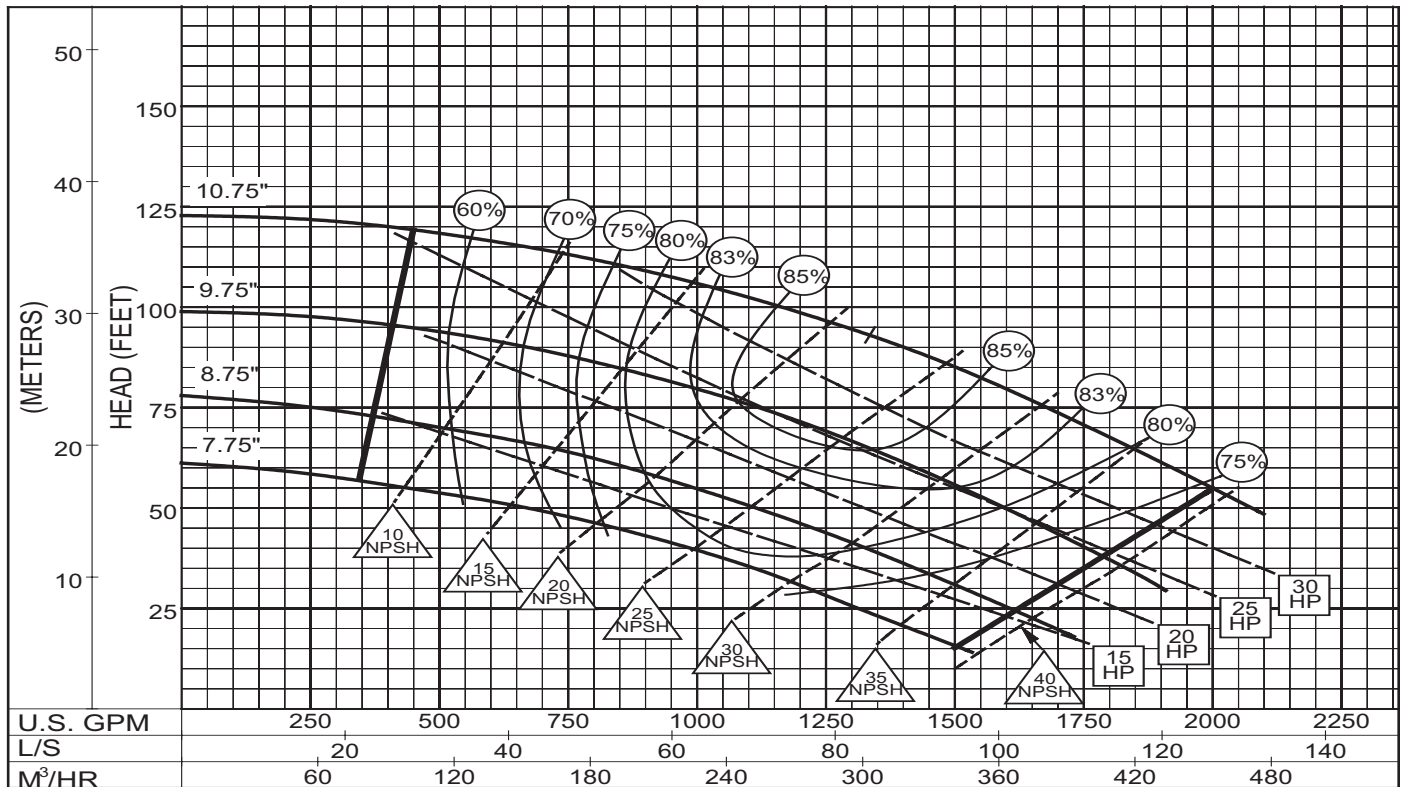


PC-177207

# Performance Curve - 8" 1591

IMPELLER: 444A263

RPM: 1760 SOLIDS: 1.000"

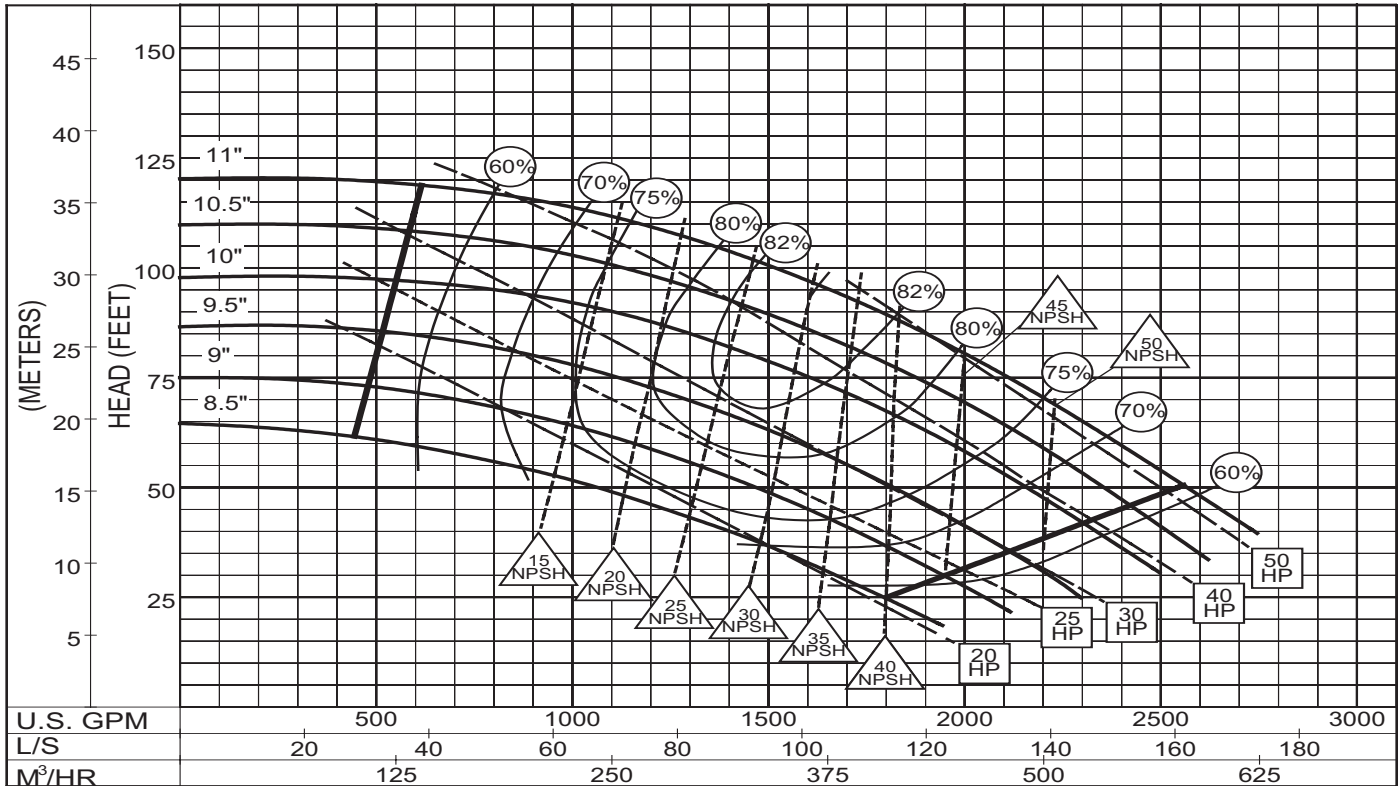


PC-177198

# Performance Curve - 8" 1592

RPM: 1760 SOLIDS: 1.312"

IMPELLER: 444R371

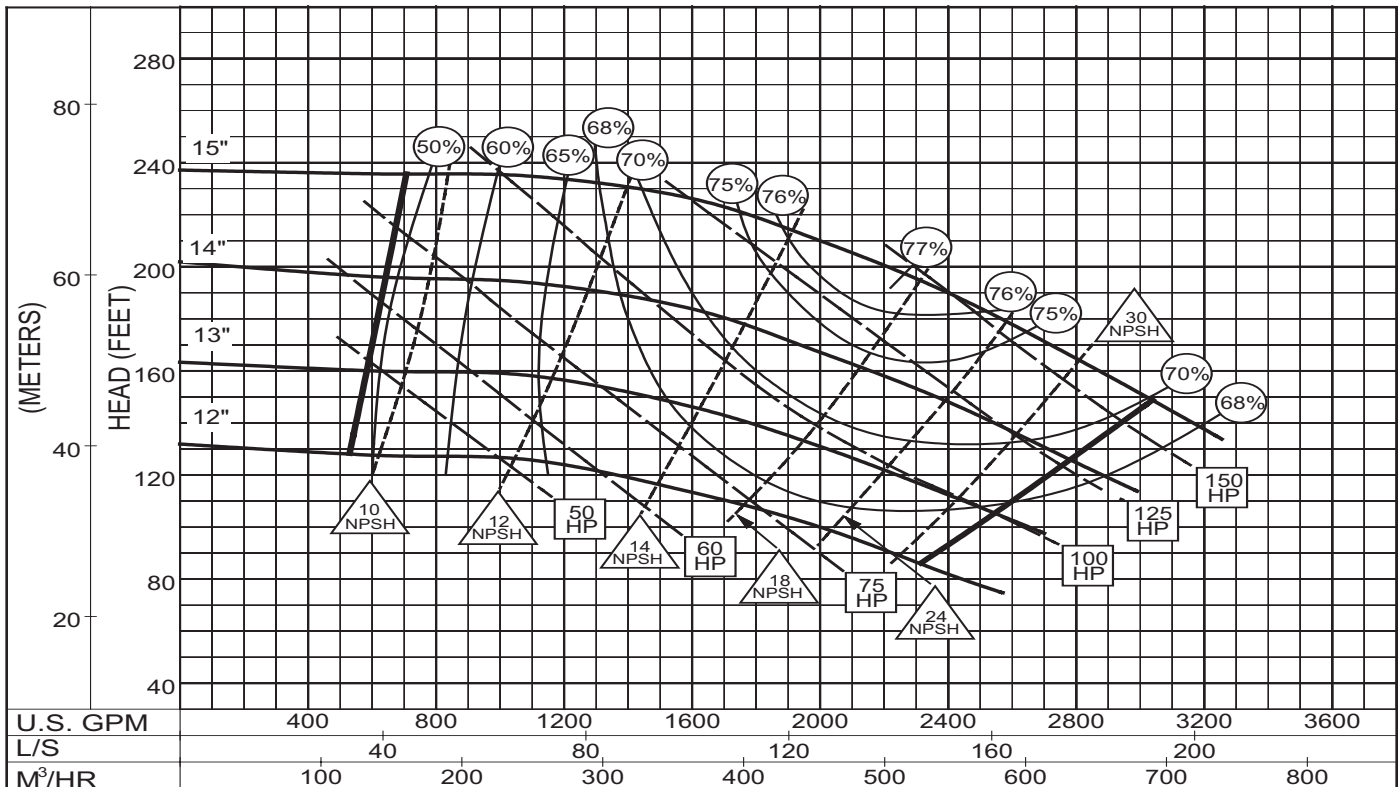


PC - 177210

# Performance Curve - 8" 1593

RPM: 1775 SOLIDS: 1.625"

IMPELLER: 444A272

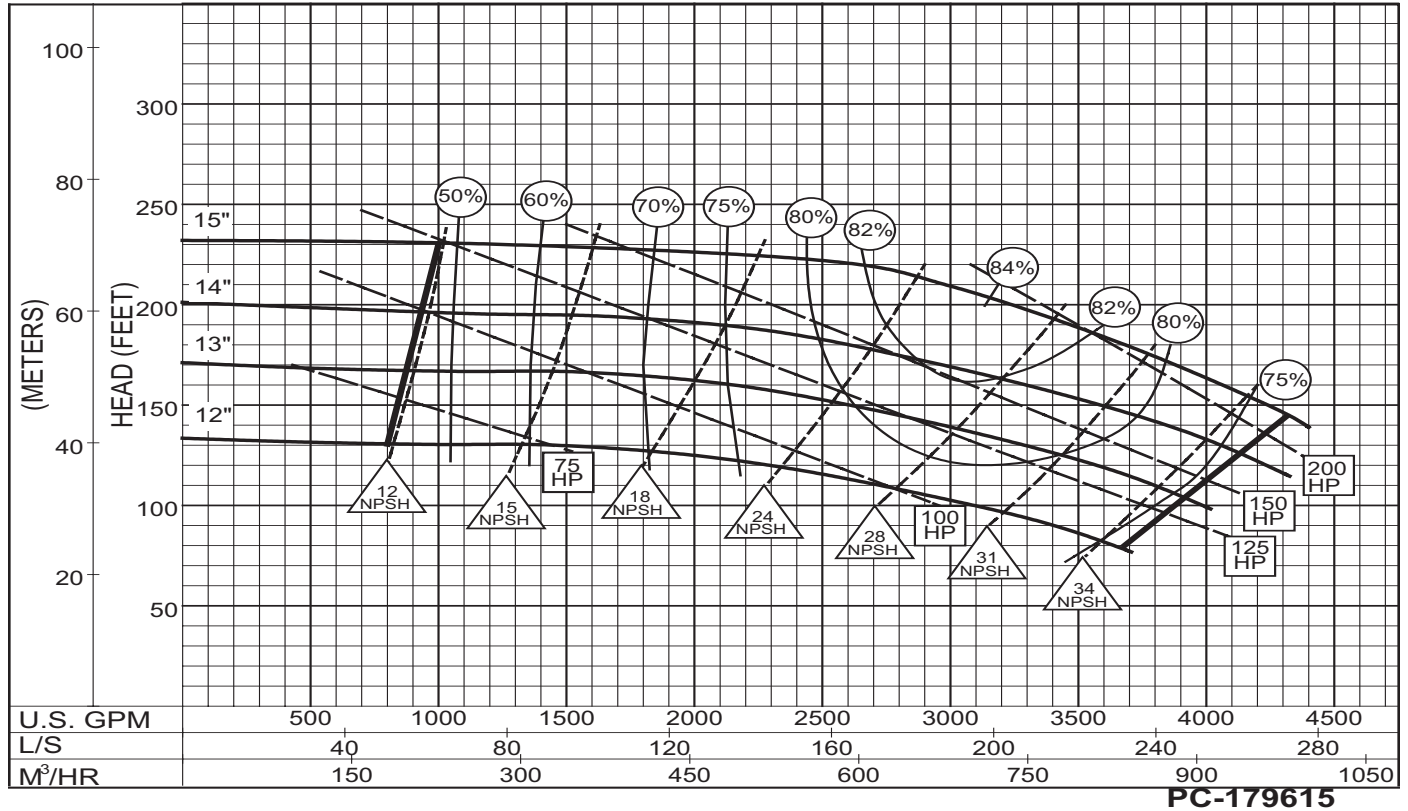


PC-179611

# Performance Curve – 10" 1591

IMPELLER: 444A273

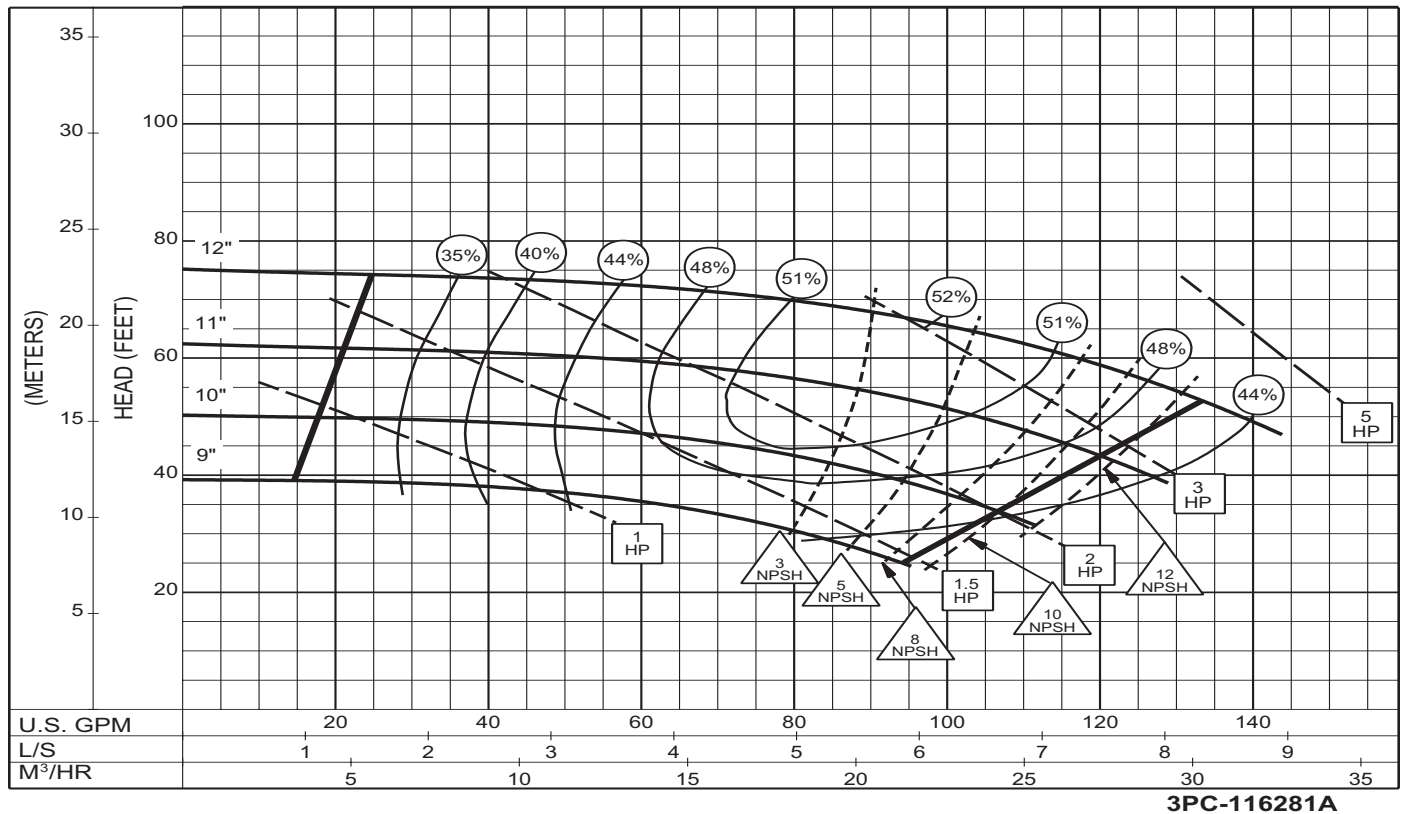
RPM: 1775 SOLIDS: 1.531"



# Performance Curve – 2" 1593

IMPELLER: 444R013

RPM: 1593 SOLIDS: .50"

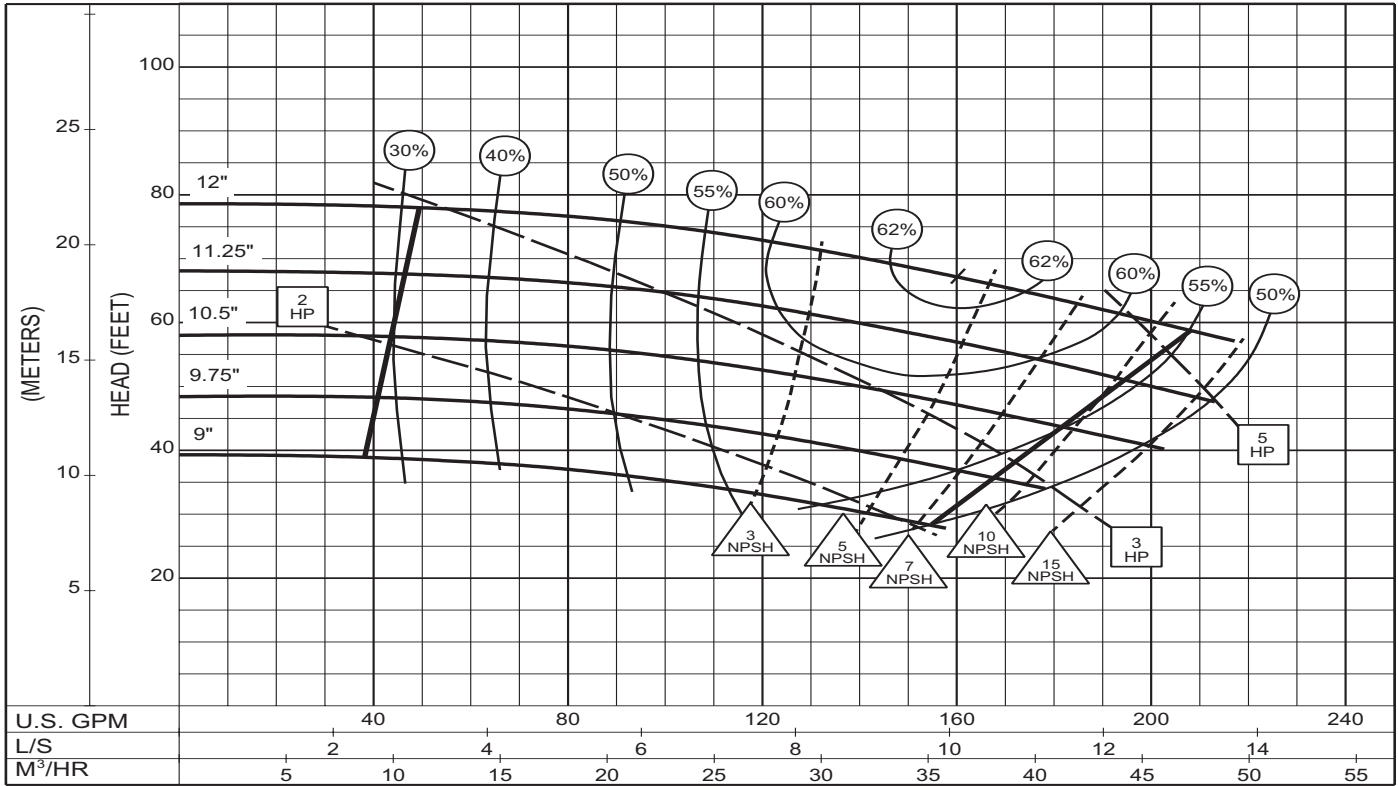




# Performance Curve - 3" 1594

IMPELLER: 444R014

RPM: 1150 SOLIDS: .625"

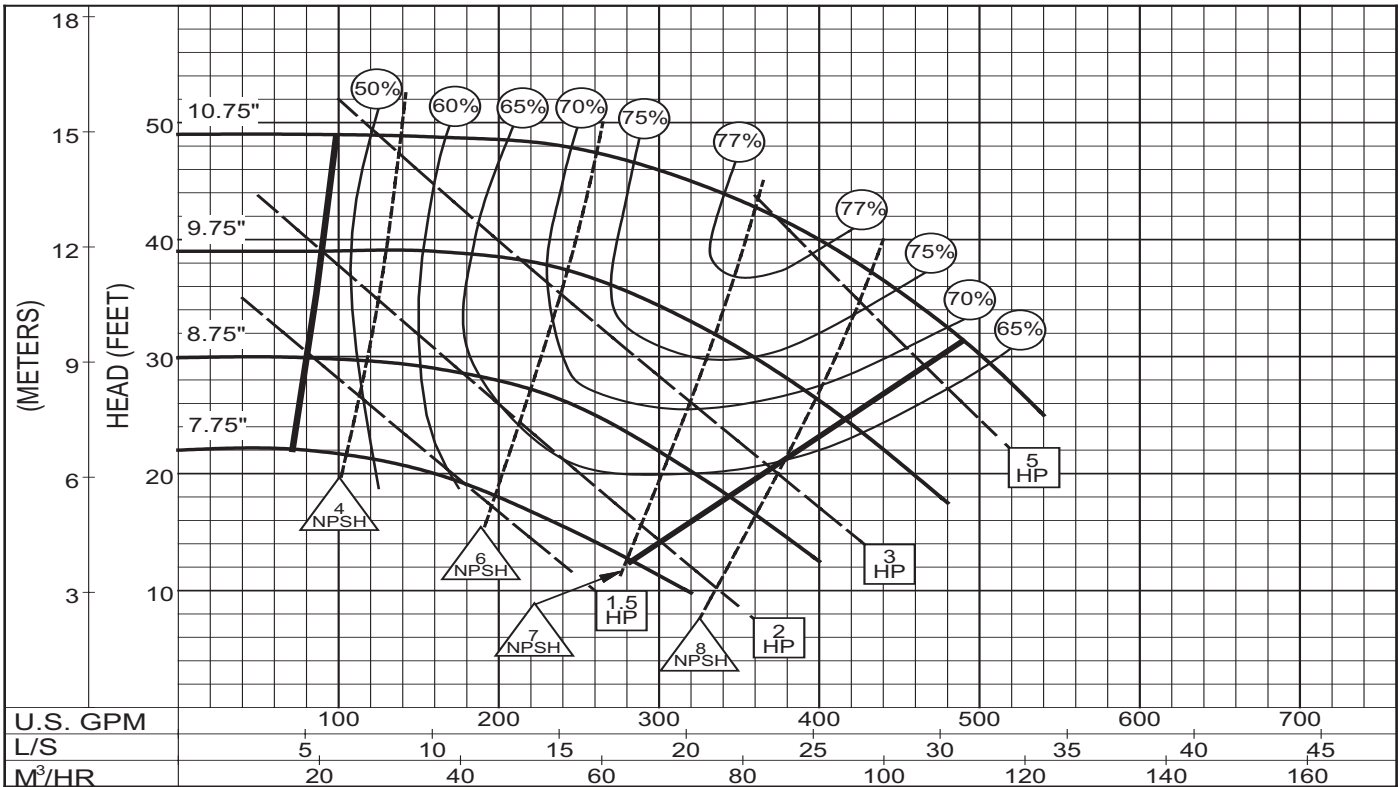


3PC-116289

# Performance Curve - 4" 1595

IMPELLER: 444A261

RPM: 1150 SOLIDS: .875"



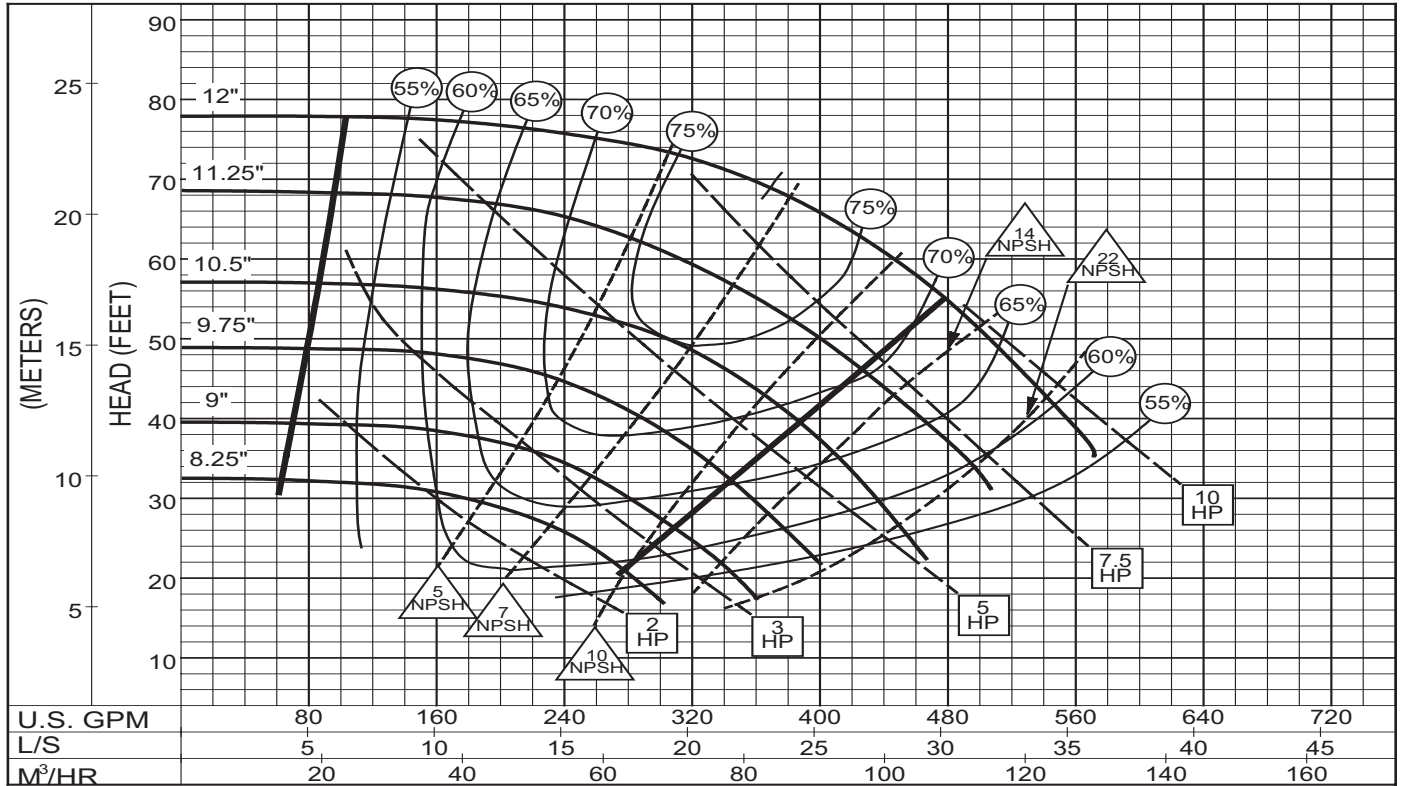
PC-177190



# Performance Curve - 4" 1596

RPM: 1150 SOLIDS: .750"

IMPELLER: 444A016

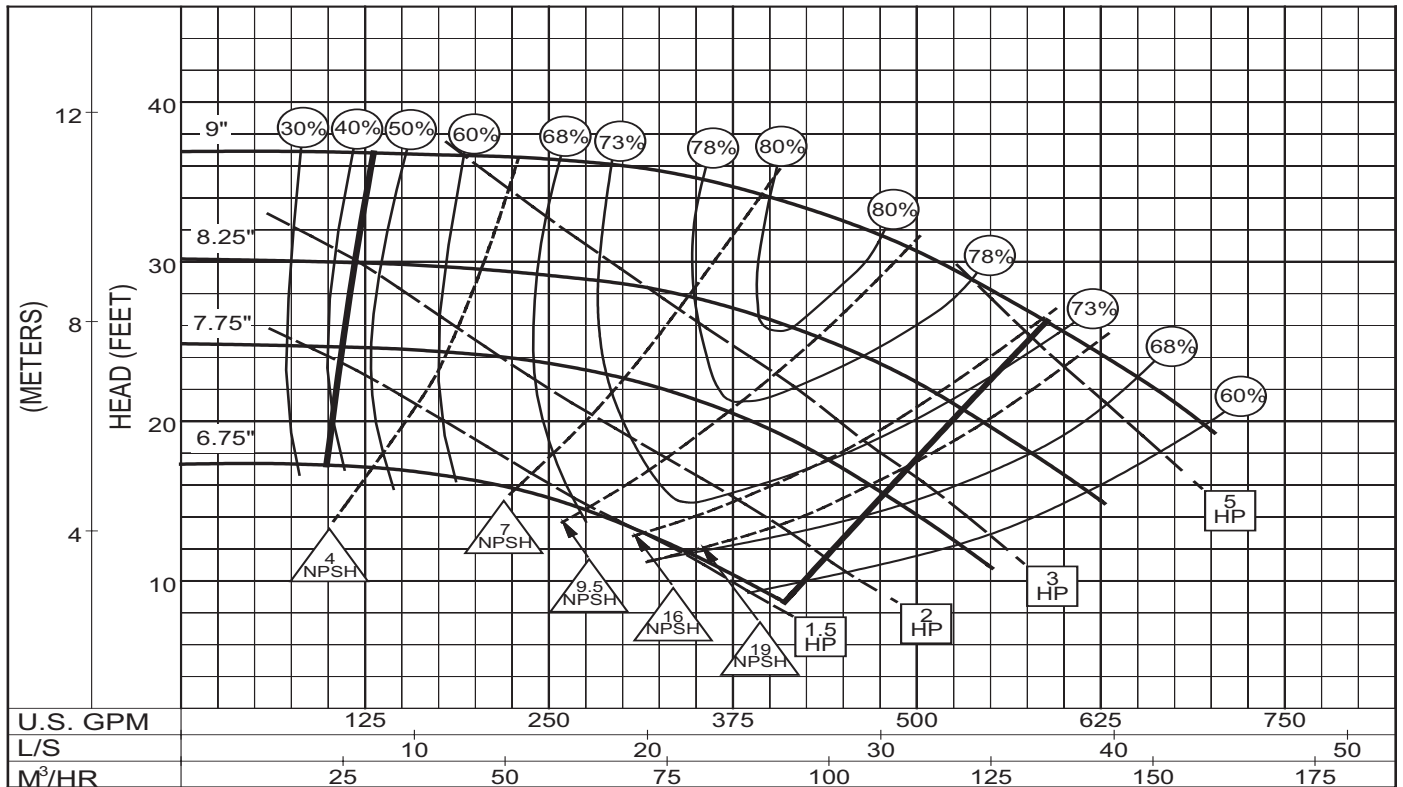


PC-177202

# Performance Curve - 5" 1591

RPM: 1150 SOLIDS: .563"

IMPELLER: 444A315

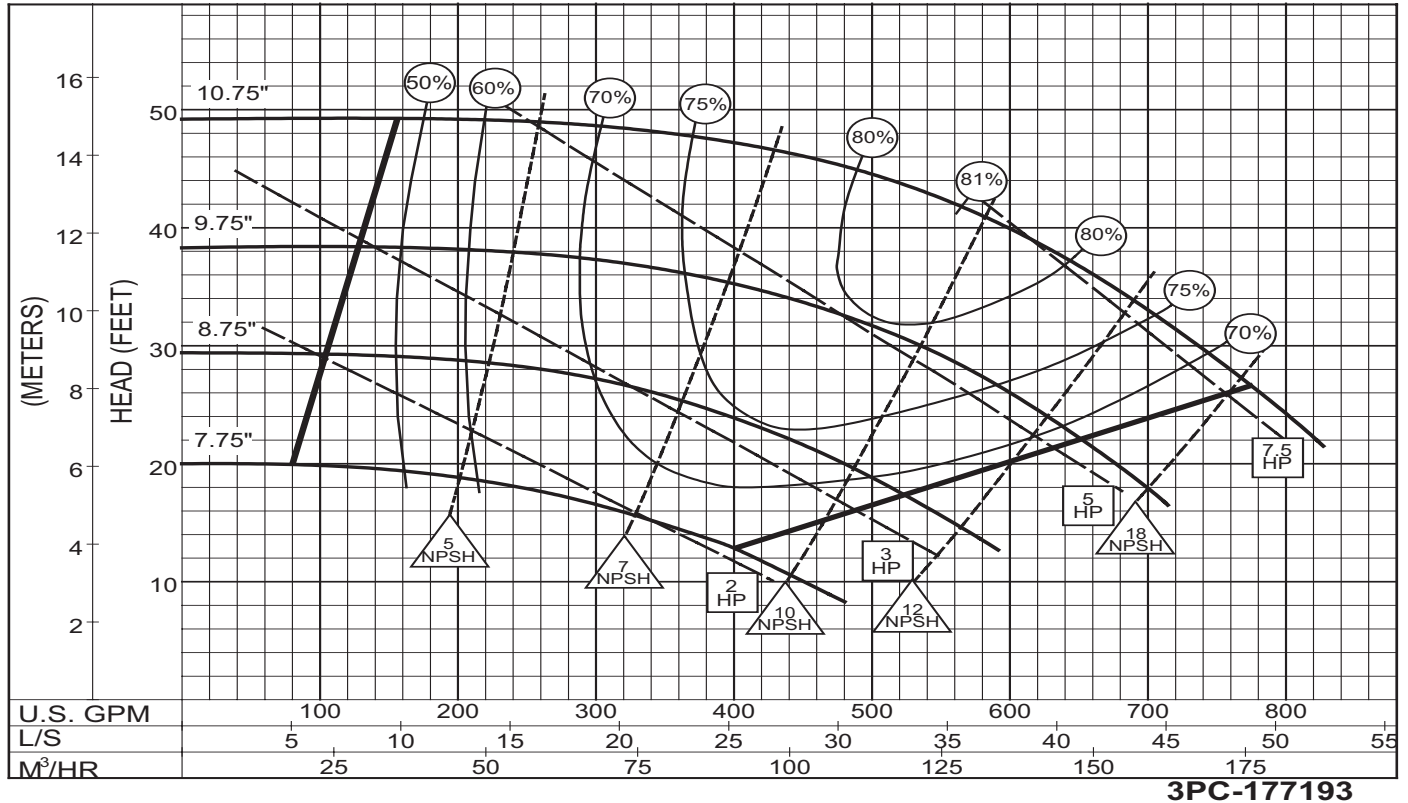


PC-177184

# Performance Curve - 5" 1592

IMPELLER: 444R262

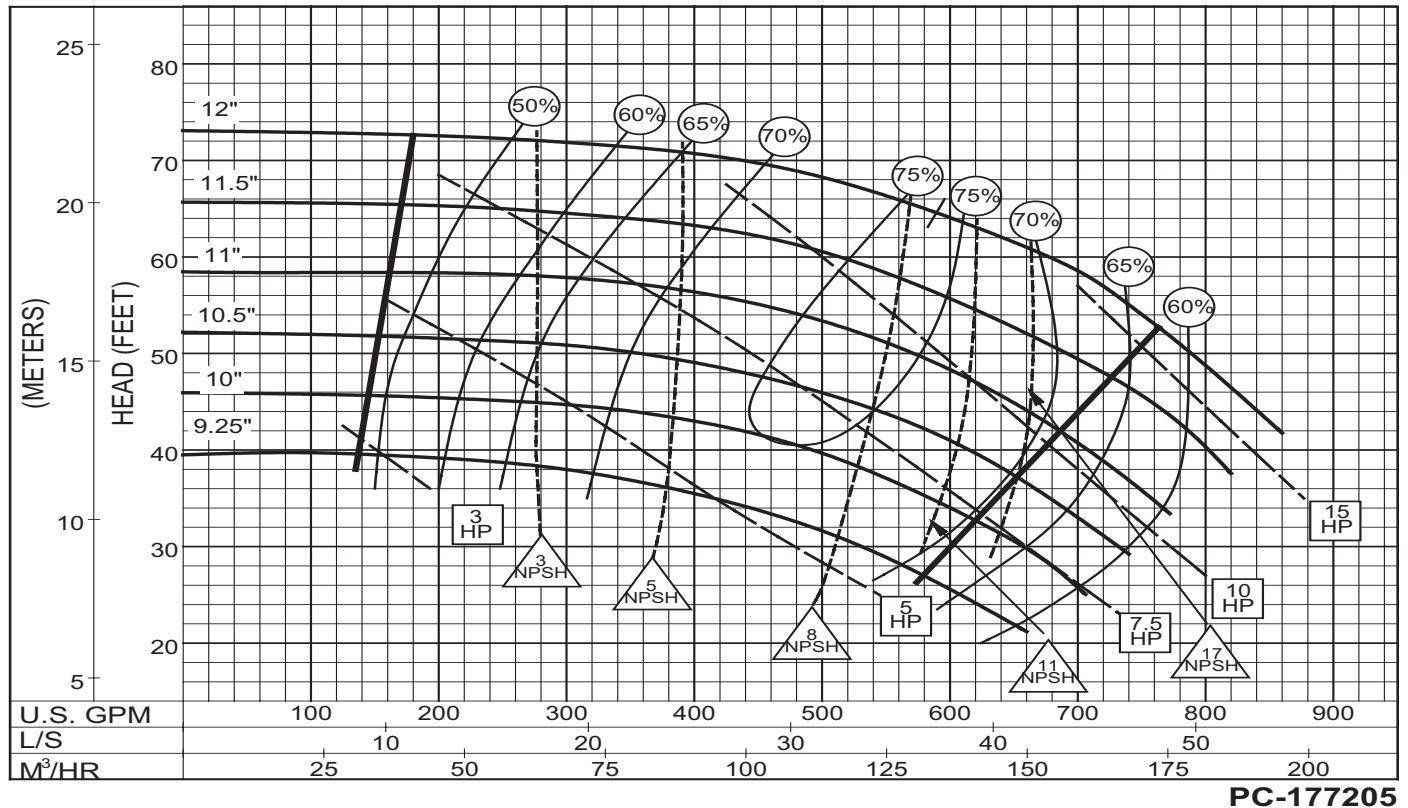
RPM: 1150 SOLIDS: 1.063"



# Performance Curve - 5" 1593

IMPELLER: 444A017

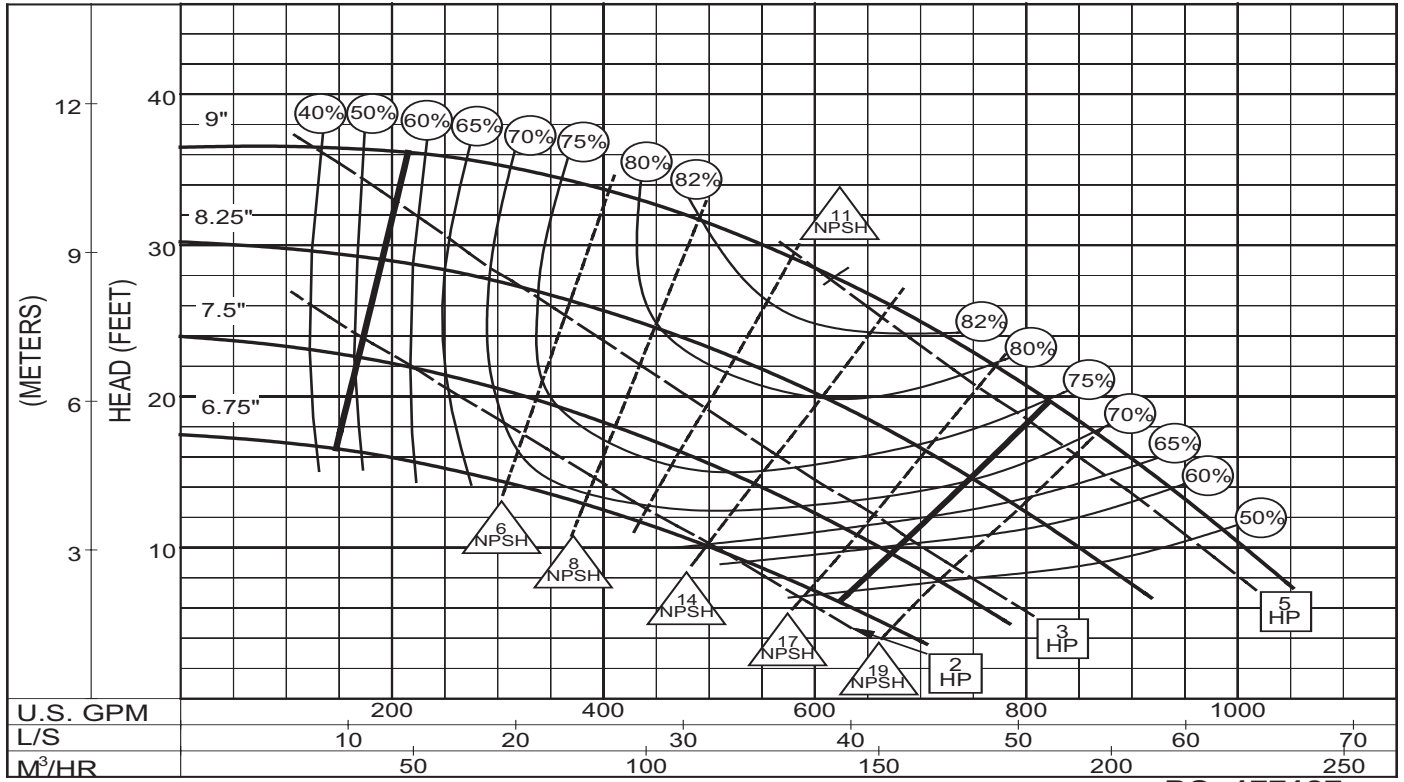
RPM: 1150 SOLIDS: .438"



# Performance Curve – 6" 1591

IMPELLER: 444A234

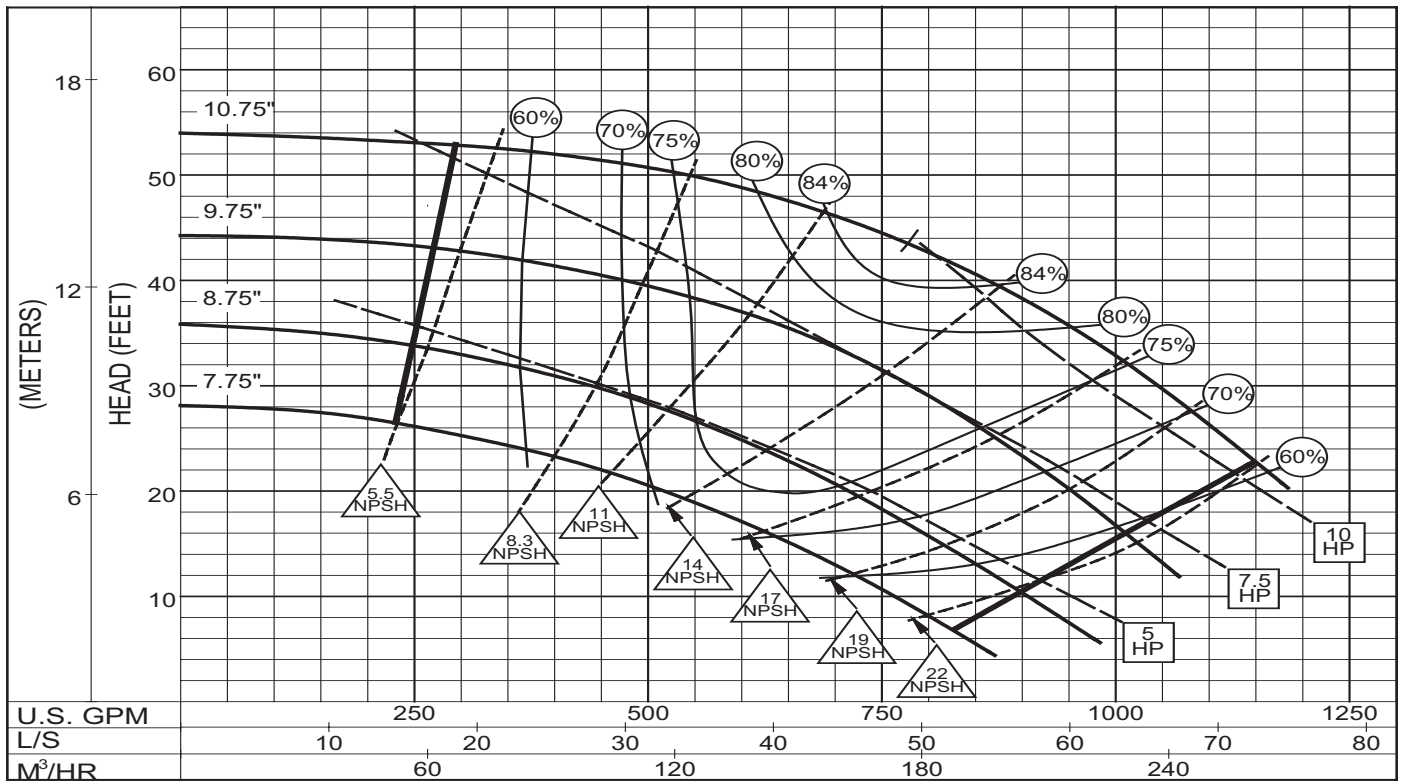
RPM: 1150 SOLIDS: 1.25"



# Performance Curve – 6" 1592

IMPELLER: 444A263

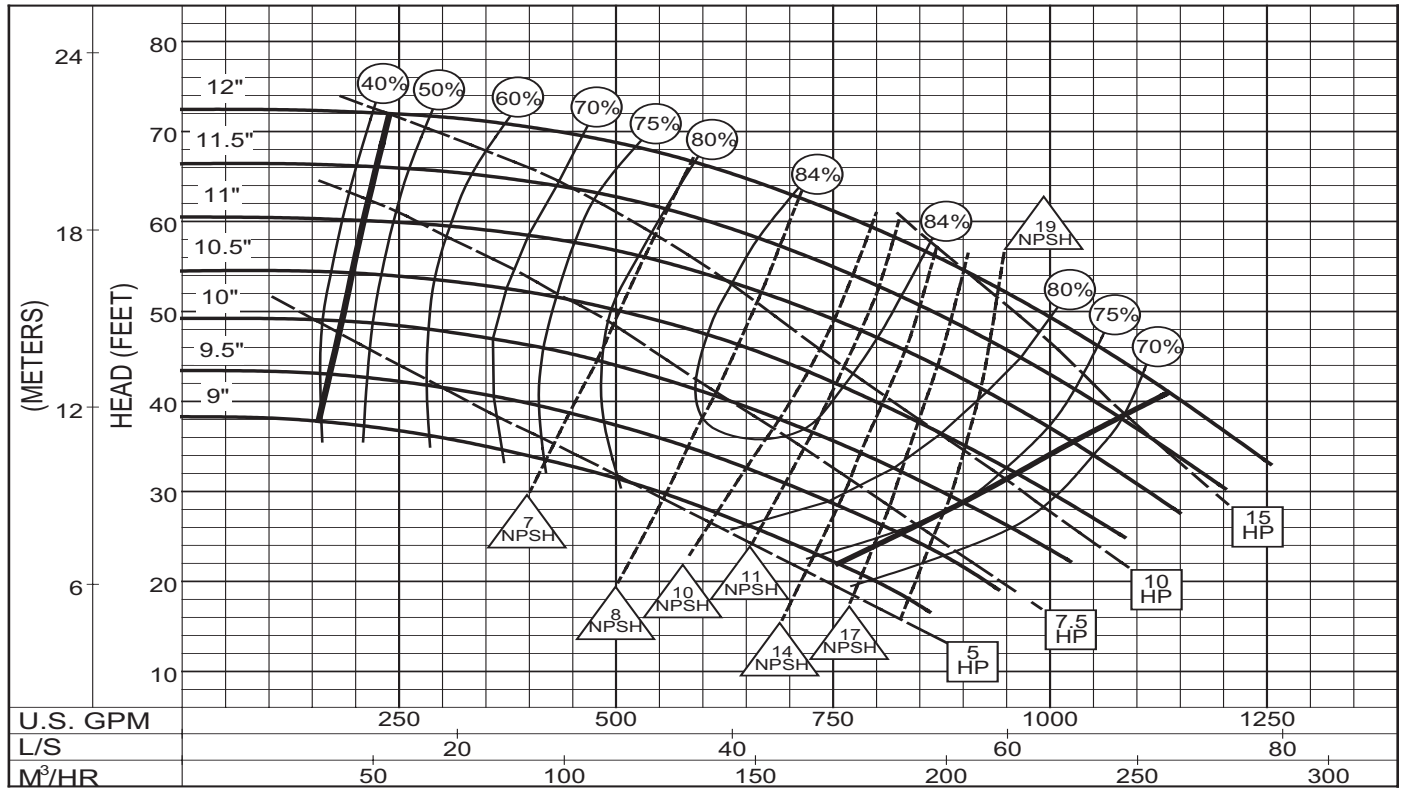
RPM: 1150 SOLIDS: 1.00"



# Performance Curve - 6" 1593

IMPELLER: 444A018

RPM: 1150 SOLIDS: .938"

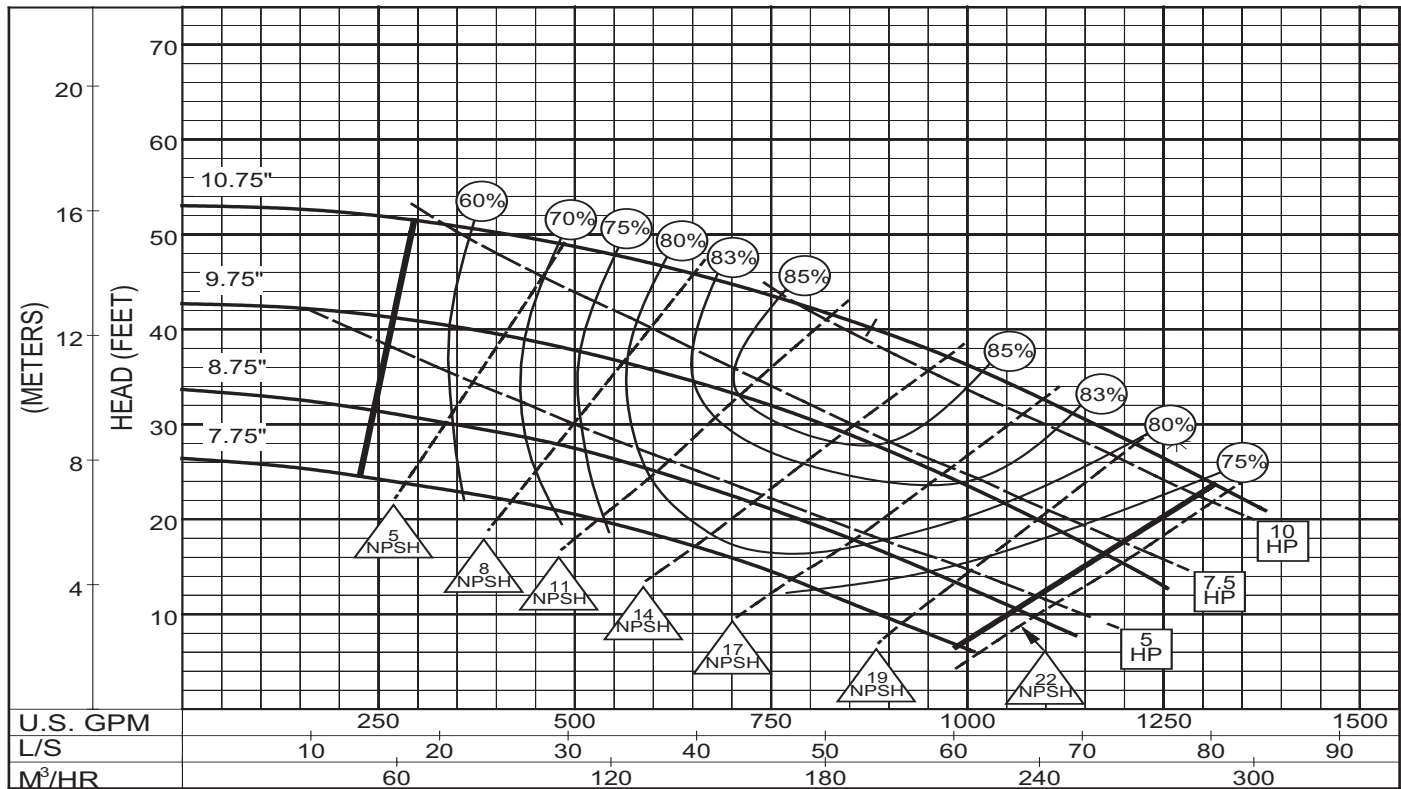


PC-177208

# Performance Curve - 8" 1591

IMPELLER: 444A263

RPM: 1150 SOLIDS: 1.00"

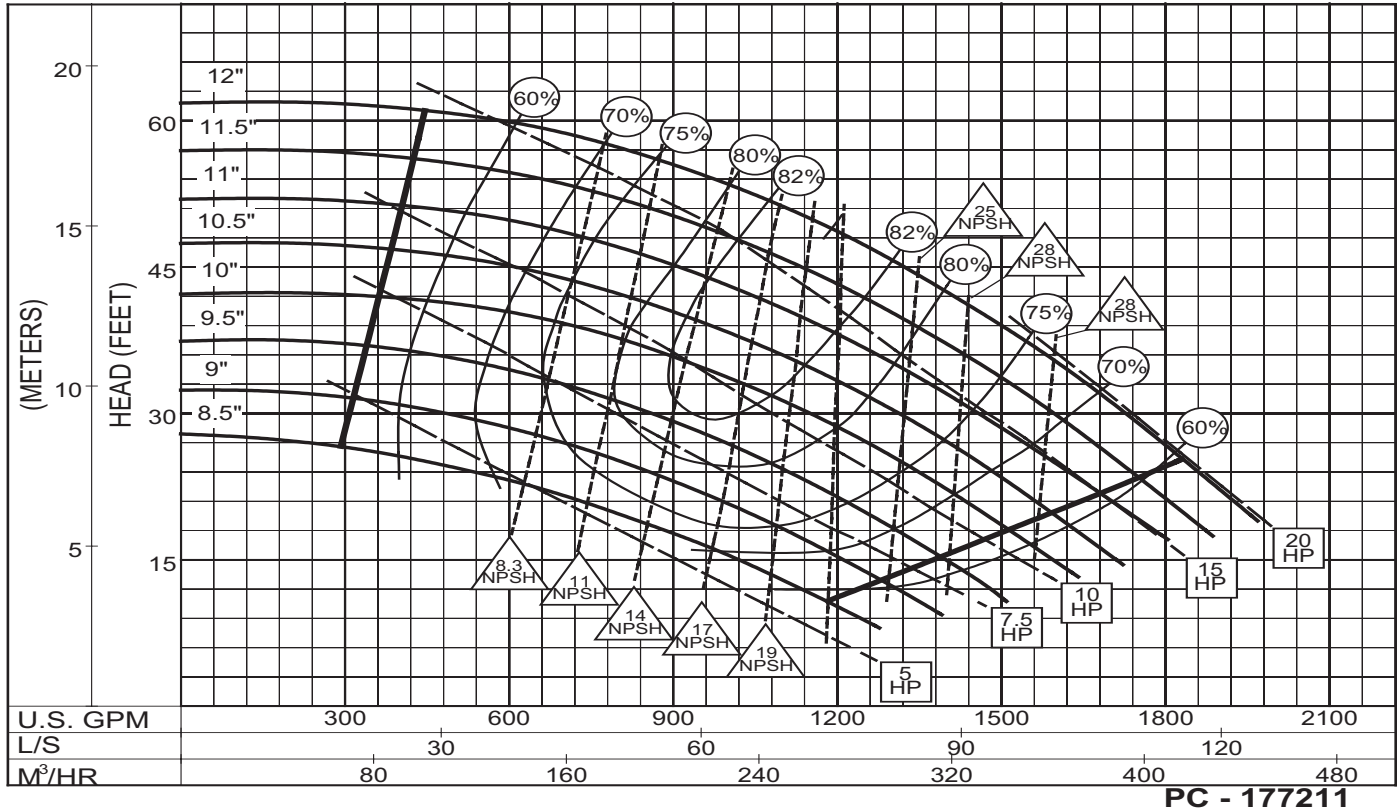


PC-177199

# Performance Curve – 8" 1592

IMPELLER: 444R371

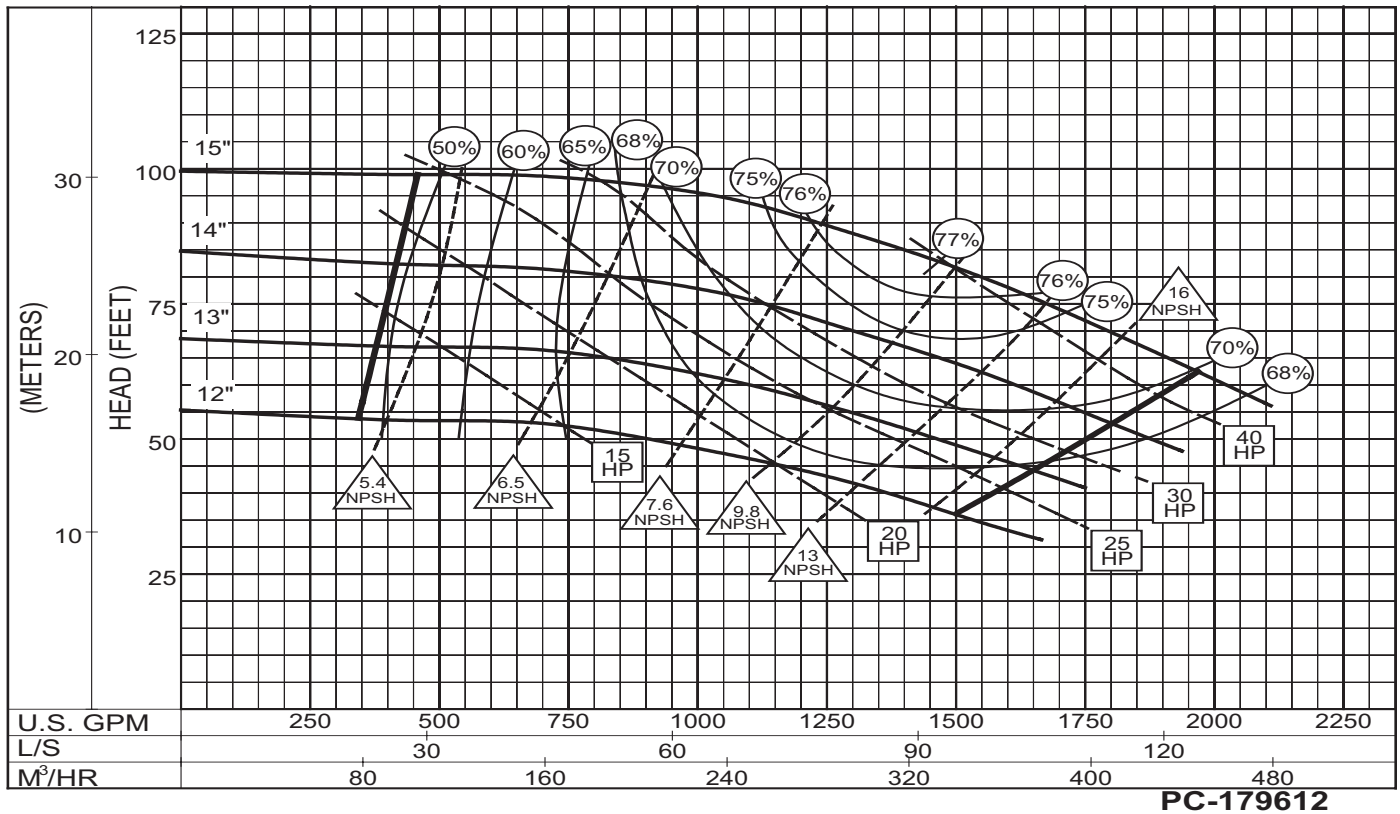
RPM: 1150 SOLIDS: 1.312"



# Performance Curve – 8" 1593

IMPELLER: 444A272

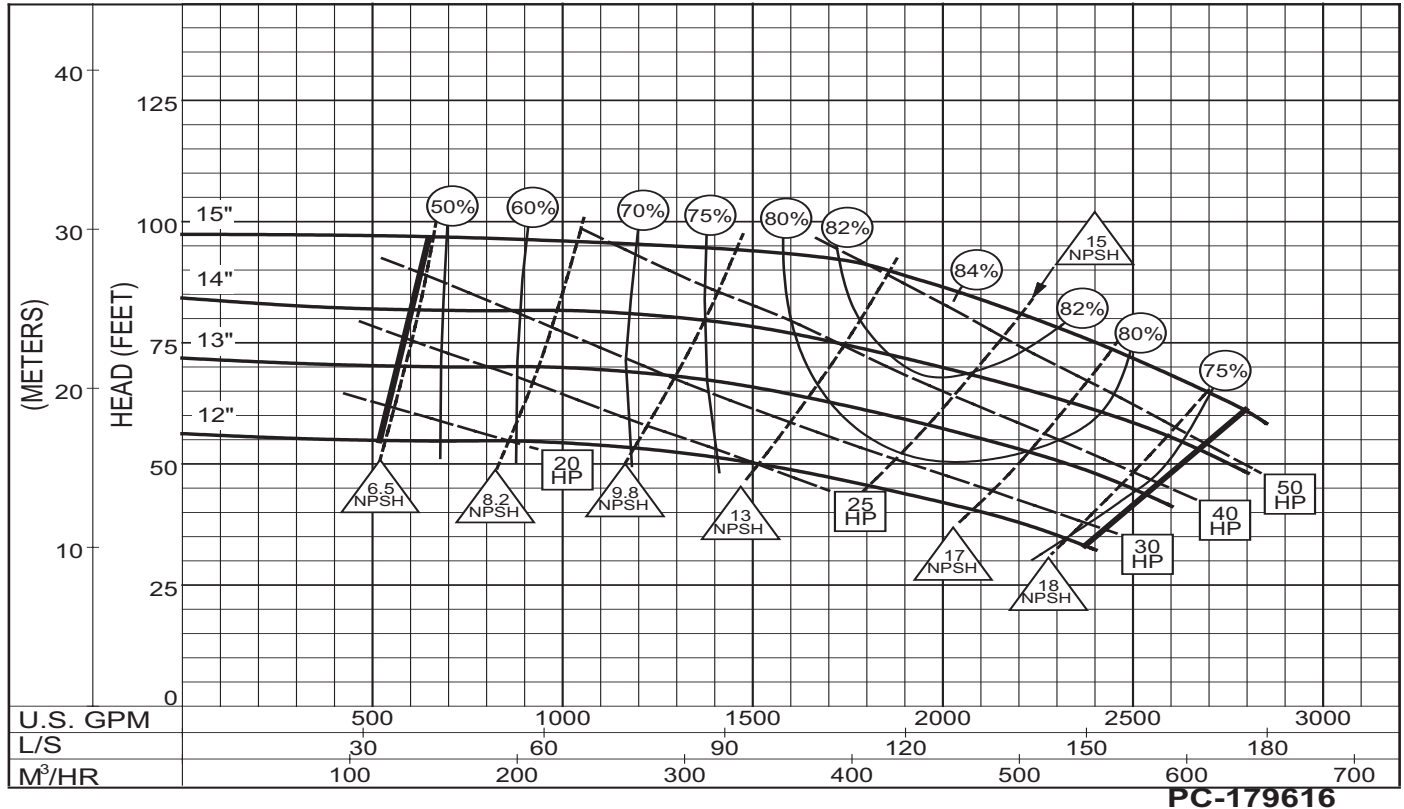
RPM: 1150 SOLIDS: 1.625"



# Performance Curve - 10" 1591

RPM: 1150 SOLIDS: 1.531"

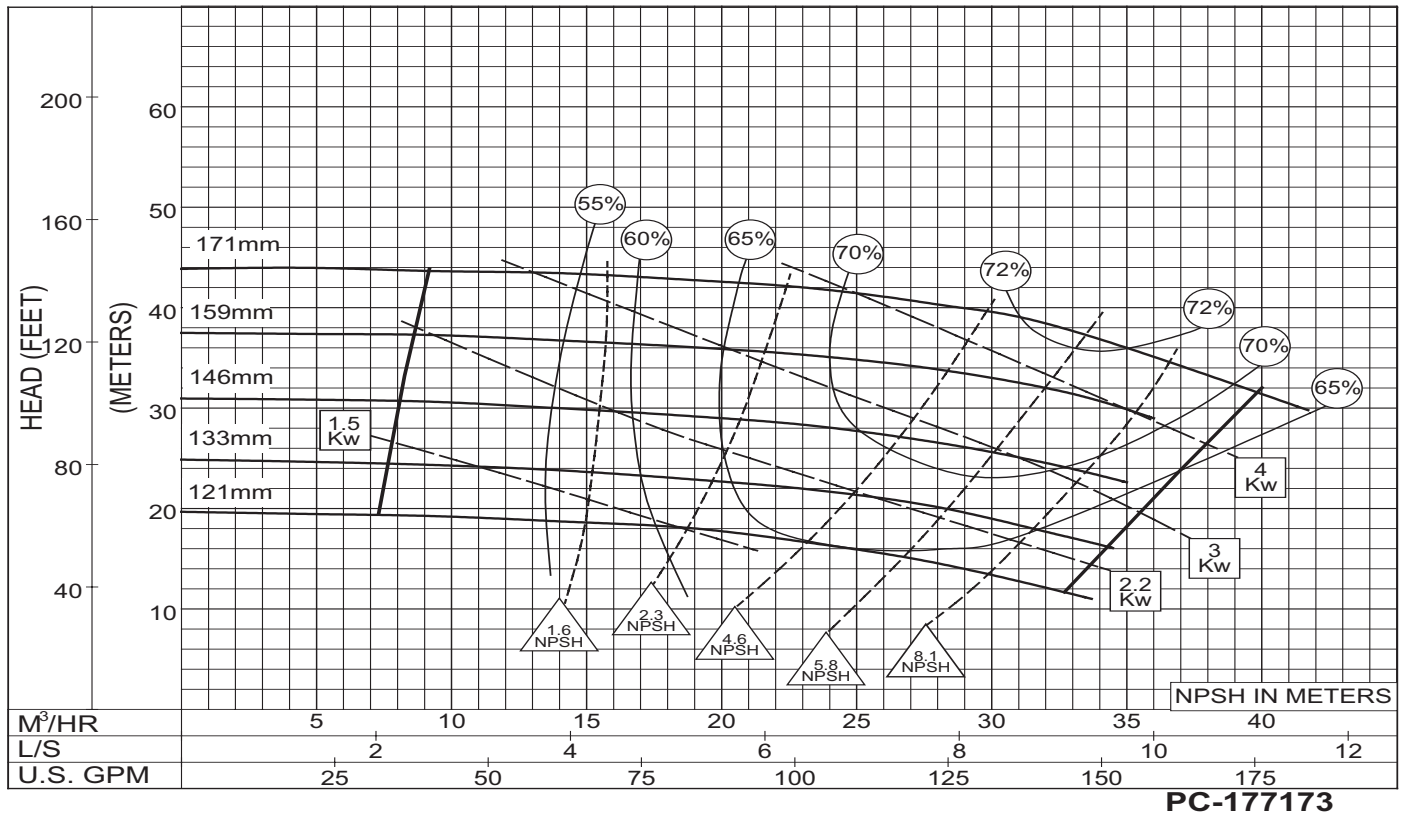
IMPELLER: 444A273



# Performance Curve - 2" 1591

RPM: 2880 SOLIDS: 11 MM

IMPELLER: 444A223

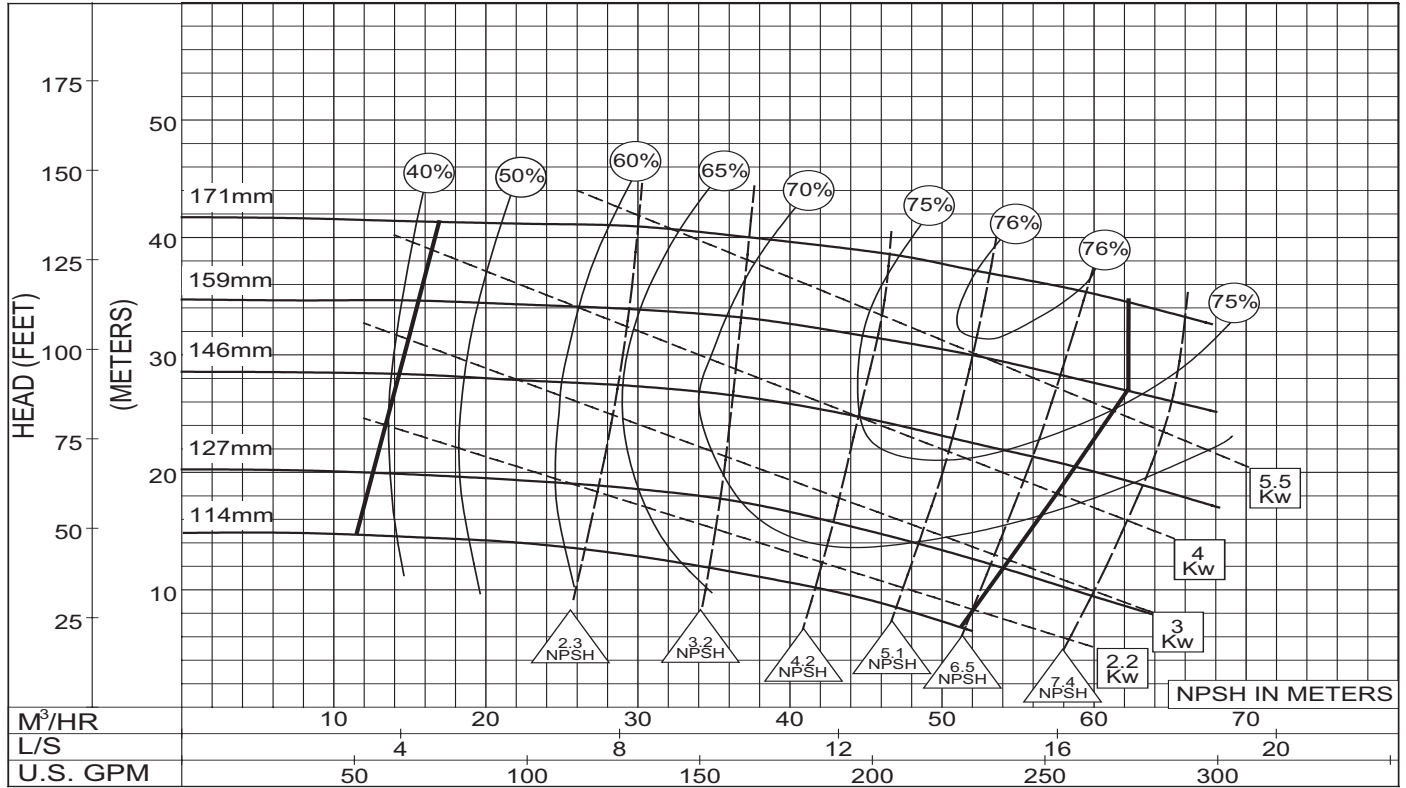




# Performance Curve – 2-1/2" 1591

IMPELLER: 444A224

RPM: 2880 SOLIDS: 9.5 MM

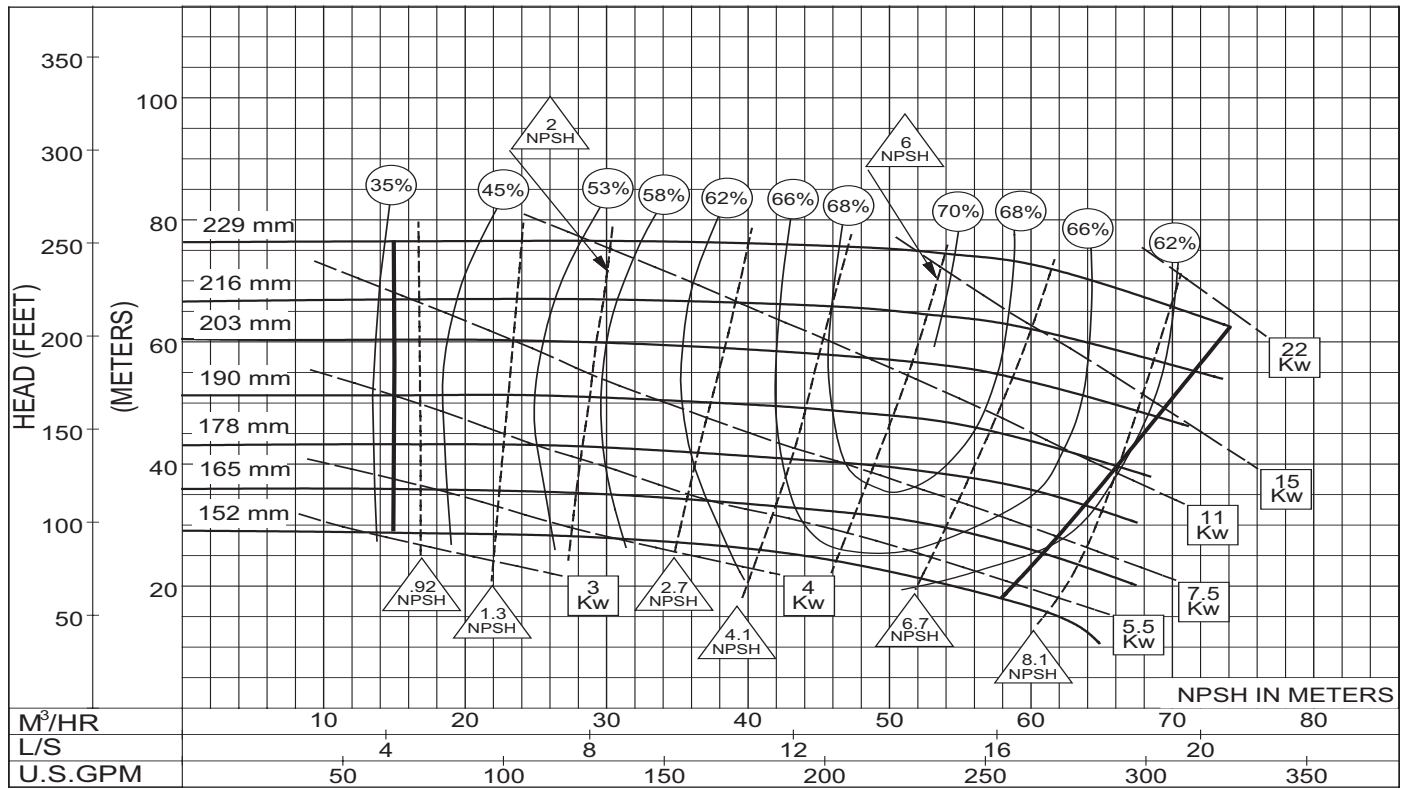


PC-177177

# Performance Curve – 2-1/2" 1592

IMPELLER: 444A230

RPM: 2880 SOLIDS: 16 MM

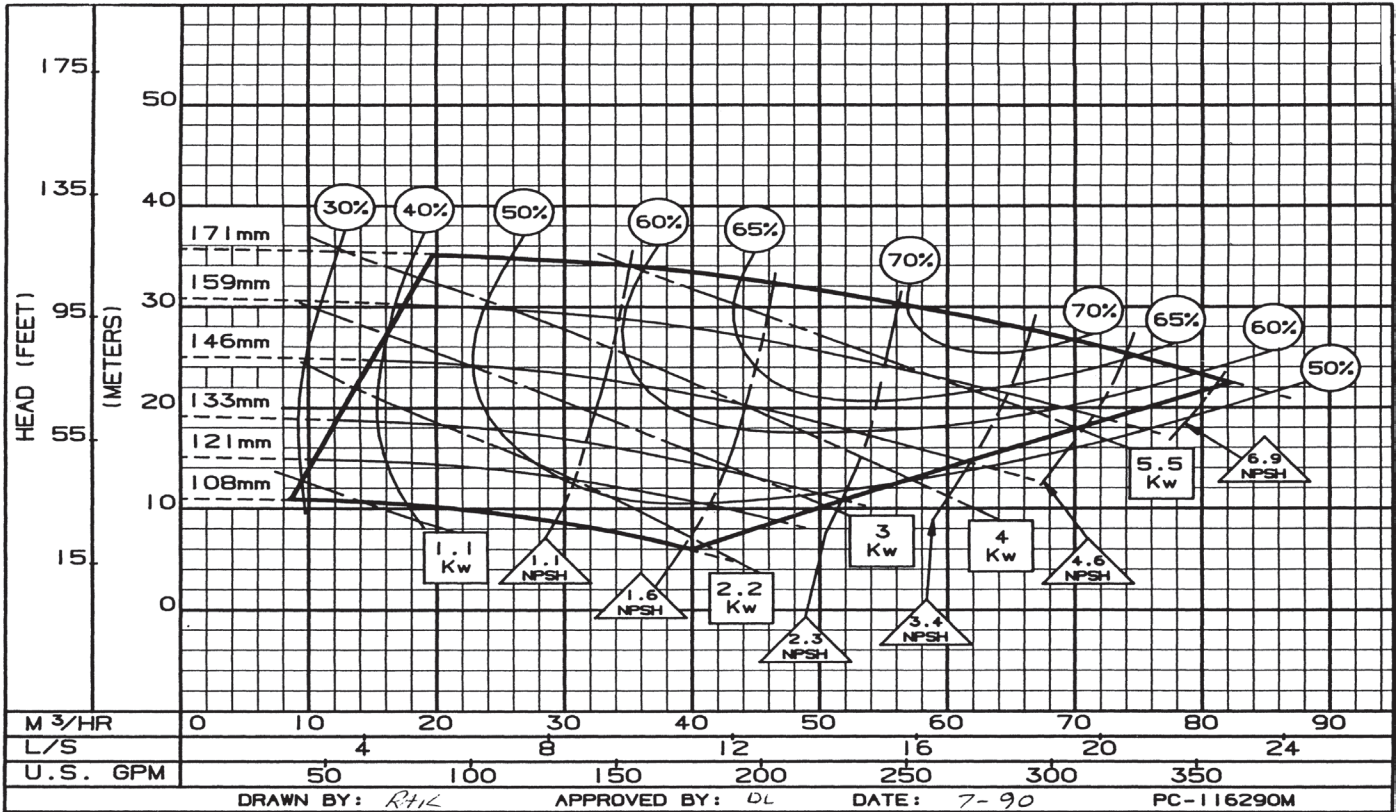


PC-177181

# Performance Curve - 3" 1591A

IMPELLER: 444A039

RPM: 2880 SOLIDS: 16 MM



# Performance Curve - 3" 1591B

IMPELLER: 444A226

RPM: 2880 SOLIDS: 17 MM

