

Pompe à eau normalisée / à huile  
thermique / à eau surchauffée

**50 Hz**

Etanorm, Etanorm SYT  
Etanorm V  
Etabloc, Etabloc SYT  
Etanorm-R, Etanorm-RSY

**Courbier**



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Courbier 50 Hz

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## Pompes centrifuges avec garniture d'étanchéité d'arbre

Pompe à eau normalisée / à huile thermique / à eau surchauffée

### Etanorm/ SYT/ V; Etabloc/ SYT; Etanorm-R/-RSY



#### Généralités

**Classe de réception :** courbes caractéristiques selon ISO 9906  
Classe 3B

#### Valeurs NPSH

Les valeurs NPSH mesurées, indiquées sur les courbes caractéristiques correspondent à une chute de 3 % de la hauteur manométrique.

#### Valeur NPSH dans la plage de charge partielle

La mesure des valeurs NPSH pour les débits inférieurs à  $Q = 0,3 \times Q_{opt}$  est très complexe. Des informations sur les valeurs NPSH dans la plage de charge partielle ne sont pas fournies.

#### Densité du fluide pompé

Les hauteurs manométriques et les puissances indiquées sont valables pour tous les fluides pompés dont la densité  $\rho = 1,0$  kg/dm<sup>3</sup> et la viscosité cinématique  $v$  est égale ou inférieure à 20 mm<sup>2</sup>/s. Si la densité  $\neq 1,0$ , multiplier la puissance indiquée par  $\rho$ . Pour les viscosités  $> 20$  mm<sup>2</sup>/s, il convient de calculer les données correspondantes à l'eau froide et de déterminer l'incidence sur la puissance de la pompe.

#### Perte de puissance par frottement

Pour certaines versions (paliers renforcés, certaines garnitures d'étanchéité d'arbre), il convient de tenir compte des pertes de puissance par frottement et de les indiquer dans la fiche de spécifications en tant que puissance supplémentaire.

#### Facteurs de correction

Les courbes caractéristiques sont valables pour les pompes équipées de roues en fonte ou en bronze.

- **Etanorm/SYT ; Etabloc/SYT**

Lorsque la roue est en acier moulé, le rendement et la puissance des tailles concernées doivent être corrigés avec les facteurs de correction indiqués sur les courbes caractéristiques.

- **Etanorm-R/-RSY**

Lorsque la roue est en 1.4408, les taux de rendement indiqués sur les courbes caractéristiques doivent être baissés de 2 points de pourcentage.

## Récapitulatif des tailles

### Récapitulatif des tailles

Taille	Gamme						Vitesse de rotation [t/min]			
	Etanorm	Etanorm SYT	Etanorm V	Etabloc	Etabloc SYT	Etanorm-R	Etanorm-RSY	2900	1450	960
040-025-160	X	X	-	X	X	-	-	(⇒ page 24)	(⇒ page 58)	(⇒ page 116)
040-025-200	X	X	-	X	X	-	-	(⇒ page 25)	(⇒ page 59)	(⇒ page 117)
050-032-125.1	X	X	X	X	X	-	-	(⇒ page 26)	(⇒ page 60)	(⇒ page 118)
050-032-160.1	X	X	X	X	X	-	-	(⇒ page 27)	(⇒ page 61)	(⇒ page 119)
050-032-200.1	X	X	X	X	X	-	-	(⇒ page 28)	(⇒ page 62)	(⇒ page 120)
050-032-250.1	X	-	X	X	-	-	-	(⇒ page 29)	(⇒ page 63)	(⇒ page 121)
050-032-125	X	-	X	X	-	-	-	(⇒ page 30)	(⇒ page 64)	(⇒ page 122)
050-032-160	X	X	X	X	X	-	-	(⇒ page 31)	(⇒ page 65)	(⇒ page 123)
050-032-200	X	X	X	X	X	-	-	(⇒ page 32)	(⇒ page 66)	(⇒ page 124)
050-032-250	X	X	X	X	-	-	-	(⇒ page 33)	(⇒ page 67)	(⇒ page 125)
065-040-125	X	-	X	X	-	-	-	(⇒ page 34)	(⇒ page 68)	(⇒ page 126)
065-040-160	X	X	X	X	X	-	-	(⇒ page 35)	(⇒ page 69)	(⇒ page 127)
065-040-200	X	X	X	X	X	-	-	(⇒ page 36)	(⇒ page 70)	(⇒ page 128)
065-040-250	X	X	X	X	-	-	-	(⇒ page 37)	(⇒ page 71)	(⇒ page 129)
065-040-315	X	X	X	X	-	-	-	(⇒ page 38)	(⇒ page 72)	(⇒ page 130)
065-050-125	X	-	X	X	-	-	-	(⇒ page 39)	(⇒ page 73)	(⇒ page 131)
065-050-160	X	X	X	X	X	-	-	(⇒ page 40)	(⇒ page 74)	(⇒ page 132)
065-050-200	X	X	X	X	X	-	-	(⇒ page 41)	(⇒ page 75)	(⇒ page 133)
065-050-250	X	X	X	X	-	-	-	(⇒ page 42)	(⇒ page 76)	(⇒ page 134)
065-050-315	X	X	X	X	-	-	-	(⇒ page 43)	(⇒ page 77)	(⇒ page 135)
080-065-125	X	-	X	X	-	-	-	(⇒ page 44)	(⇒ page 78)	(⇒ page 136)
080-065-160	X	X	X	X	X	-	-	(⇒ page 45)	(⇒ page 79)	(⇒ page 137)
080-065-200	X	X	X	X	X	-	-	(⇒ page 46)	(⇒ page 80)	(⇒ page 138)
080-065-250	X	X	X	X	-	-	-	(⇒ page 47)	(⇒ page 81)	(⇒ page 139)
080-065-315	X	X	X	X	-	-	-	(⇒ page 48)	(⇒ page 82)	(⇒ page 140)
100-080-160	X	X	X	X	X	-	-	(⇒ page 49)	(⇒ page 83)	(⇒ page 141)
100-080-200	X	X	X	X	-	-	-	(⇒ page 50)	(⇒ page 84)	(⇒ page 142)
100-080-250	X	X	X	X	-	-	-	(⇒ page 51)	(⇒ page 85)	(⇒ page 143)
100-080-315	X	X	X	X	-	-	-	(⇒ page 52)	(⇒ page 86)	(⇒ page 144)
100-080-400	X	-	X	X	-	-	-	-	(⇒ page 87)	(⇒ page 145)
125-100-160	X	X	X	X	-	-	-	(⇒ page 53)	(⇒ page 88)	(⇒ page 146)
125-100-200	X	X	X	X	-	-	-	(⇒ page 54)	(⇒ page 89)	(⇒ page 147)
125-100-250	X	X	X	X	-	-	-	(⇒ page 55)	(⇒ page 90)	(⇒ page 148)
125-100-315	X	X	X	X	-	-	-	(⇒ page 56)	(⇒ page 91)	(⇒ page 149)
125-100-400	X	-	X	X	-	-	-	-	(⇒ page 92)	(⇒ page 150)
150-125-200	X	X	X	X	-	-	-	(⇒ page 57)	(⇒ page 93)	(⇒ page 151)
150-125-250	X	X	X	X	-	-	-	-	(⇒ page 94)	(⇒ page 152)
150-125-315	X	X	X	X	-	-	-	-	(⇒ page 95)	(⇒ page 153)

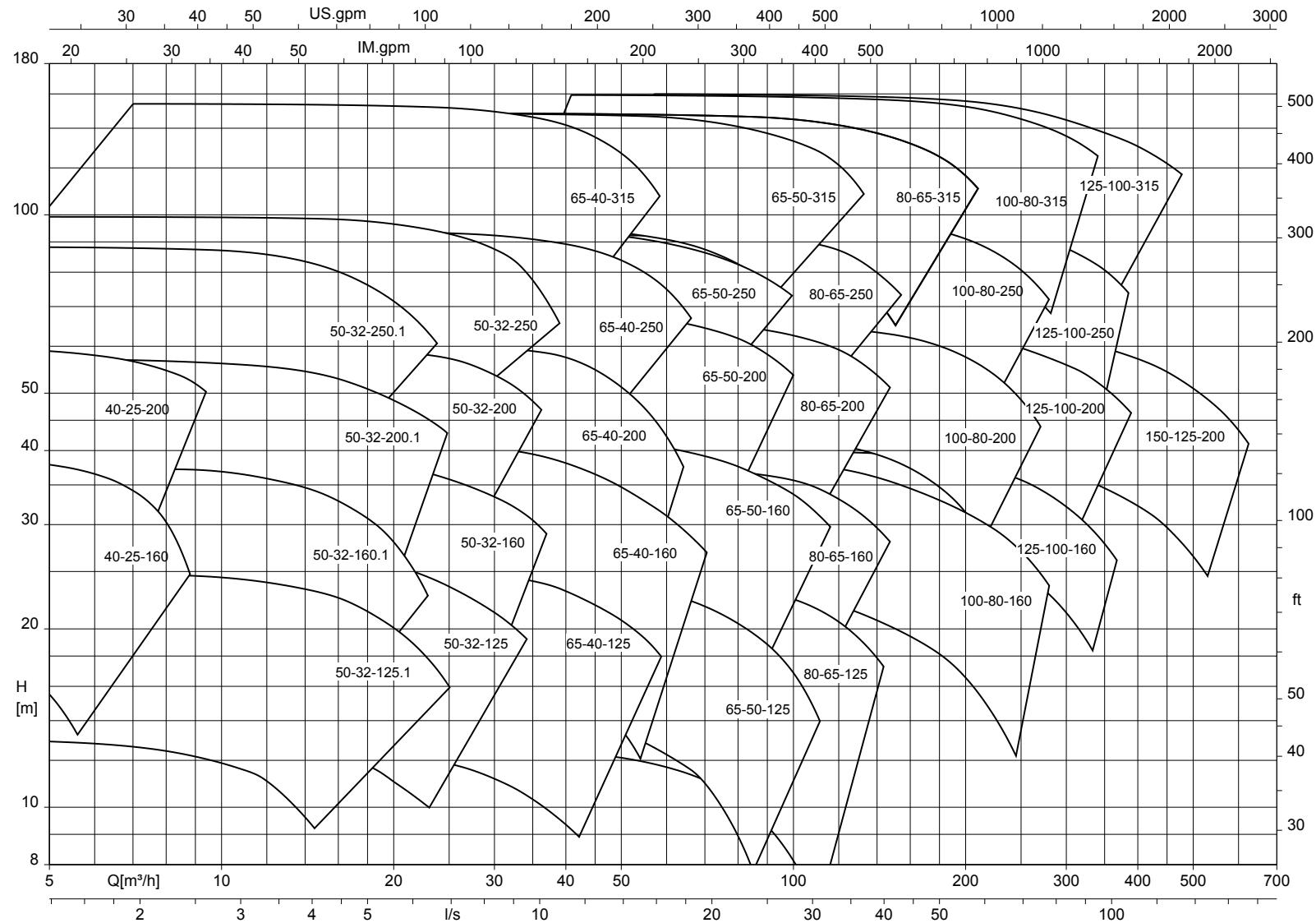
Taille	Gamme						Vitesse de rotation [t/min]			
	Etanorm	Etanorm SYT	Etanorm V	Etabloc	Etabloc SYT	Etanorm-R	Etanorm-RSY	2900	1450	960
150-125-400	X	X	X	X	-	-	-	-	(⇒ page 96)	(⇒ page 154)
200-150-200	X	-	X	X	-	-	-	-	(⇒ page 97)	(⇒ page 155)
200-150-250	X	-	X	X	-	-	-	-	(⇒ page 98)	(⇒ page 156)
200-150-315	X	X	X	X	-	-	-	-	(⇒ page 99)	(⇒ page 157)
200-150-400	X	X	X	X	-	-	-	-	(⇒ page 100)	(⇒ page 158)

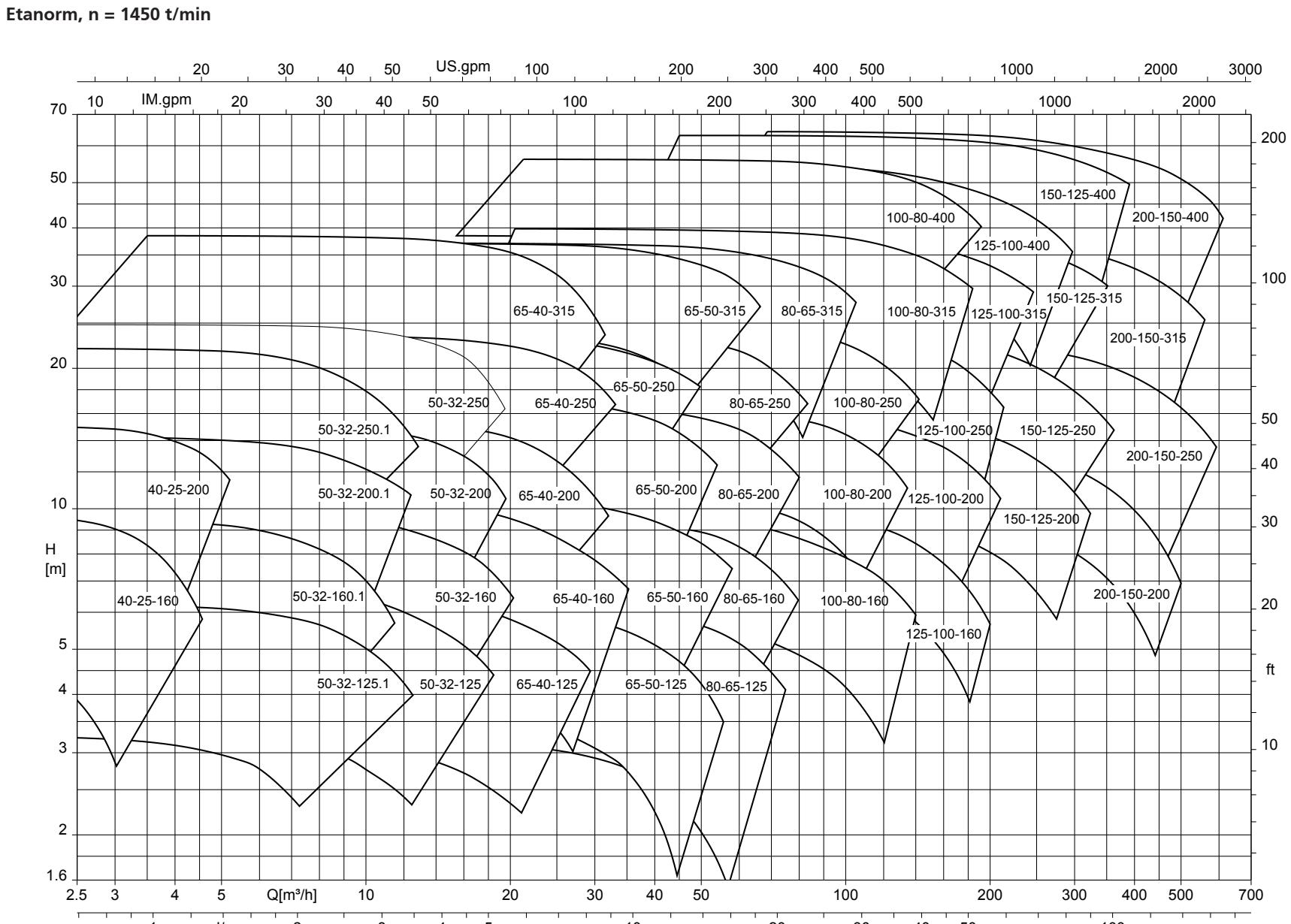
Récapitulatif des tailles

Taille	Gamme						Vitesse de rotation [t/min]			
	Etanorm	Etanorm SYT	Etanorm V	Etabloc	Etabloc SYT	Etanorm-R	Etanorm-RSY	2900	1450	960
125-500.2	-	-	-	-	-	X	X	-	(⇒ page 101)	(⇒ page 159)
150-500.1	-	-	-	-	-	X	X	-	(⇒ page 102)	(⇒ page 160)
200-250	-	-	-	-	-	X	-	-	(⇒ page 103)	(⇒ page 161)
200-260	-	-	-	-	-	X	-	-	(⇒ page 104)	(⇒ page 162)
200-330	-	-	-	-	-	X	X	-	(⇒ page 105)	(⇒ page 163)
200-400	-	-	-	-	-	X	X	-	(⇒ page 106)	(⇒ page 164)
200-500	-	-	-	-	-	X	X	-	(⇒ page 107)	(⇒ page 165)
250-300	-	-	-	-	-	X	X	-	(⇒ page 108)	(⇒ page 166)
250-330	-	-	-	-	-	X	X	-	(⇒ page 109)	(⇒ page 167)
250-400	-	-	-	-	-	X	X	-	(⇒ page 110)	(⇒ page 168)
250-500	-	-	-	-	-	X	X	-	(⇒ page 111)	(⇒ page 169)
300-340	-	-	-	-	-	X	-	-	(⇒ page 112)	(⇒ page 170)
300-360	-	-	-	-	-	X	X	-	(⇒ page 113)	(⇒ page 171)
300-400	-	-	-	-	-	X	X	-	(⇒ page 114)	(⇒ page 172)
300-500	-	-	-	-	-	X	X	-	(⇒ page 115)	(⇒ page 173)

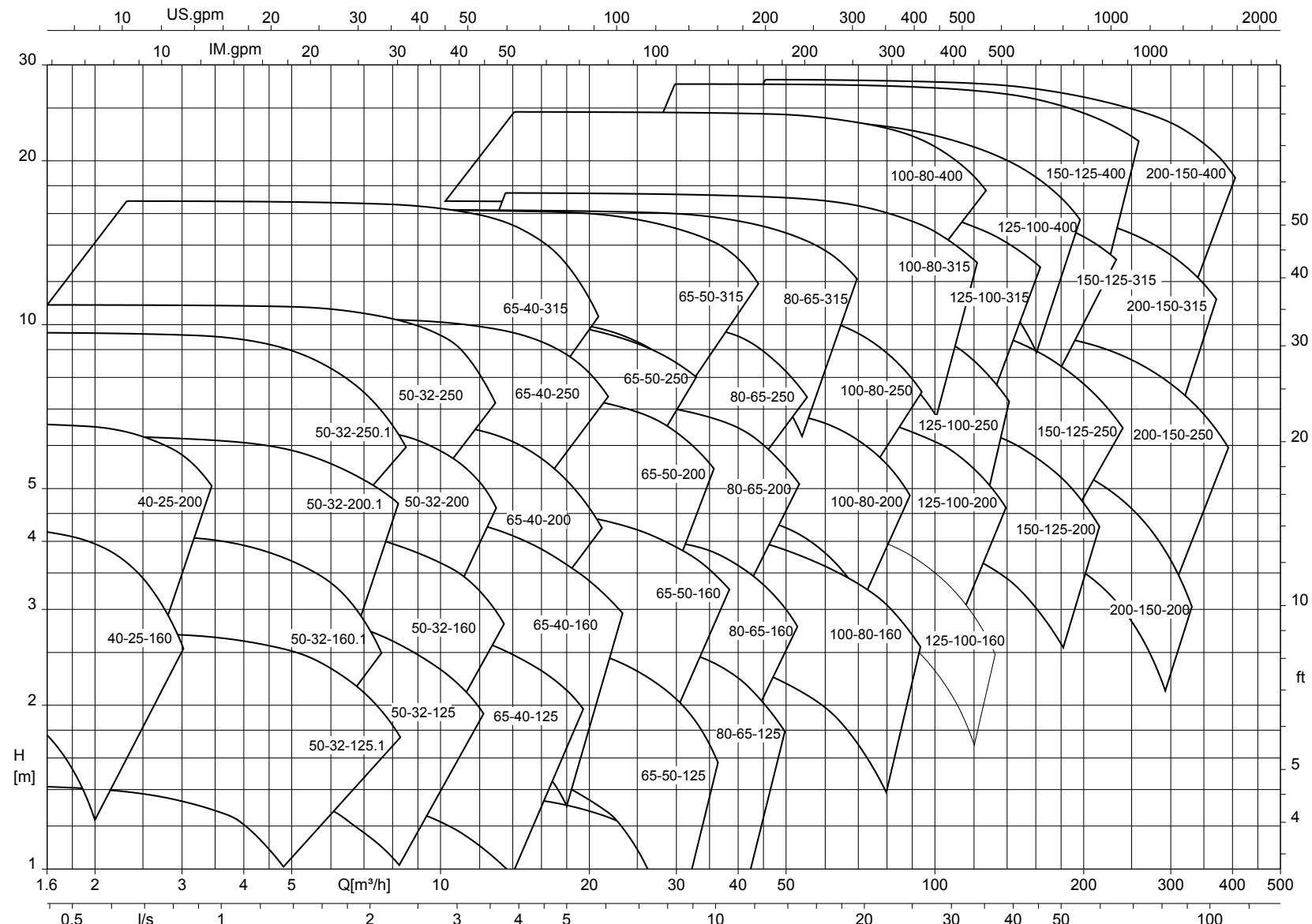
## Grilles de sélection

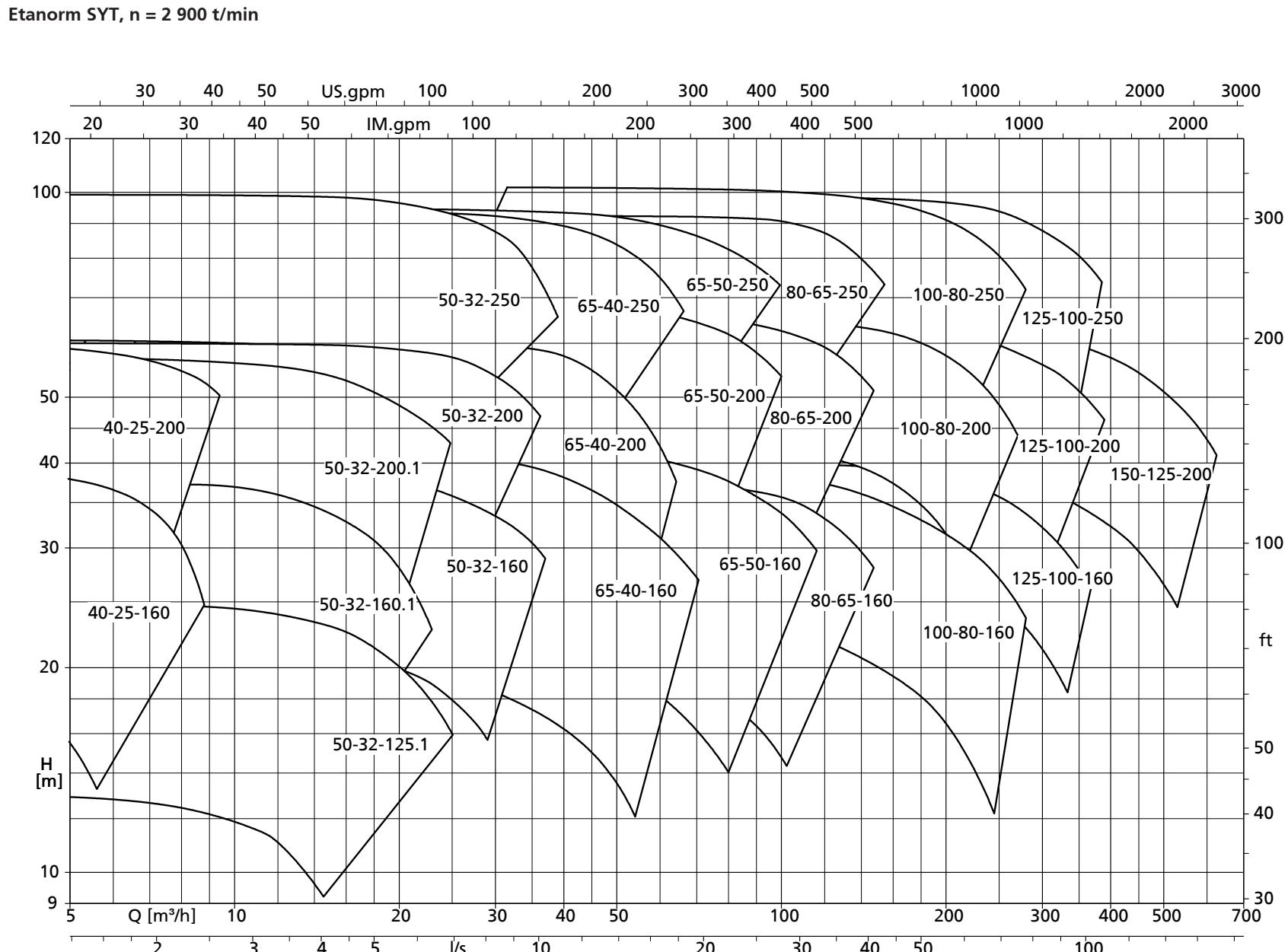
Etanorm,  $n = 2900$  t/min



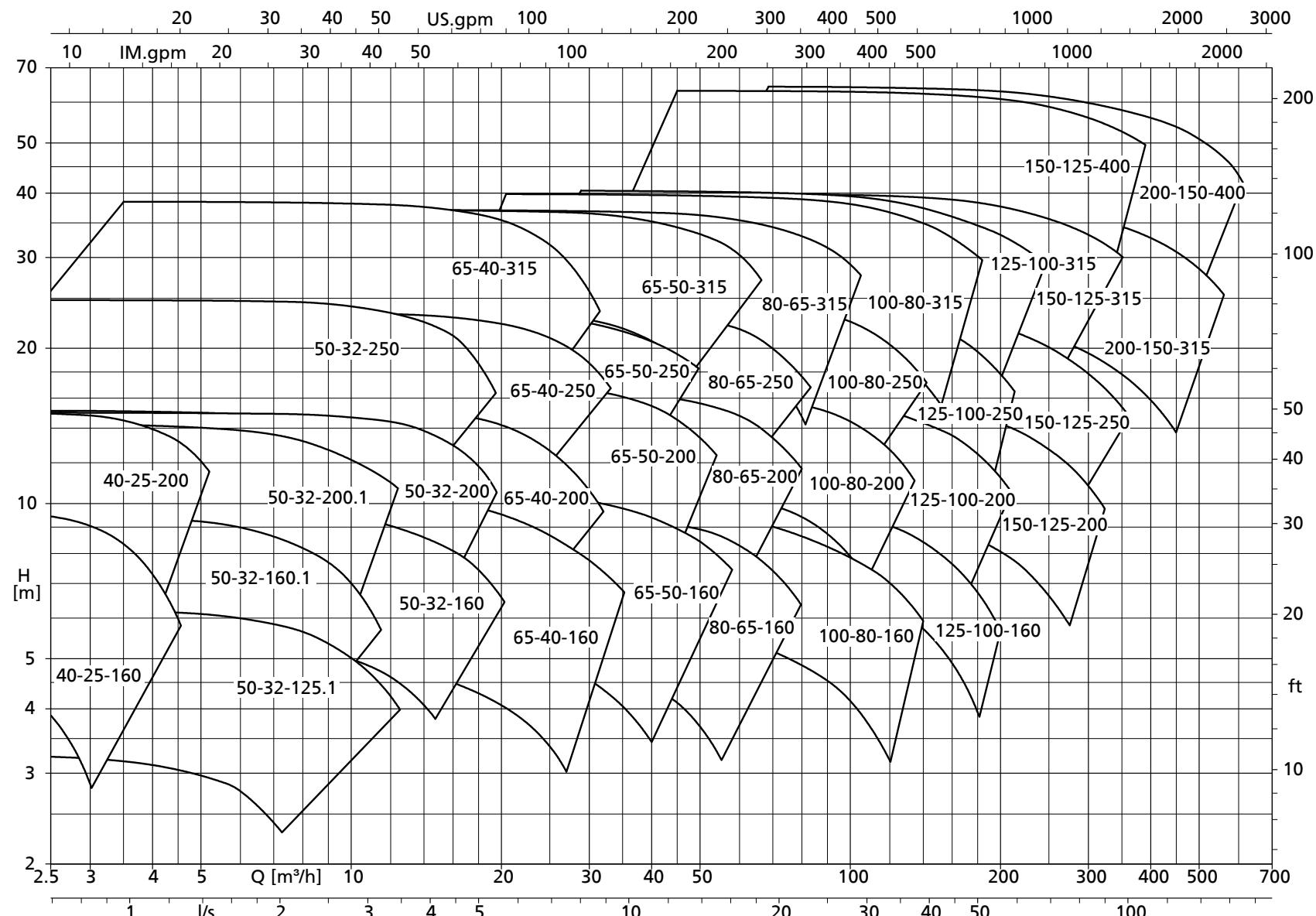


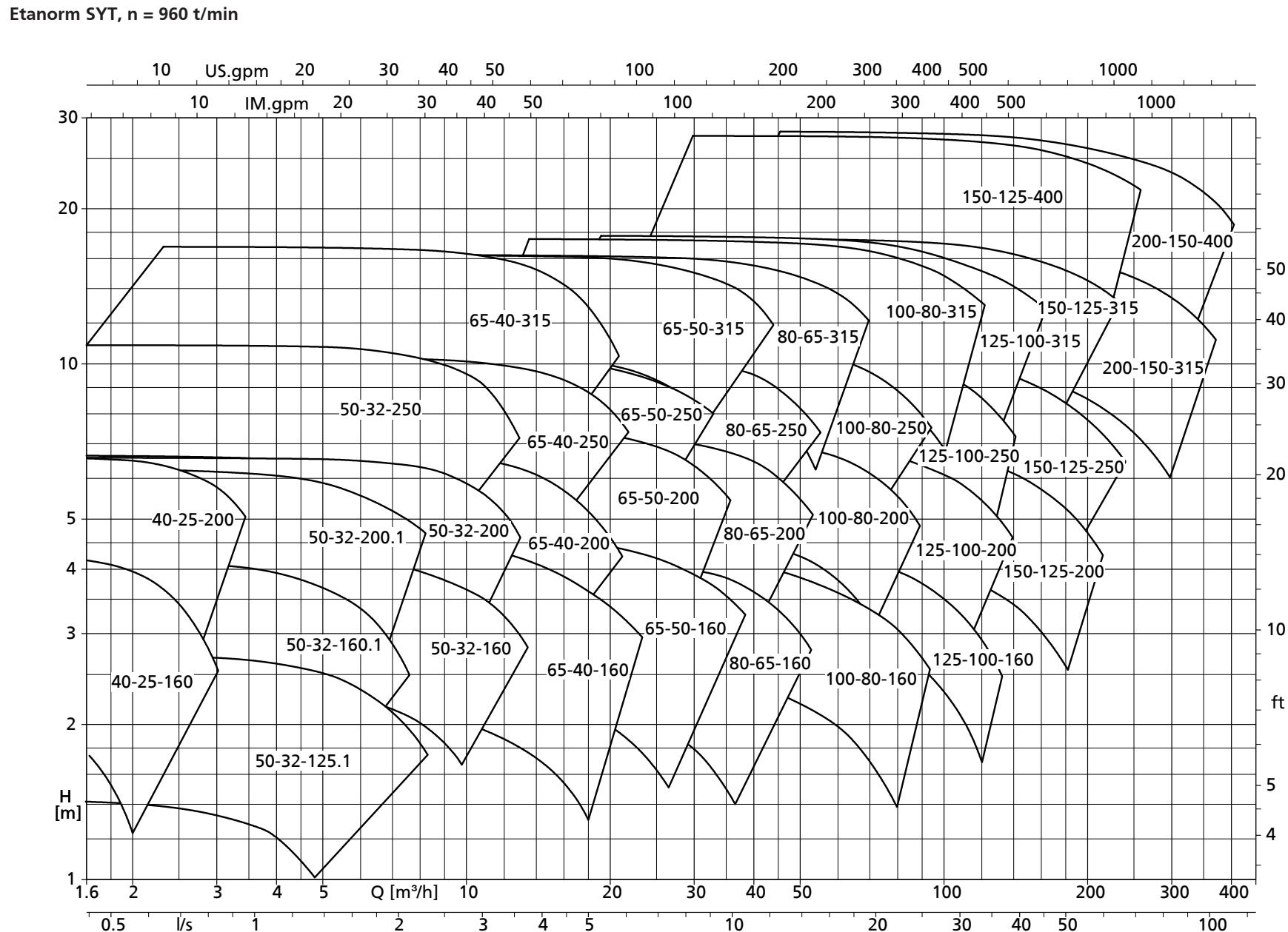
Etanorm,  $n = 960$  t/min



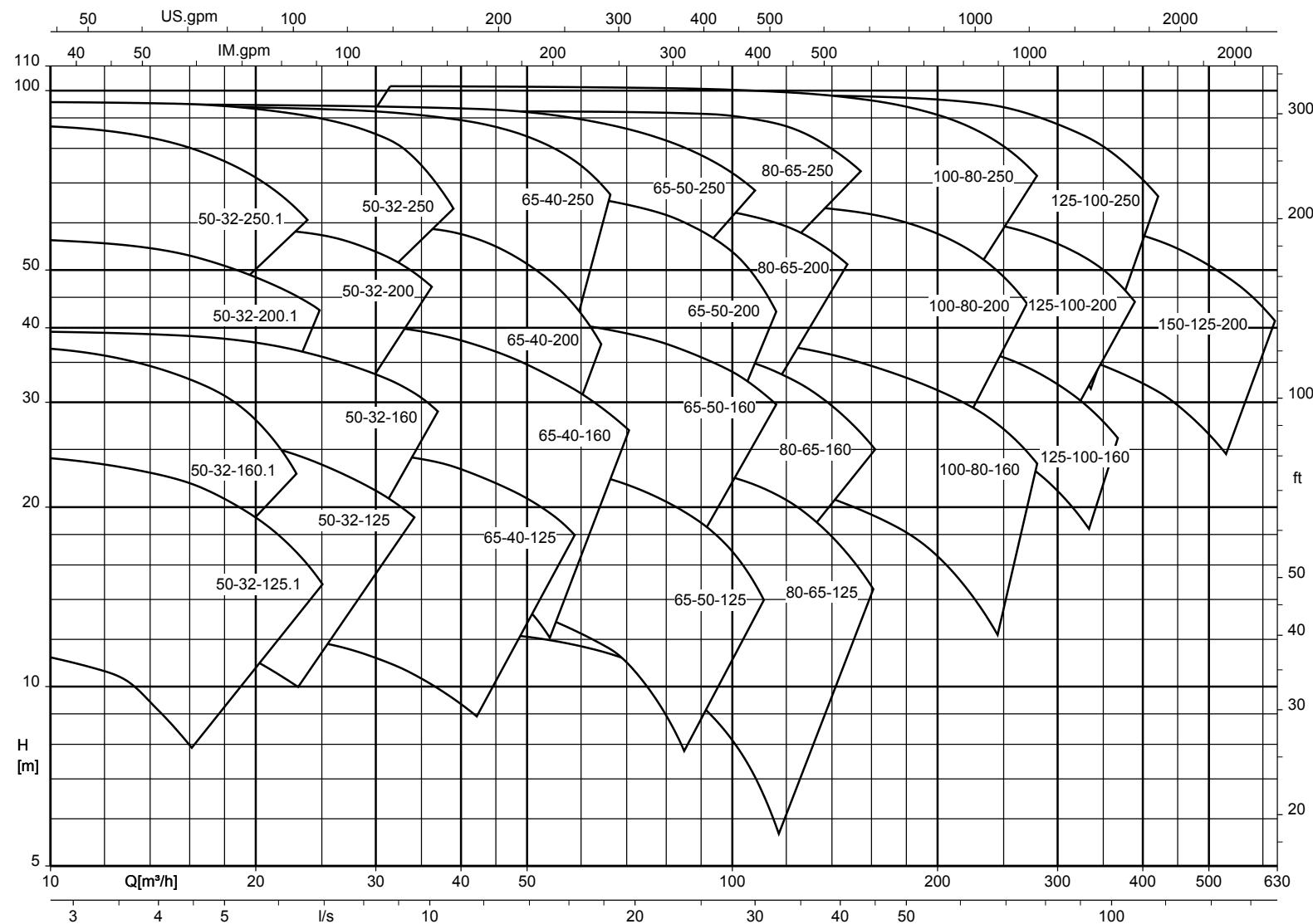


Etanorm SYT,  $n = 1450 \text{ t/min}$

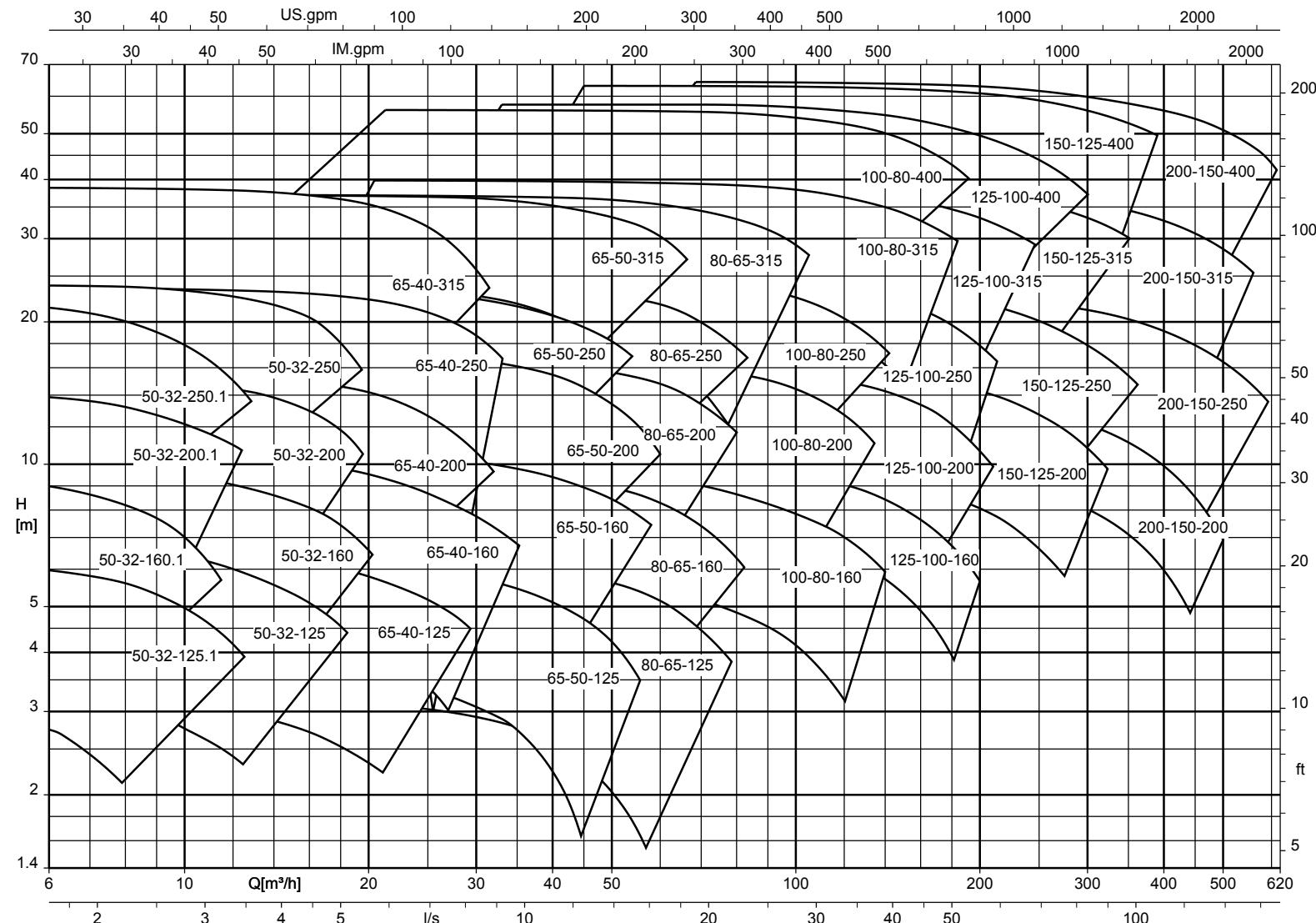




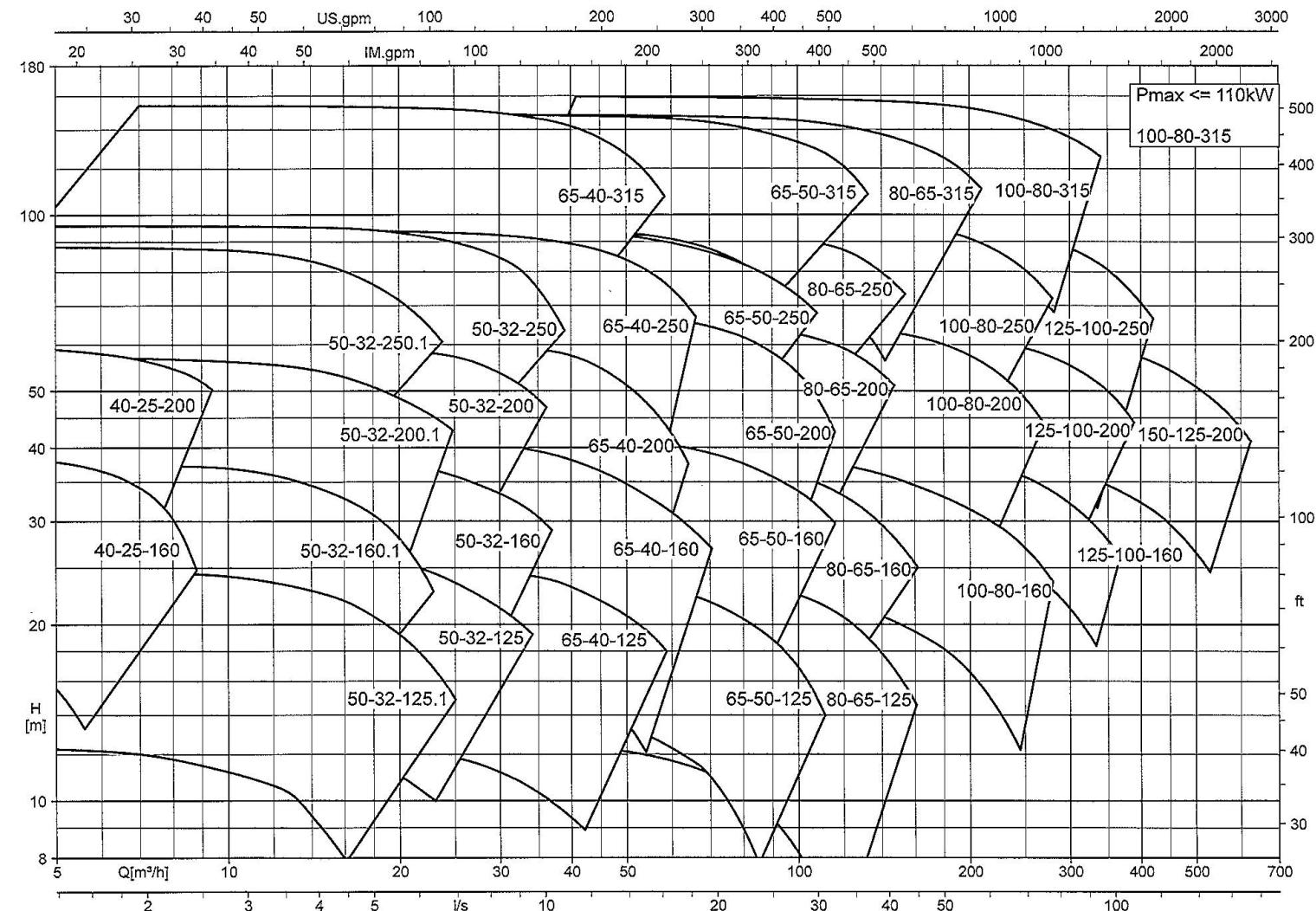
Etanorm V, n = 2 900 t/min



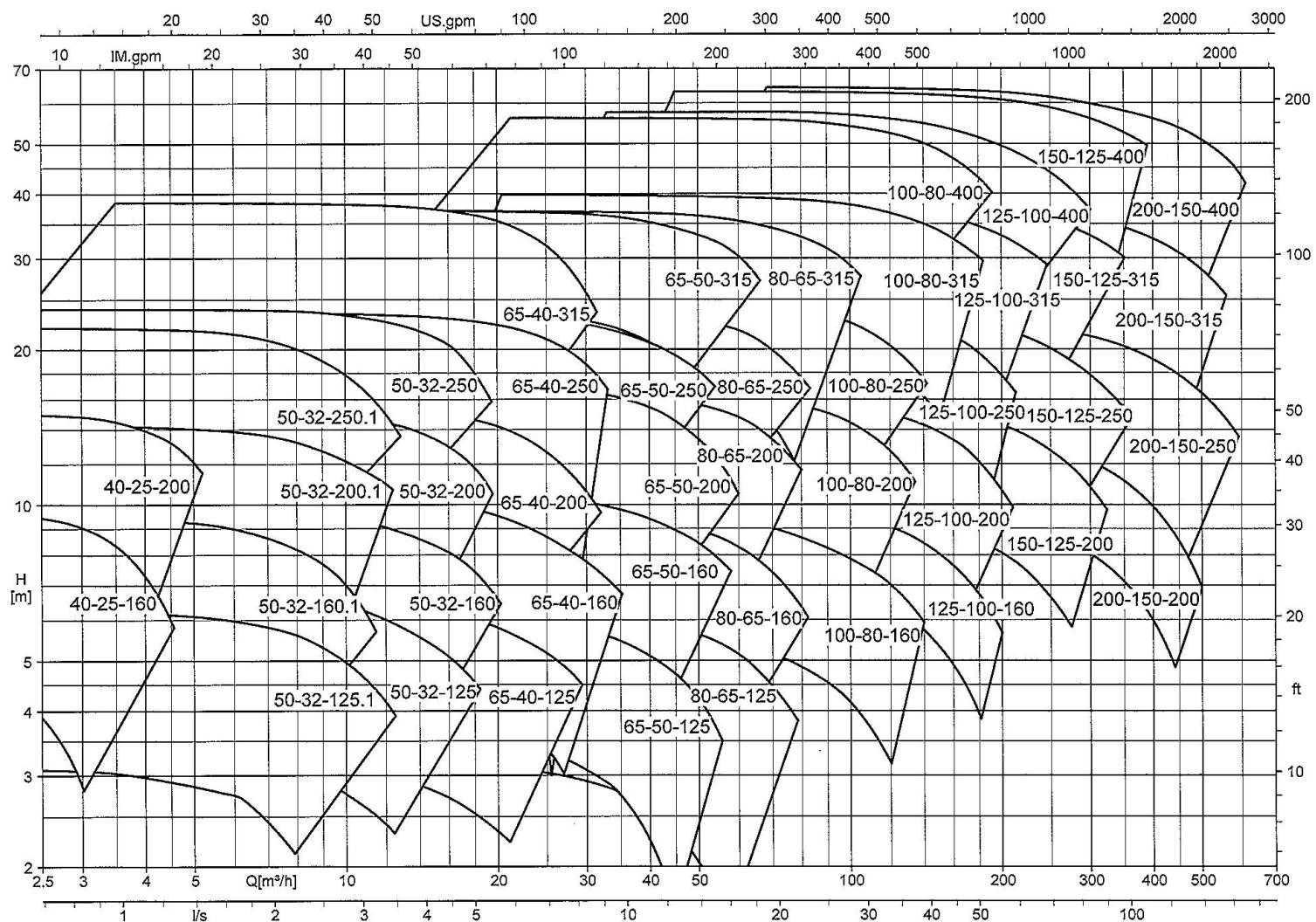
Etanorm V,  $n = 1\,450 \text{ t/min}$



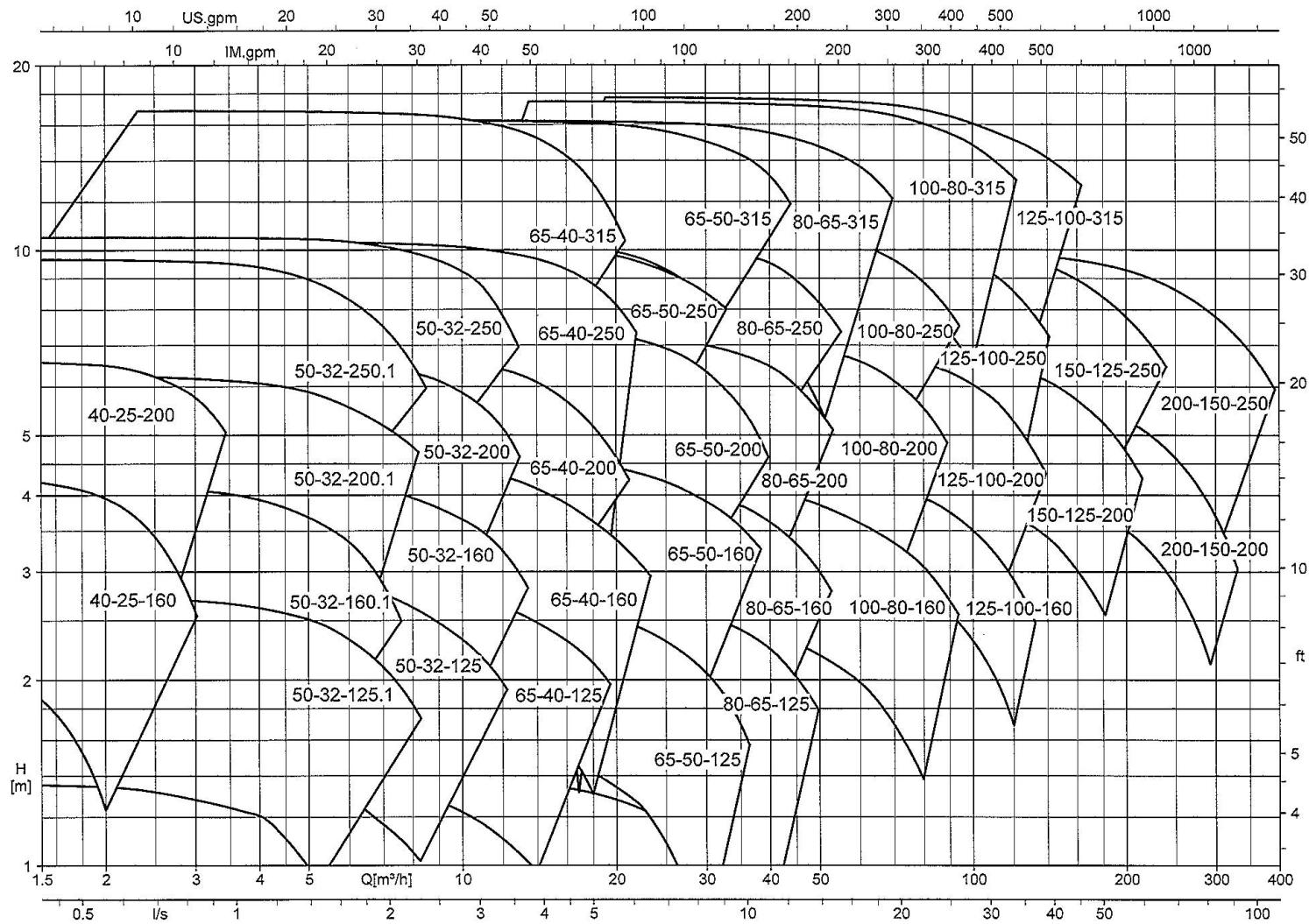
Etabloc,  $n = 2\ 900 \text{ t/min}$



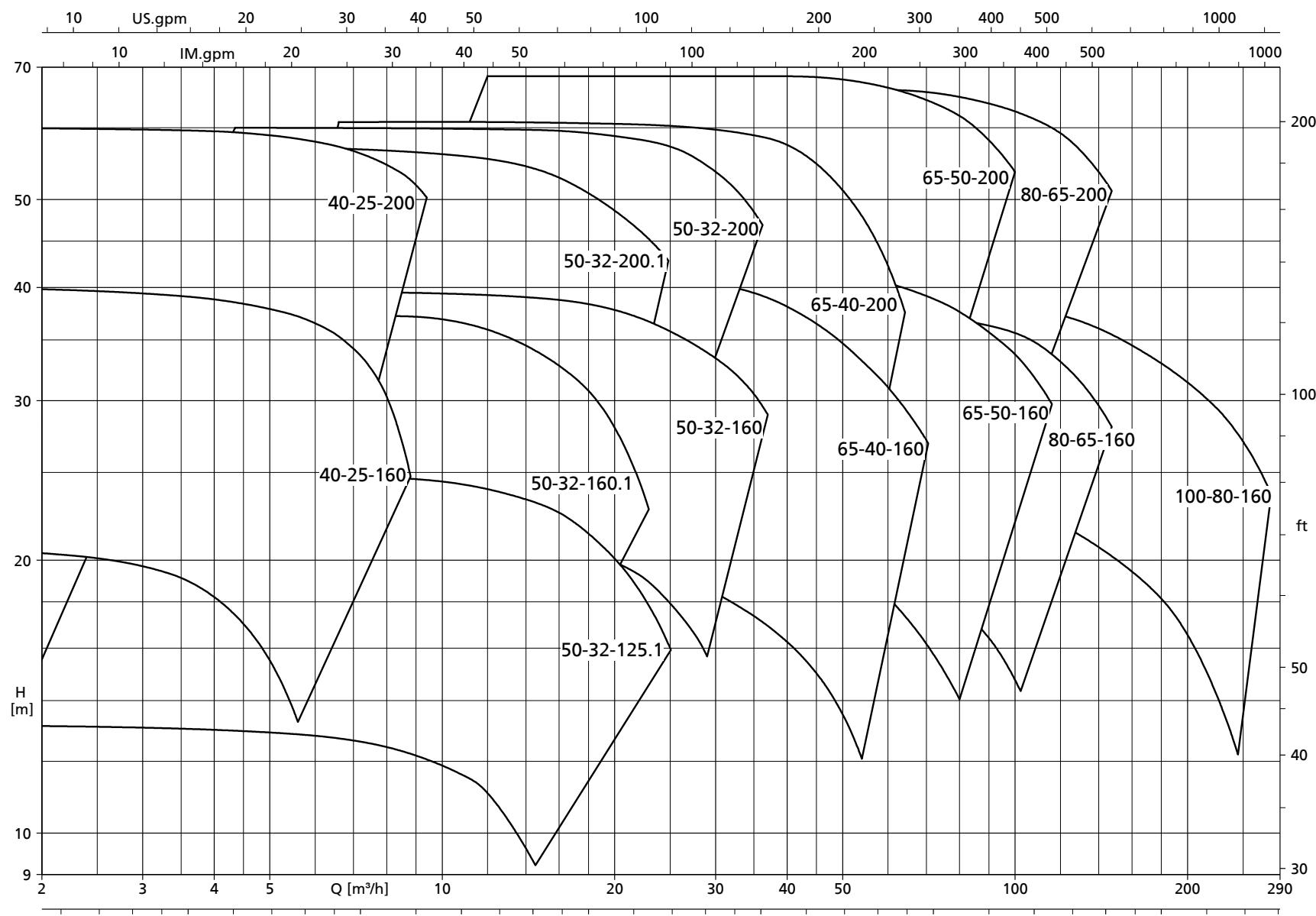
Etabloc,  $n = 1\,450$  t/min



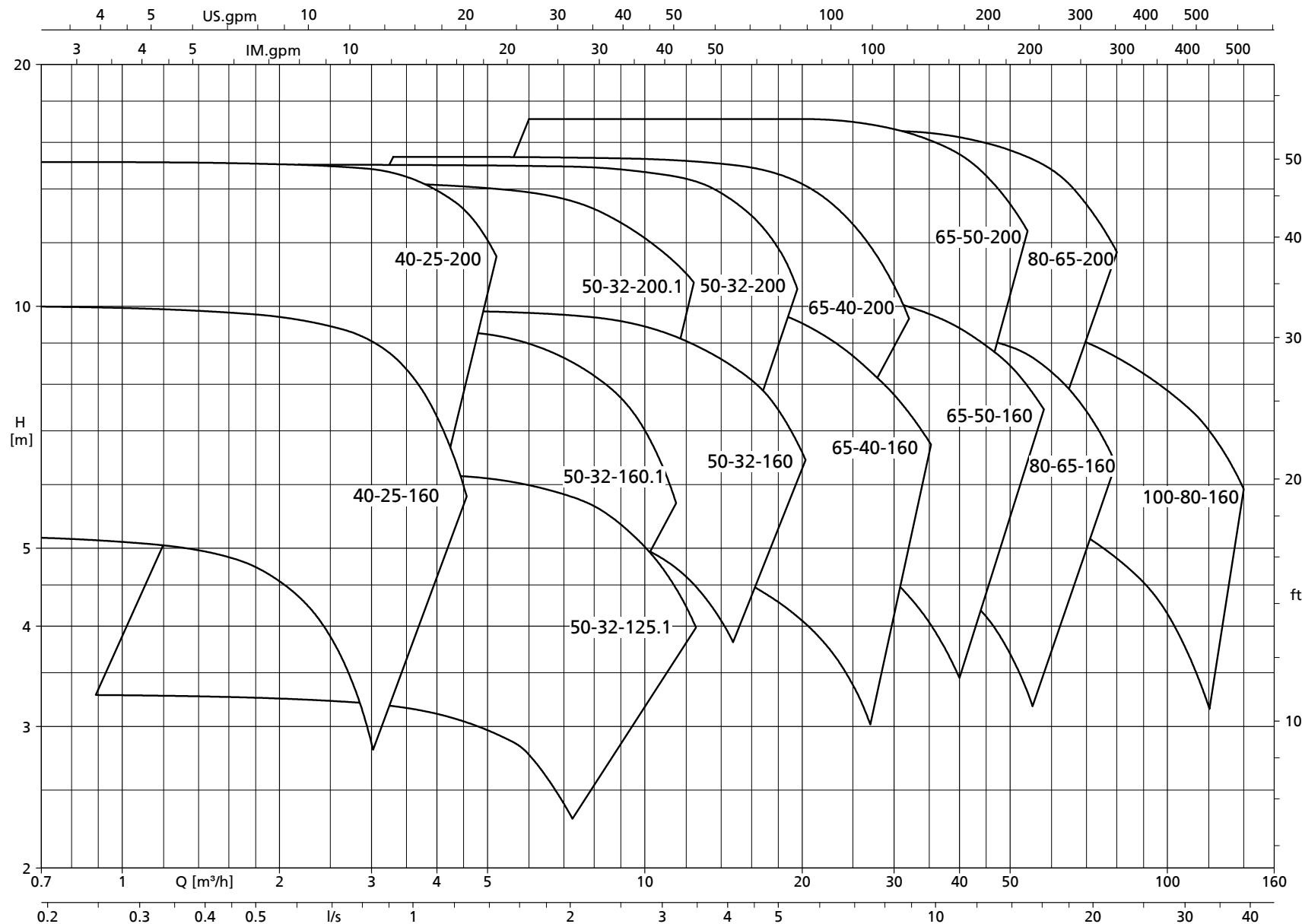
Etabloc,  $n = 960 \text{ t/min}$



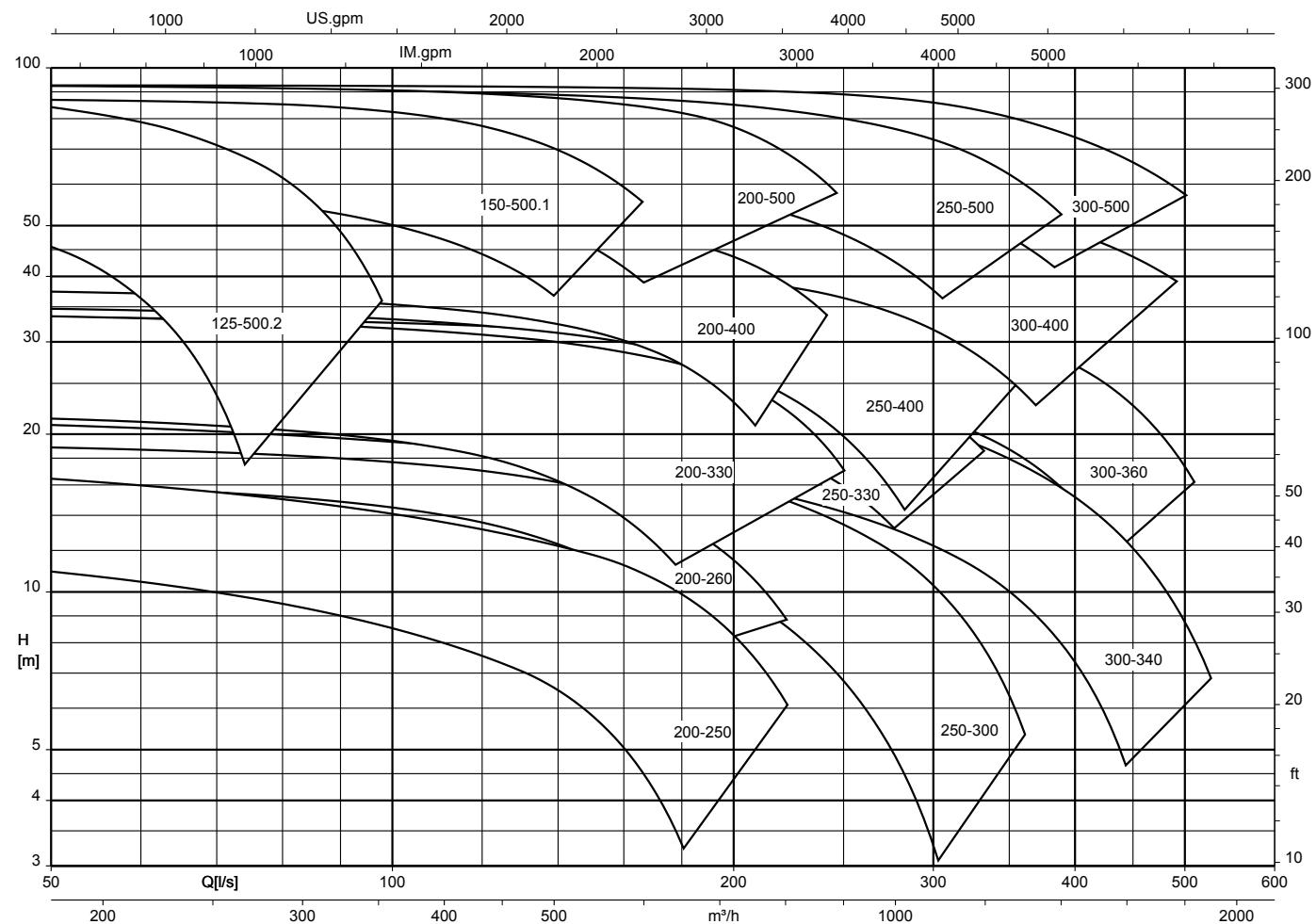
Etabloc SYT,  $n = 2\ 900 \text{ t/min}$



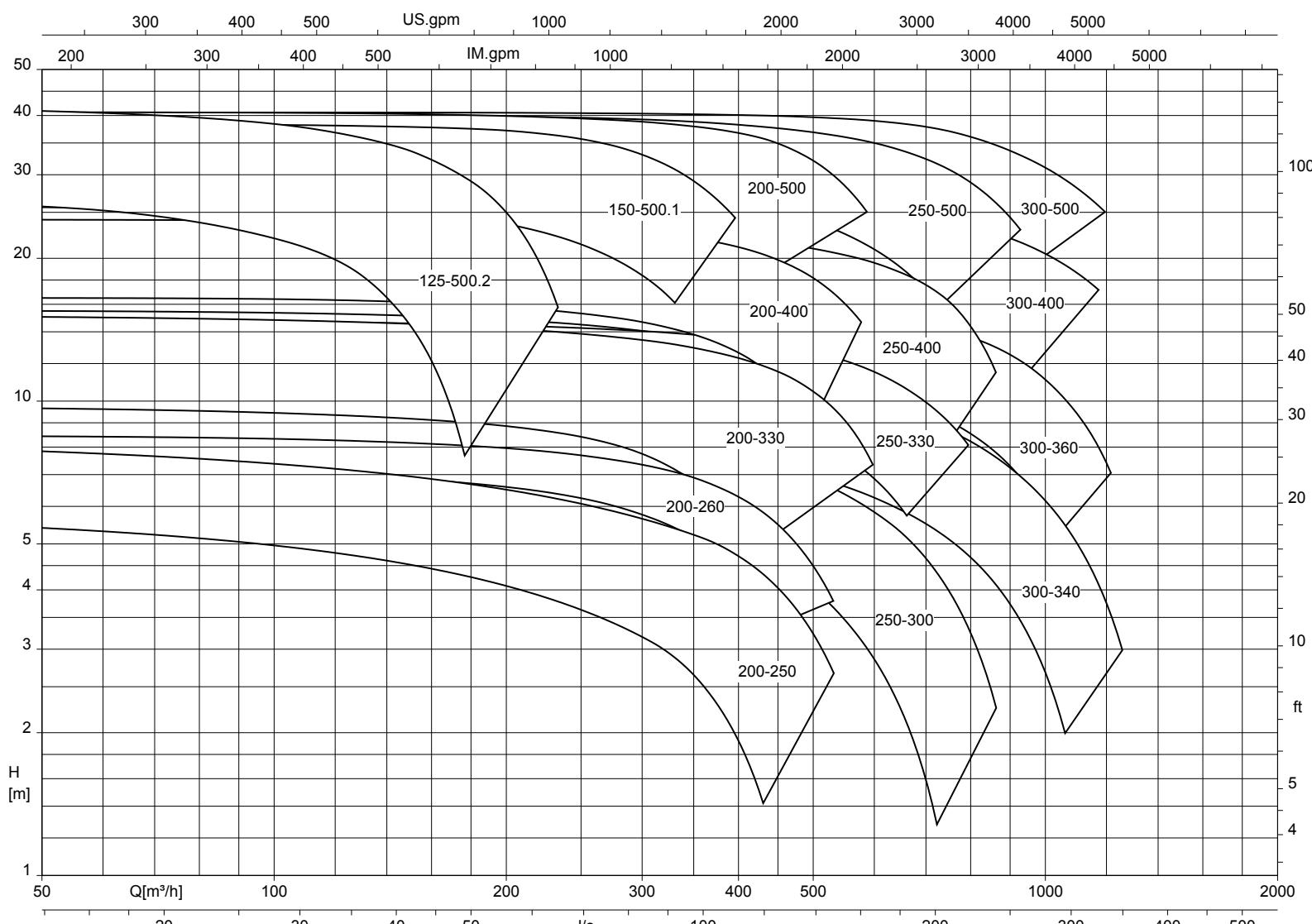
Etabloc SYT,  $n = 1\,450$  t/min



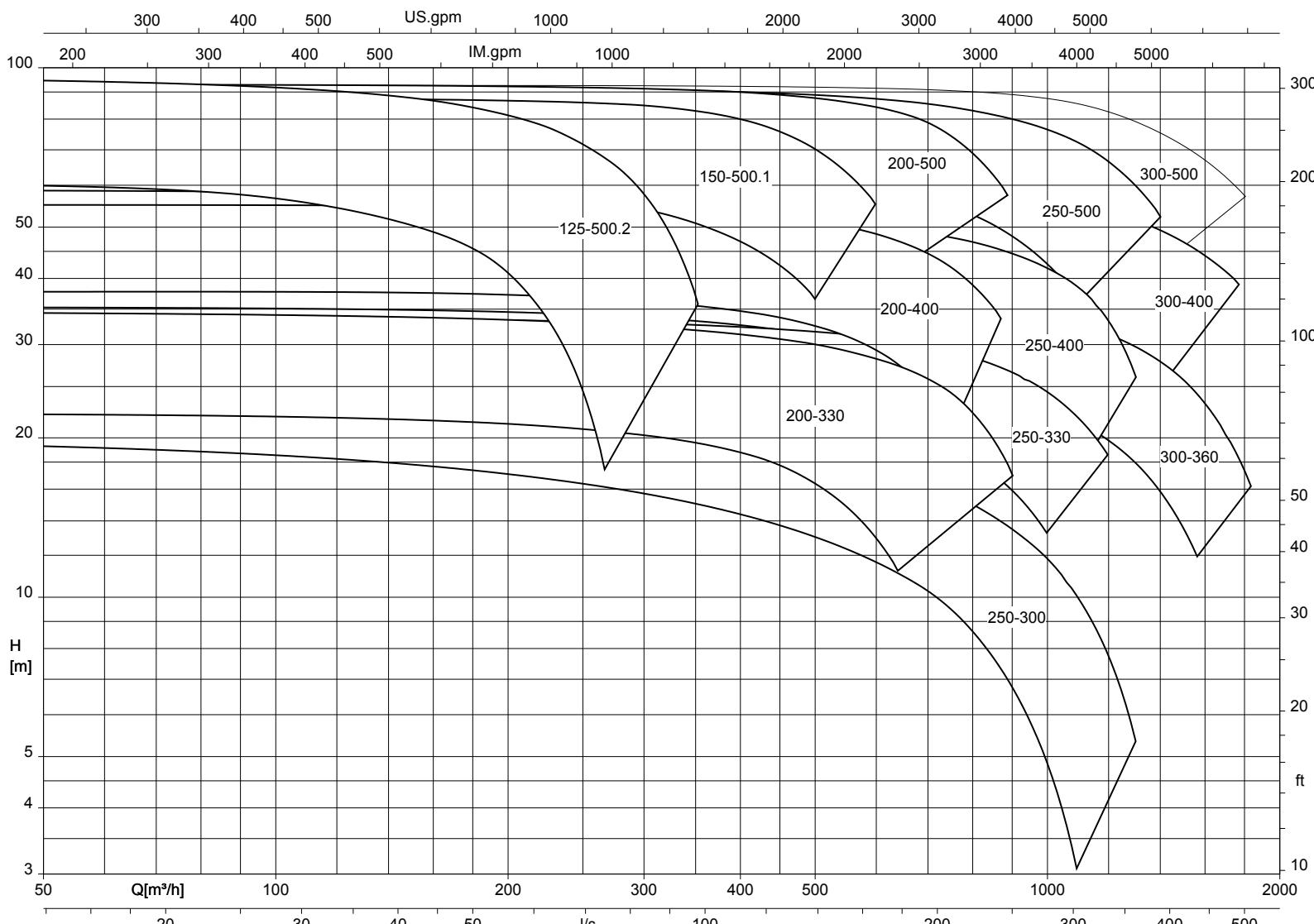
Etanorm-R,  $n = 1\,450 \text{ t/min}$



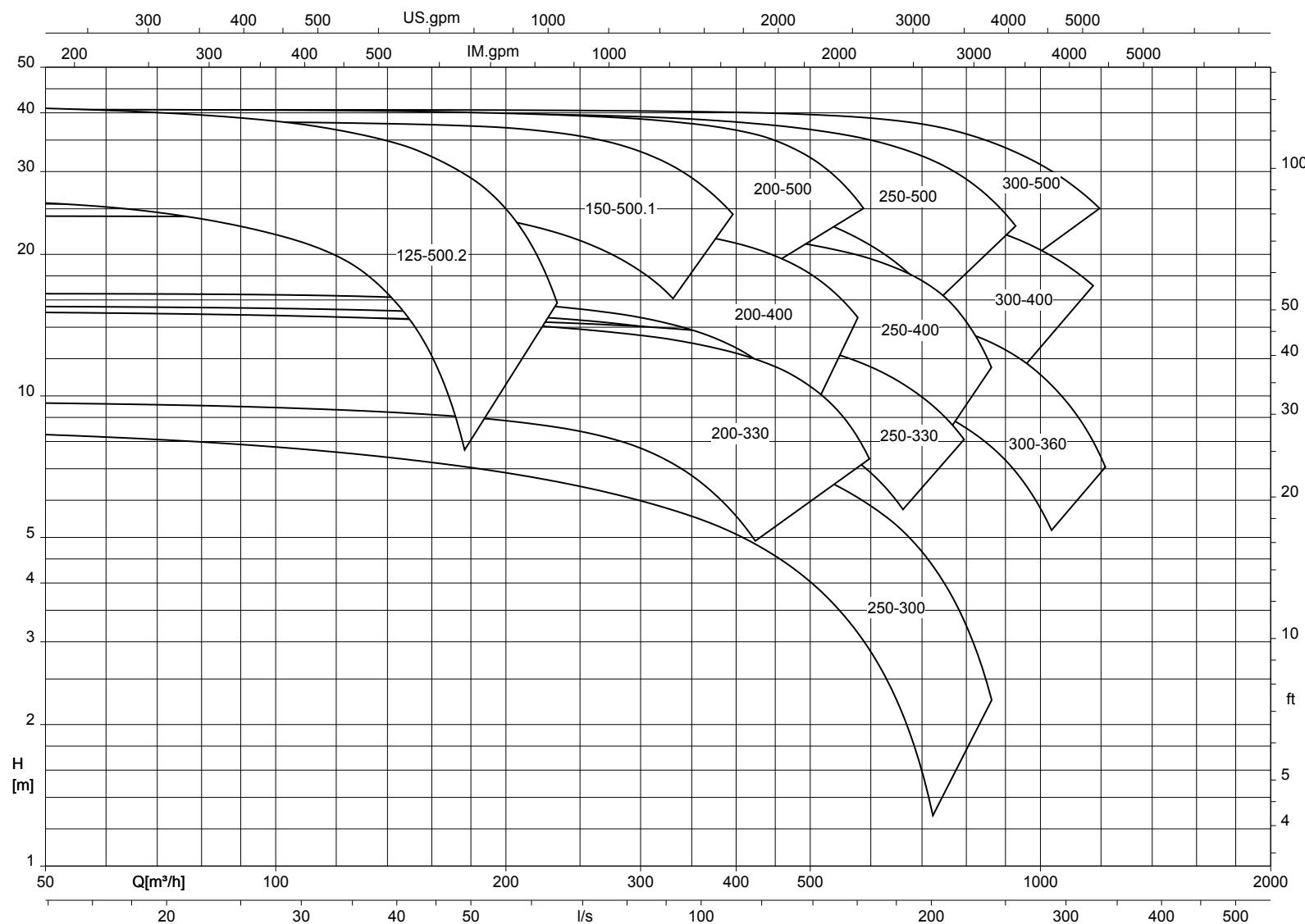
Etanorm-R, n = 960 t/min



Etanorm-RSY,  $n = 1450 \text{ t/min}$



Etanorm-RSY,  $n = 960 \text{ t/min}$

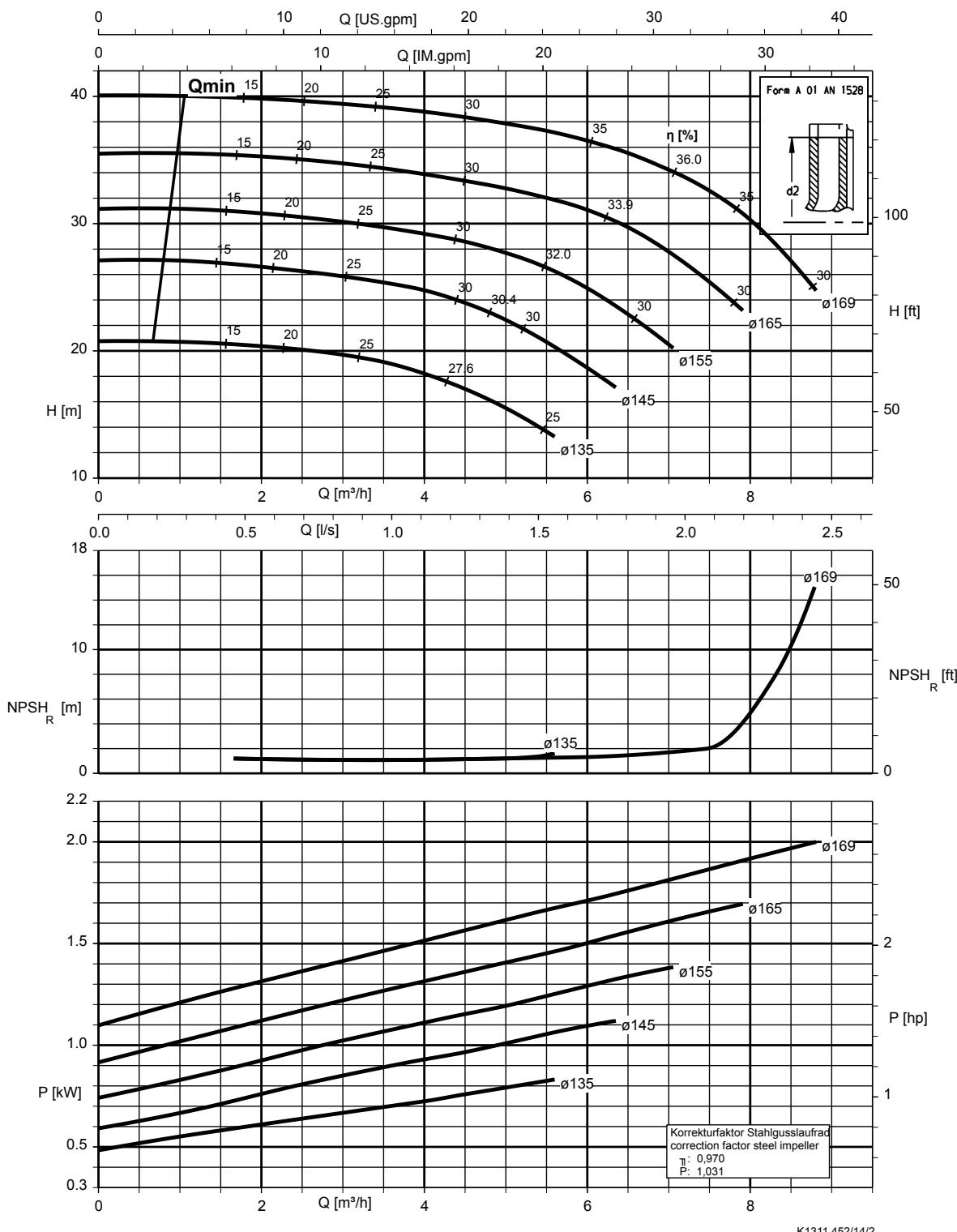


## Courbes caractéristiques

$n = 2900 \text{ t/min}$

Etanorm 040-025-160,  $n = 2900 \text{ t/min}$

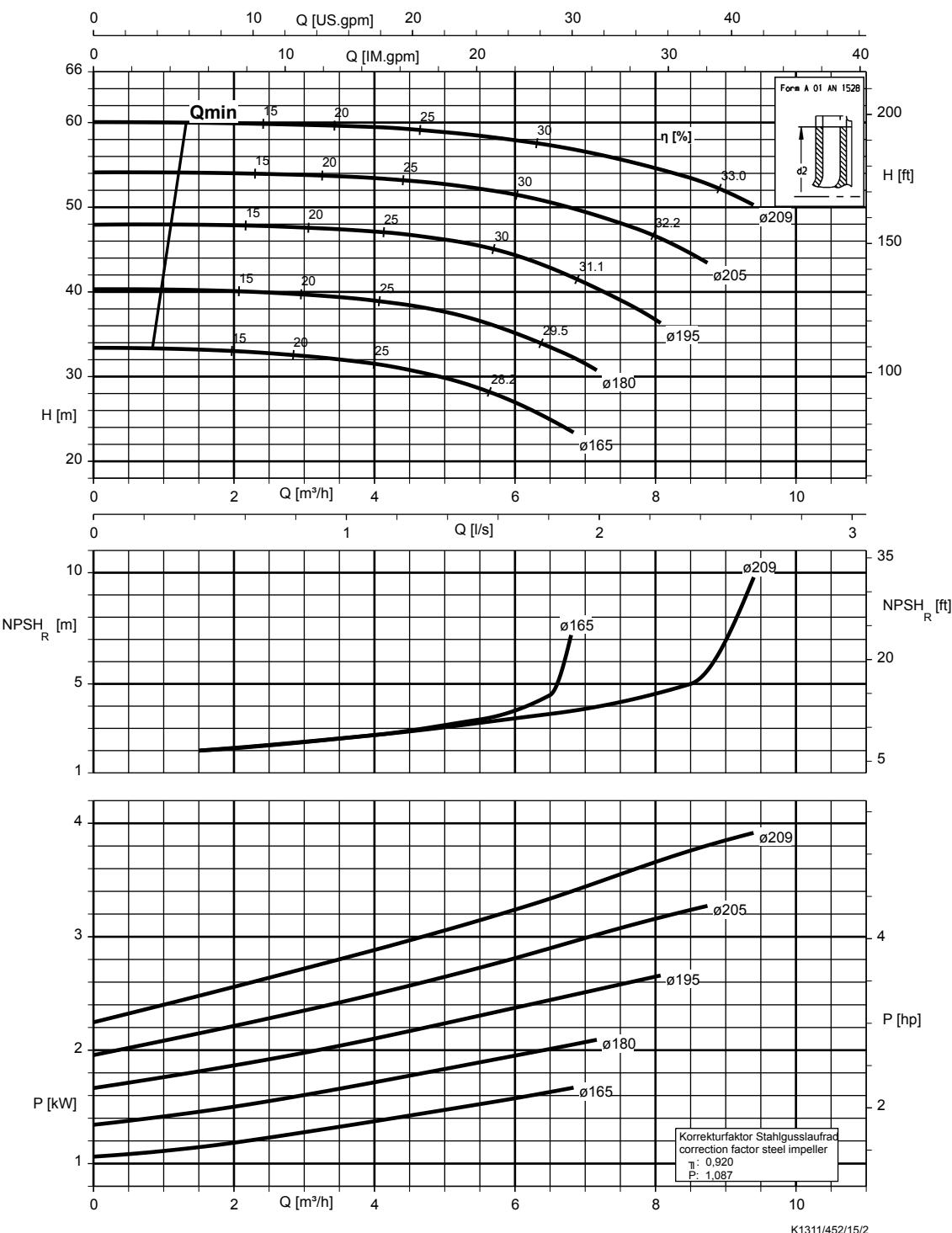
Etanorm SYT, Etabloc, Etabloc SYT



K1311.452/14/2

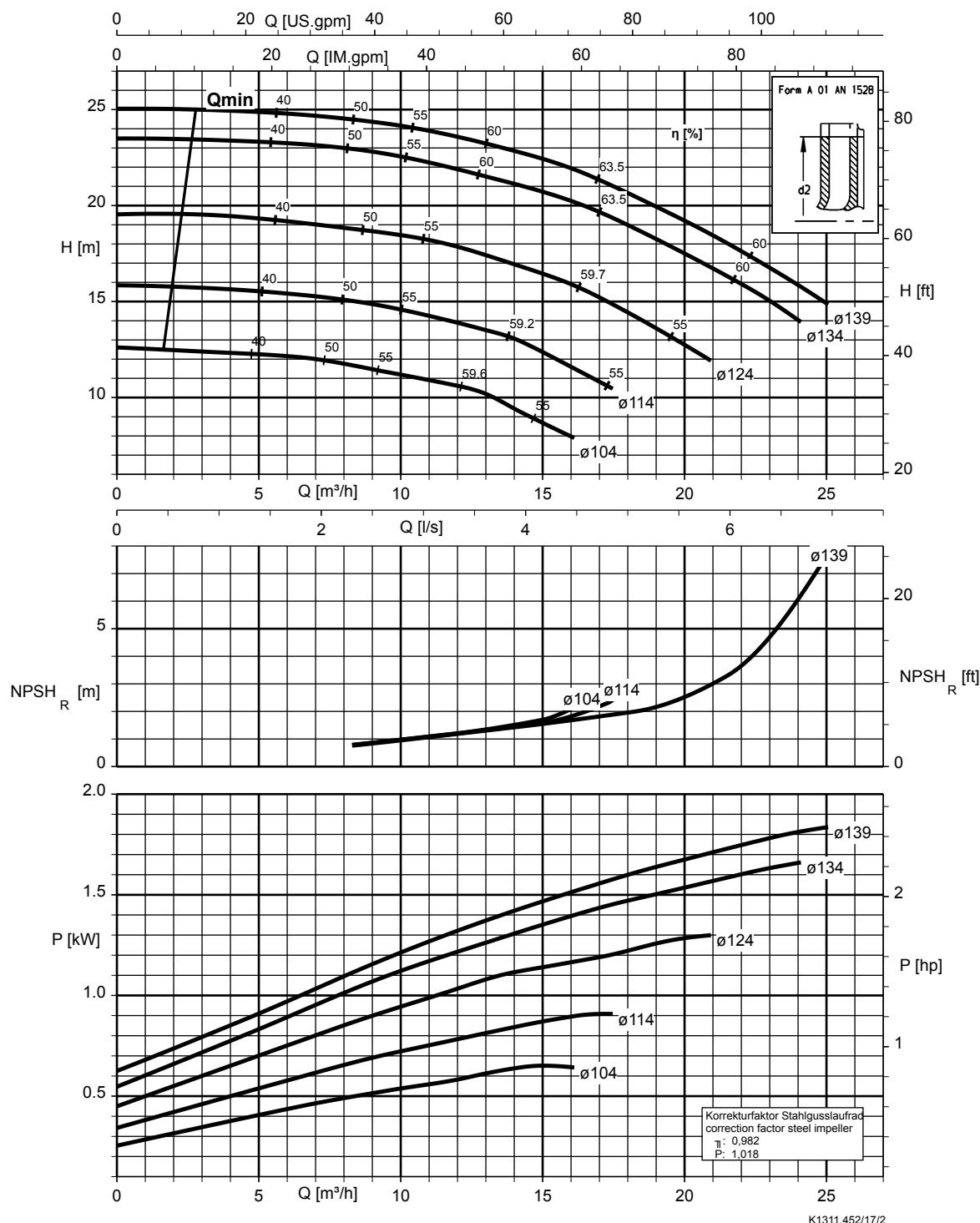
**Etanorm 040-025-200, n = 2 900 t/min**

Etanorm SYT, Etabloc, Etabloc SYT



**Etanorm 050-032-125.1,  $n = 2\,900 \text{ t/min}$**

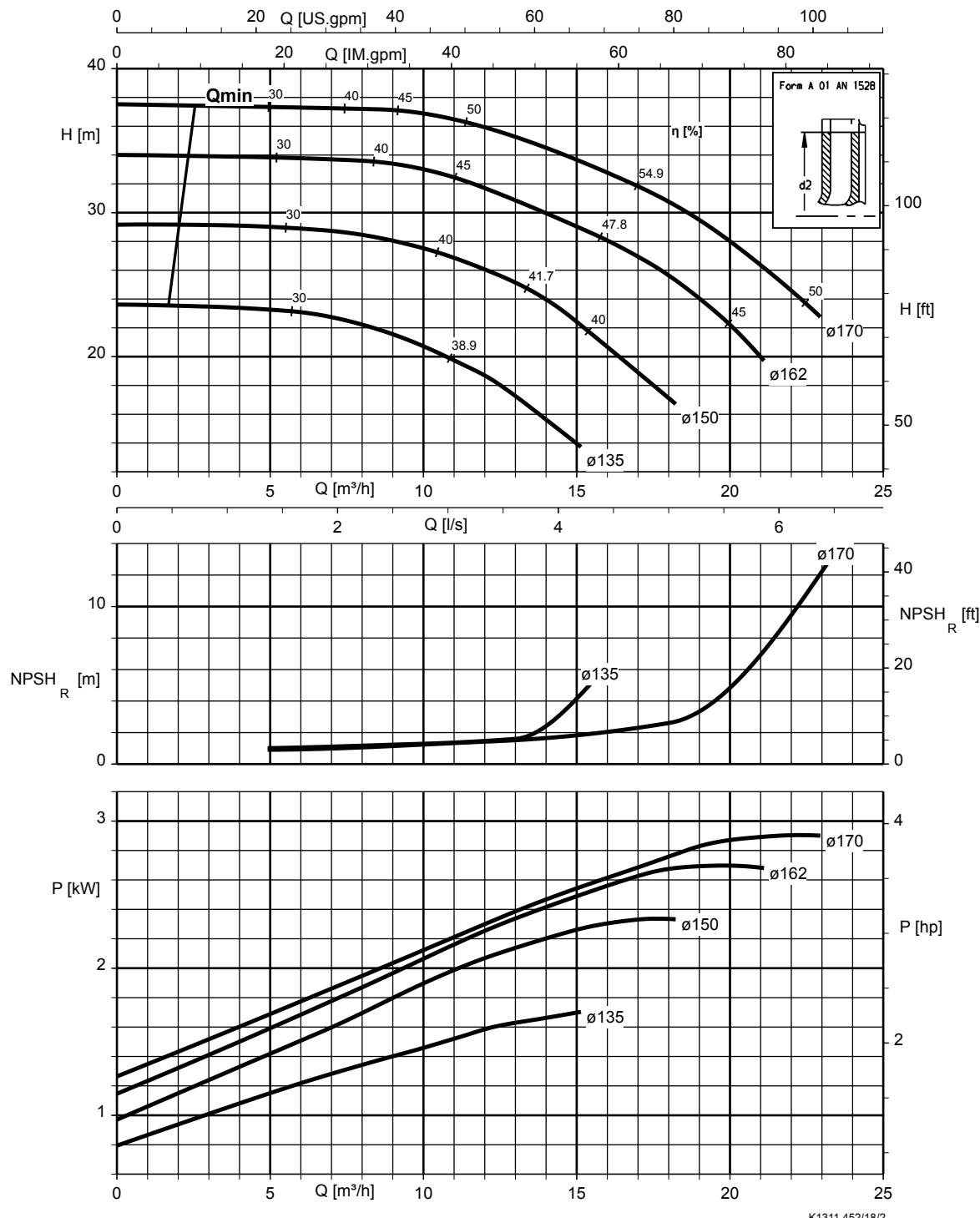
Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



K1311.452/17/2

**Etanorm 050-032-160.1,  $n = 2\,900 \text{ t/min}$**

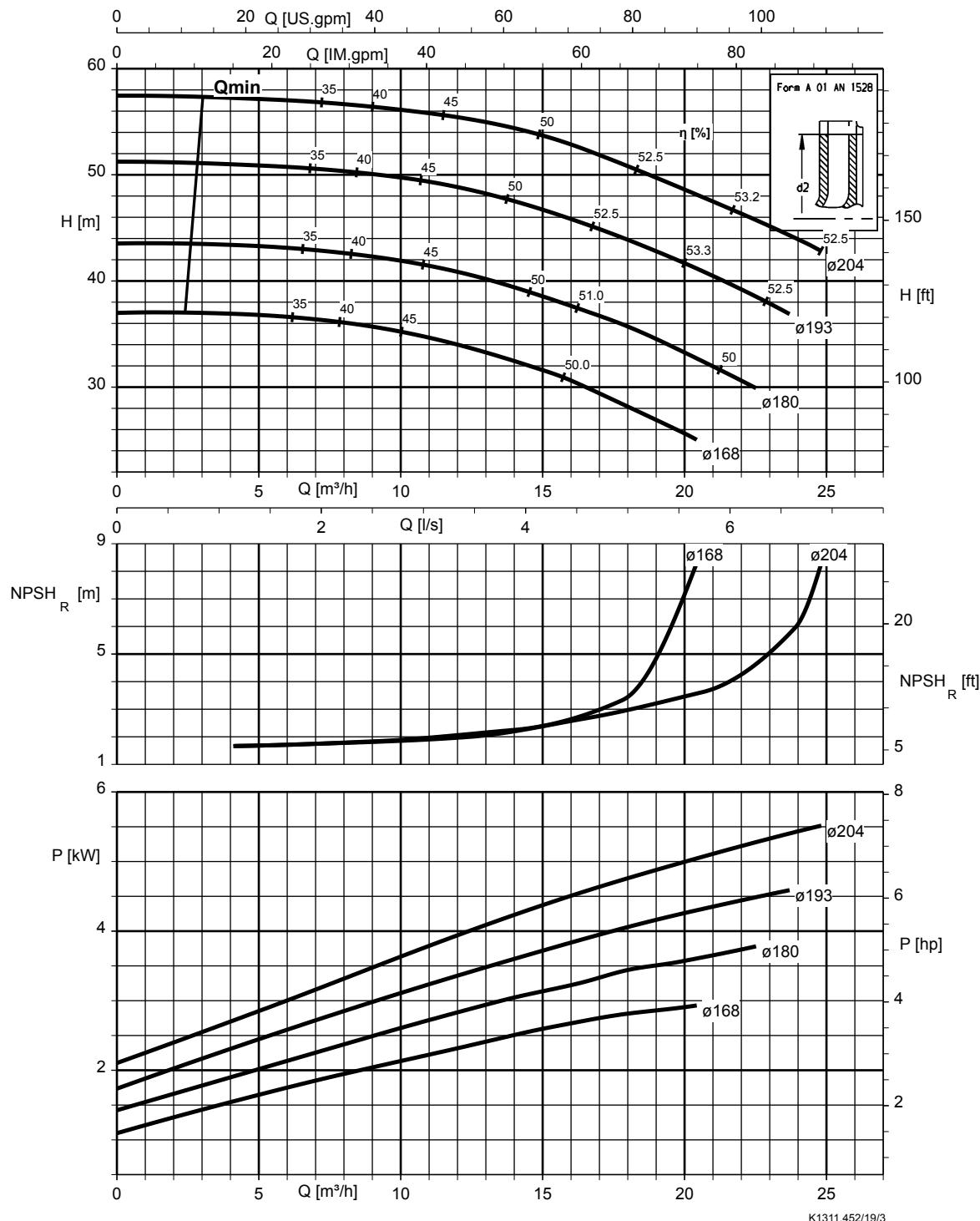
Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



K1311.452/18/2

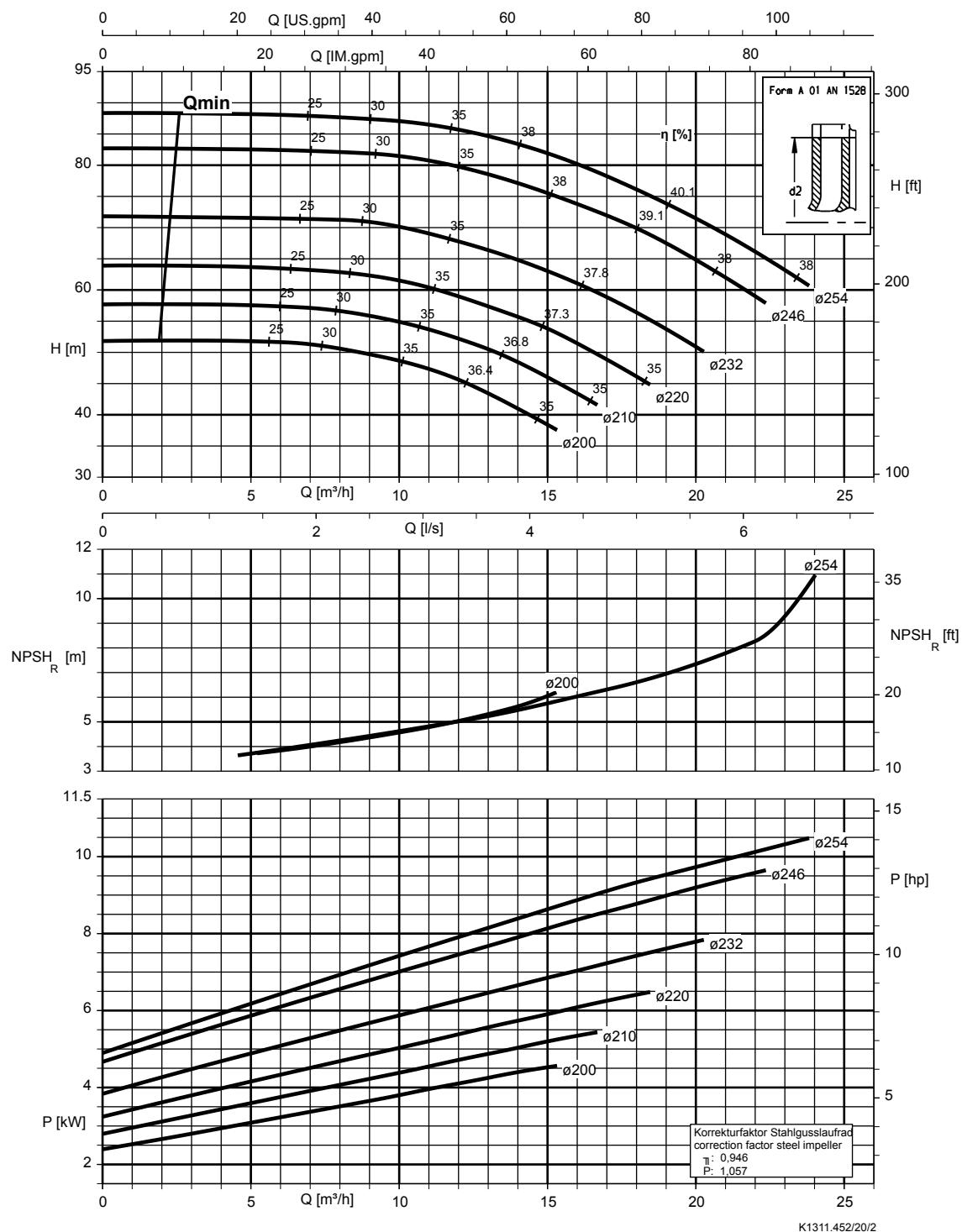
**Etanorm 050-032-200.1, n = 2 900 t/min**

Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



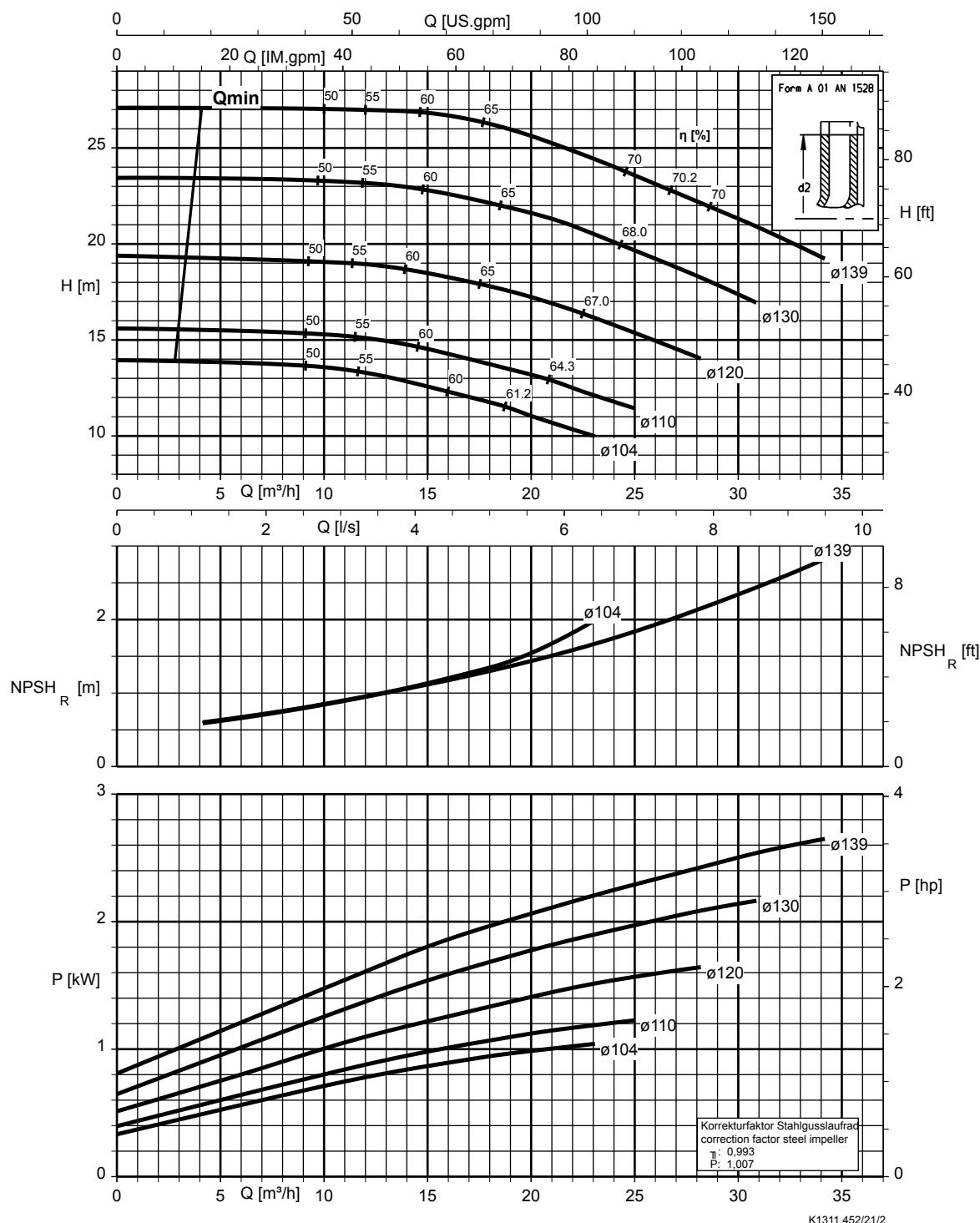
Etanorm 050-032-250.1,  $n = 2\,900 \text{ t/min}$

Etanorm V, Etabloc



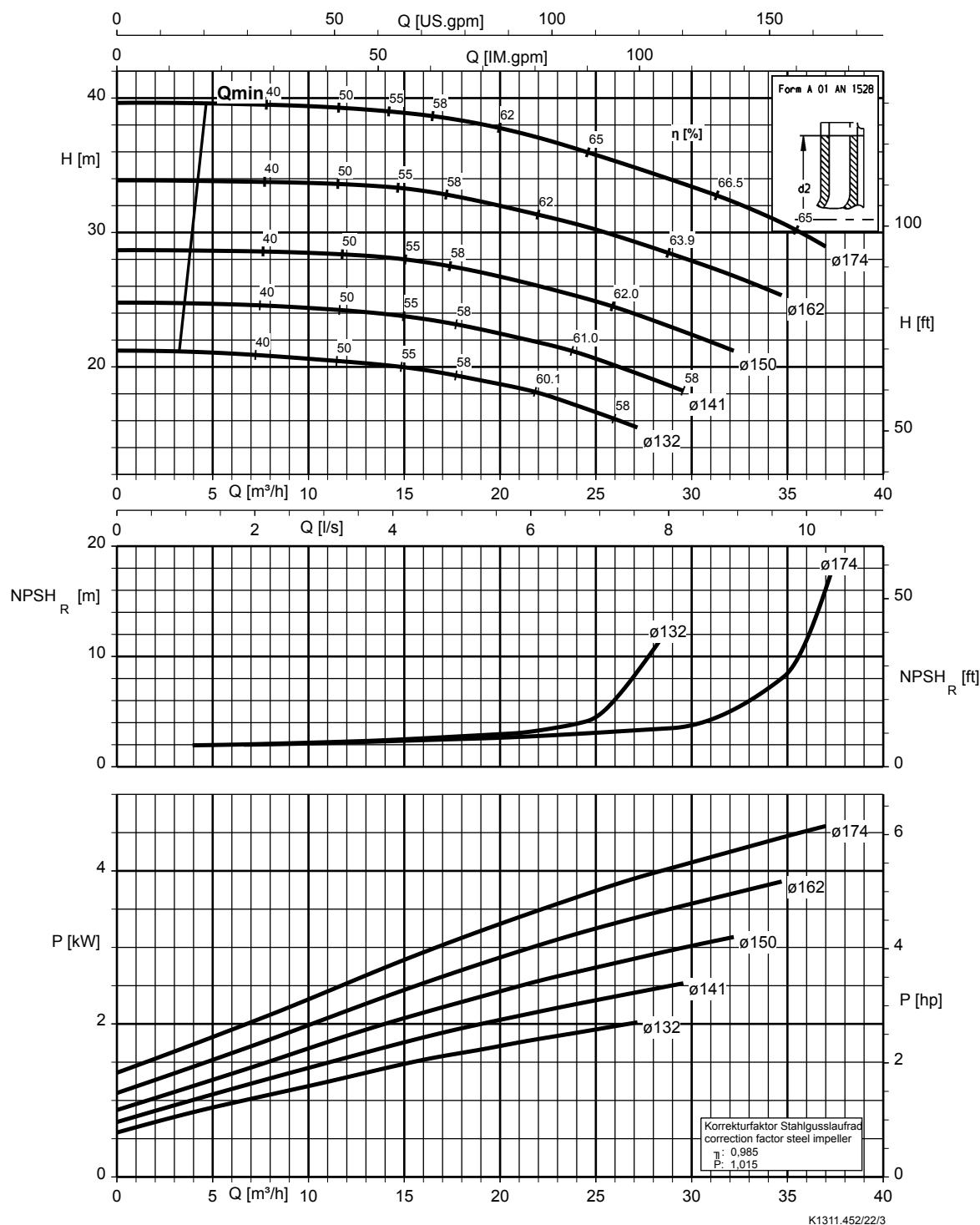
Etanorm 050-032-125, n = 2 900 t/min

Etanorm V, Etabloc



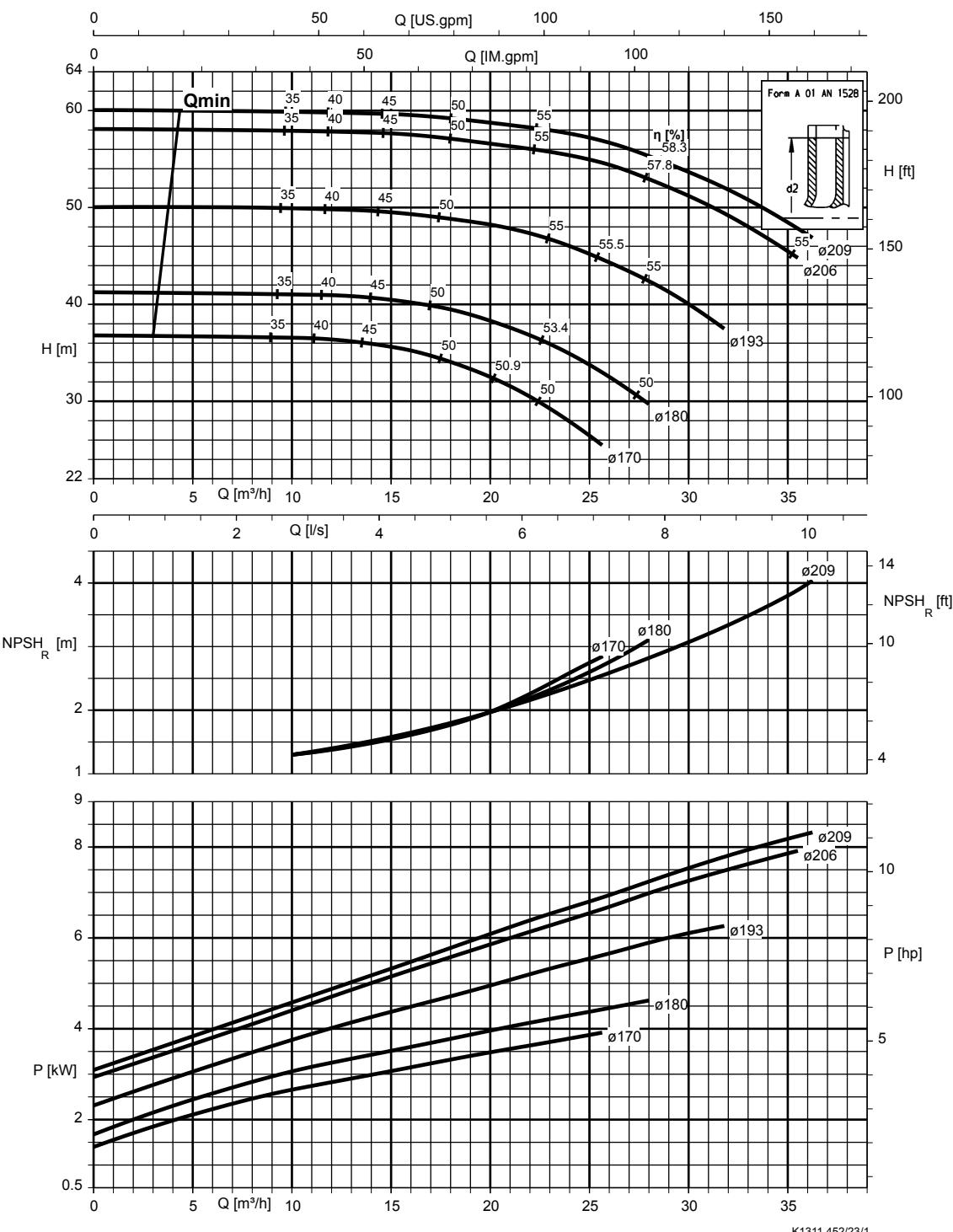
**Etanorm 050-032-160, n = 2 900 t/min**

Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



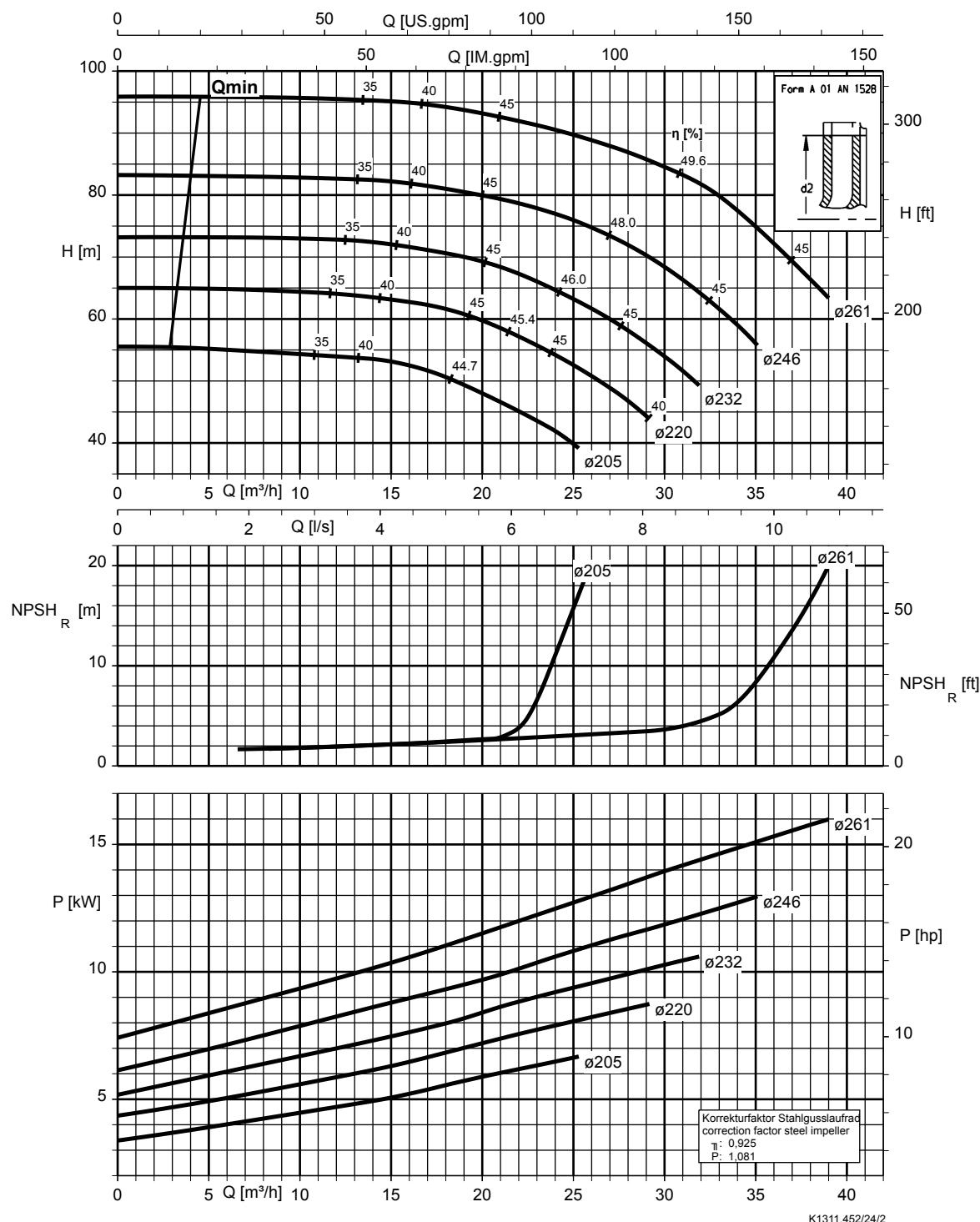
**Etanorm 050-032-200, n = 2 900 t/min**

Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



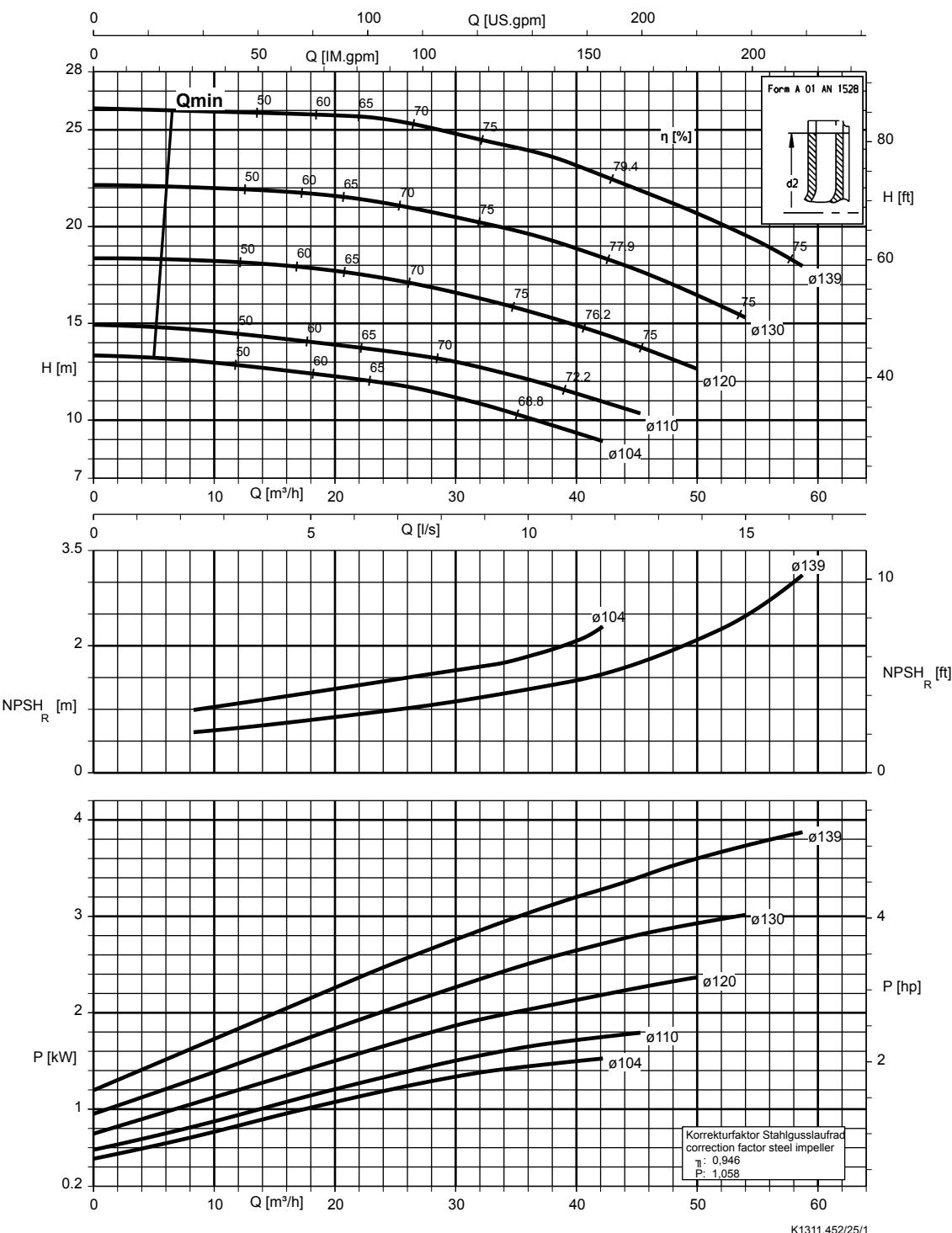
**Etanorm 050-032-250, n = 2 900 t/min**

Etanorm SYT, Etanorm V, Etabloc



Etanorm 065-040-125,  $n = 2900 \text{ t/min}$

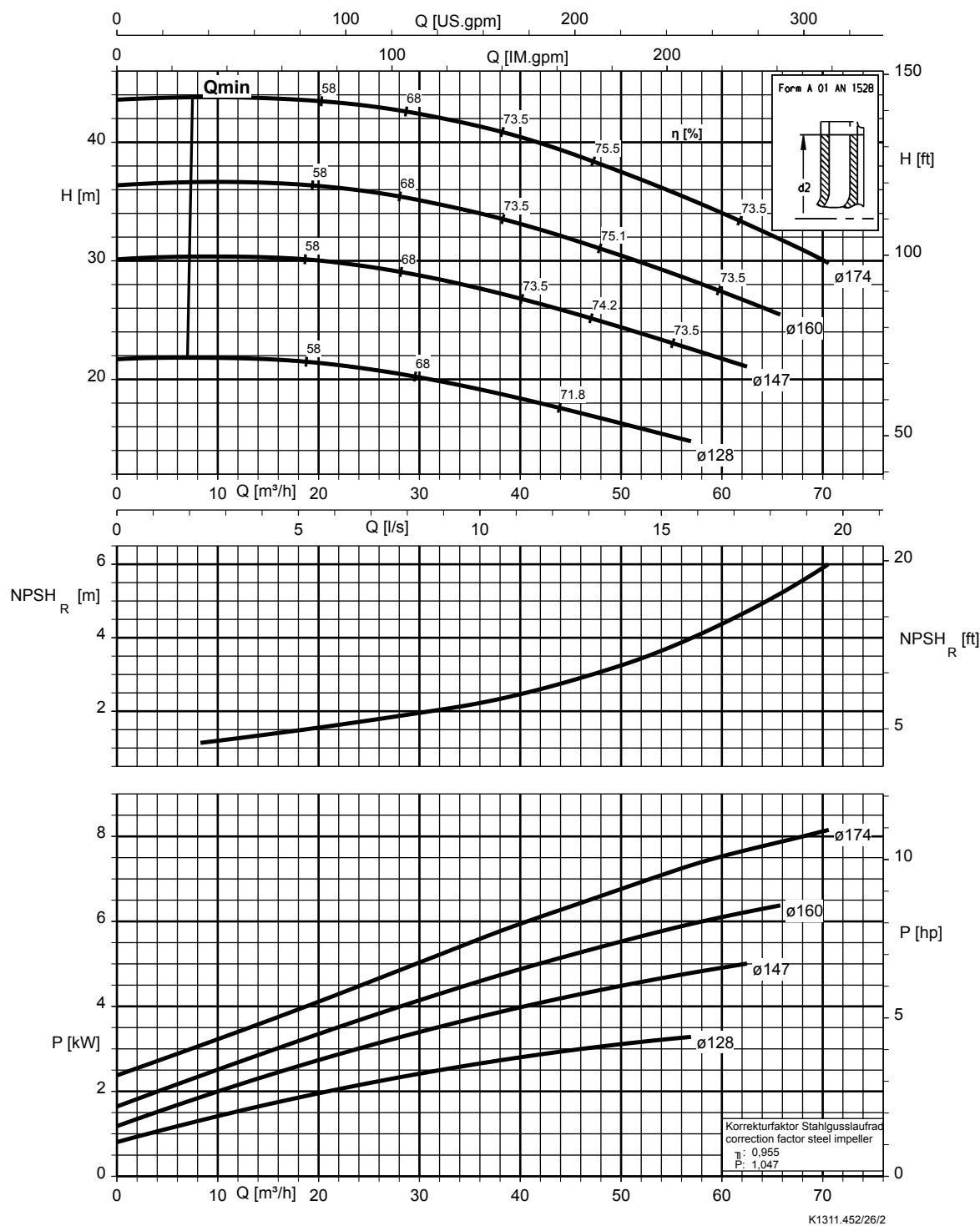
Etanorm V, Etabloc



K1311.452/25/1

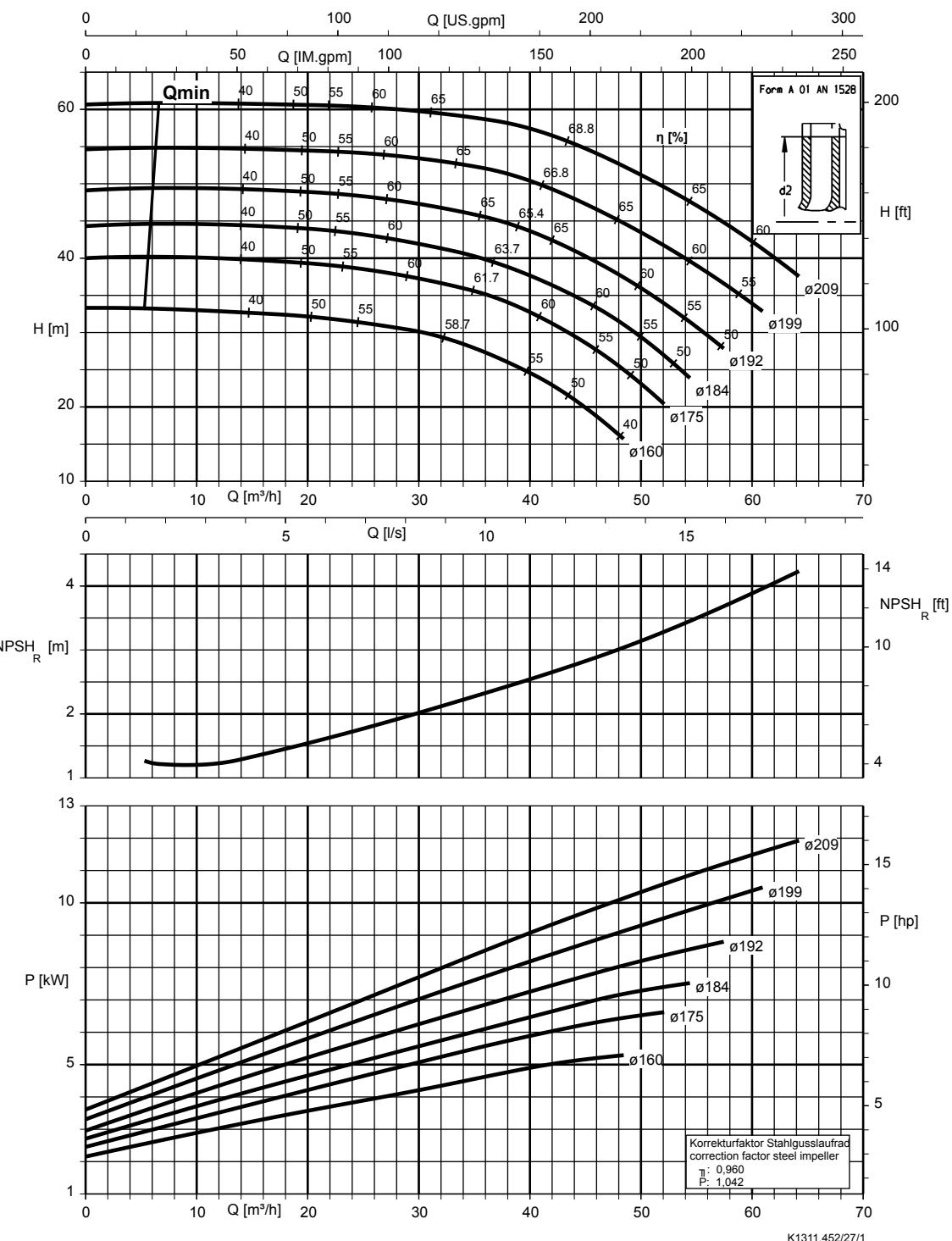
**Etanorm 065-040-160, n = 2 900 t/min**

Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



**Etanorm 065-040-200, n = 2 900 t/min**

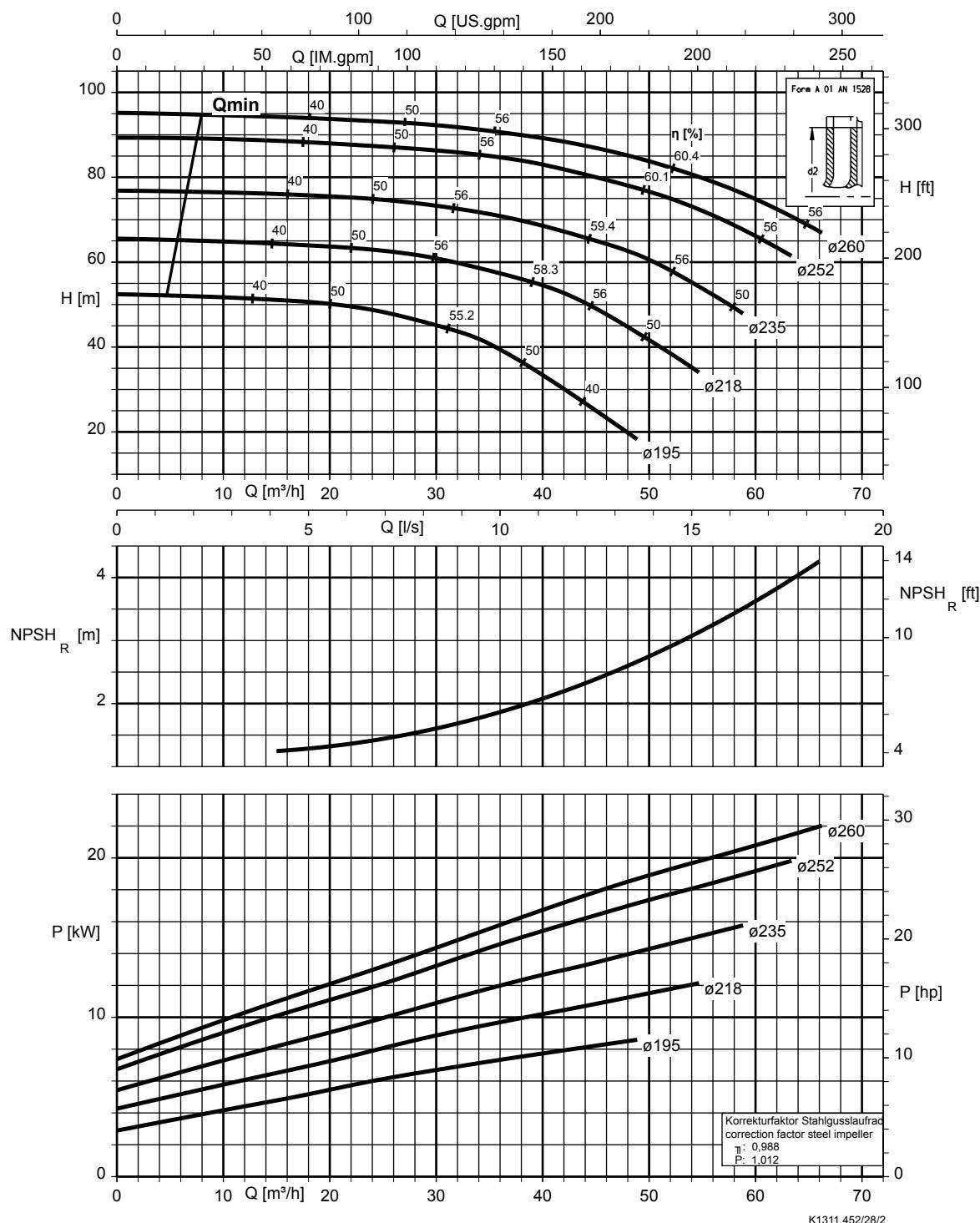
Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



K1311.452/27/1

**Etanorm 065-040-250, n = 2 900 t/min**

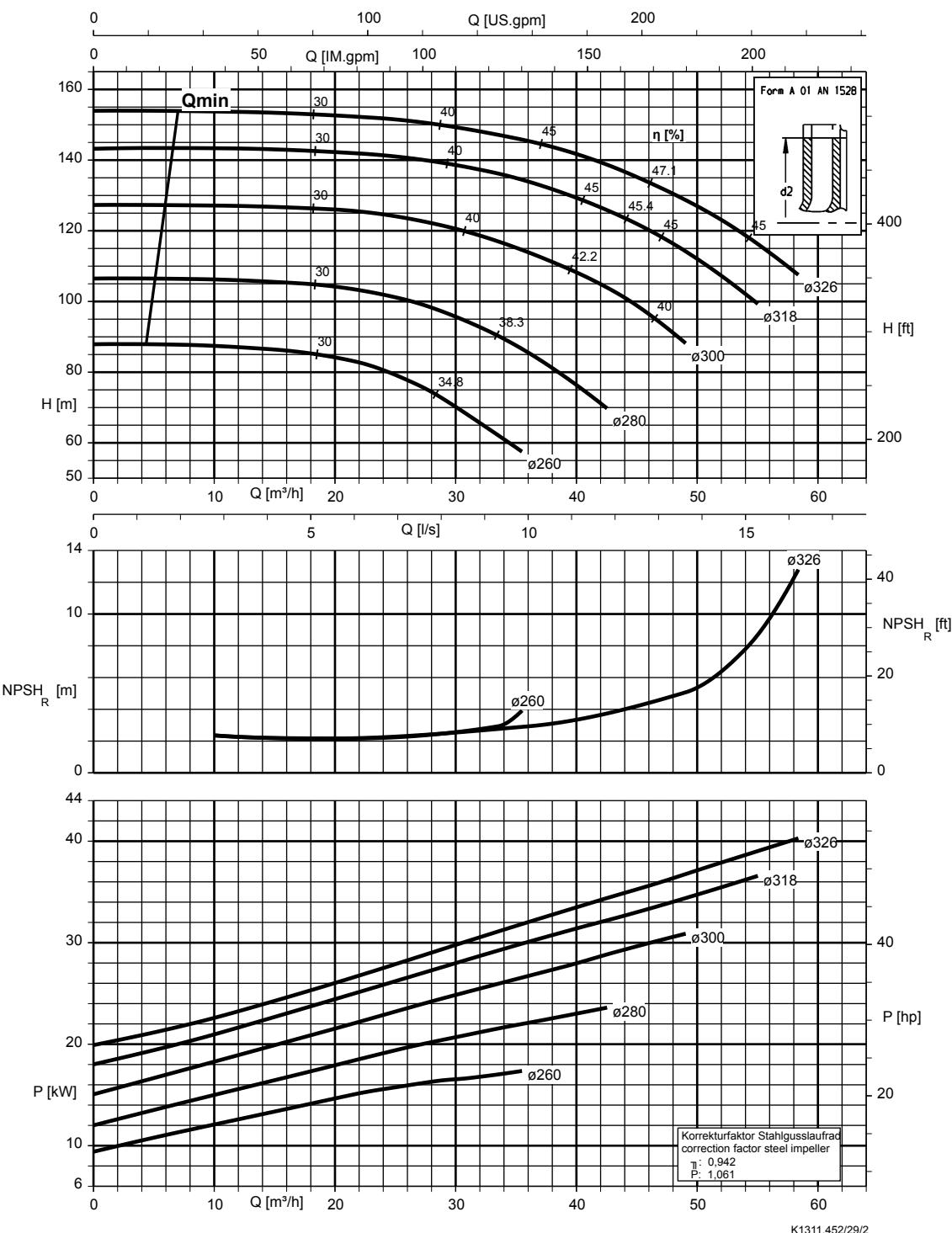
Etanorm SYT, Etanorm V, Etabloc



K1311.452/28/2

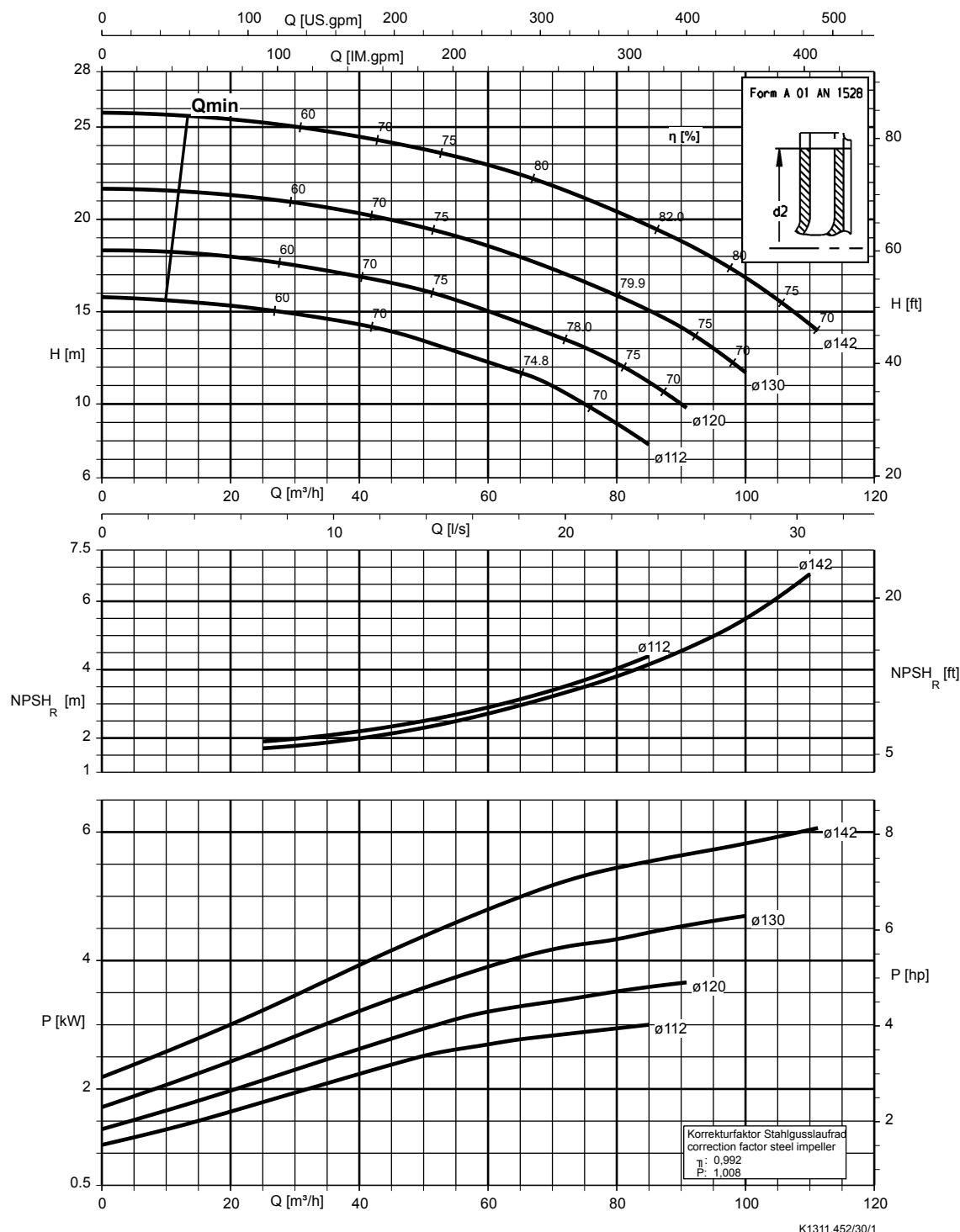
Etanorm 065-040-315, n = 2900 t/min

Etabloc



Etanorm 065-050-125, n = 2 900 t/min

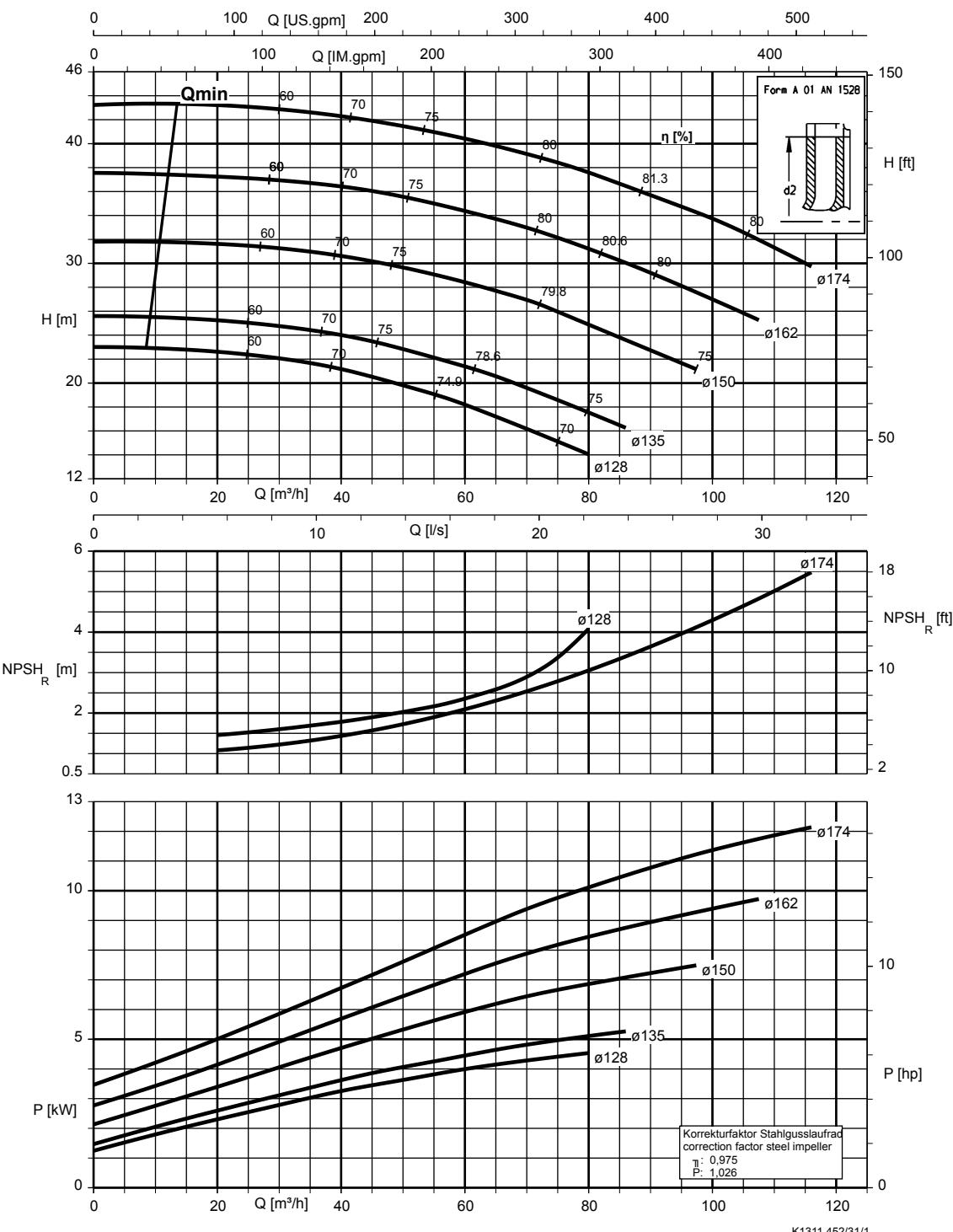
Etanorm V, Etabloc



K1311.452/30/1

**Etanorm 065-050-160, n = 2 900 t/min**

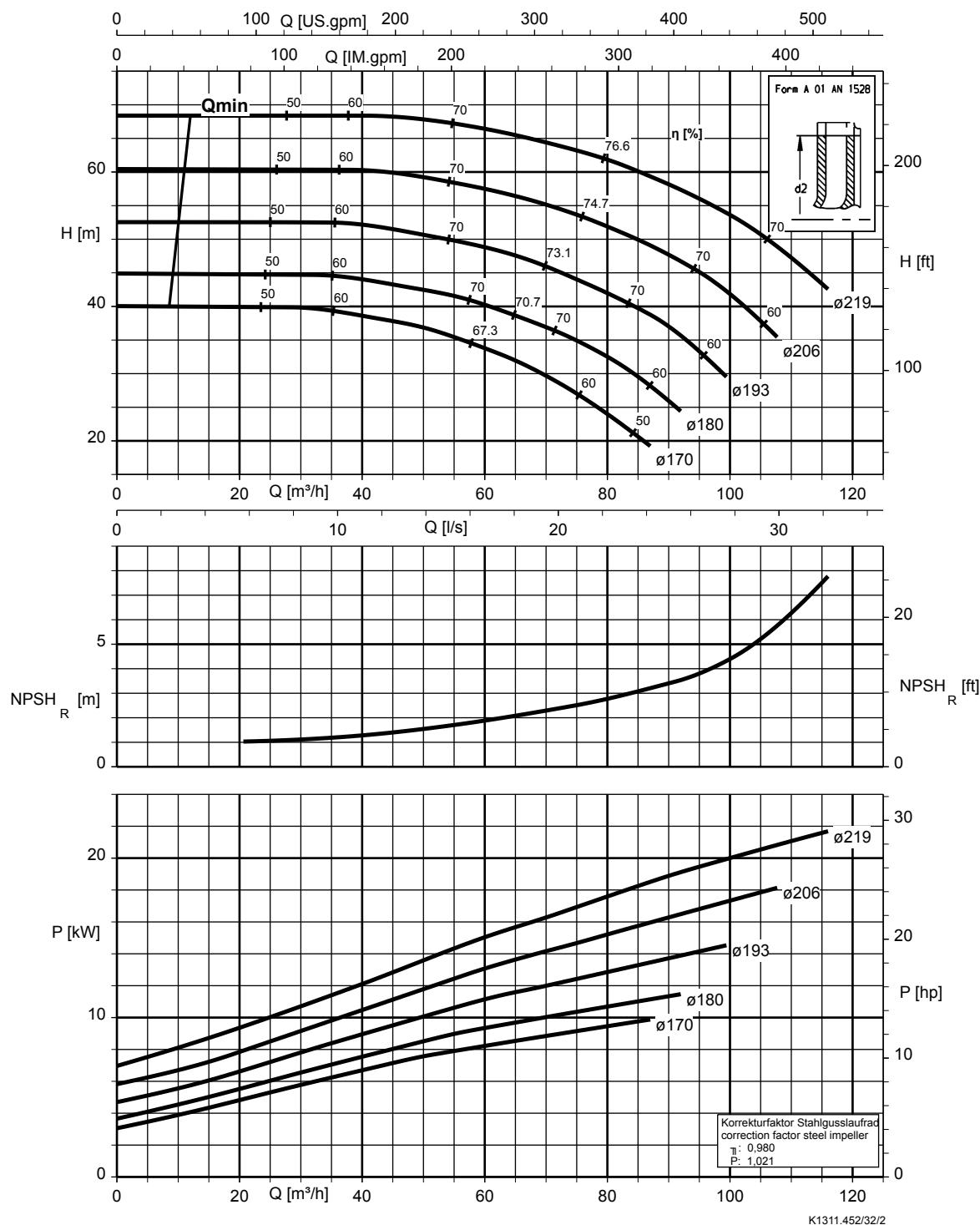
Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



K1311.452/31/1

**Etanorm 065-050-200, n = 2 900 t/min**

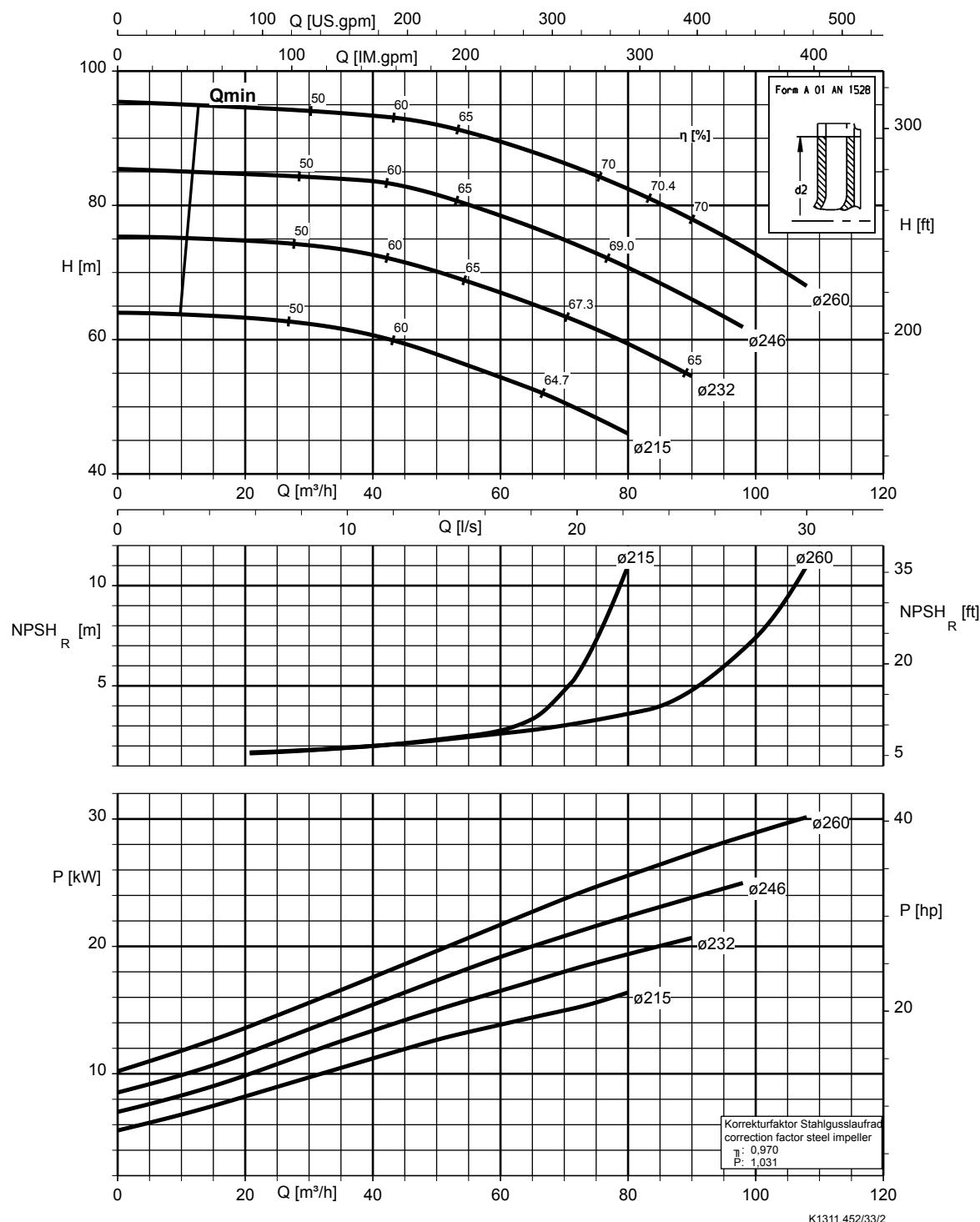
Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



K1311.452/32/2

**Etanorm 065-050-250, n = 2 900 t/min**

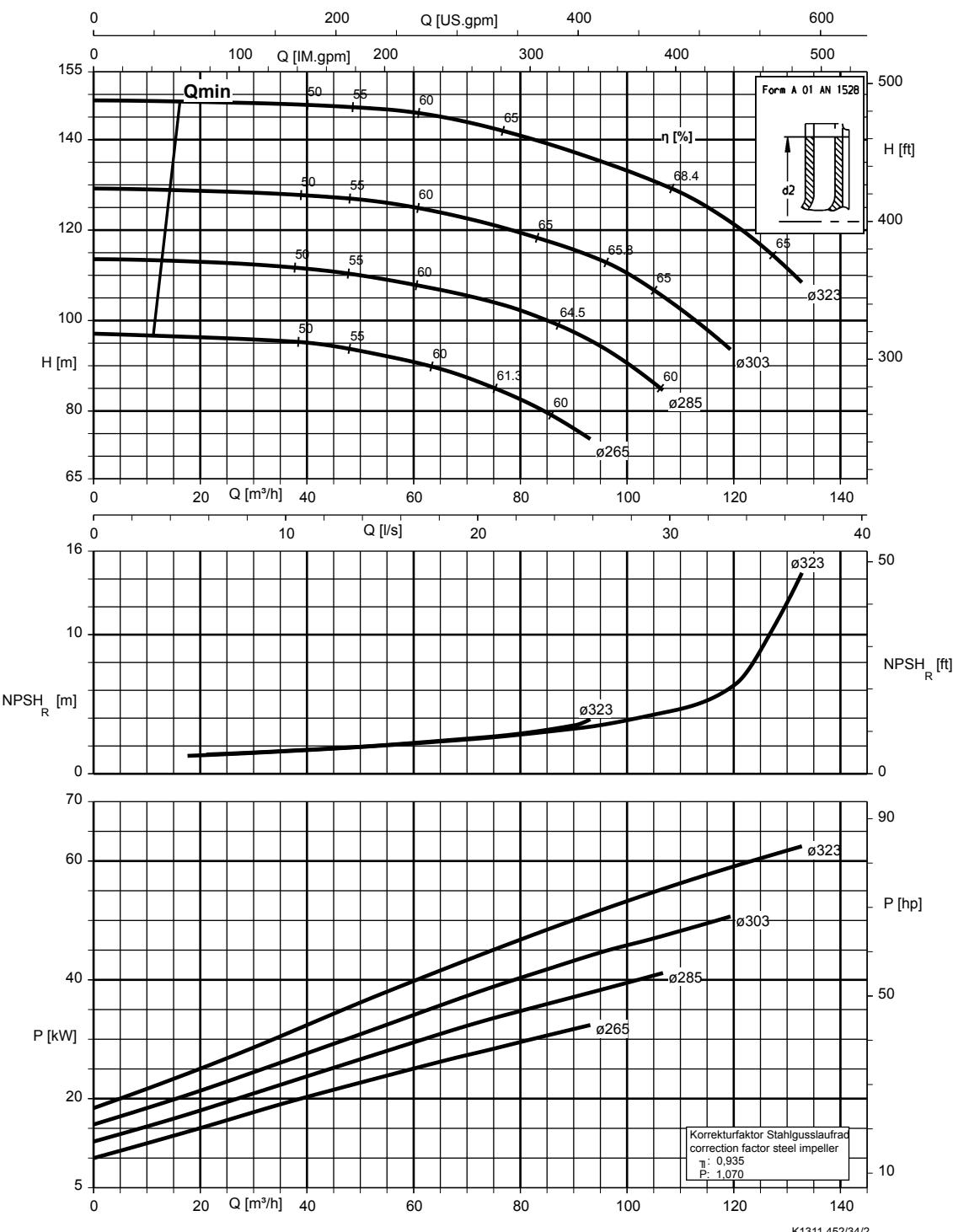
Etanorm SYT, Etanorm V, Etabloc



K1311.452/33/2

Etanorm 065-050-315,  $n = 2900 \text{ t/min}$

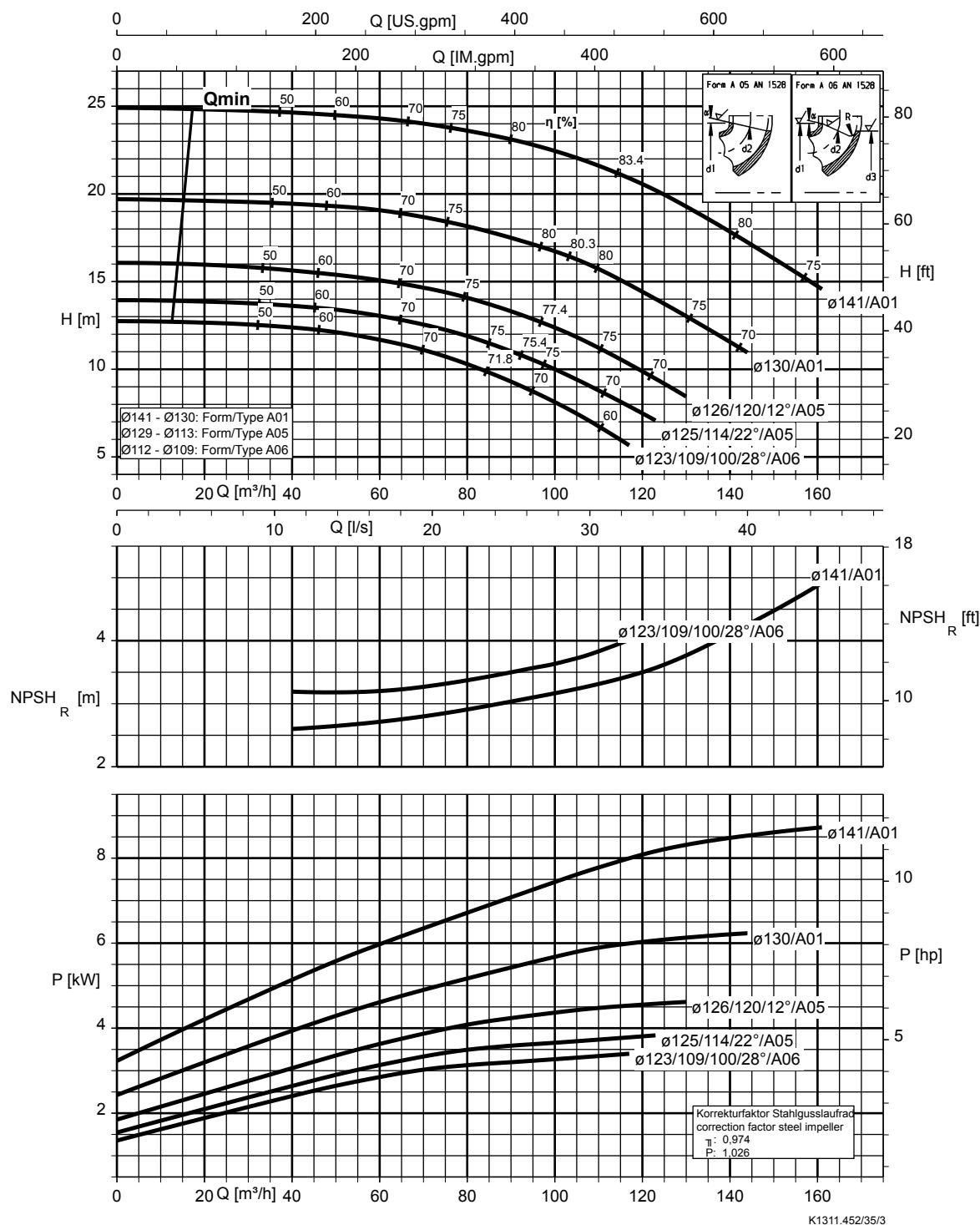
Etabloc



K1311.452/34/2

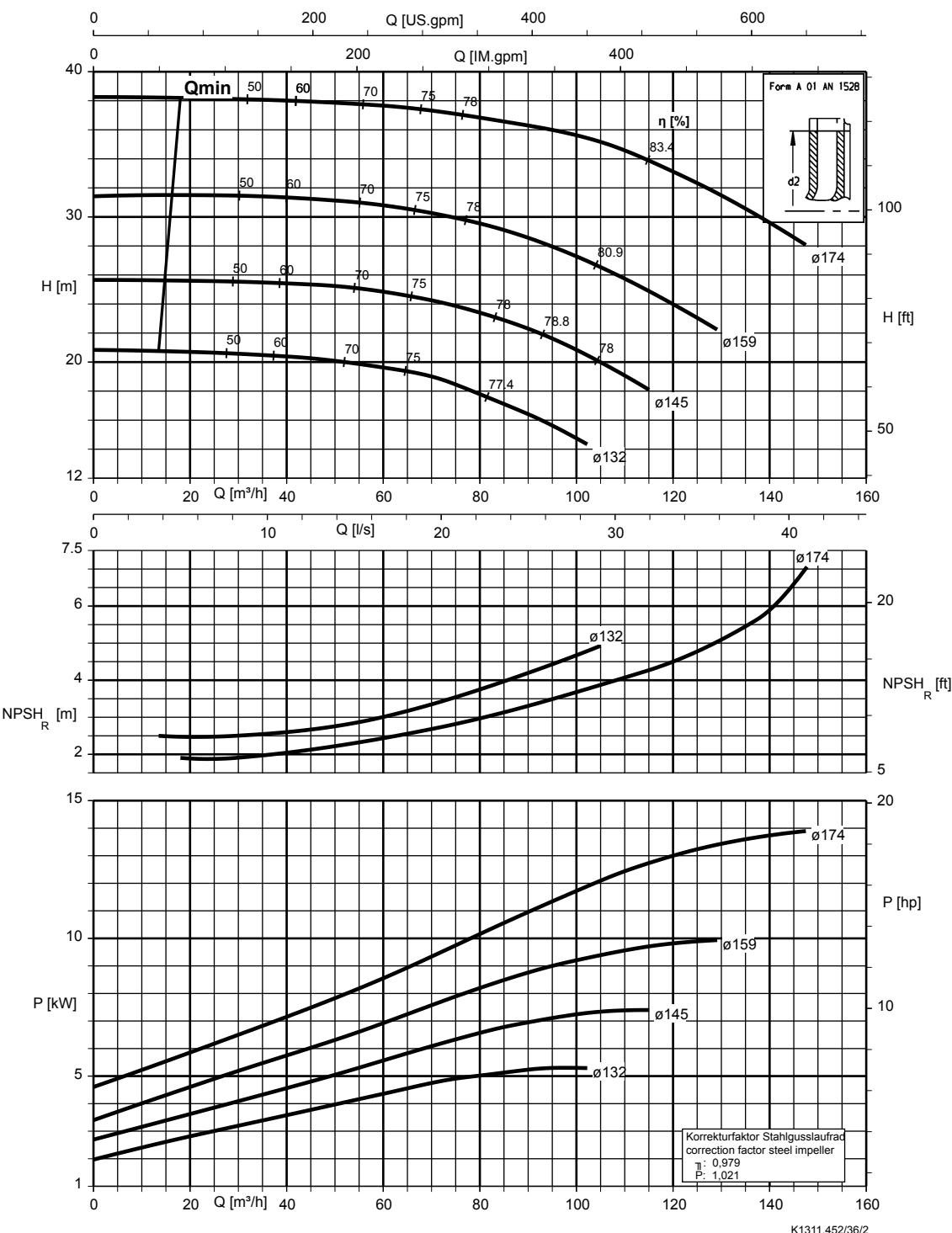
Etanorm 080-065-125, n = 2 900 t/min

Etanorm V, Etabloc



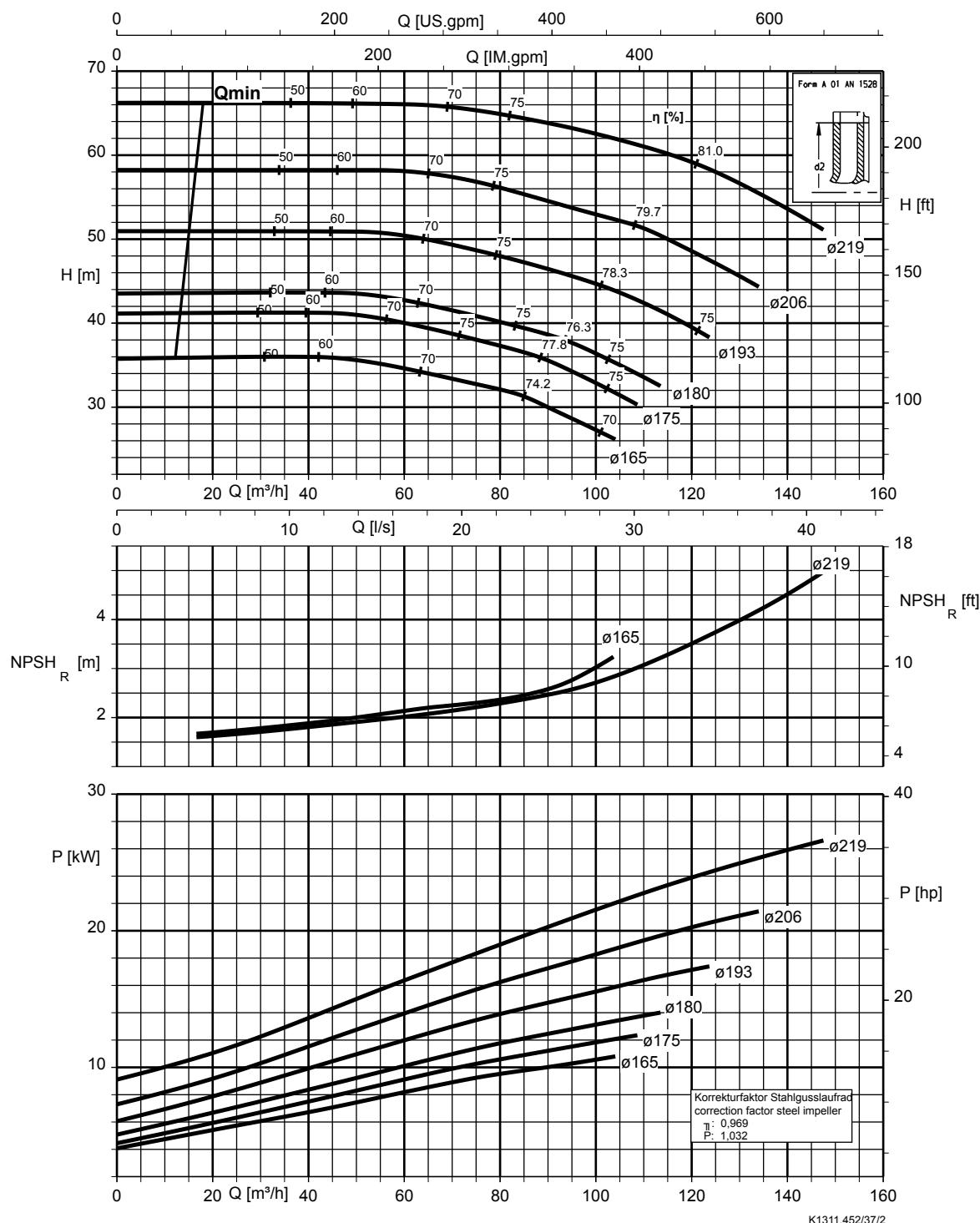
**Etanorm 080-065-160, n = 2 900 t/min**

Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



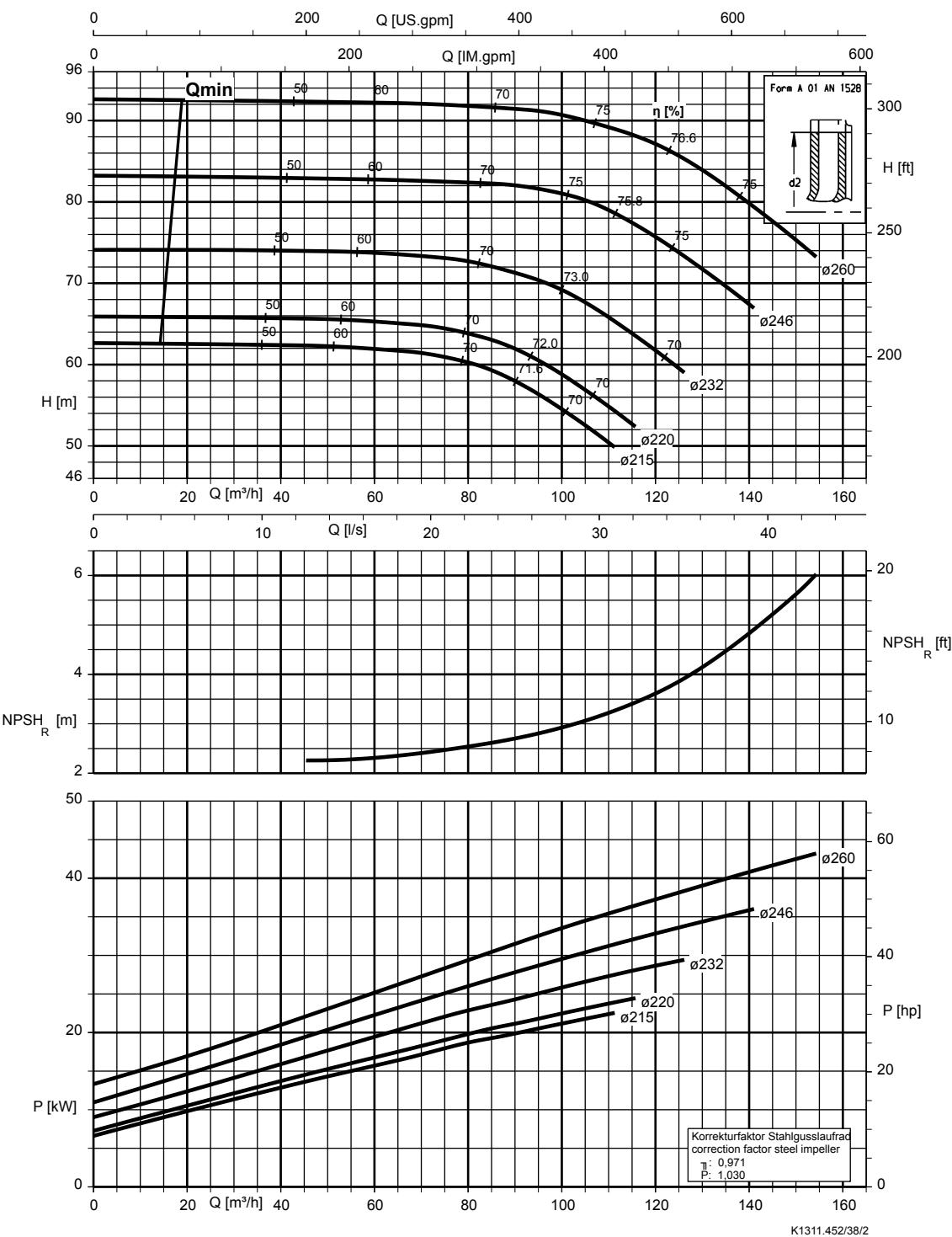
**Etanorm 080-065-200, n = 2 900 t/min**

Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



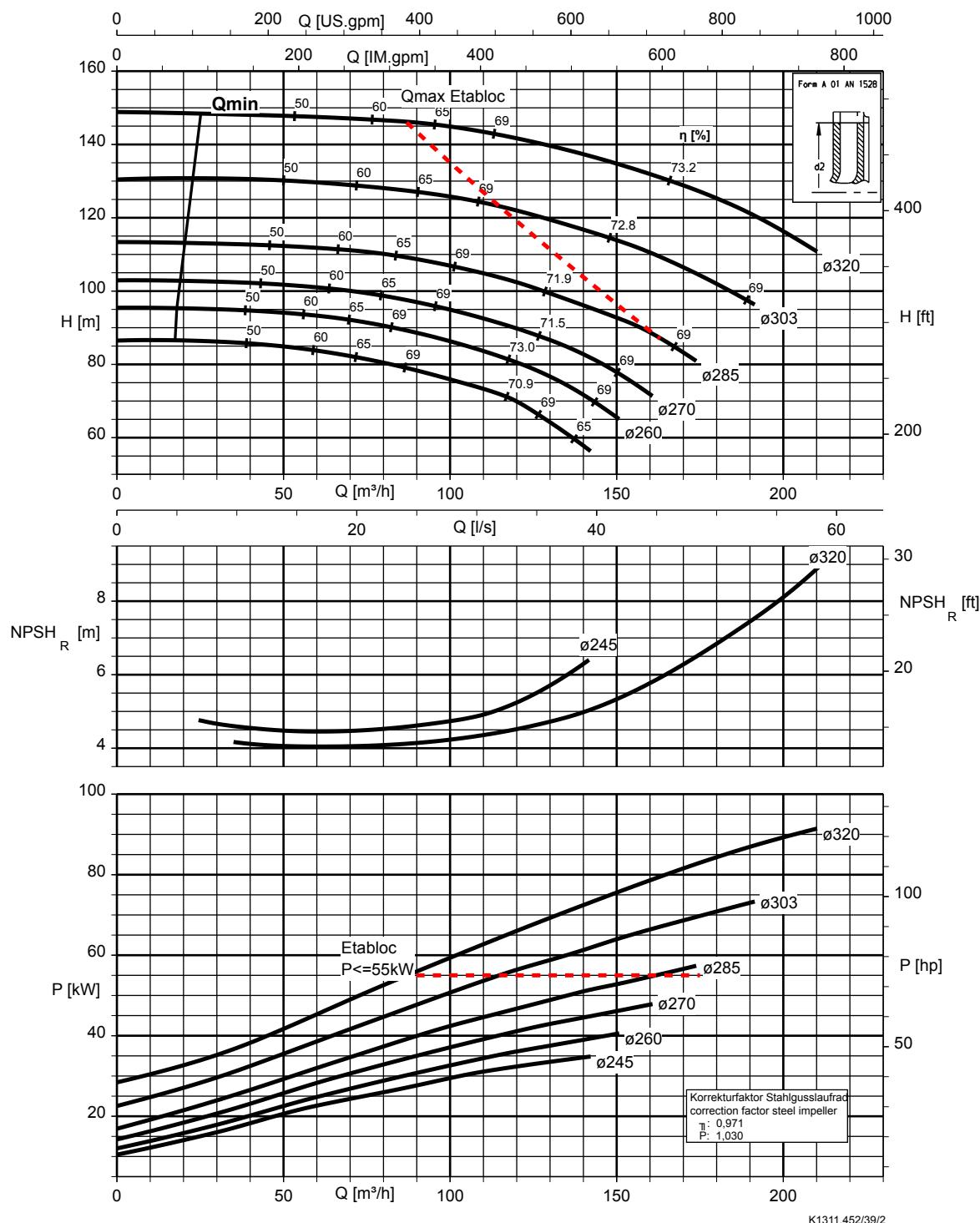
**Etanorm 080-065-250, n = 2 900 t/min**

Etanorm SYT, Etanorm V, Etabloc



Etanorm 080-065-315, n = 2900 t/min

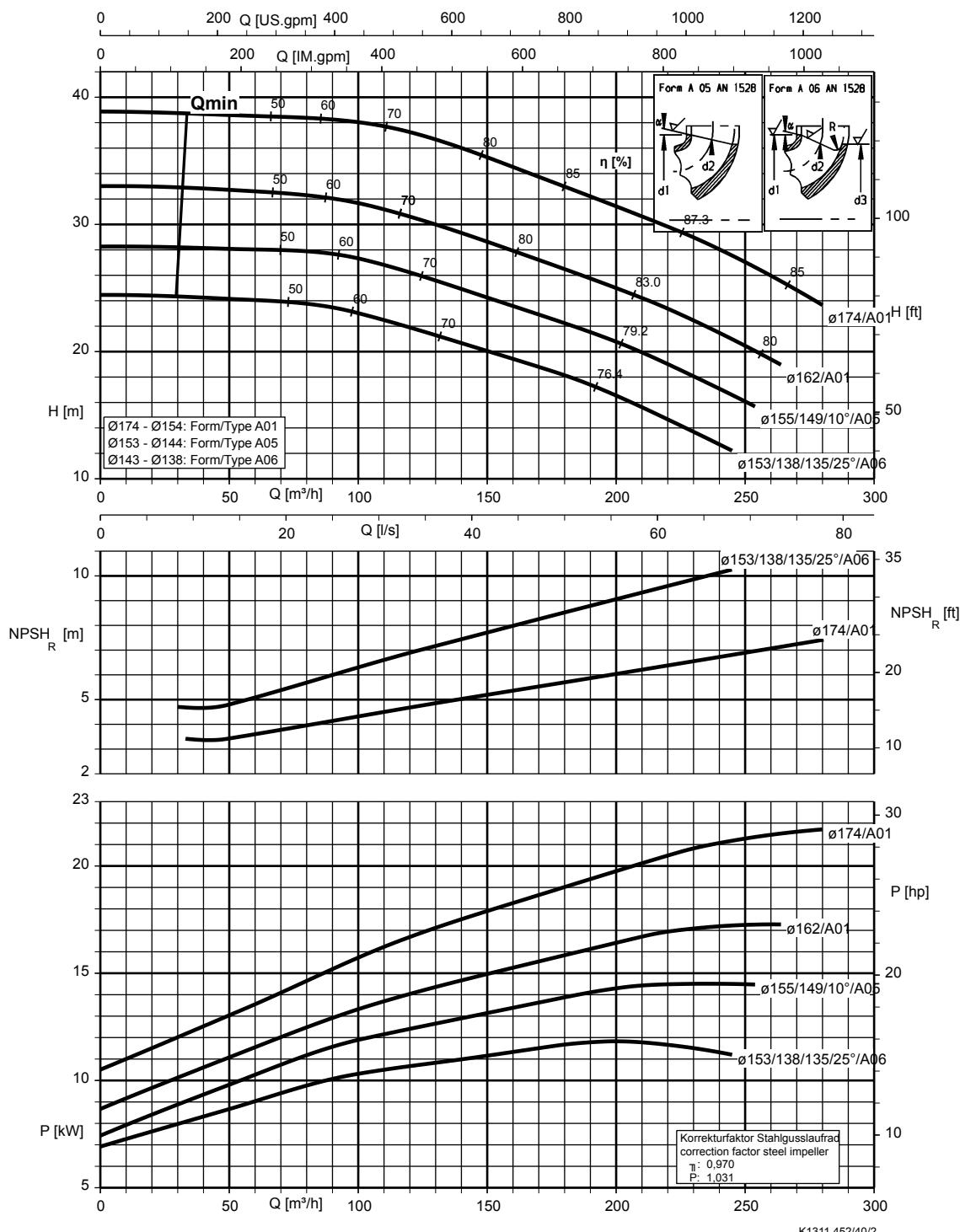
Etabloc



K1311.452/39/2

**Etanorm 100-080-160, n = 2 900 t/min**

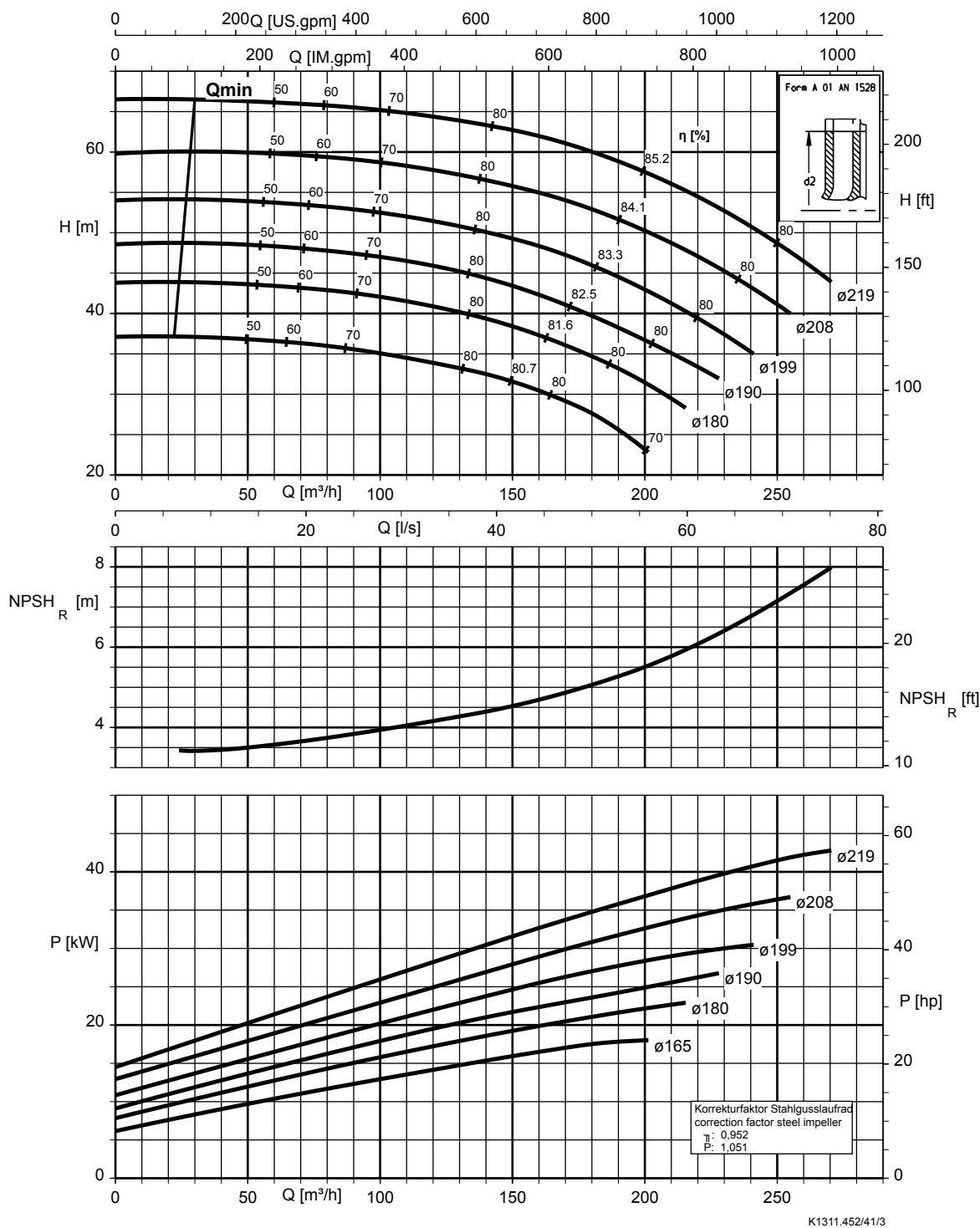
Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



K1311.452/40/2

**Etanorm 100-080-200, n = 2 900 t/min**

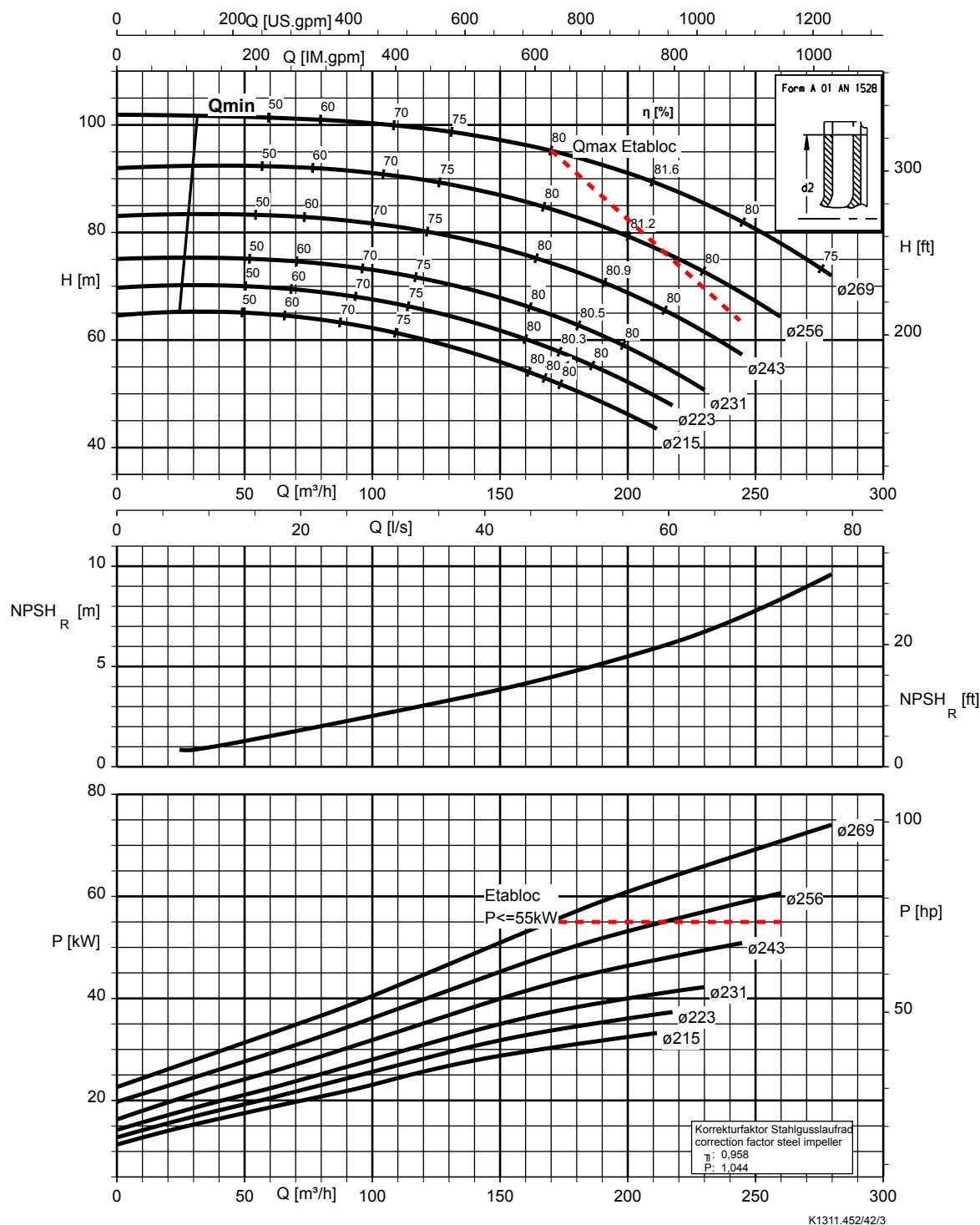
Etanorm SYT, Etanorm V, Etabloc



K1311.452/41/3

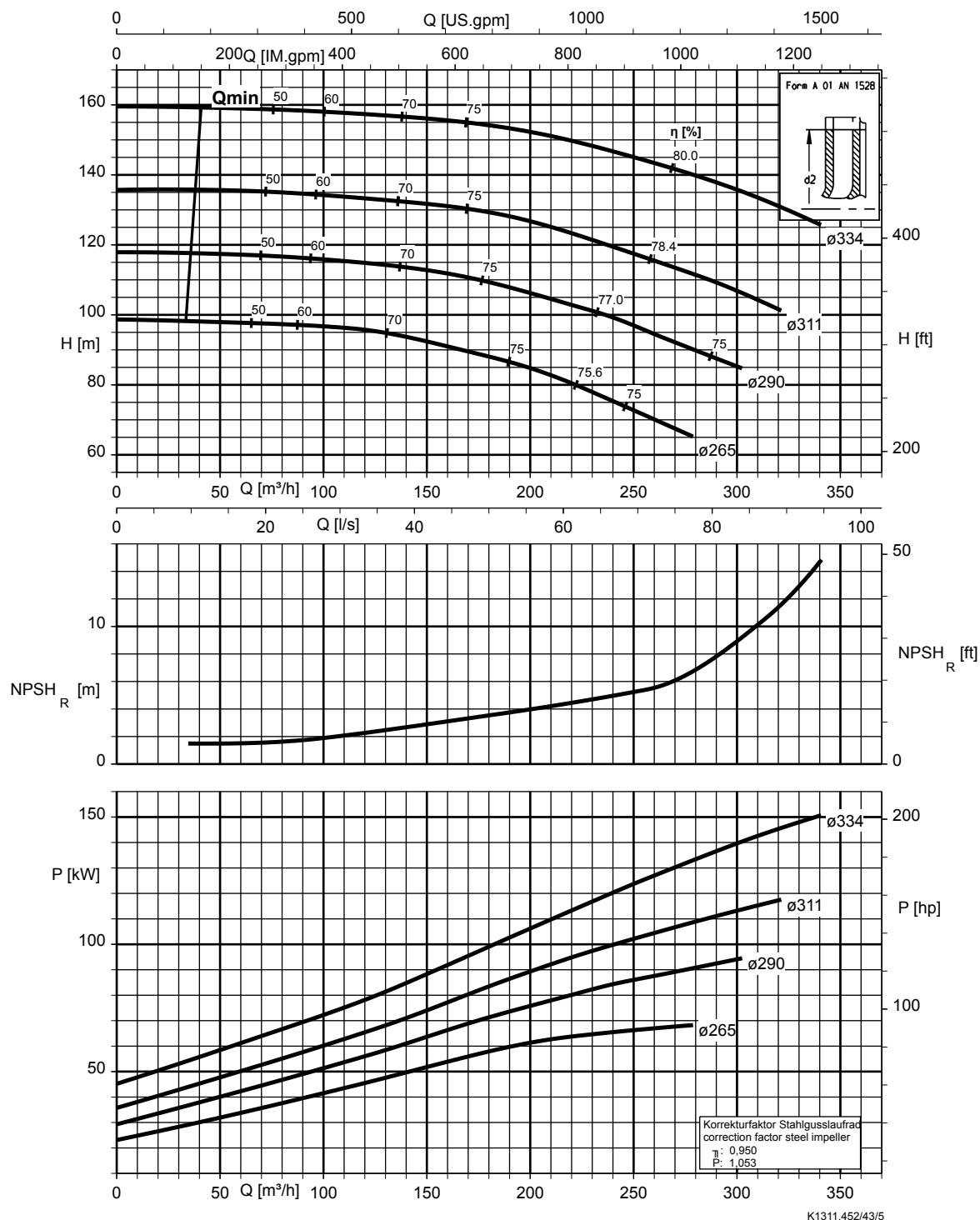
**Etanorm 100-080-250, n = 2 900 t/min**

Etanorm SYT, Etanorm V, Etabloc



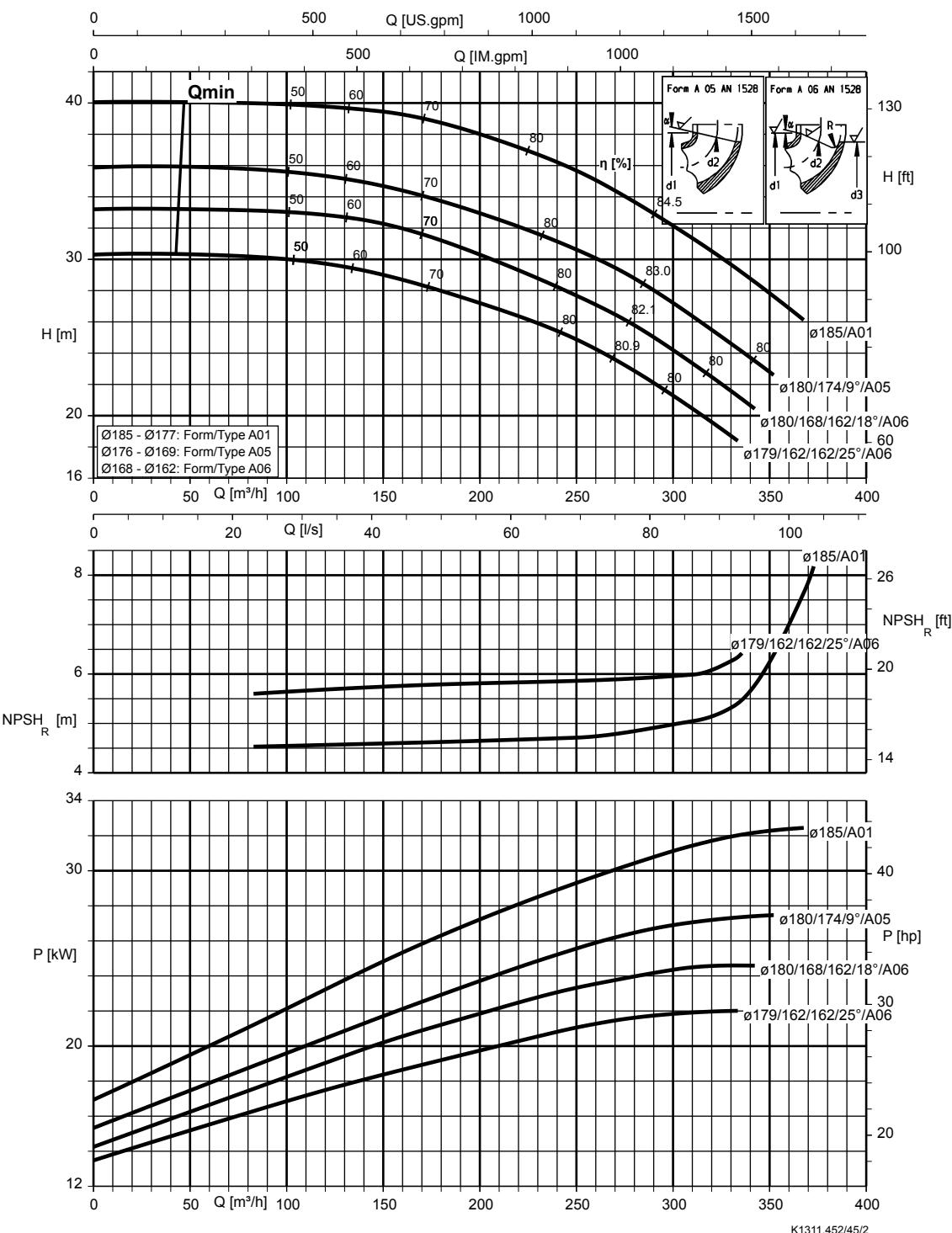
K1311.452/42/3

Etanorm 100-080-315, n = 2900 t/min



**Etanorm 125-100-160, n = 2 900 t/min**

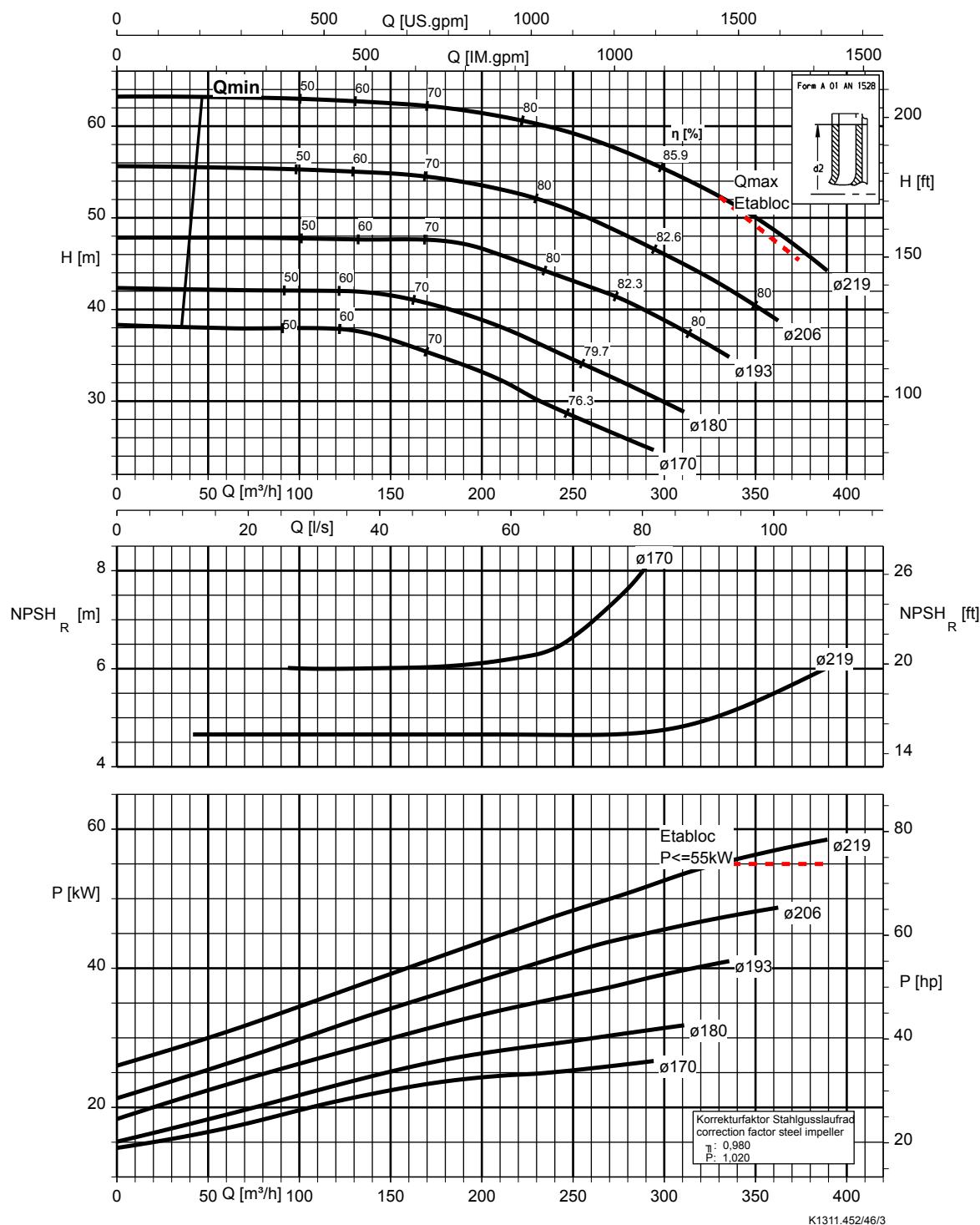
Etanorm SYT, Etanorm V, Etabloc



K1311.452/45/2

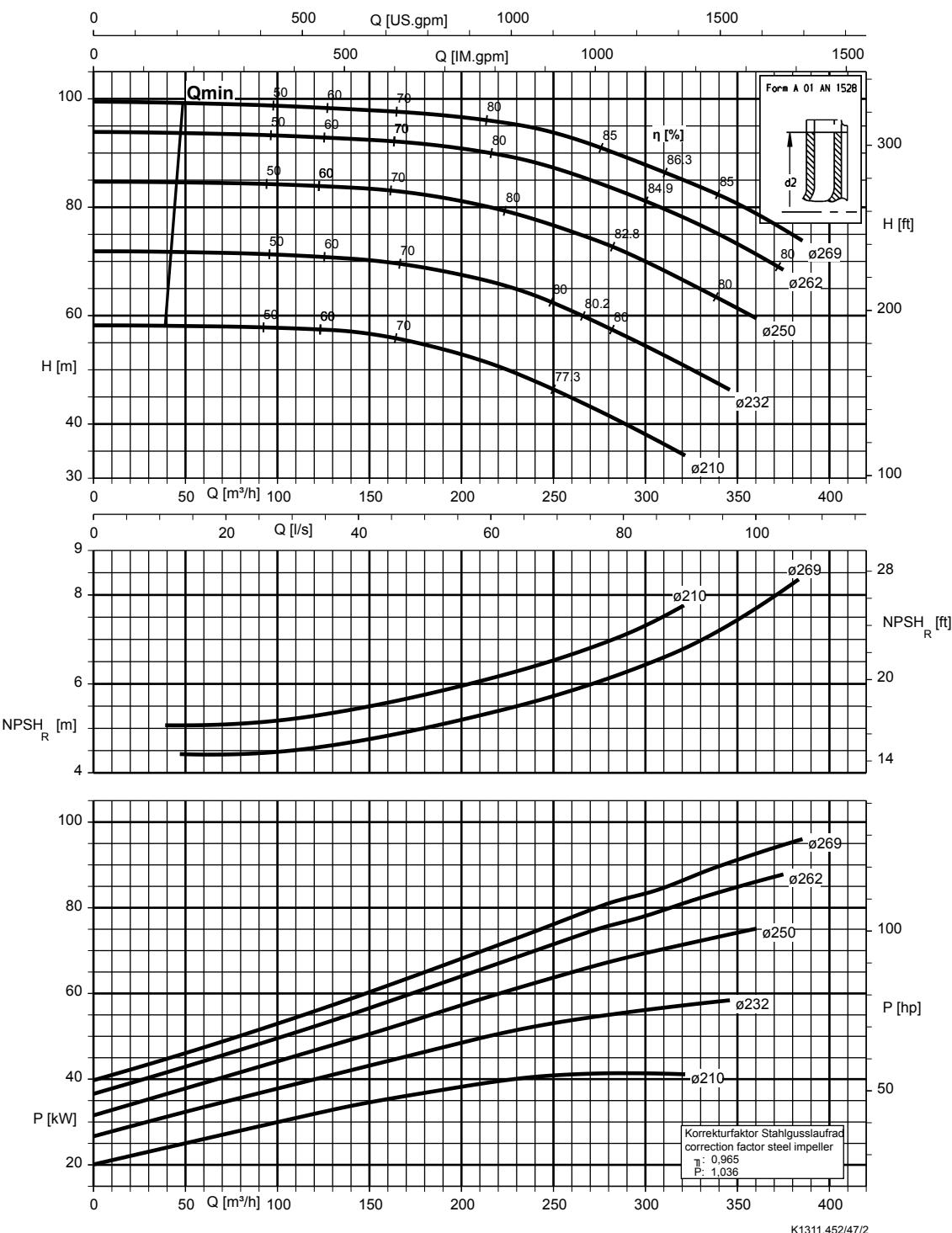
**Etanorm 125-100-200, n = 2 900 t/min**

Etanorm SYT, Etanorm V, Etabloc

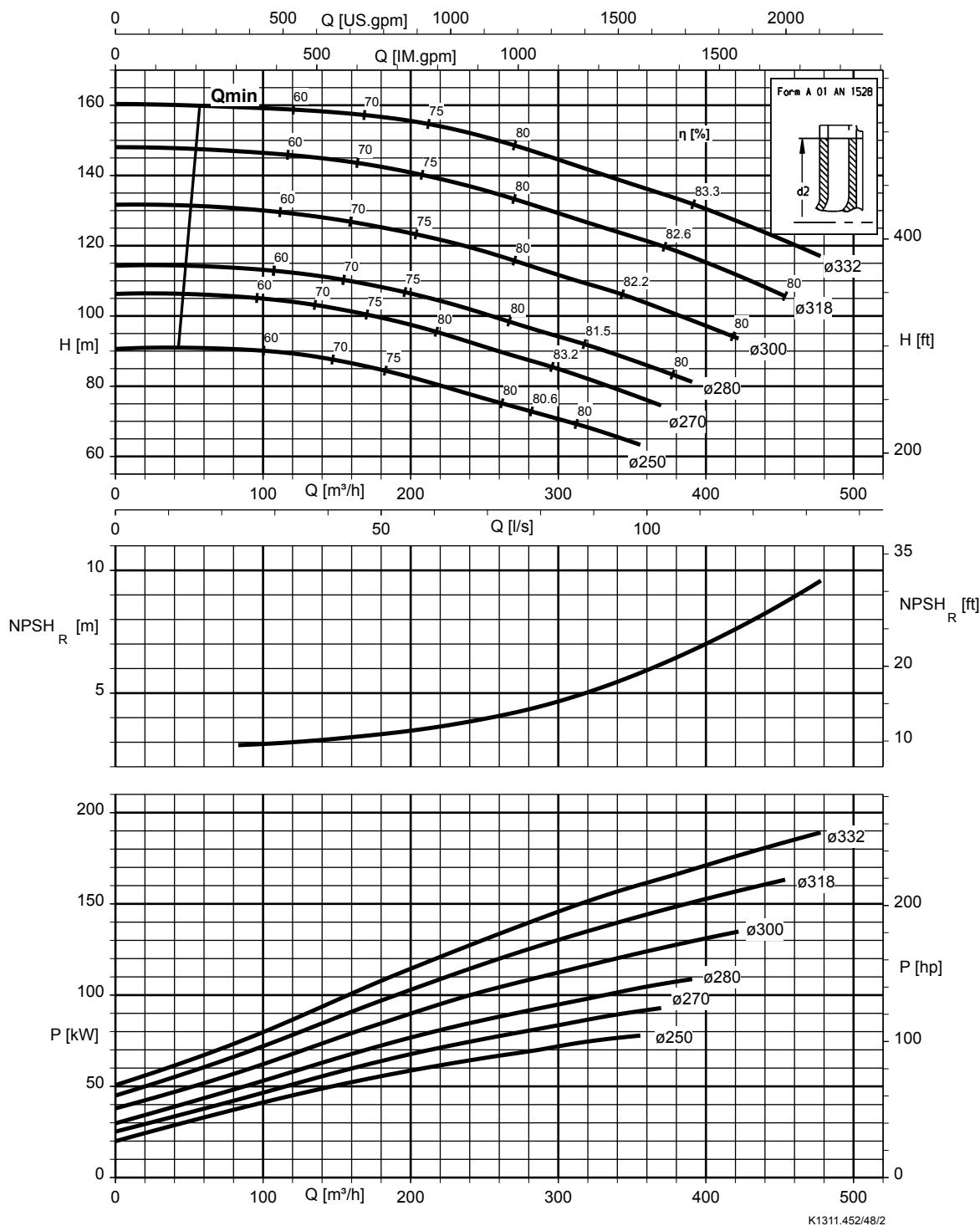


**Etanorm 125-100-250, n = 2900 t/min**

Etanorm SYT, Etanorm V, Etabloc



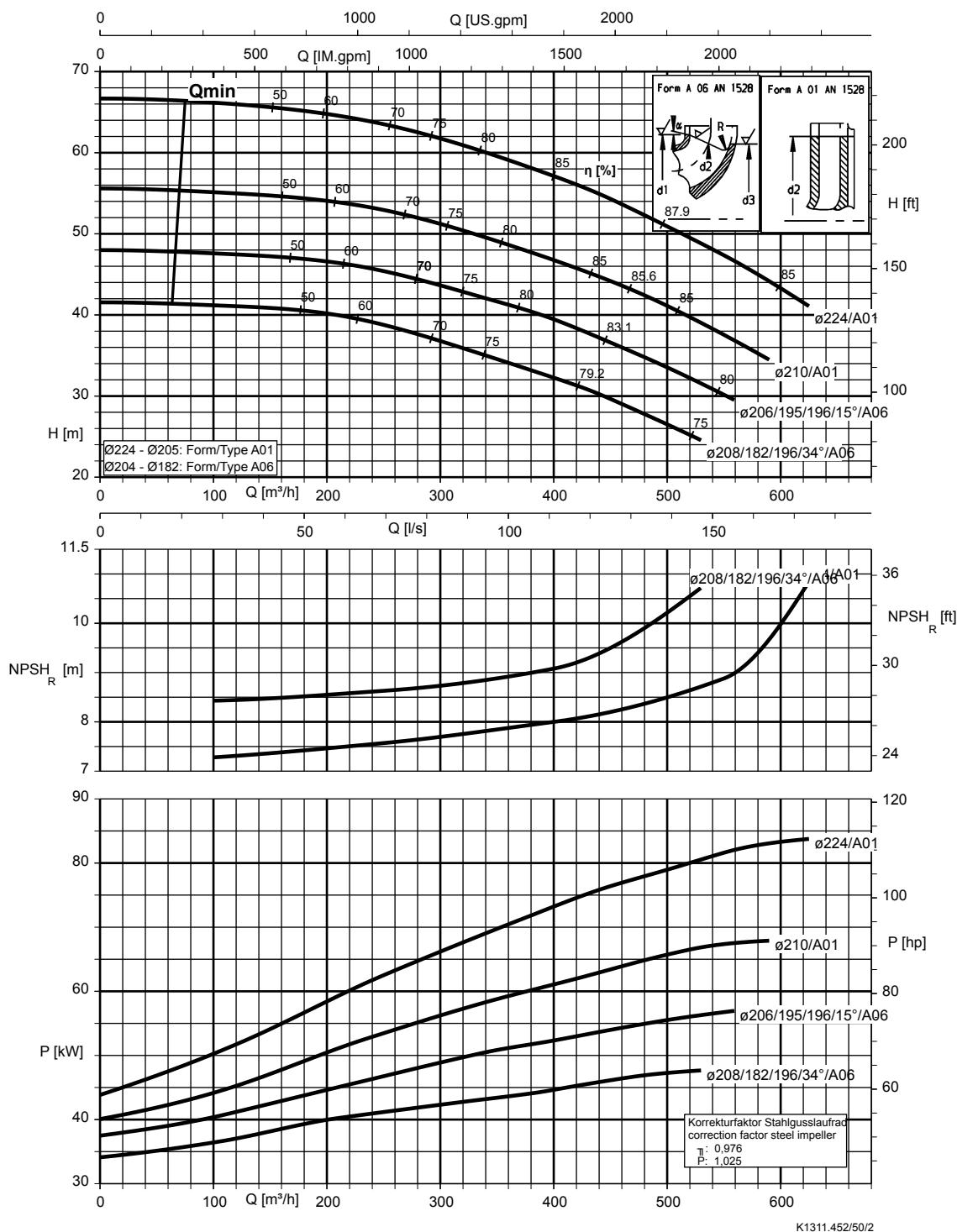
Etanorm 125-100-315, n = 2900 t/min



K1311.452/48/2

**Etanorm 150-125-200, n = 2900 t/min**

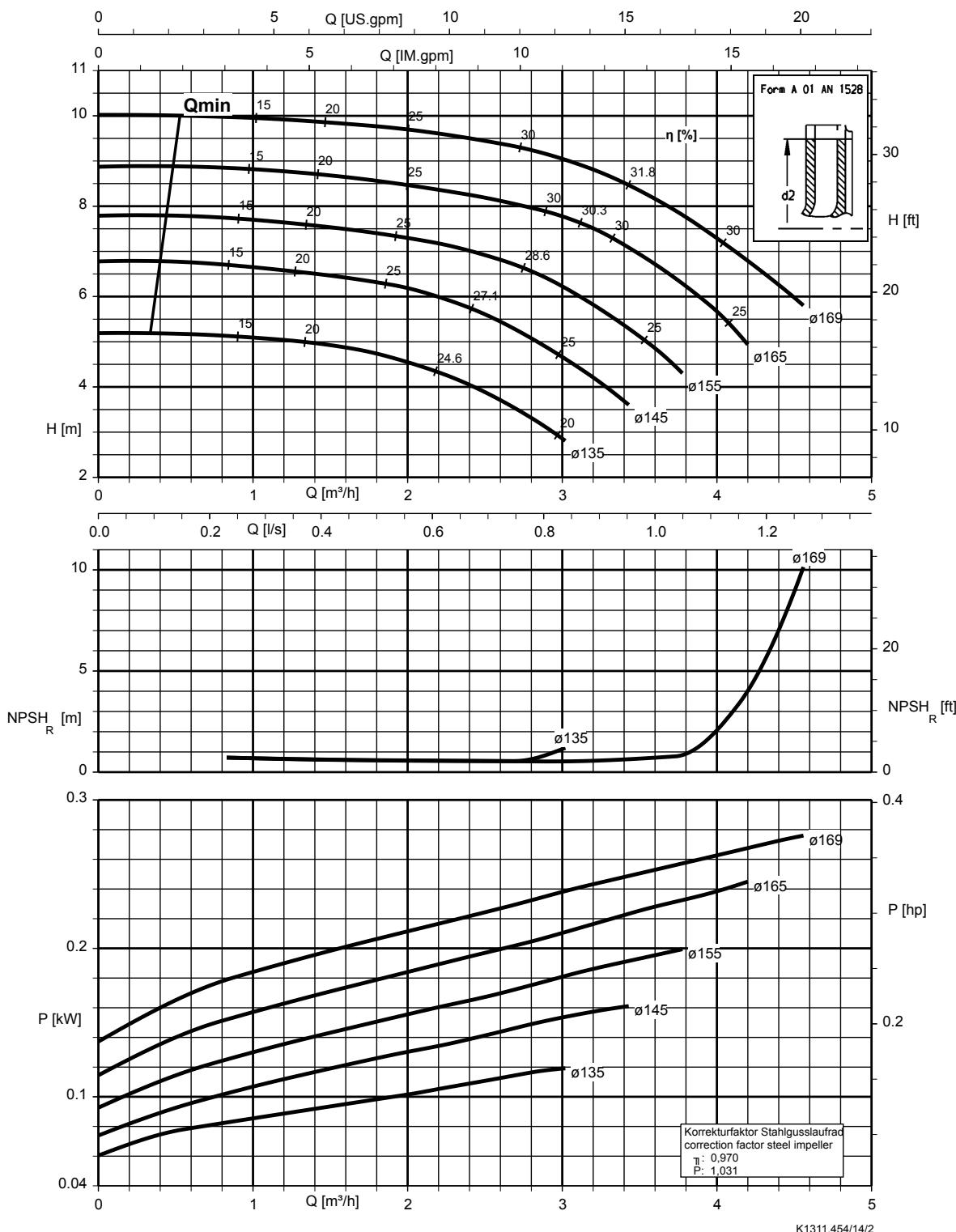
Etanorm SYT, Etanorm V, Etabloc



$n = 1450 \text{ t/min}$

Etanorm 040-025-160,  $n = 1450 \text{ t/min}$

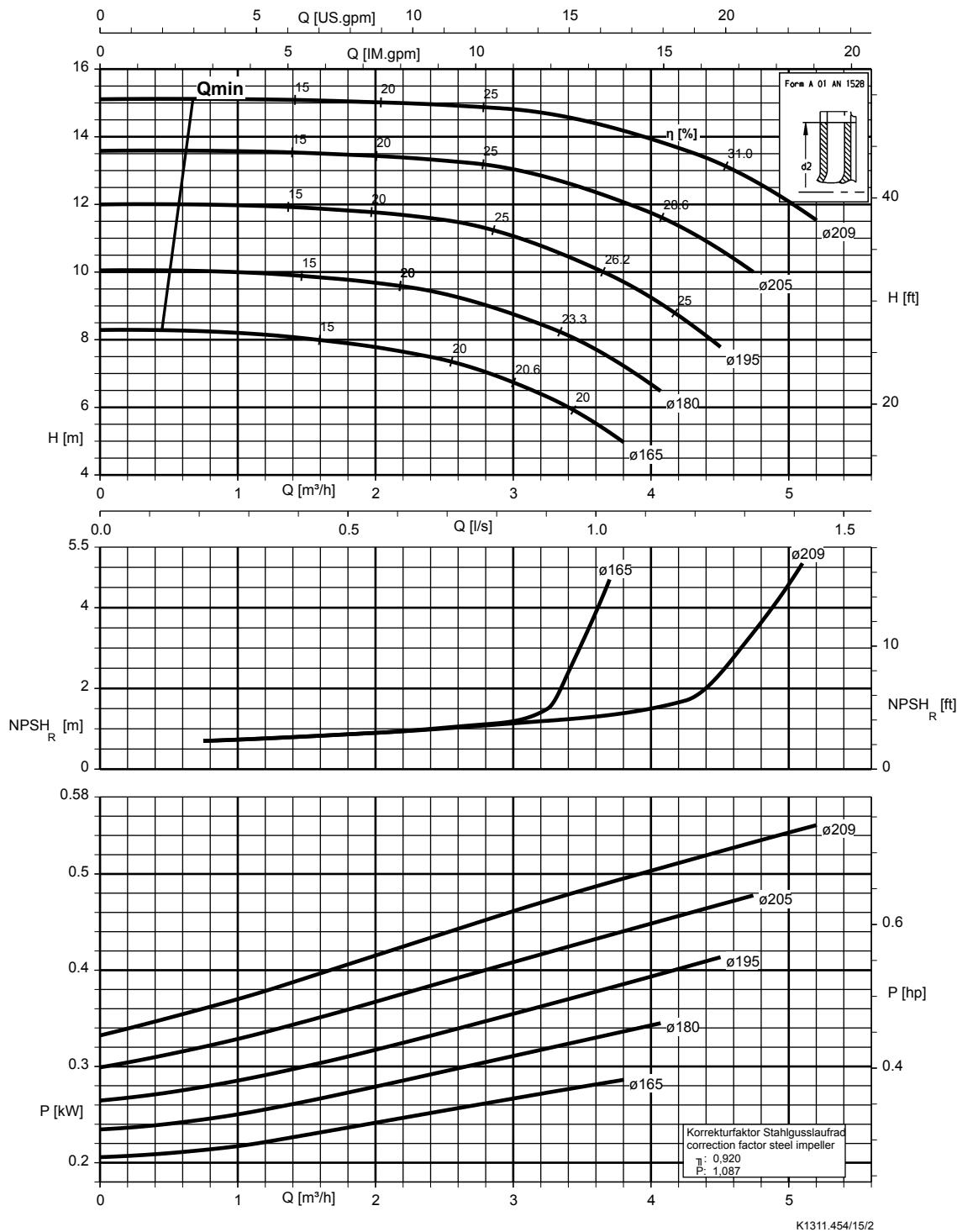
Etanorm SYT, Etabloc, Etabloc SYT



K1311.454/14/2

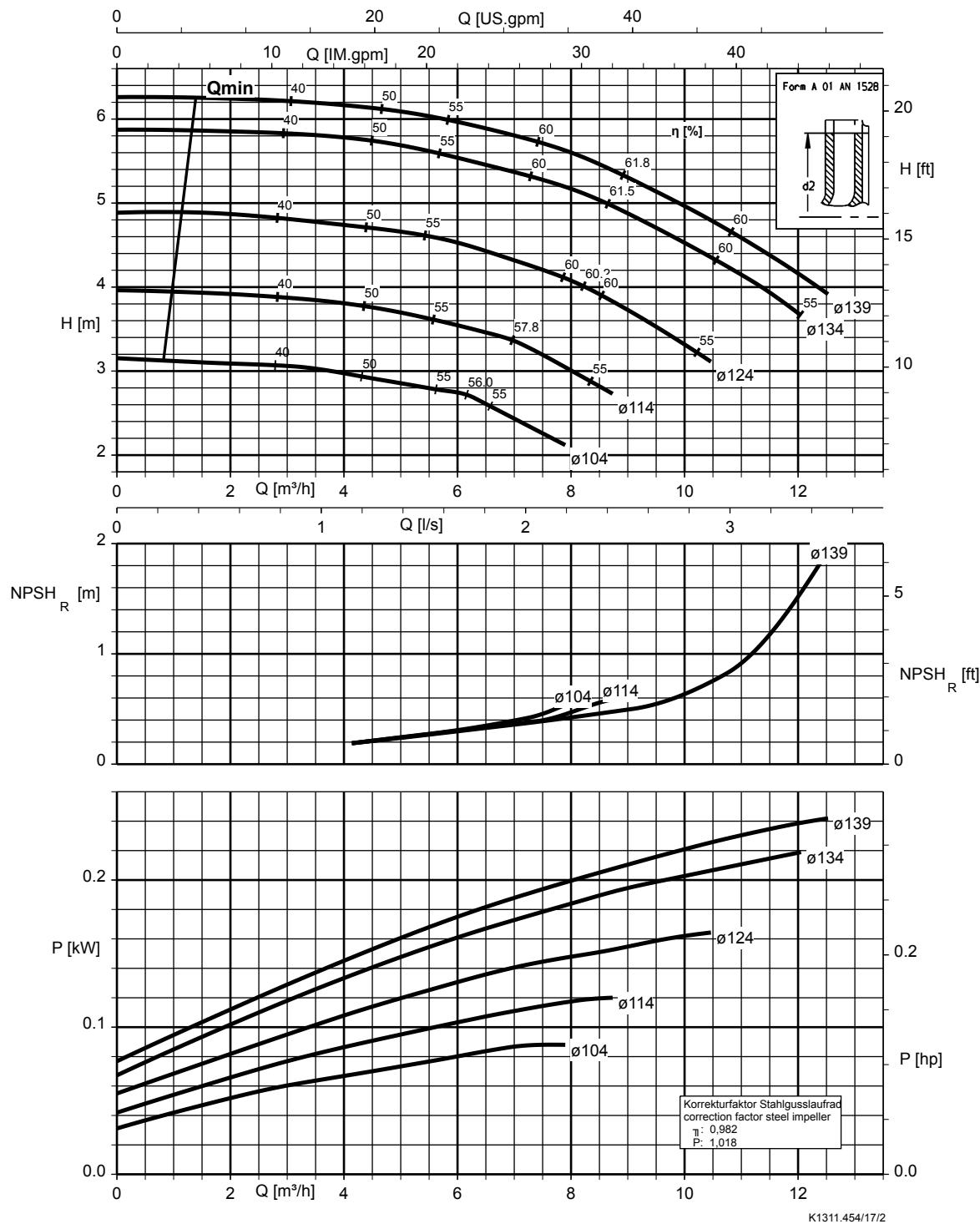
**Etanorm 040-025-200, n = 1 450 t/min**

Etanorm SYT, Etabloc, Etabloc SYT



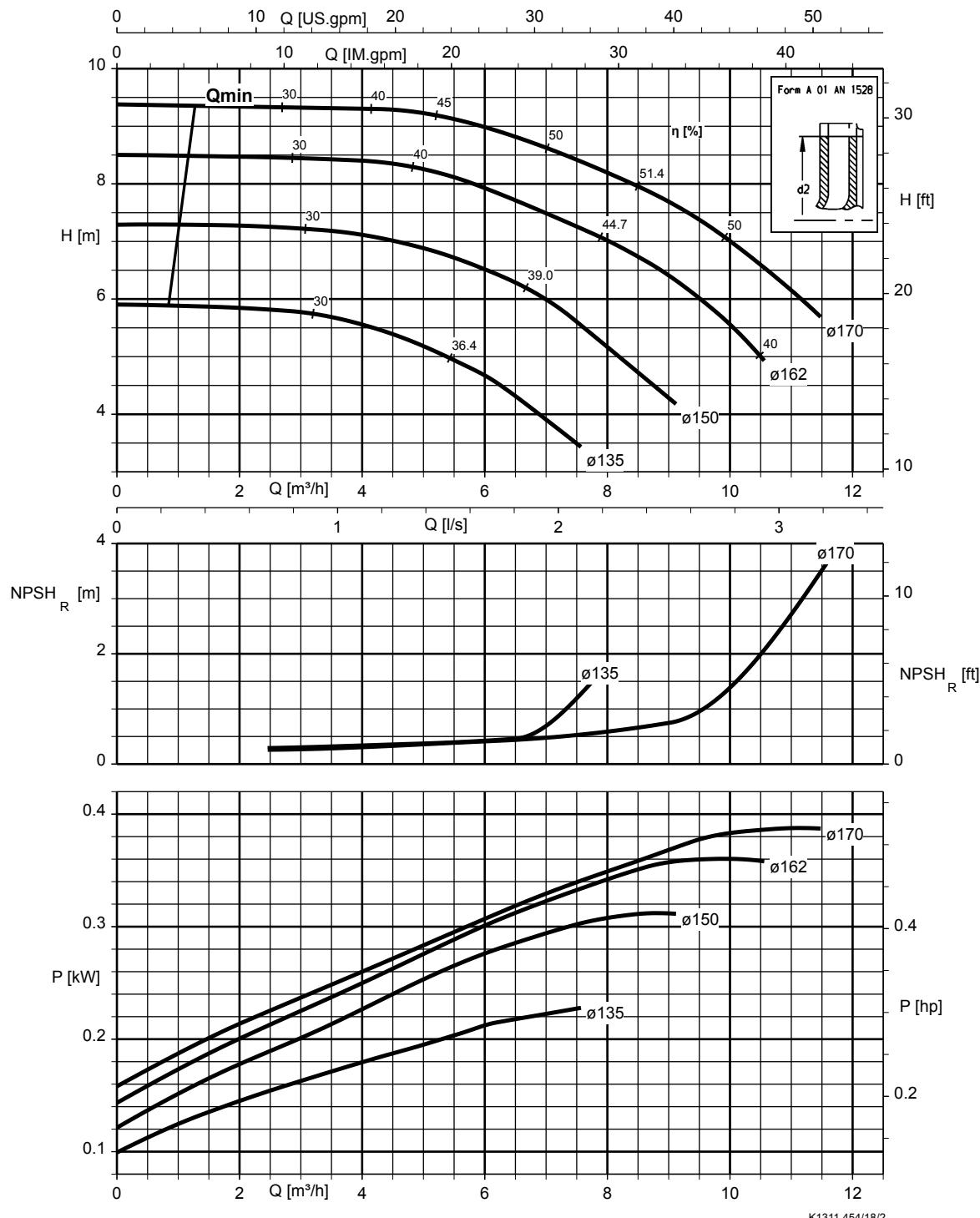
**Etanorm 050-032-125.1, n = 1 450 t/min**

Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



**Etanorm 050-032-160.1,  $n = 1\,450 \text{ t/min}$**

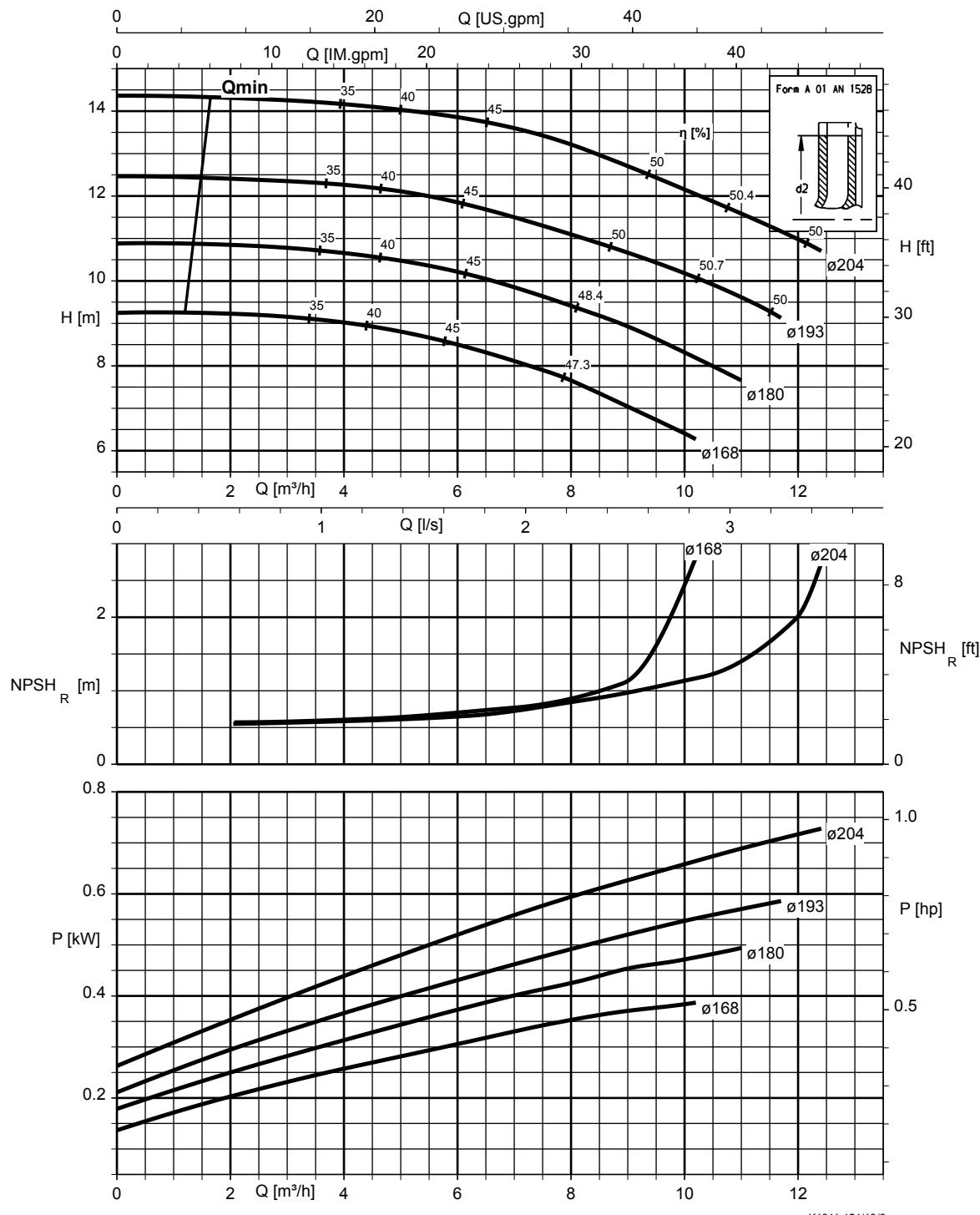
Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



K1311.454/18/2

**Etanorm 050-032-200.1,  $n = 1\,450 \text{ t/min}$**

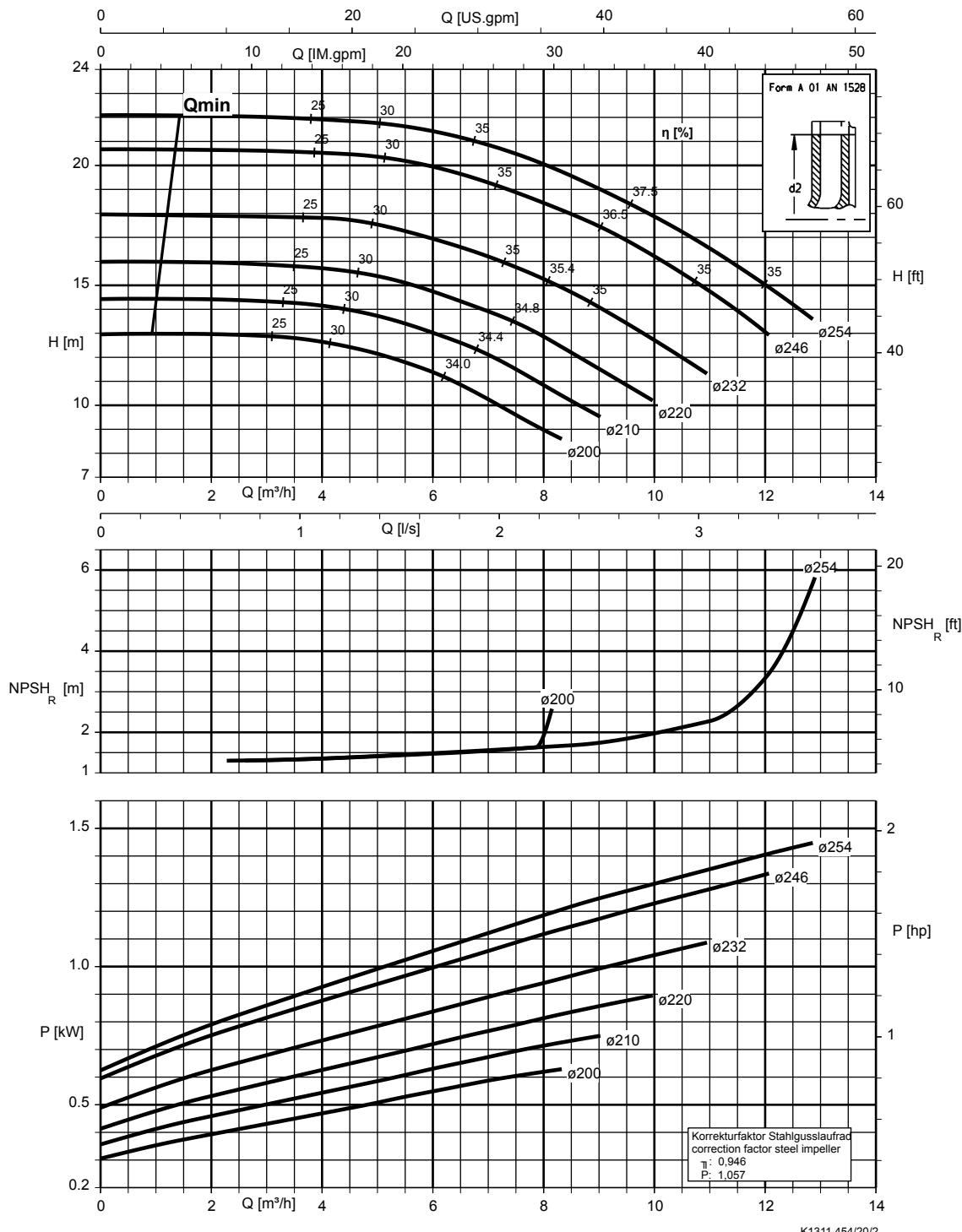
Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



K1311.454/19/2

Etanorm 050-032-250.1,  $n = 1\,450 \text{ t/min}$

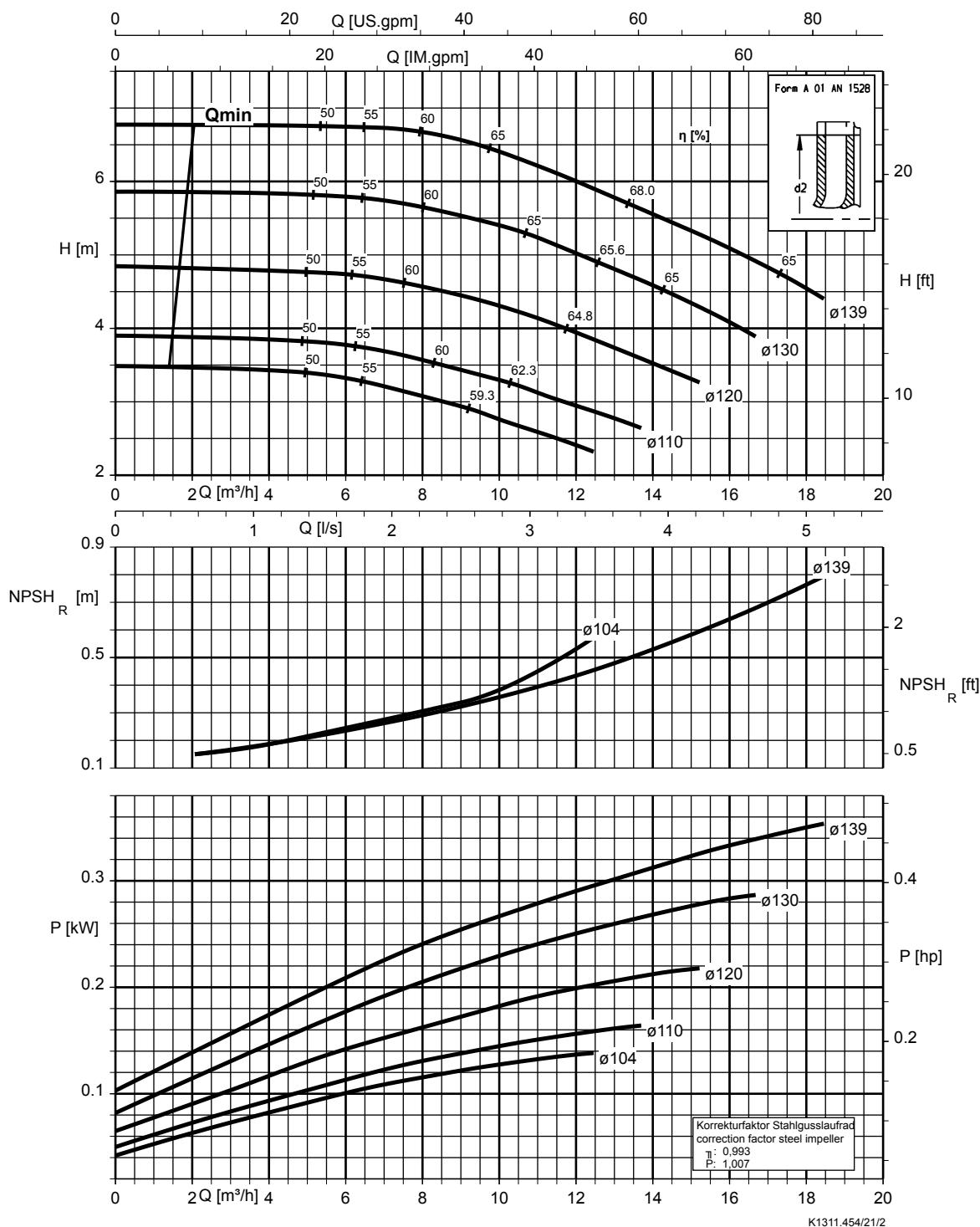
Etanorm V, Etabloc



K1311.454/20/2

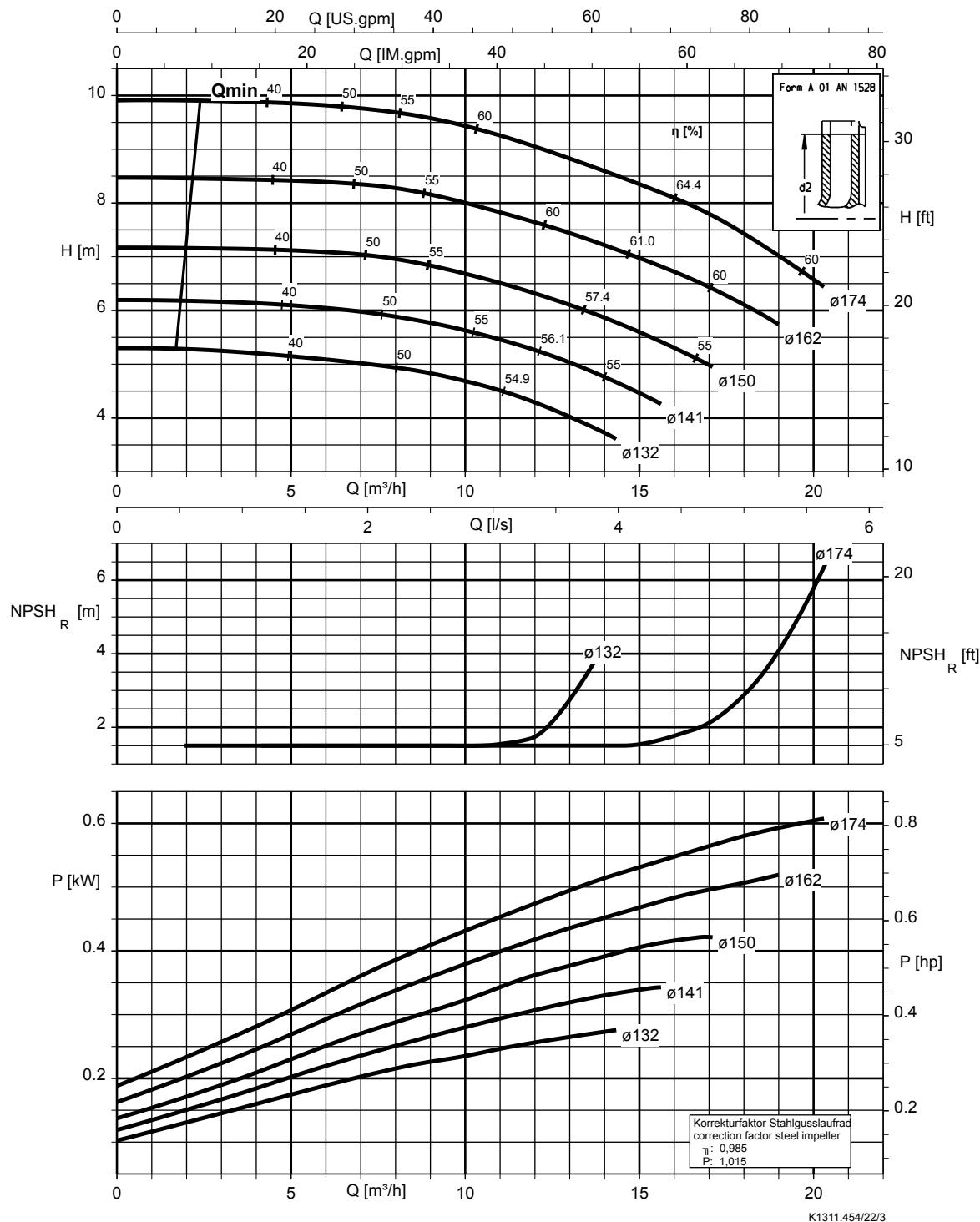
Etanorm 050-032-125 ,  $n = 1\,450 \text{ t/min}$

Etanorm V, Etabloc



**Etanorm 050-032-160, n = 1 450 t/min**

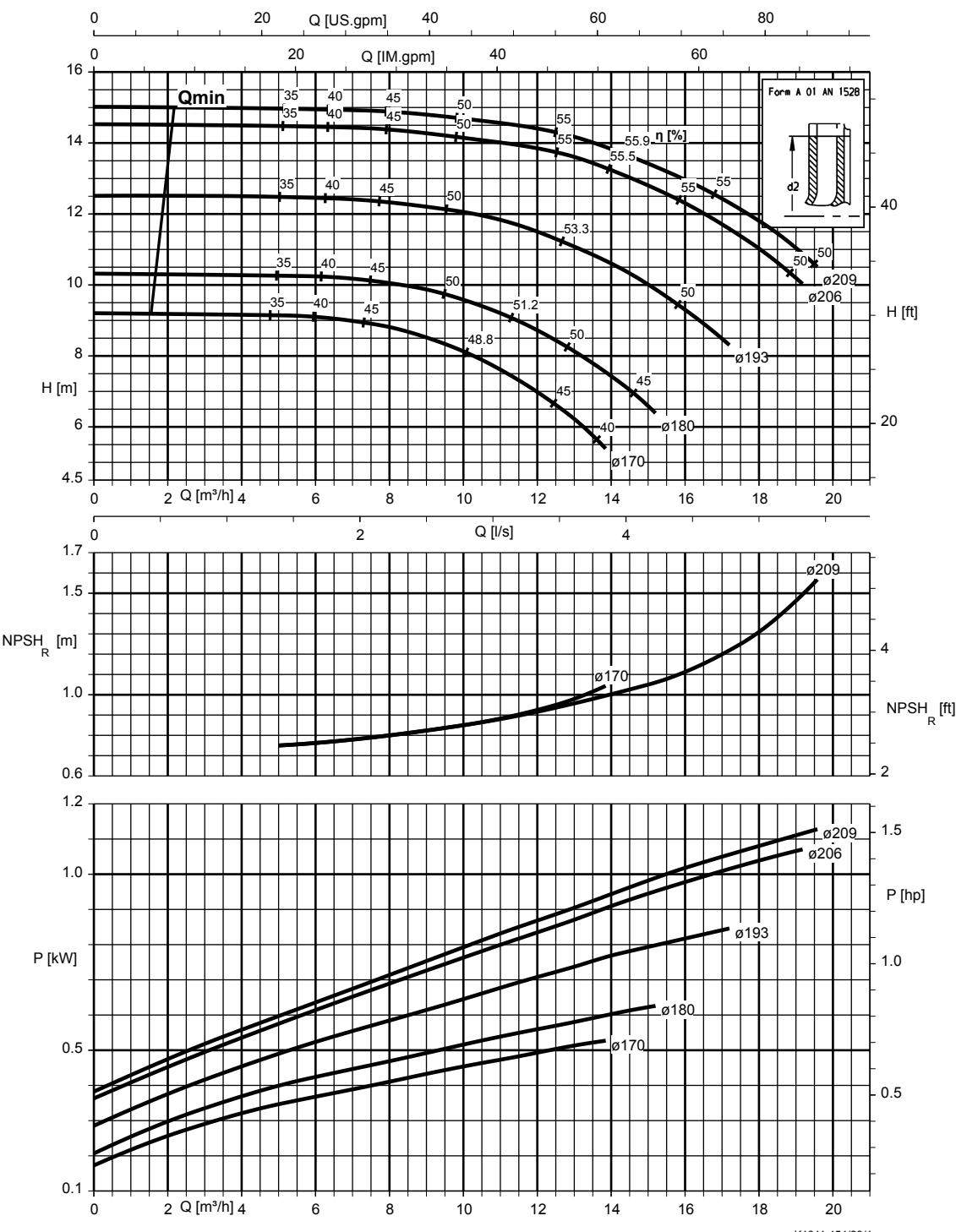
Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



K1311.454/22/3

**Etanorm 050-032-200 , n = 1 450 t/min**

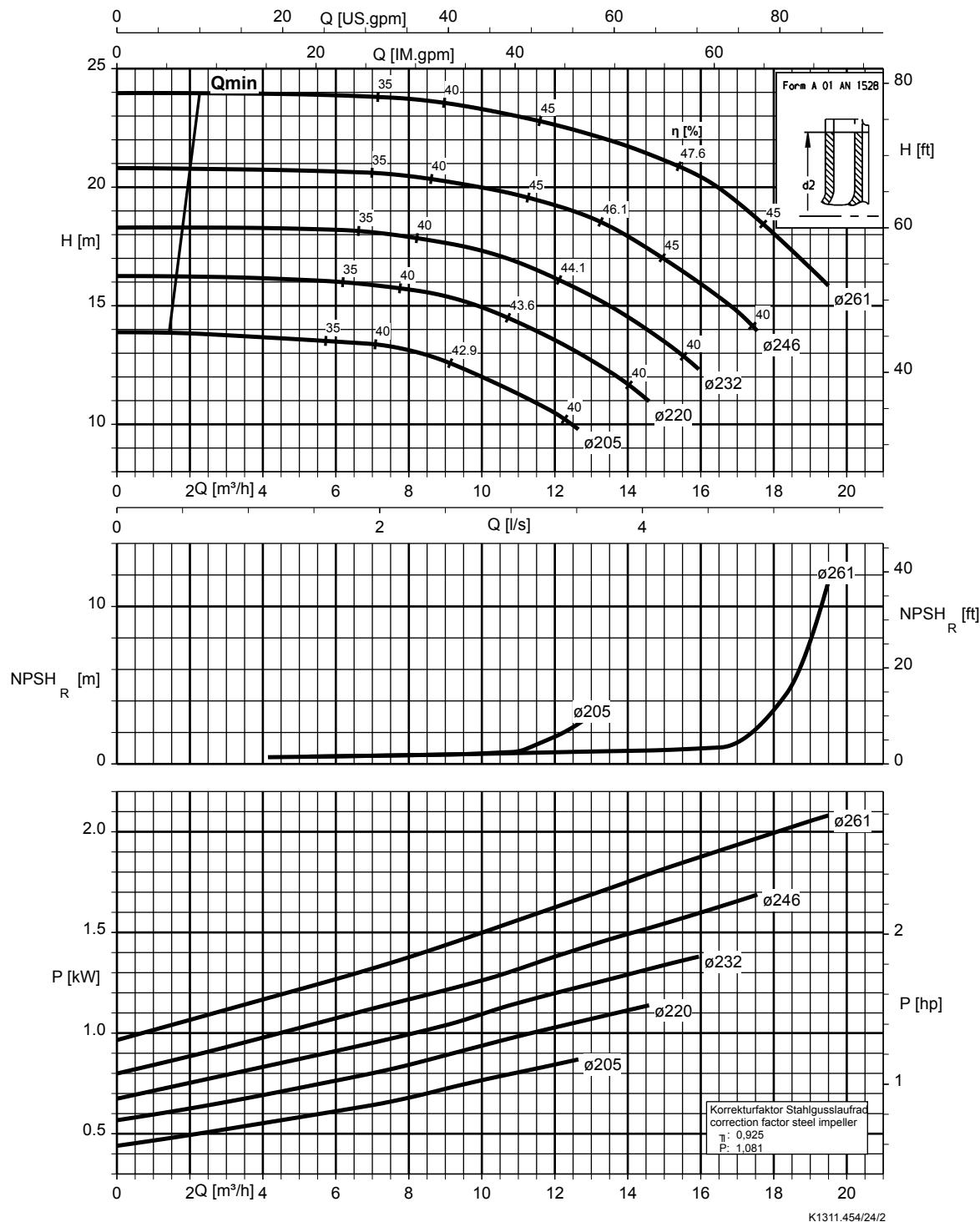
Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



K1311.454/23/1

**Etanorm 050-032-250, n = 1 450 t/min**

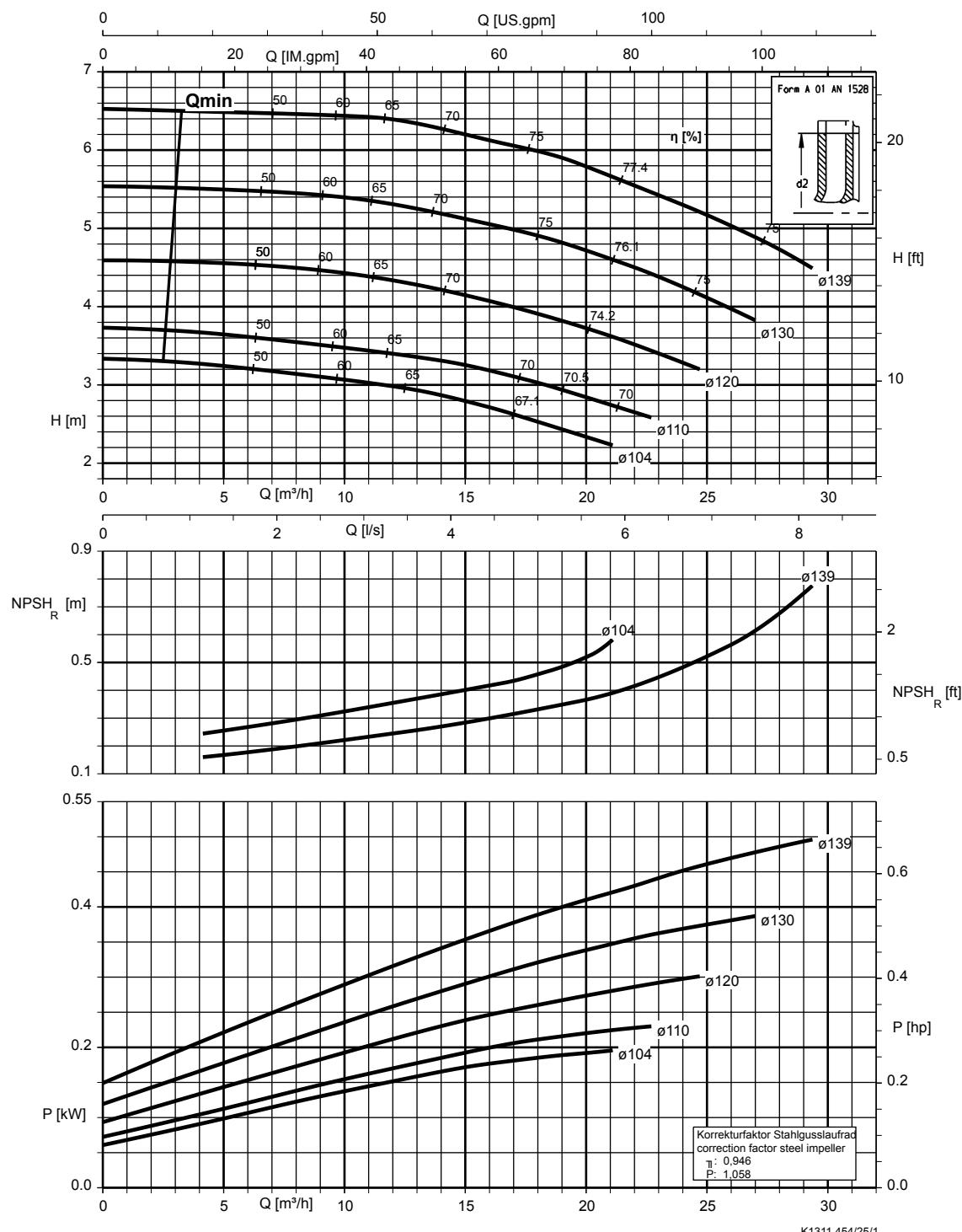
Etanorm SYT, Etanorm V, Etabloc



K1311.454/24/2

Etanorm 065-040-125,  $n = 1\,450$  t/min

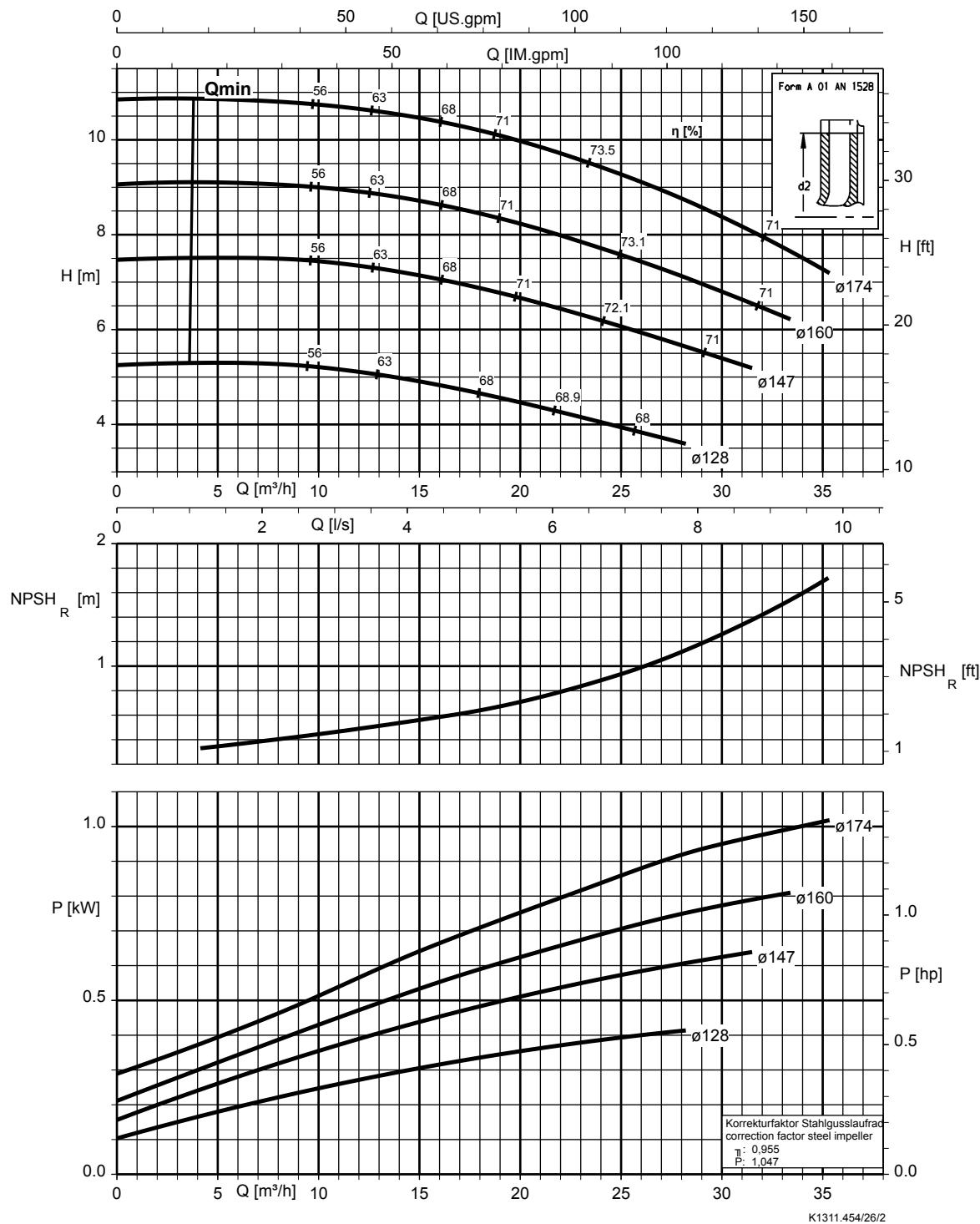
Etanorm V, Etabloc



K1311.454/25/1

**Etanorm 065-040-160, n = 1 450 t/min**

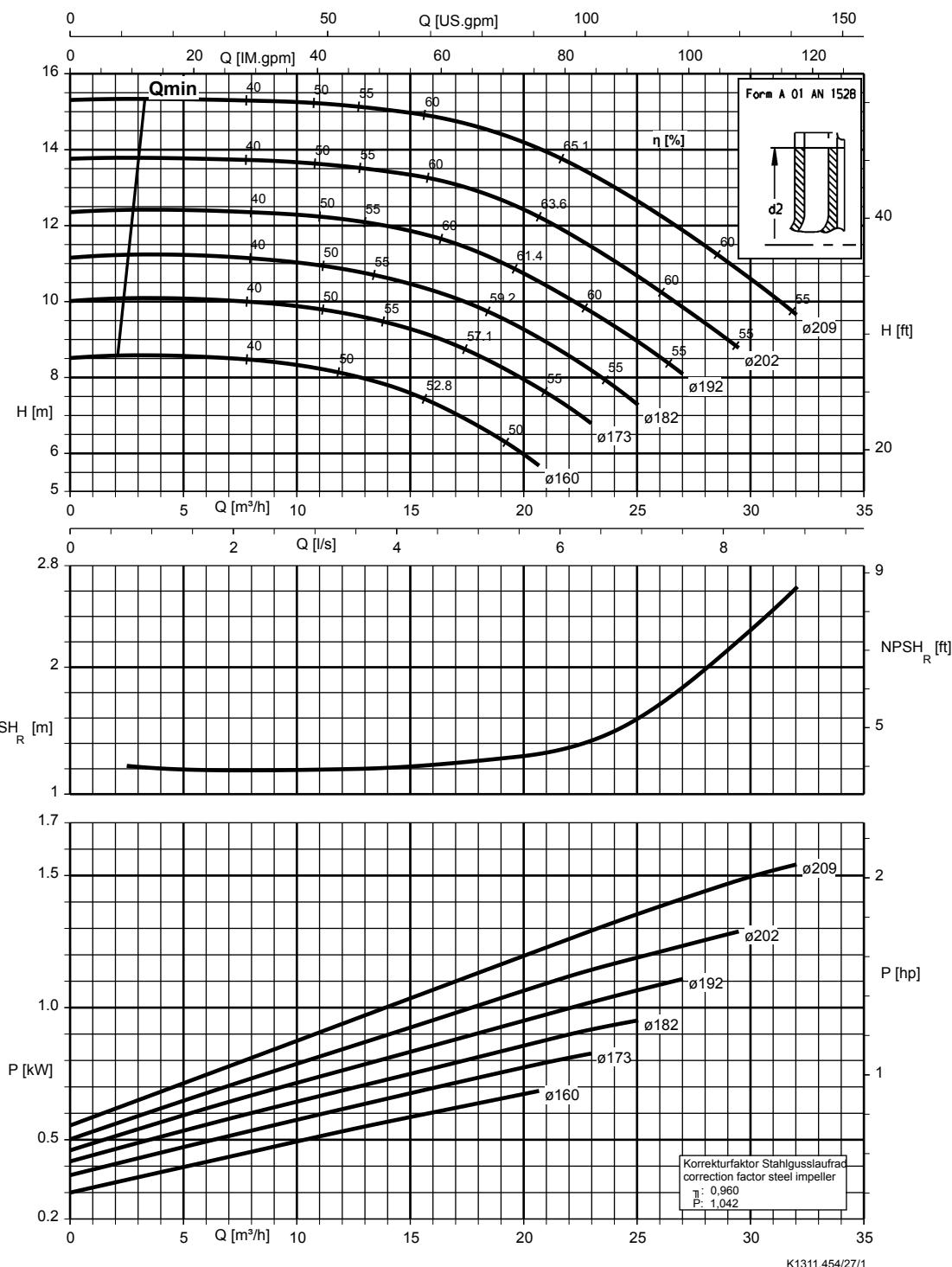
Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



K1311.454/26/2

**Etanorm 065-040-200, n = 1 450 t/min**

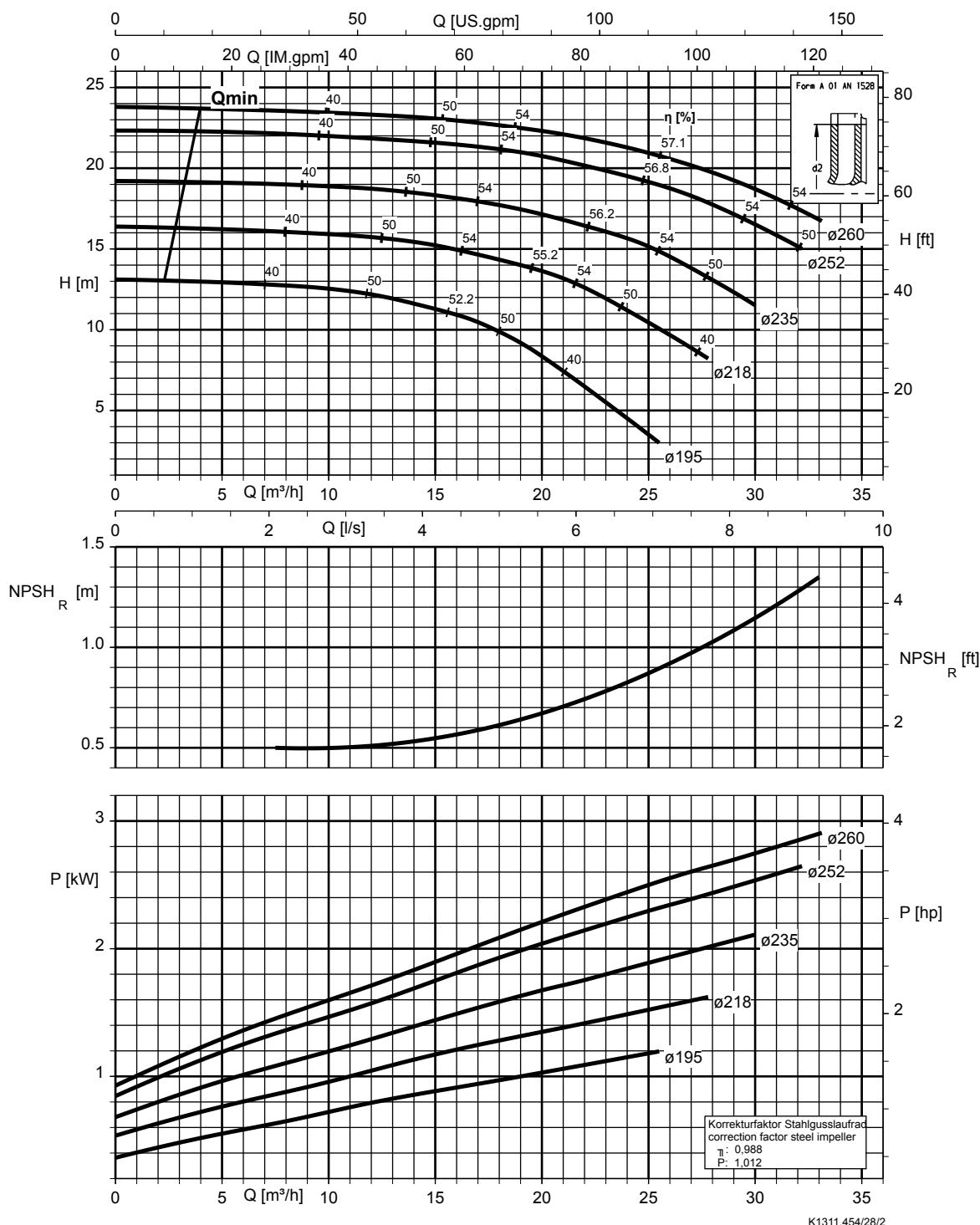
Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



K1311.454/27/1

**Etanorm 065-040-250, n = 1 450 t/min**

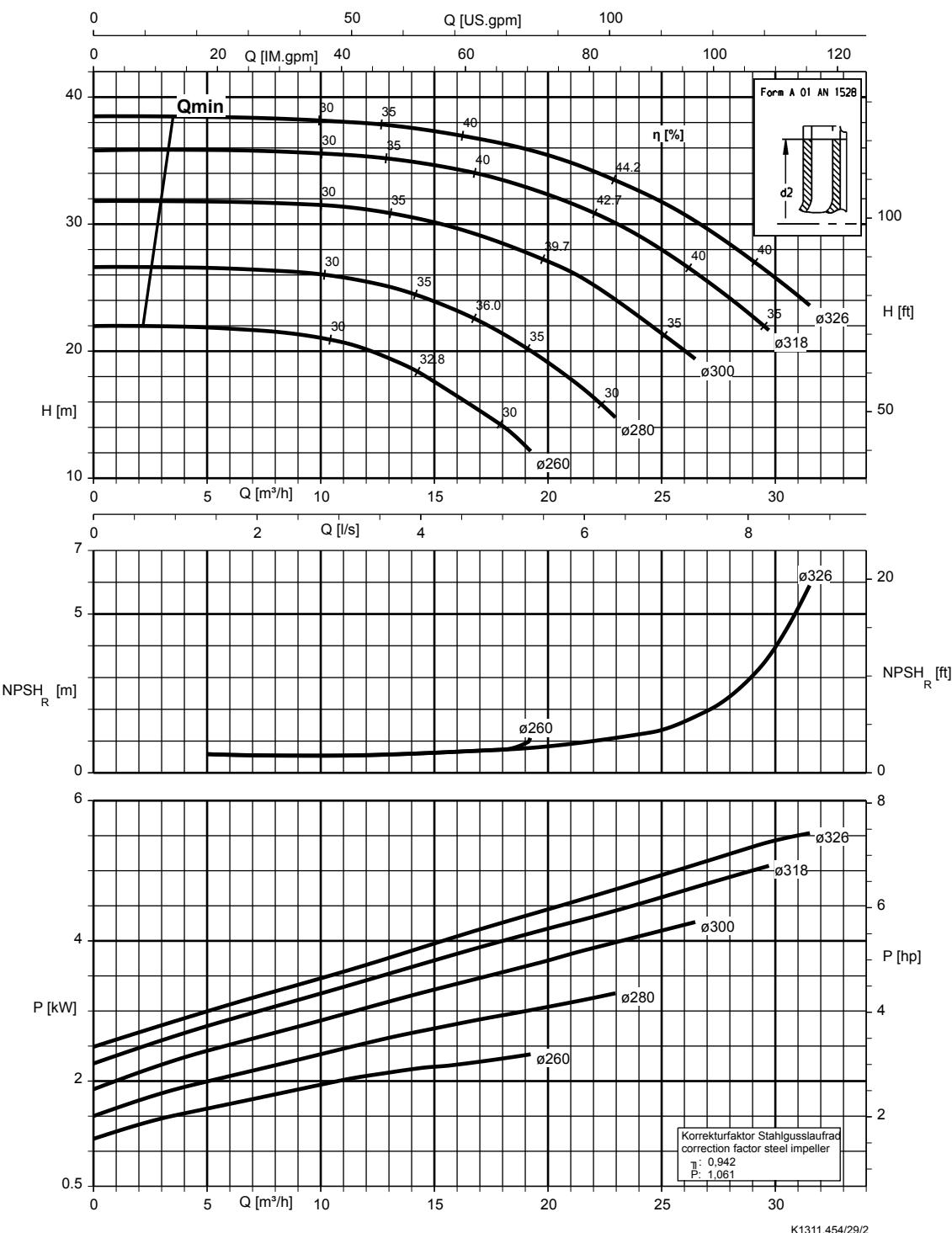
Etanorm SYT, Etanorm V, Etabloc



K1311.454/28/2

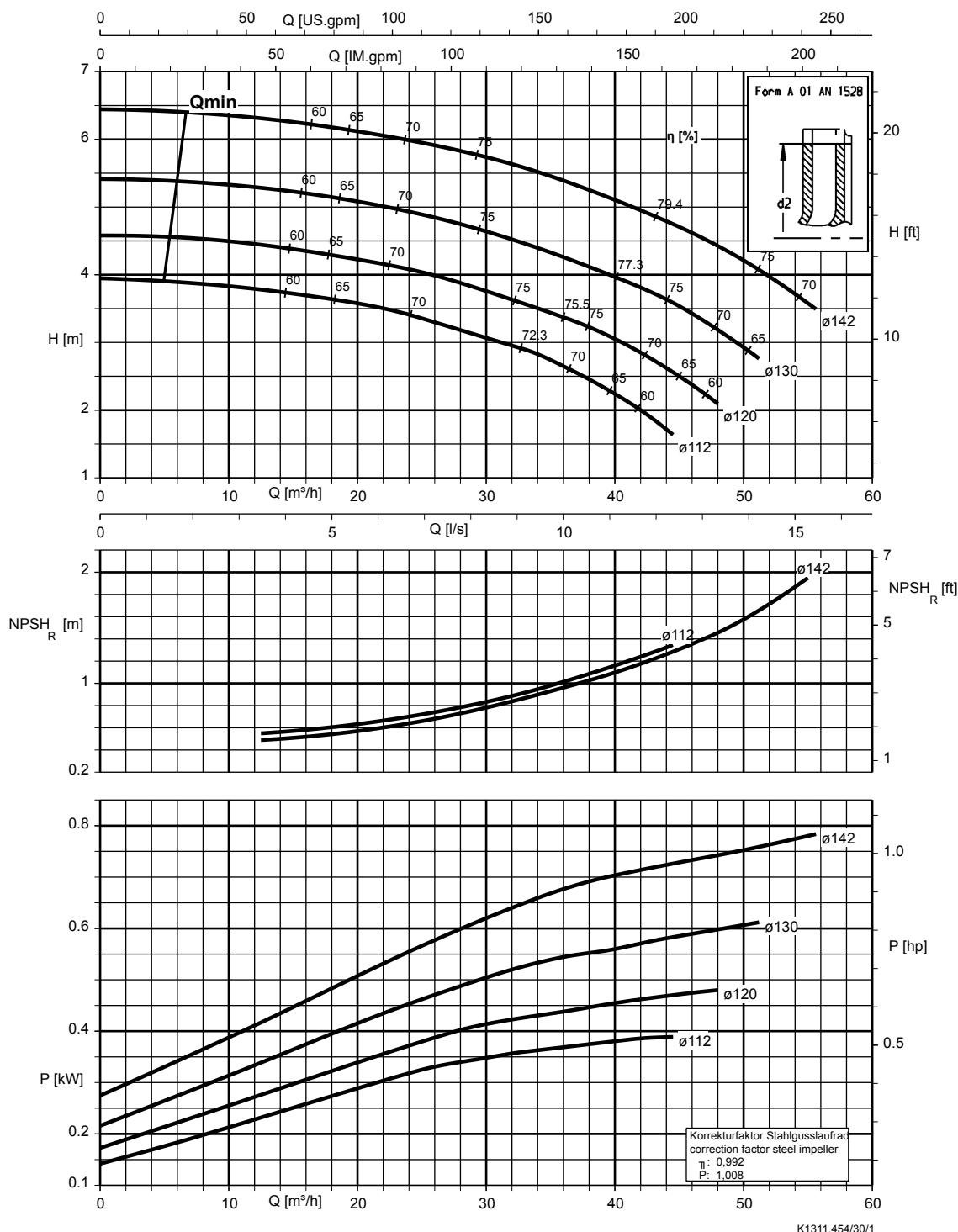
**Etanorm 065-040-315, n = 1 450 t/min**

Etanorm SYT, Etanorm V, Etabloc



Etanorm 065-050-125,  $n = 1\,450 \text{ t/min}$

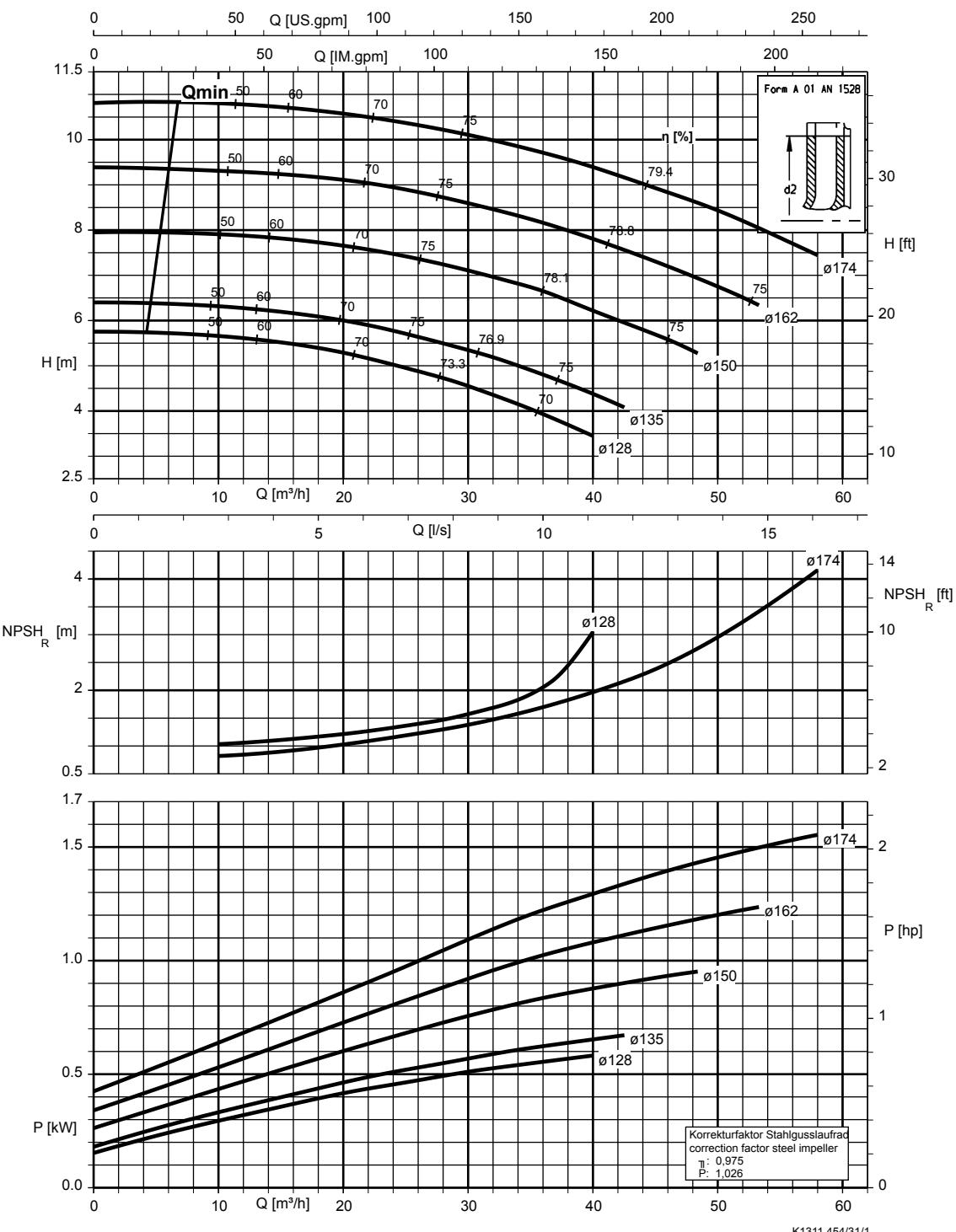
Etanorm V, Etabloc



K1311.454/30/1

**Etanorm 065-050-160, n = 1 450 t/min**

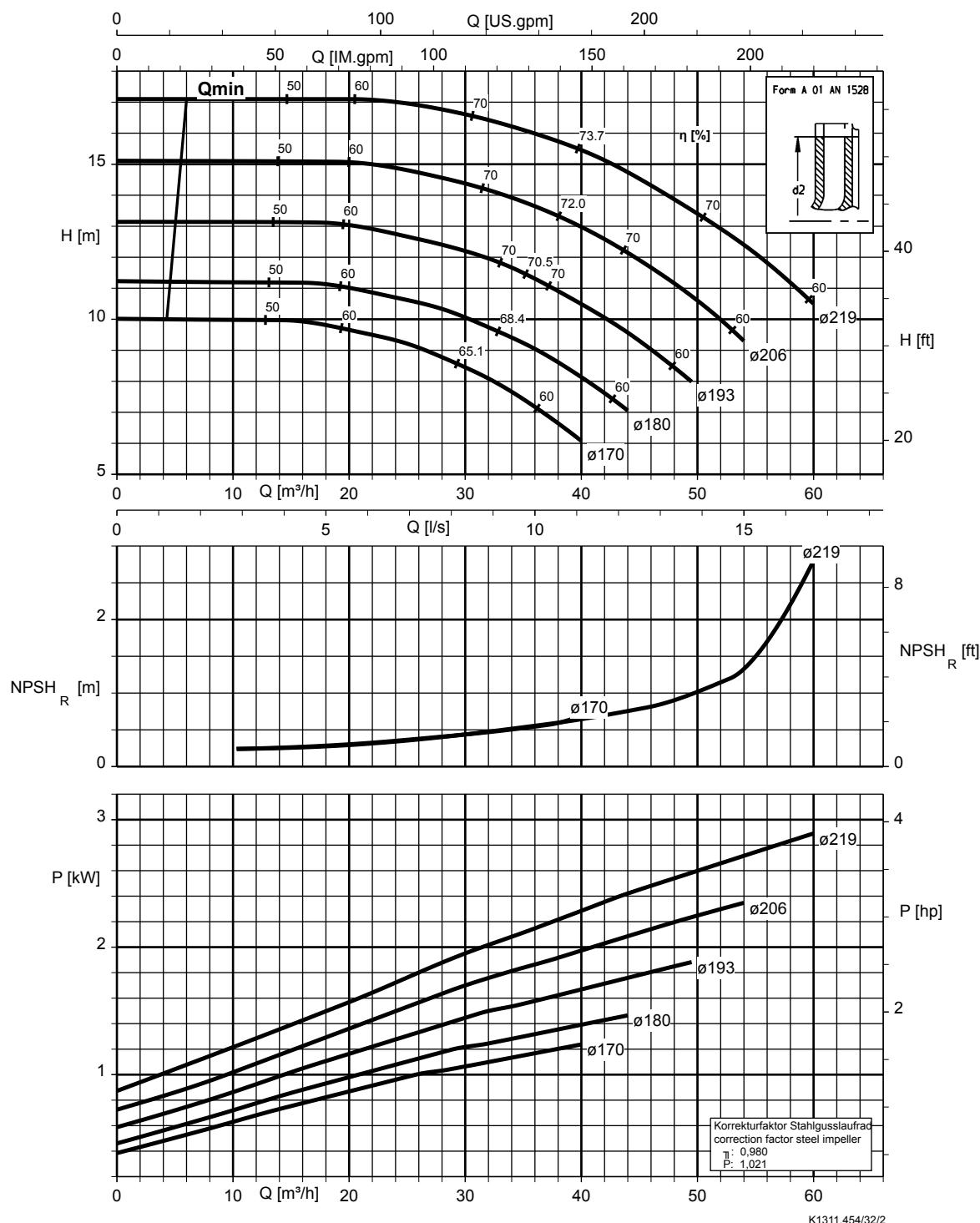
Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



K1311.454/31/1

Etanorm 065-050-200,  $n = 1\,450 \text{ t/min}$

Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT

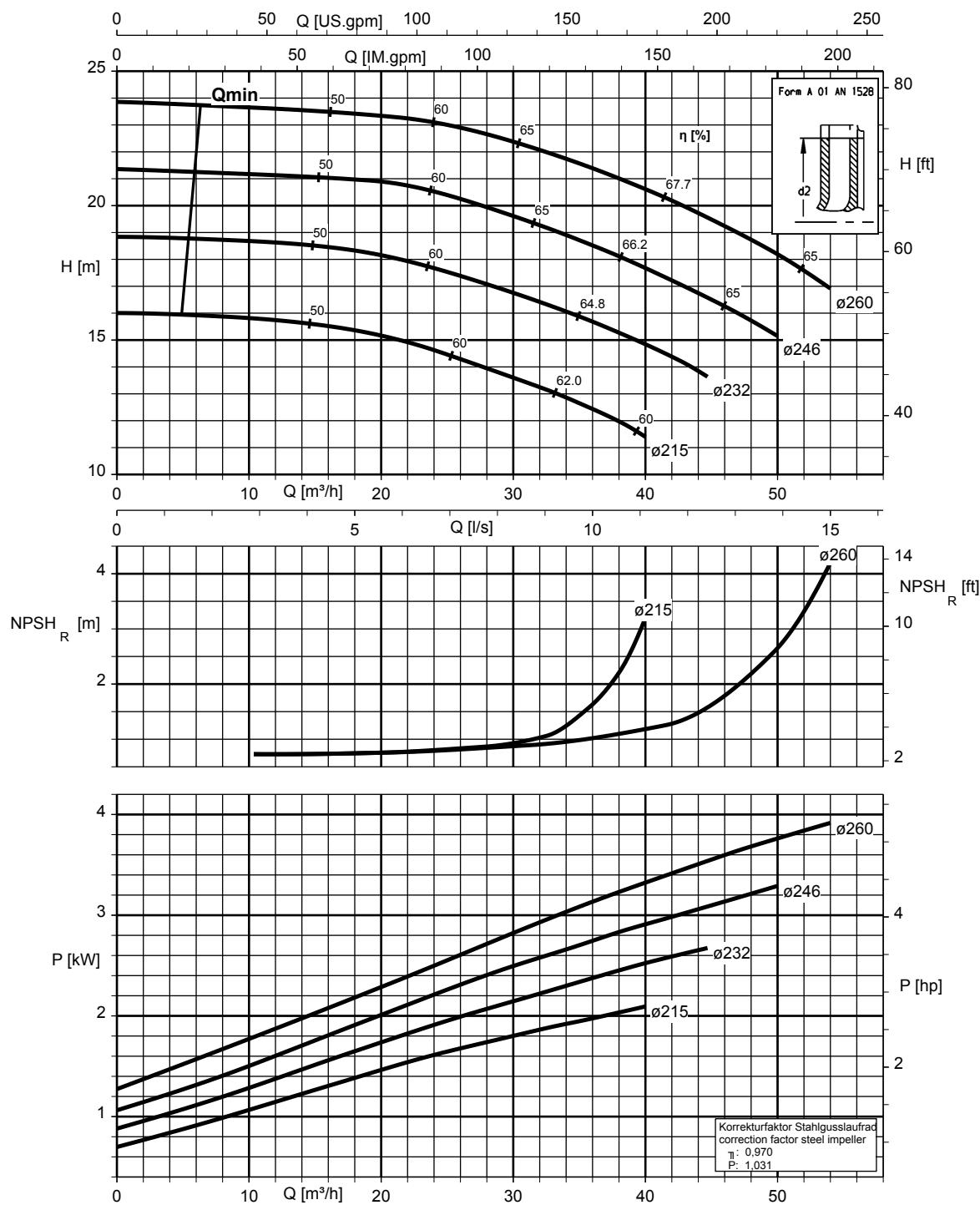


Korrekturfaktor Stahlgusslauffrad  
correction factor steel impeller  
 $\eta$ : 0.980  
P: 1.021

K1311.454/32/2

**Etanorm 065-050-250, n = 1 450 t/min**

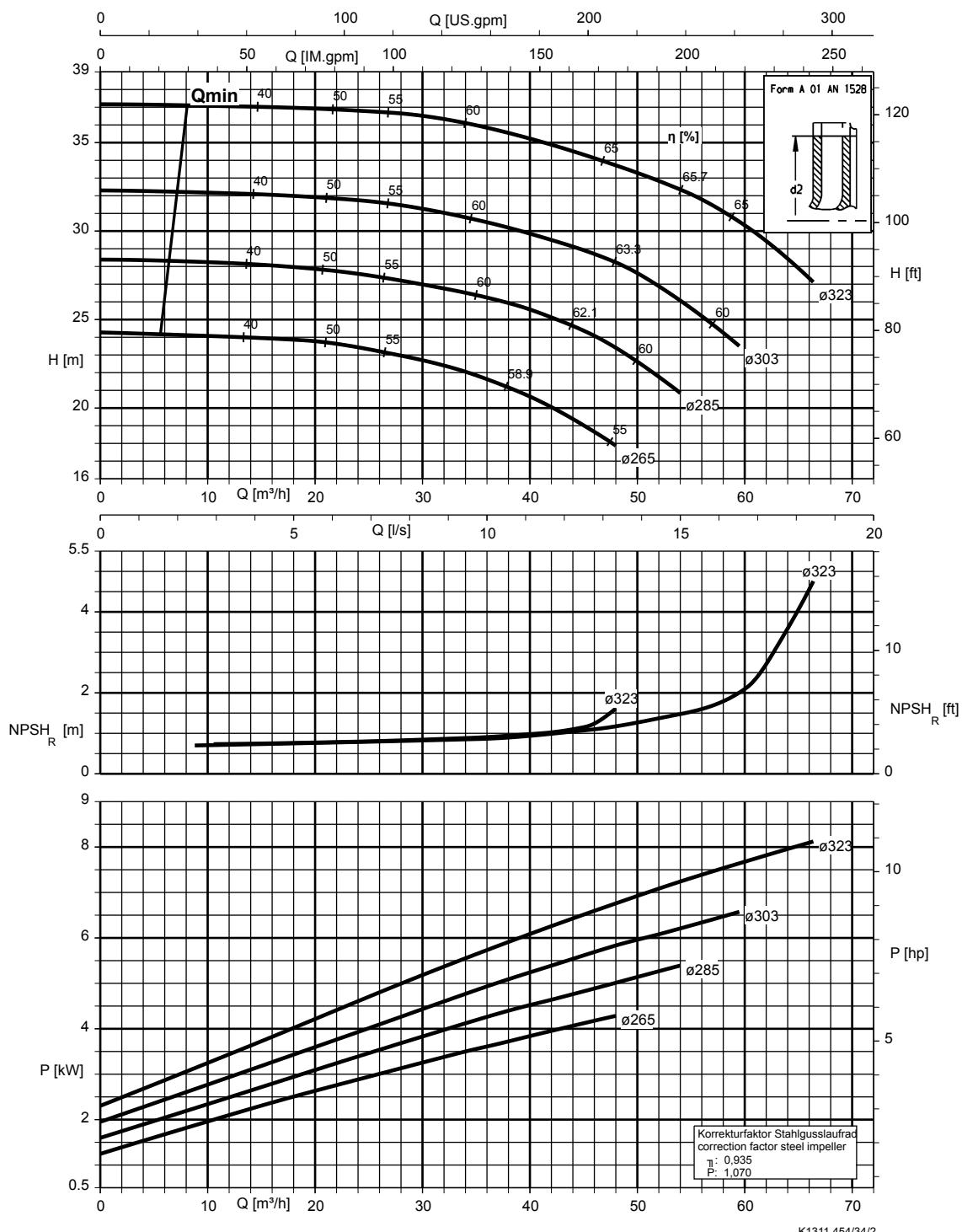
Etanorm SYT, Etanorm V, Etabloc



K1311.454/33/2

**Etanorm 065-050-315, n = 1 450 t/min**

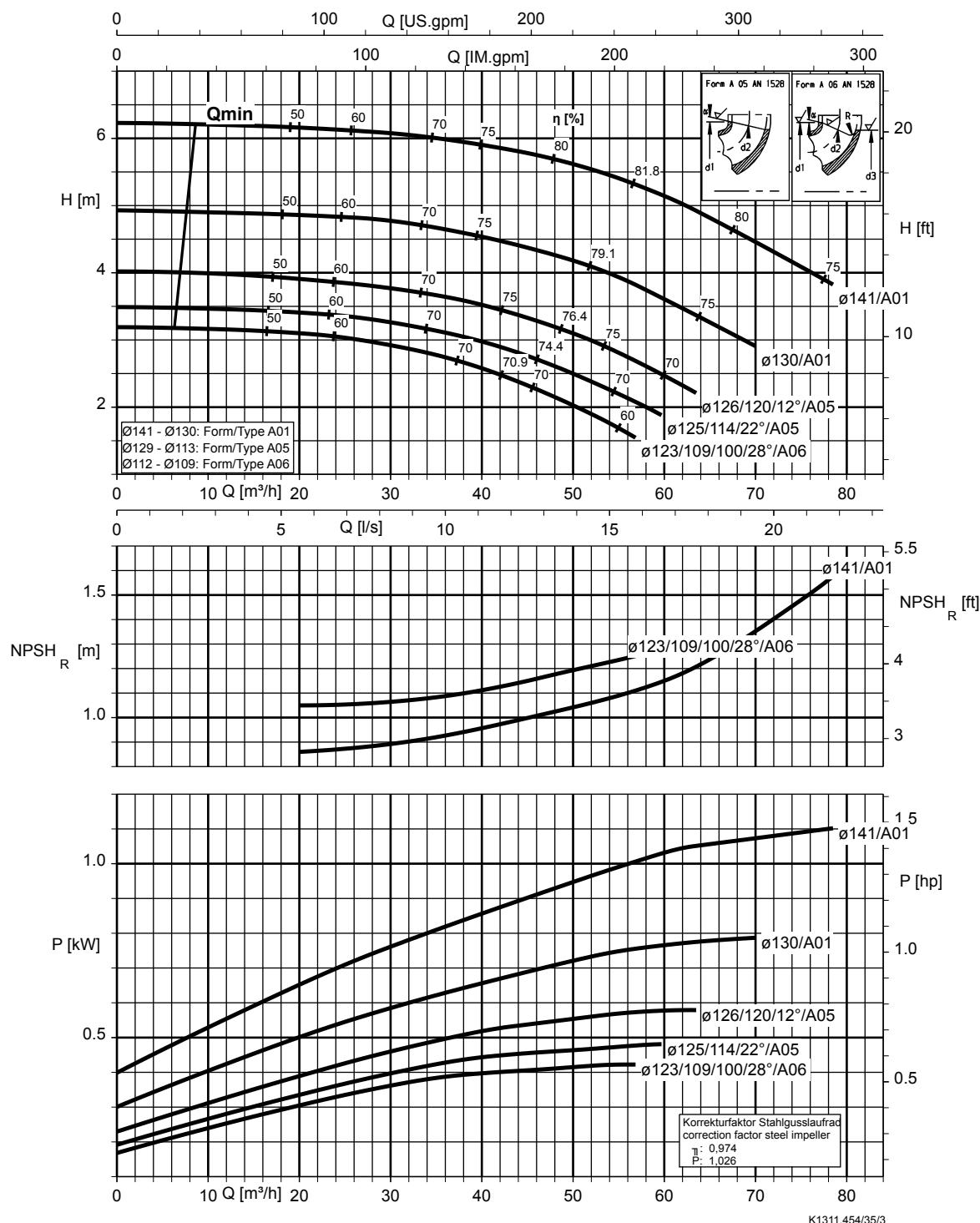
Etanorm SYT, Etanorm V, Etabloc



K1311.454/34/2

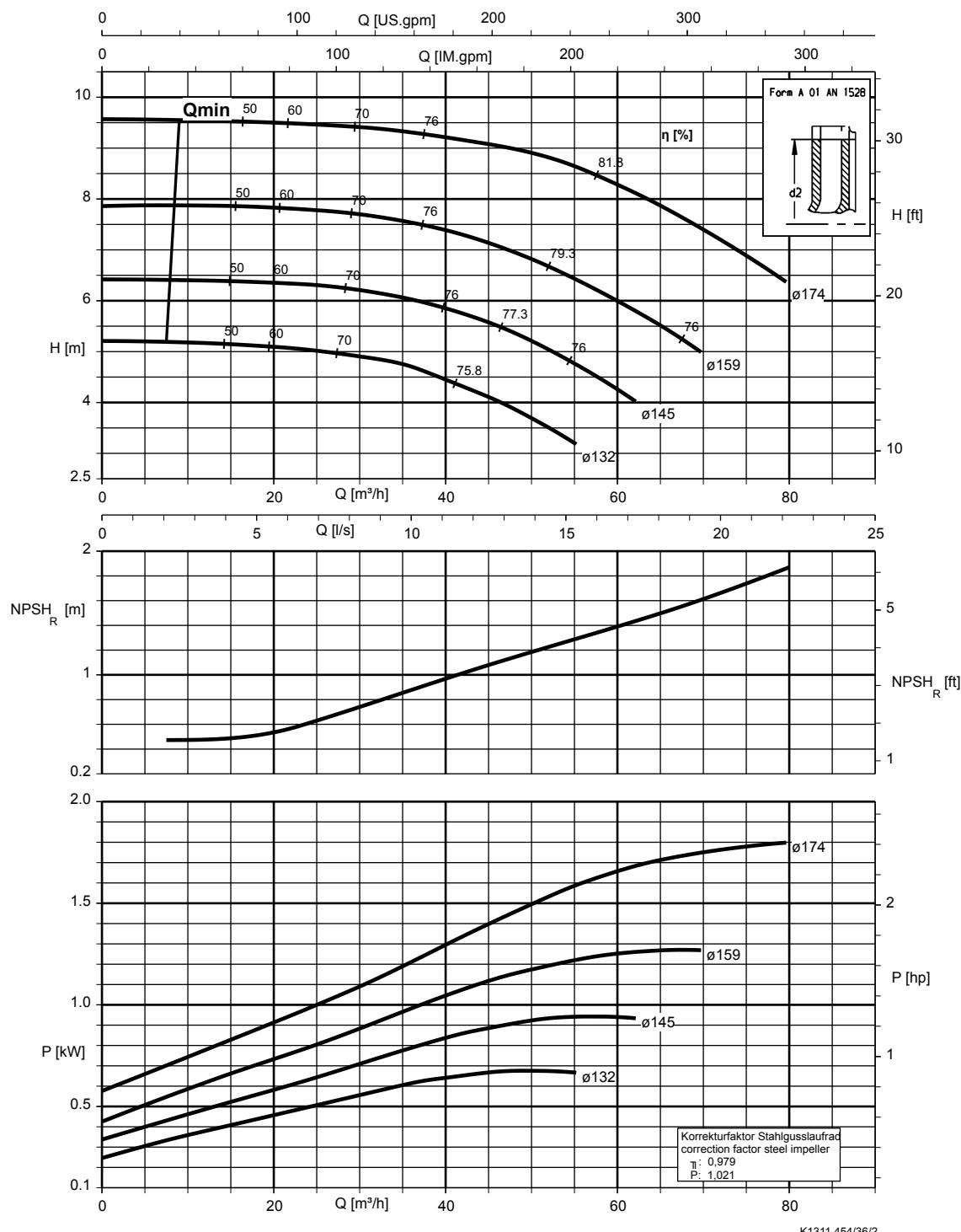
Etanorm 080-065-125, n = 1 450 t/min

Etanorm V, Etabloc



**Etanorm 080-065-160, n = 1 450 t/min**

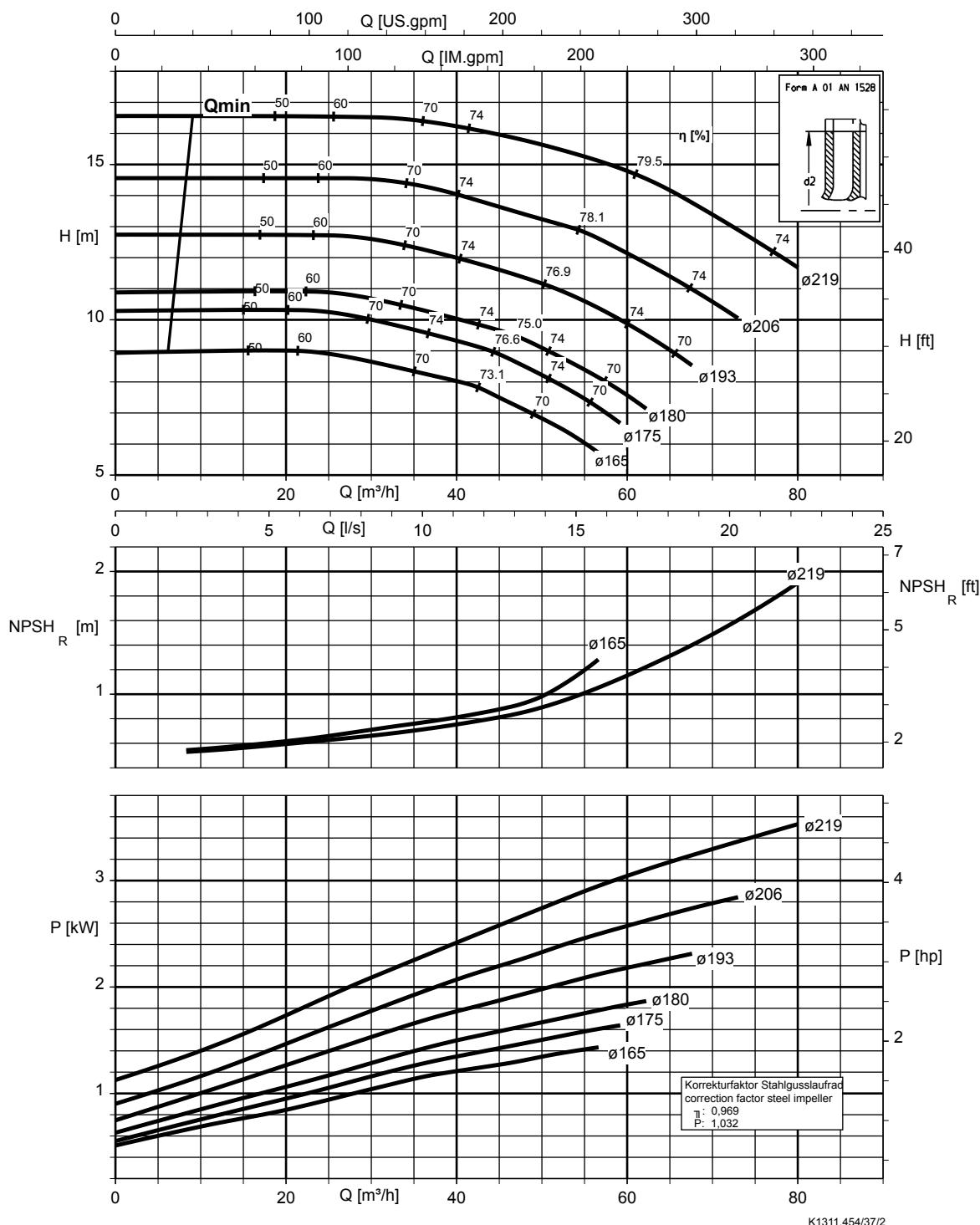
Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



K1311.454/36/2

**Etanorm 080-065-200, n = 1 450 t/min**

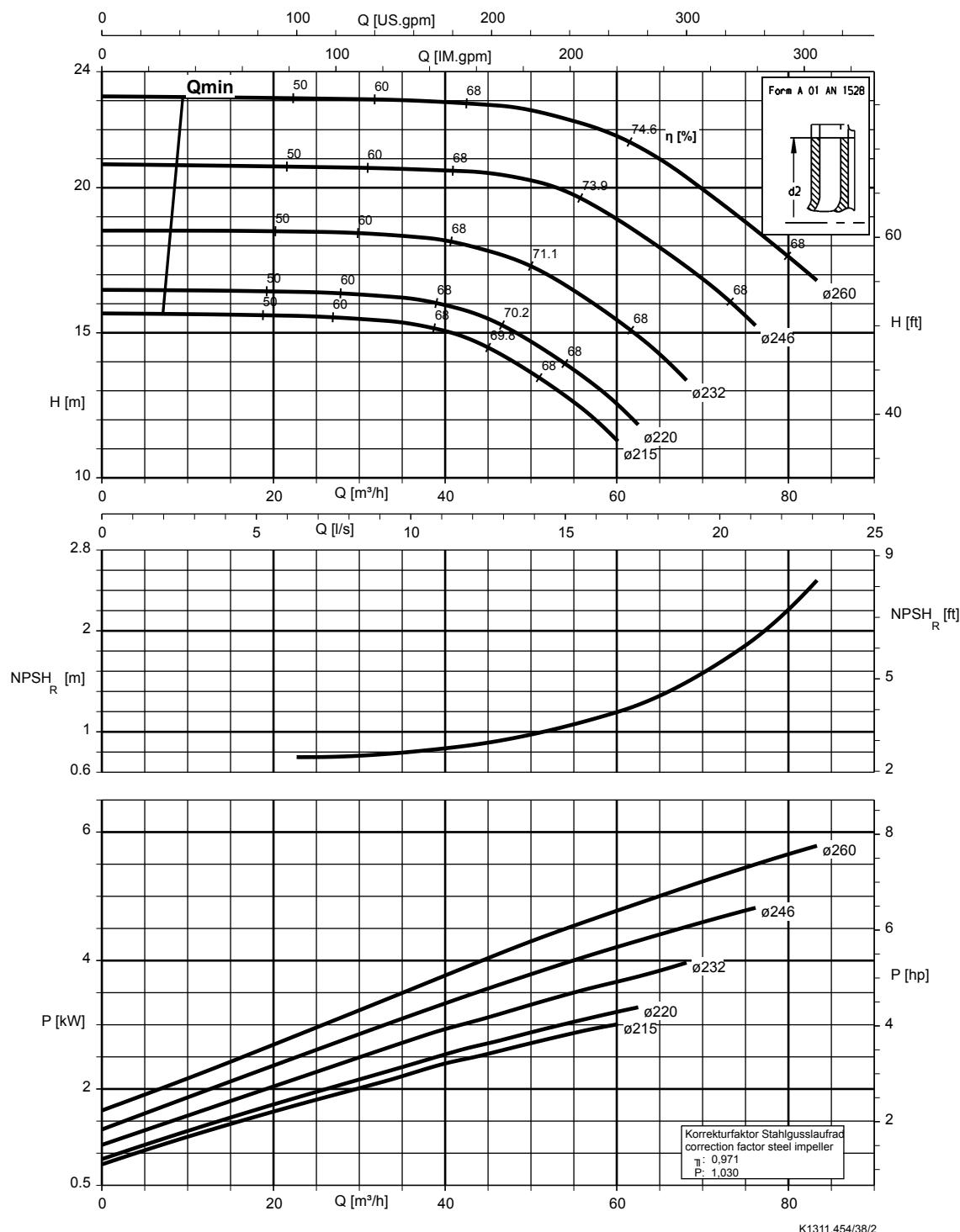
Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



K1311.454/37/2

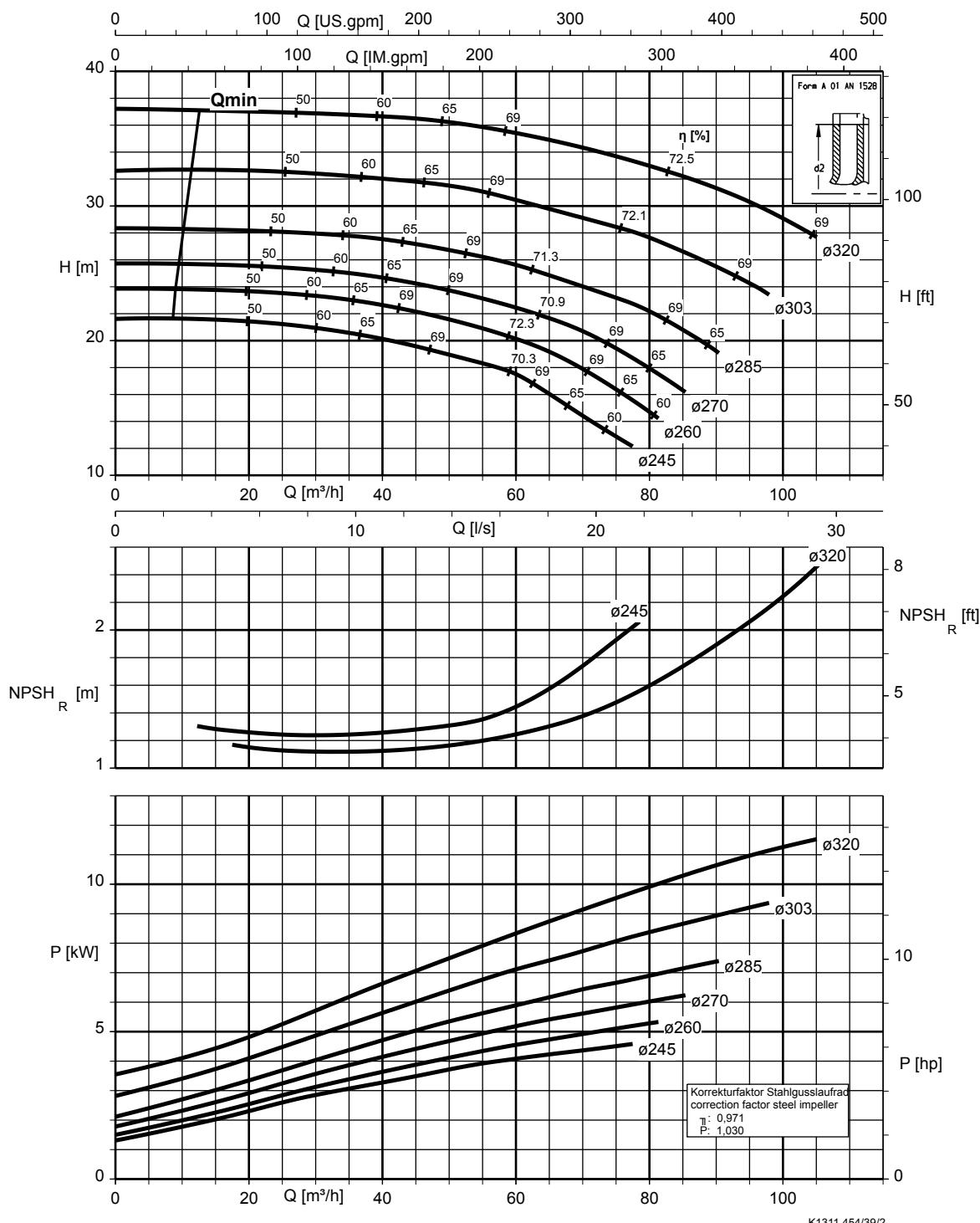
**Etanorm 080-065-250, n = 1 450 t/min**

Etanorm SYT, Etanorm V, Etabloc



**Etanorm 080-065-315, n = 1 450 t/min**

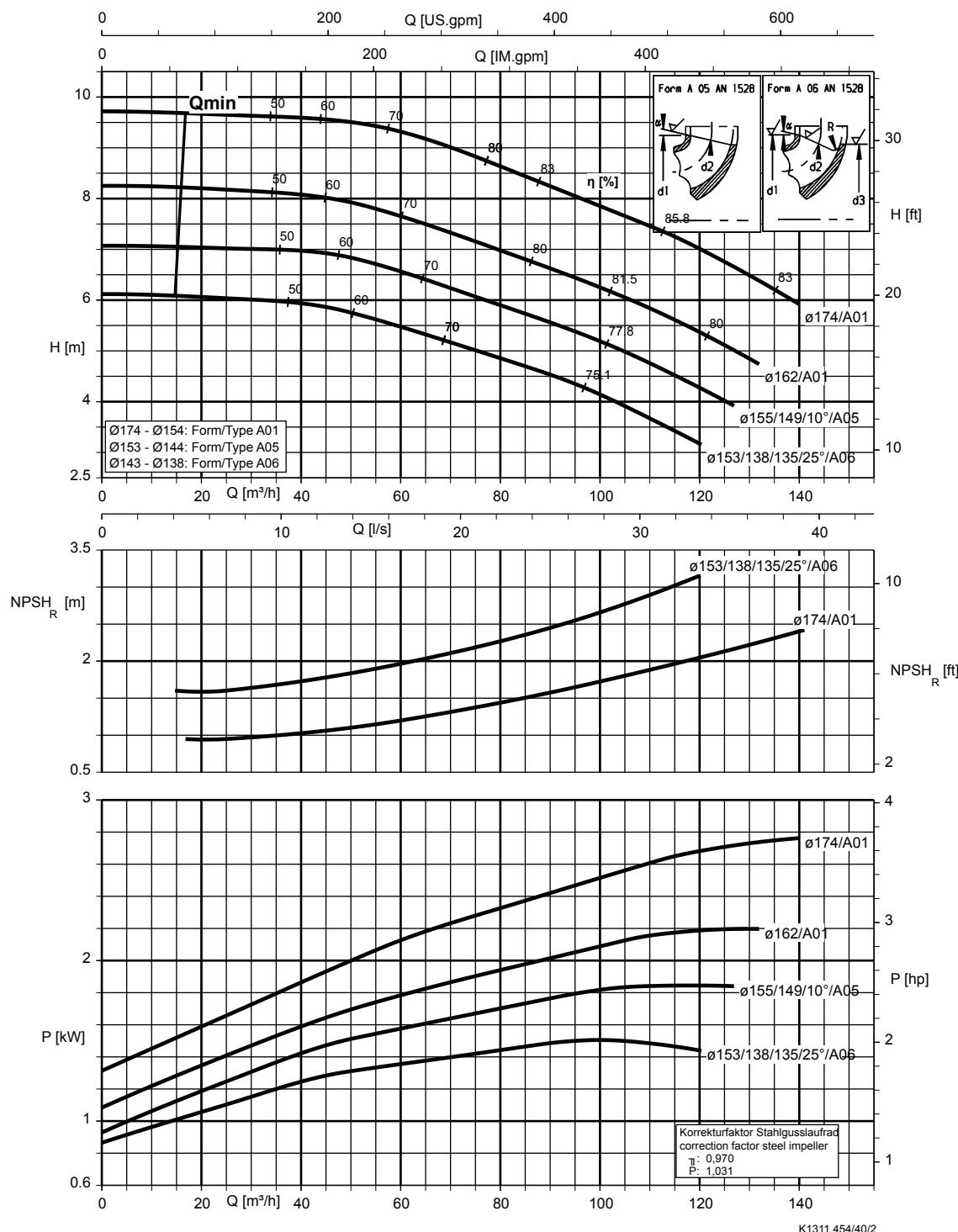
Etanorm SYT, Etanorm V, Etabloc



K1311.454/39/2

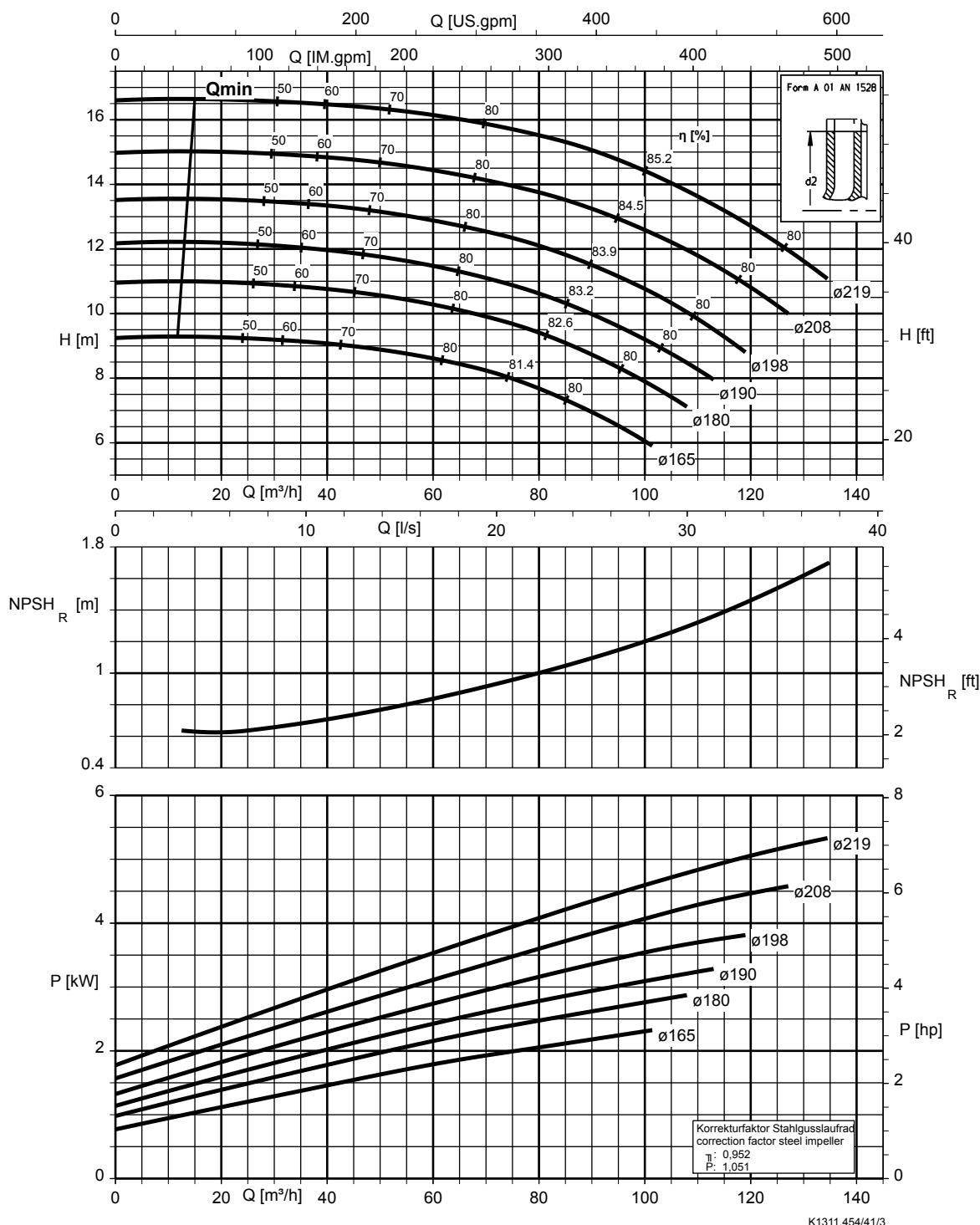
**Etanorm 100-080-160, n = 1 450 t/min**

Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



**Etanorm 100-080-200, n = 1 450 t/min**

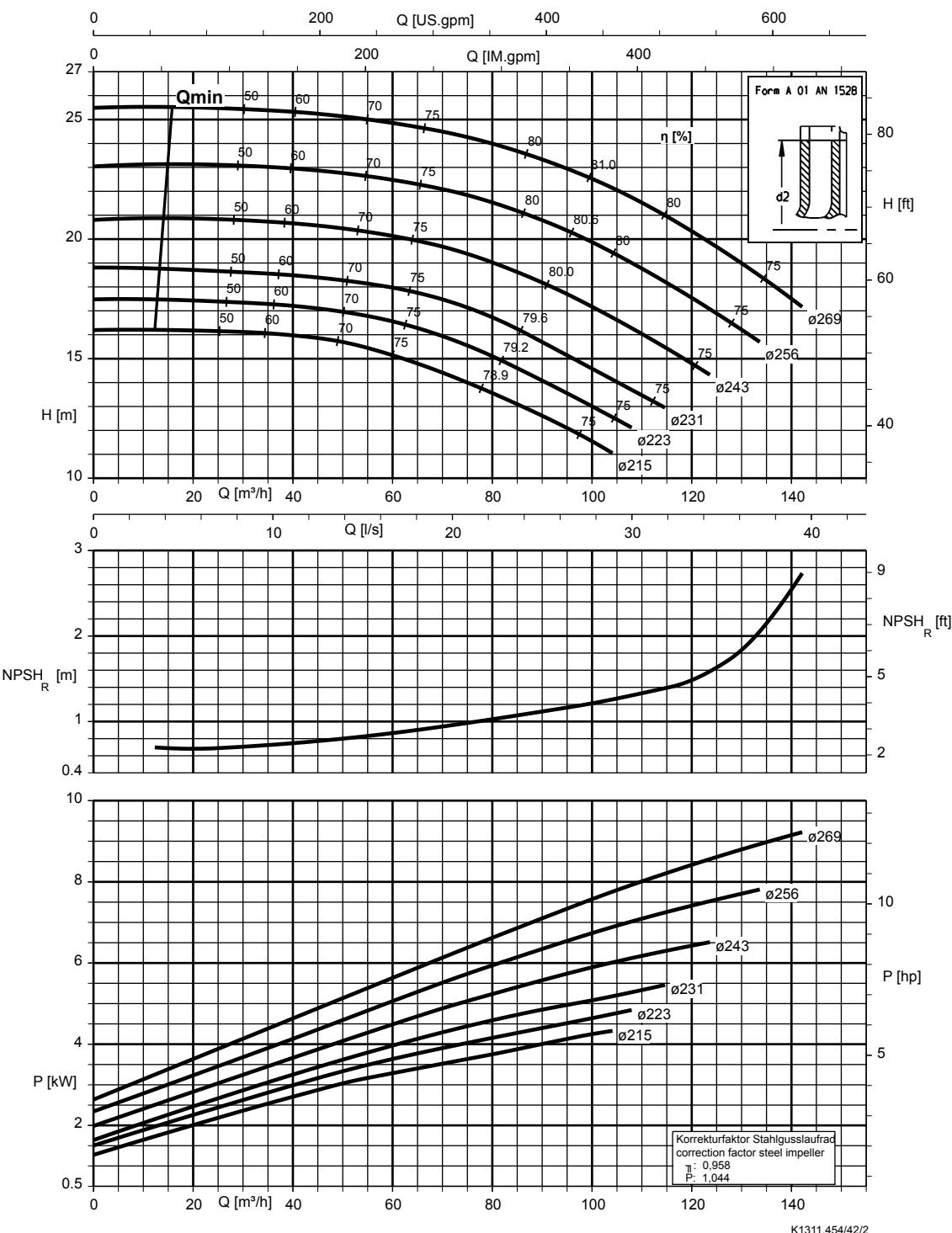
Etanorm SYT, Etanorm V, Etabloc



K1311.454/41/3

**Etanorm 100-080-250, n = 1 450 t/min**

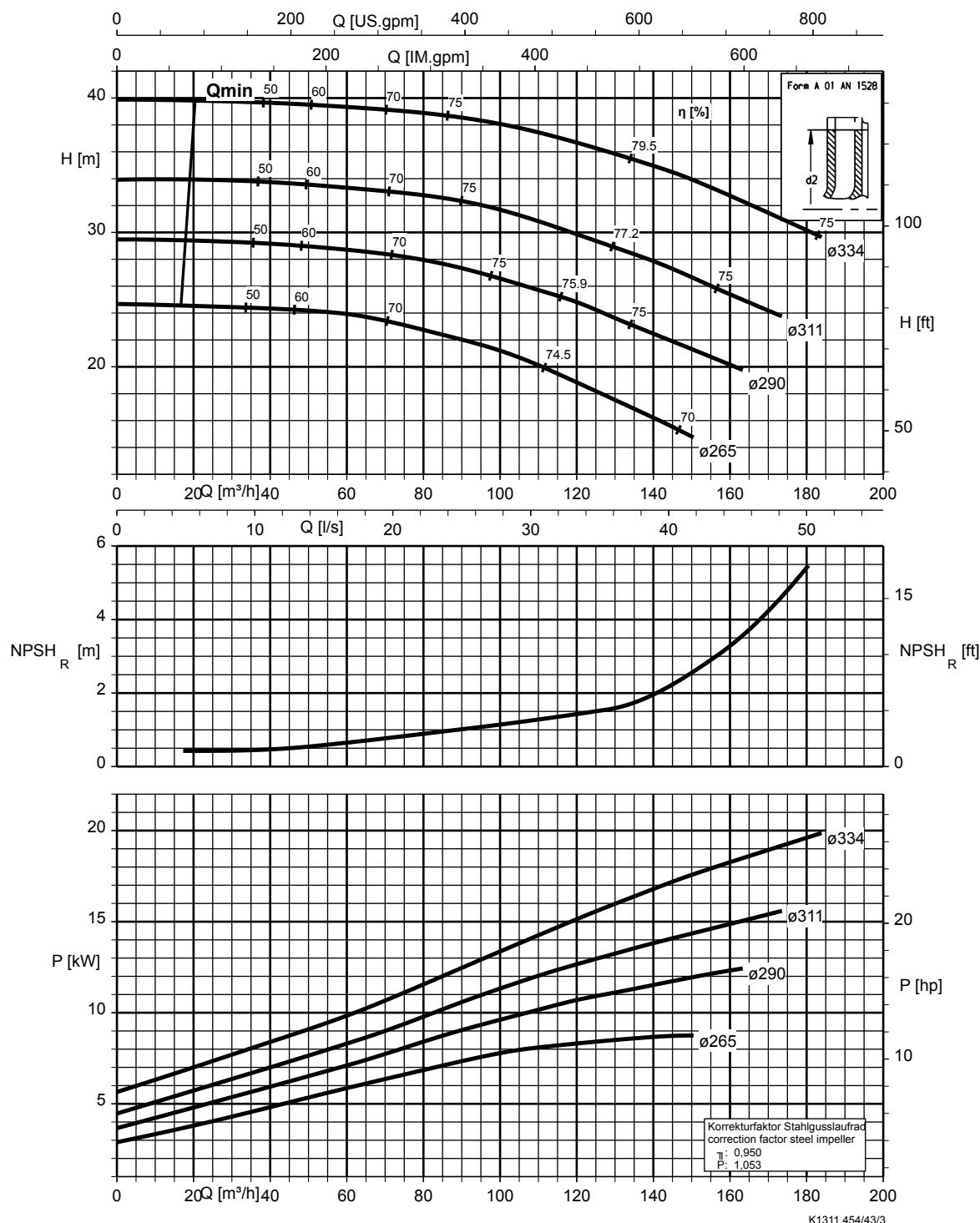
Etanorm SYT, Etanorm V, Etabloc



K1311.454/42/2

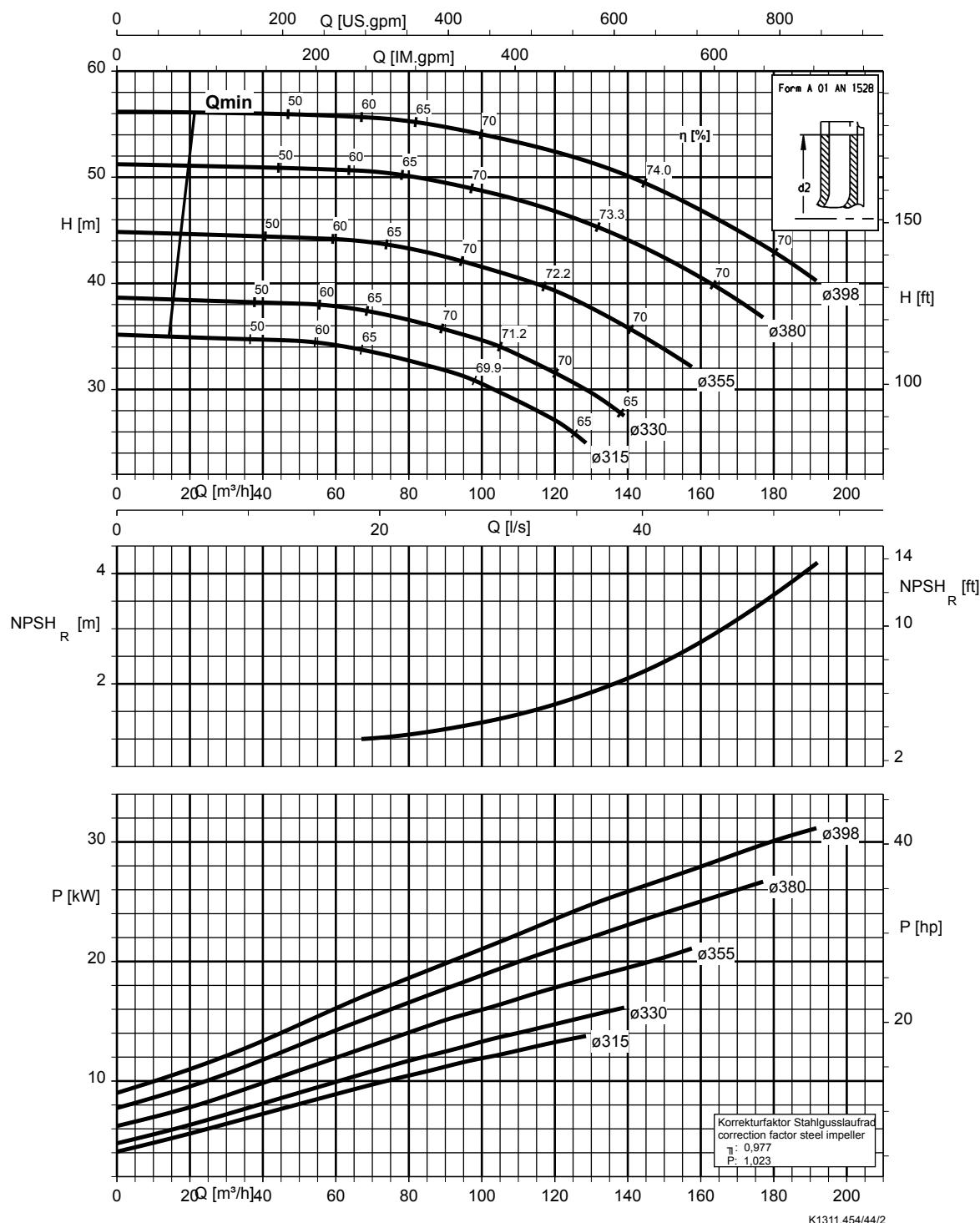
**Etanorm 100-080-315, n = 1 450 t/min**

Etanorm SYT, Etanorm V, Etabloc



Etanorm 100-080-400, n = 1 450 t/min

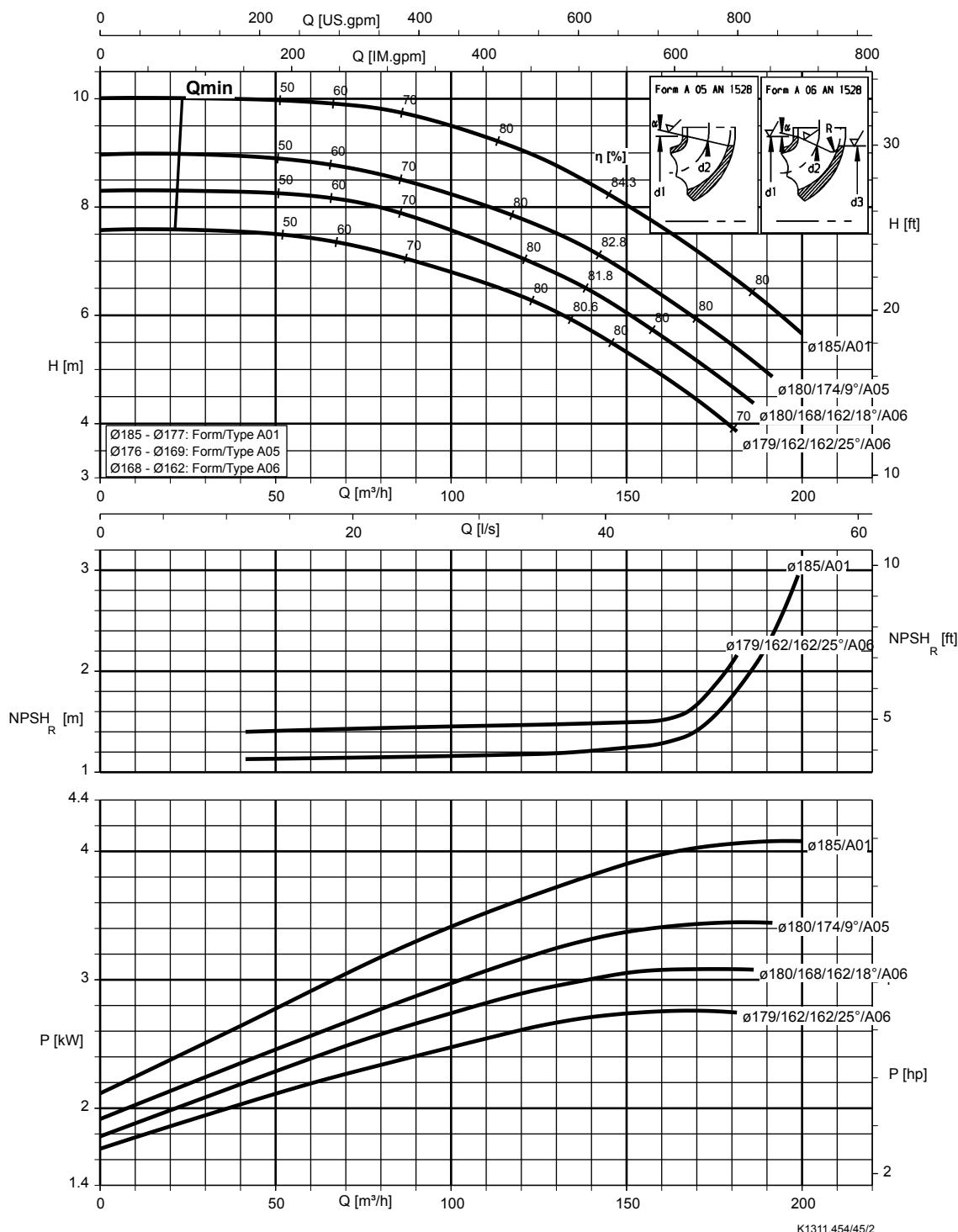
Etanorm V, Etabloc



K1311.454/44/2

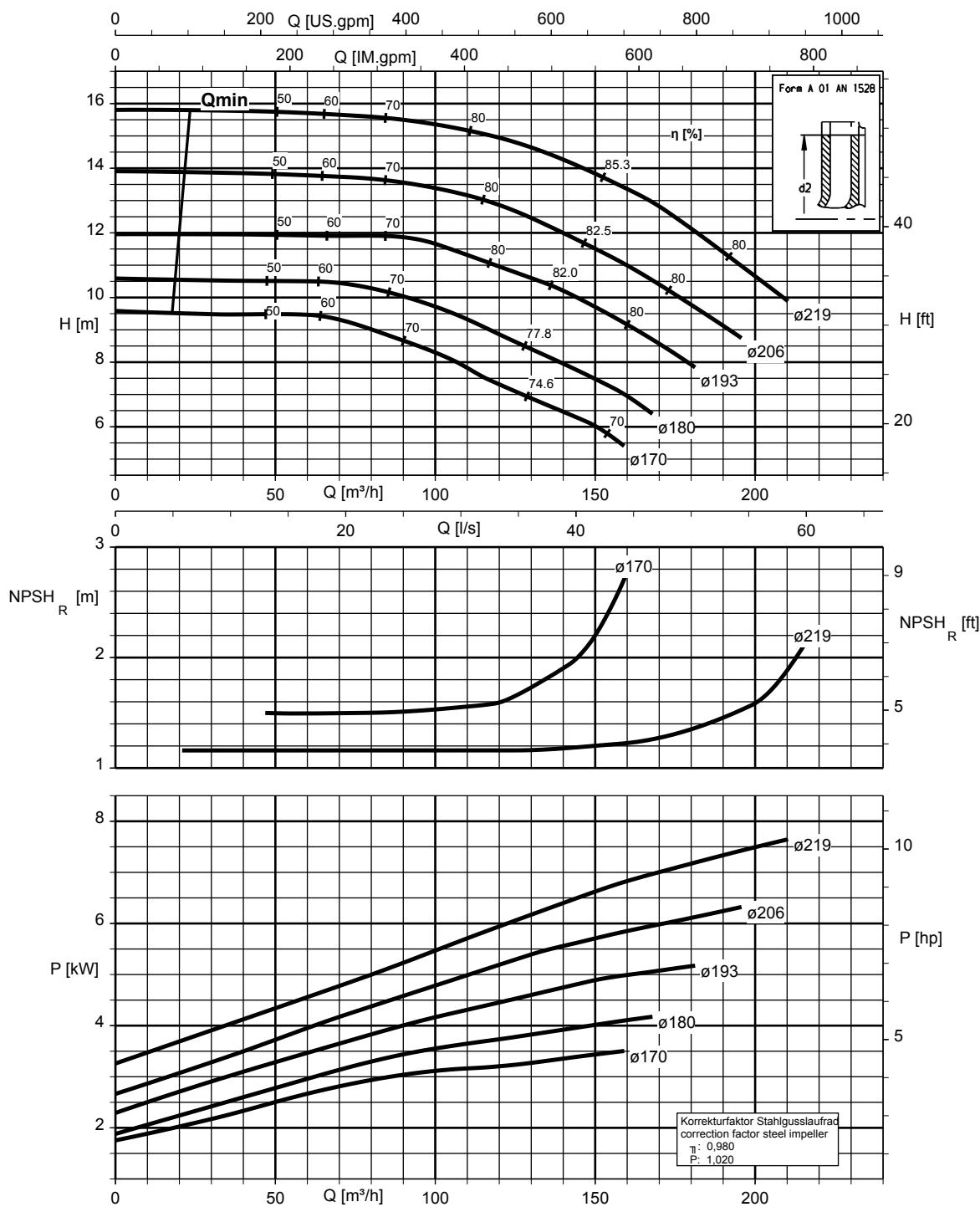
**Etanorm 125-100-160, n = 1 450 t/min**

Etanorm SYT, Etanorm V, Etabloc



**Etanorm 125-100-200, n = 1 450 t/min**

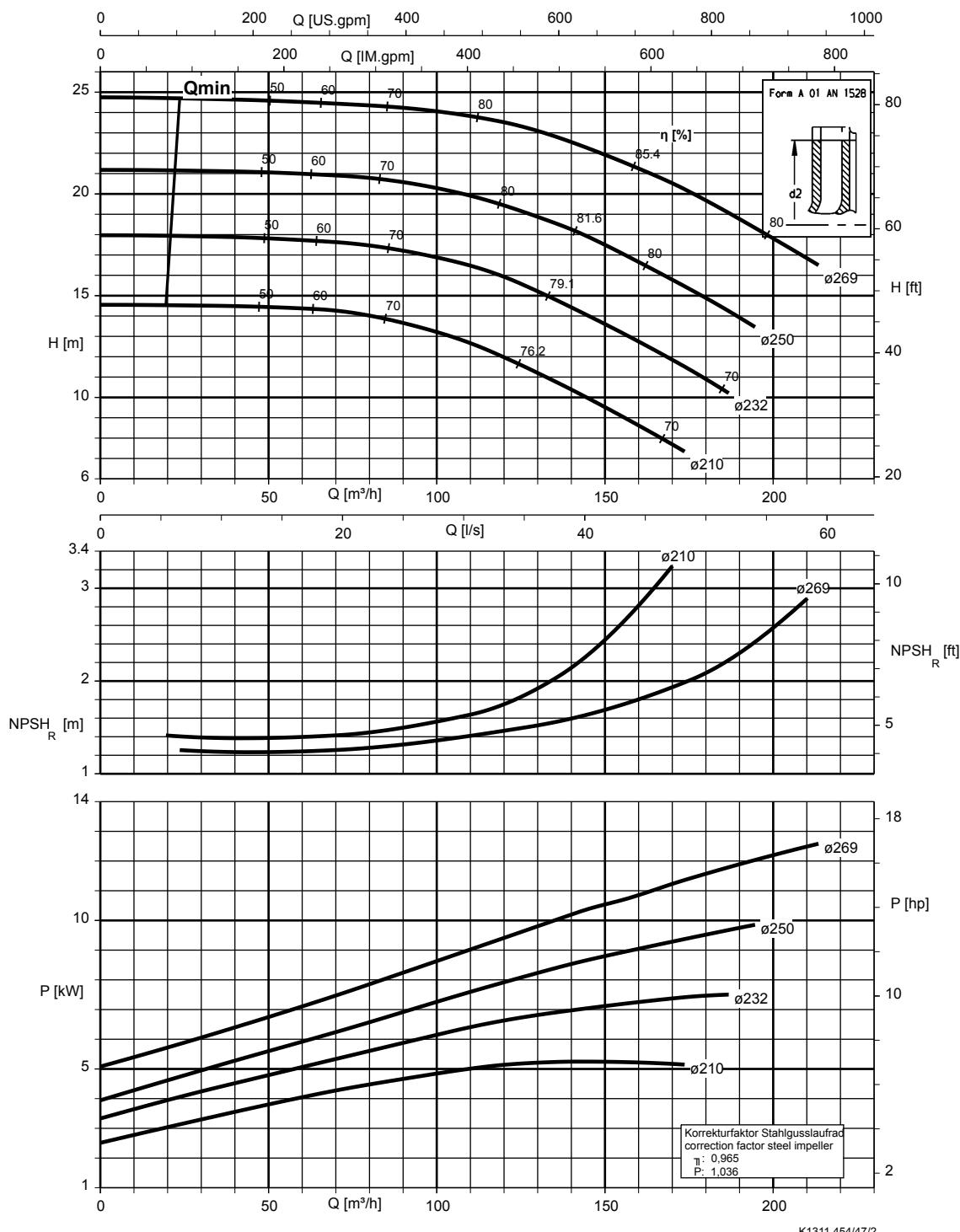
Etanorm SYT, Etanorm V, Etabloc



K1311.454/46/2

**Etanorm 125-100-250, n = 1 450 t/min**

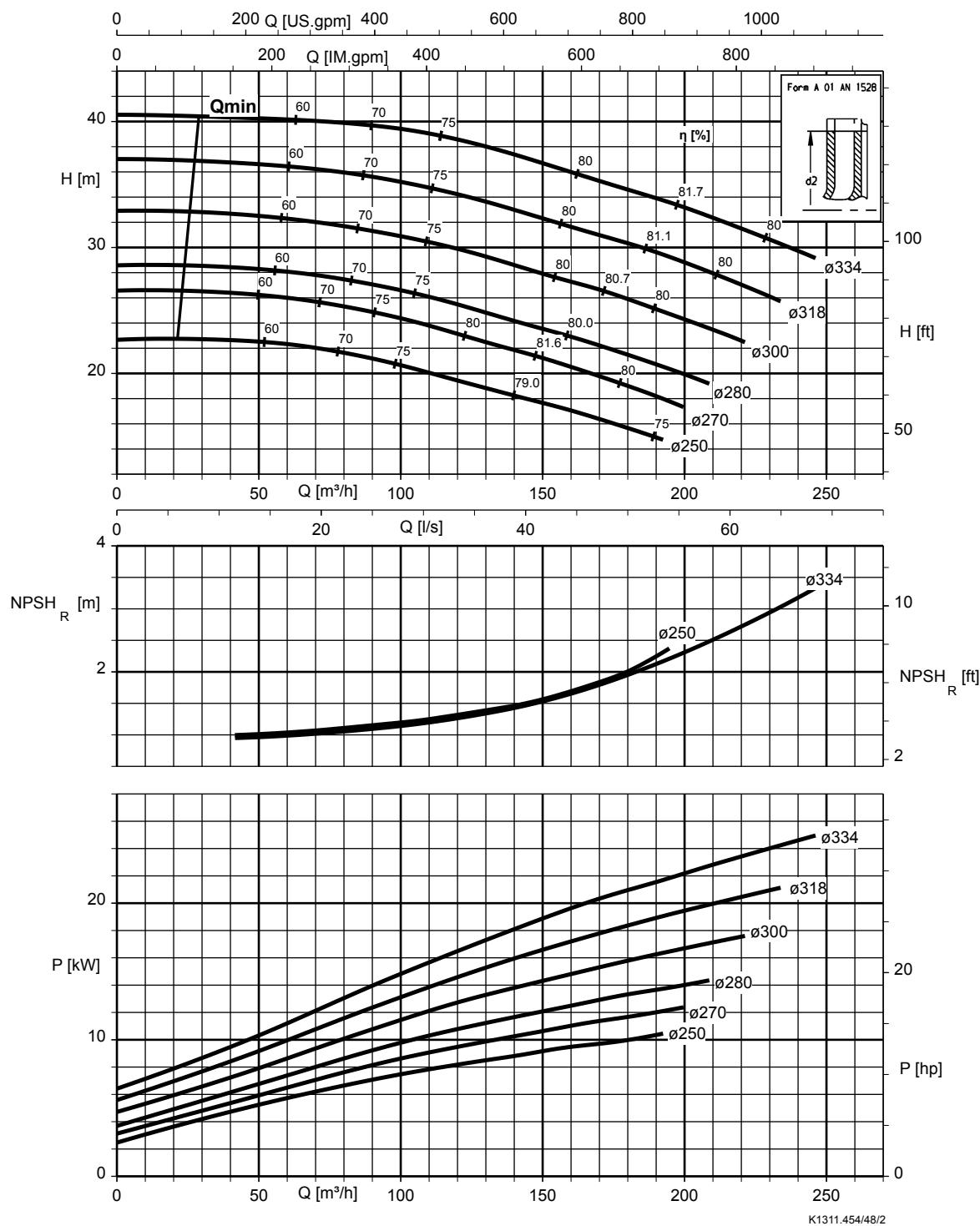
Etanorm SYT, Etanorm V, Etabloc



K1311.454/47/2

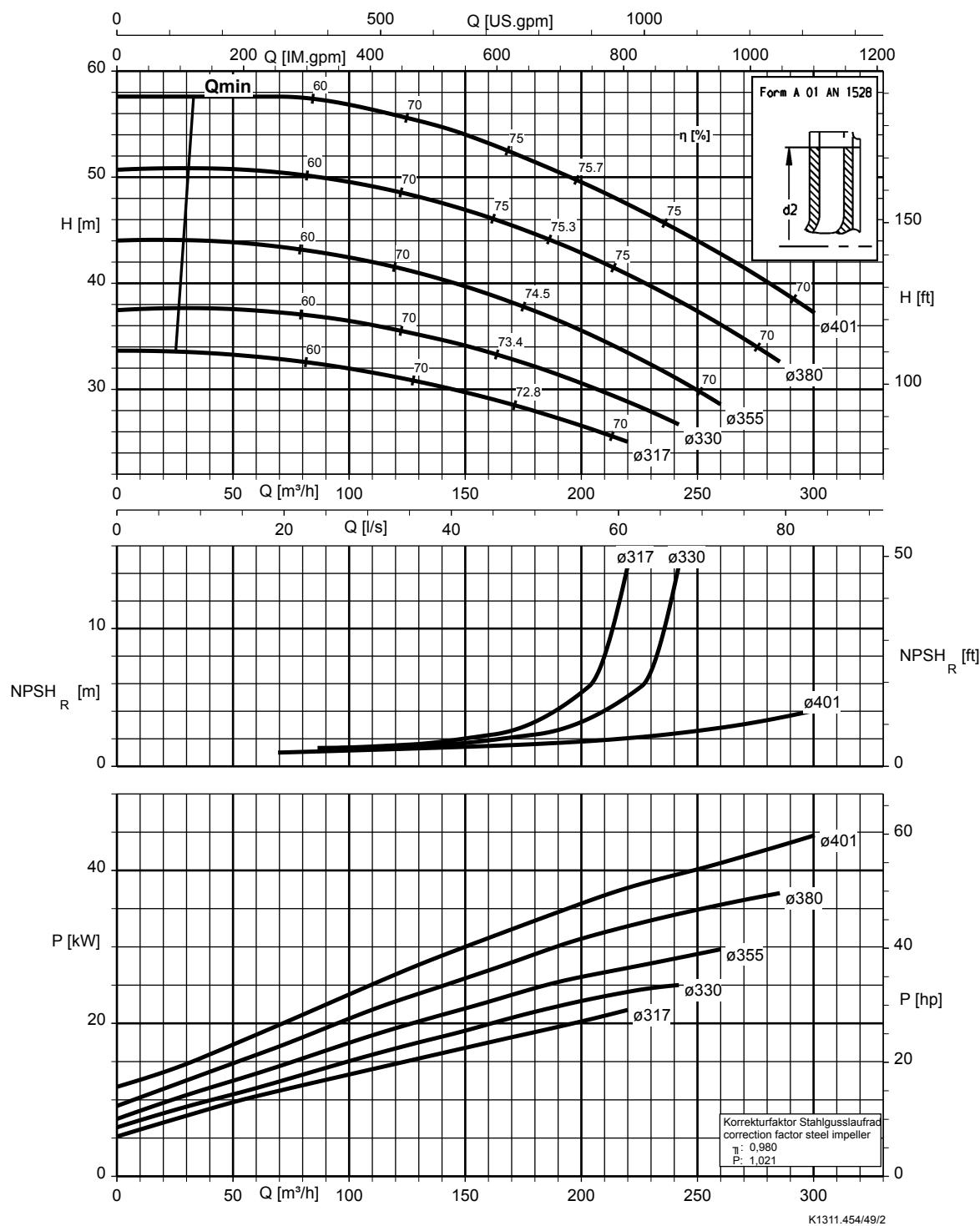
**Etanorm 125-100-315, n = 1 450 t/min**

Etanorm SYT, Etanorm V, Etabloc



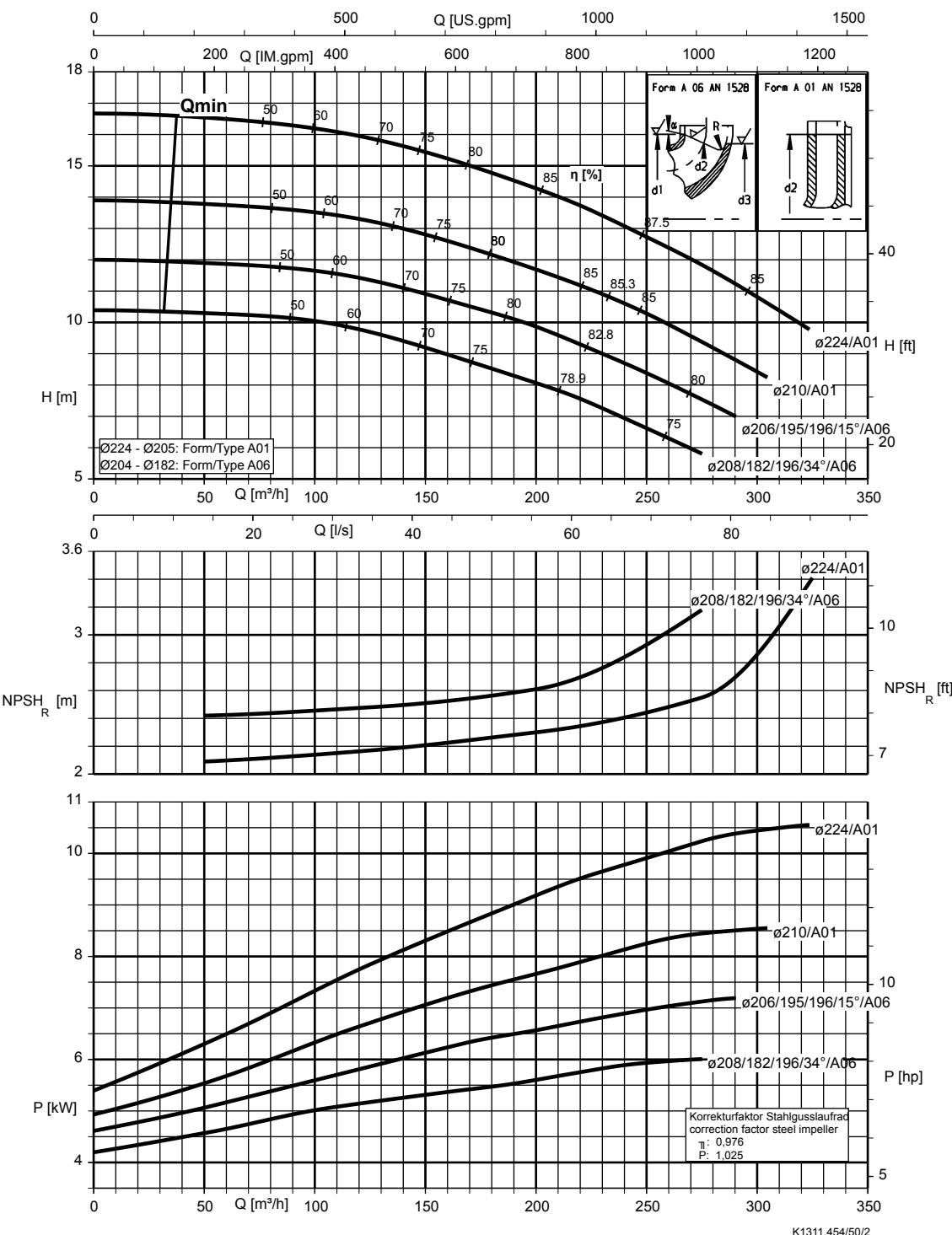
Etanorm 125-100-400, n = 1 450 t/min

Etanorm V, Etabloc



**Etanorm 150-125-200, n = 1 450 t/min**

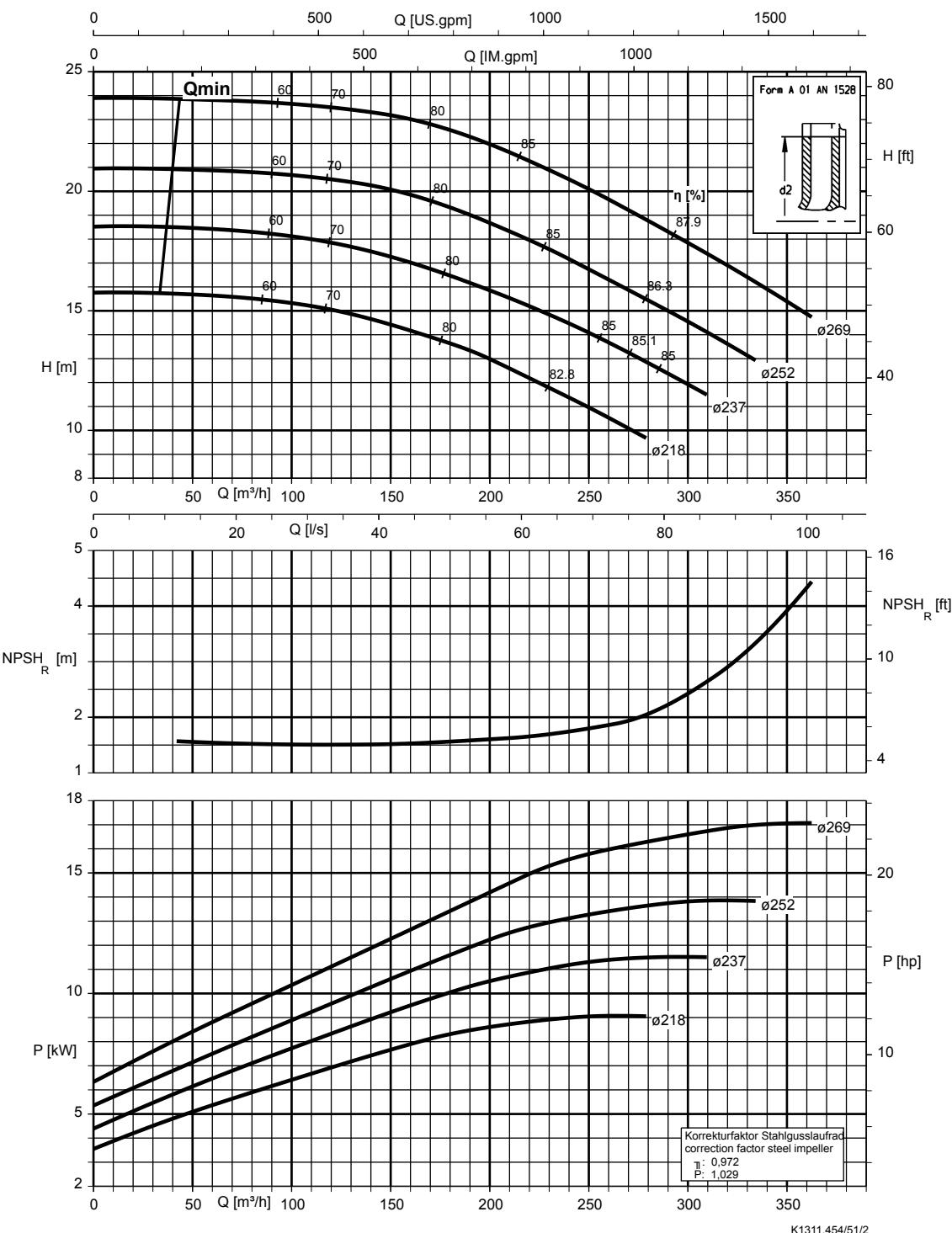
Etanorm SYT, Etanorm V, Etabloc



K1311.454/50/2

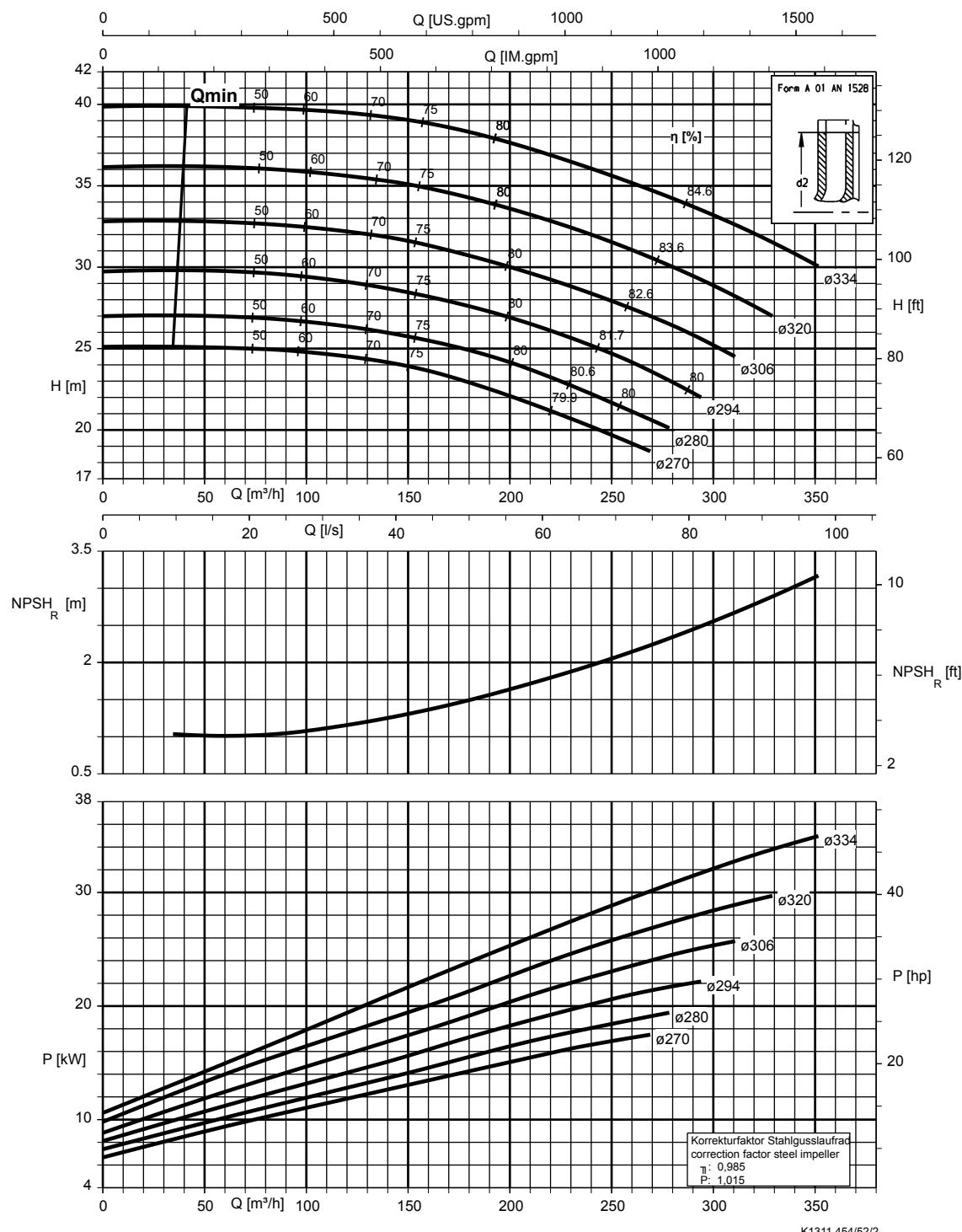
**Etanorm 150-125-250, n = 1 450 t/min**

Etanorm SYT, Etanorm V, Etabloc



**Etanorm 150-125-315, n = 1 450 t/min**

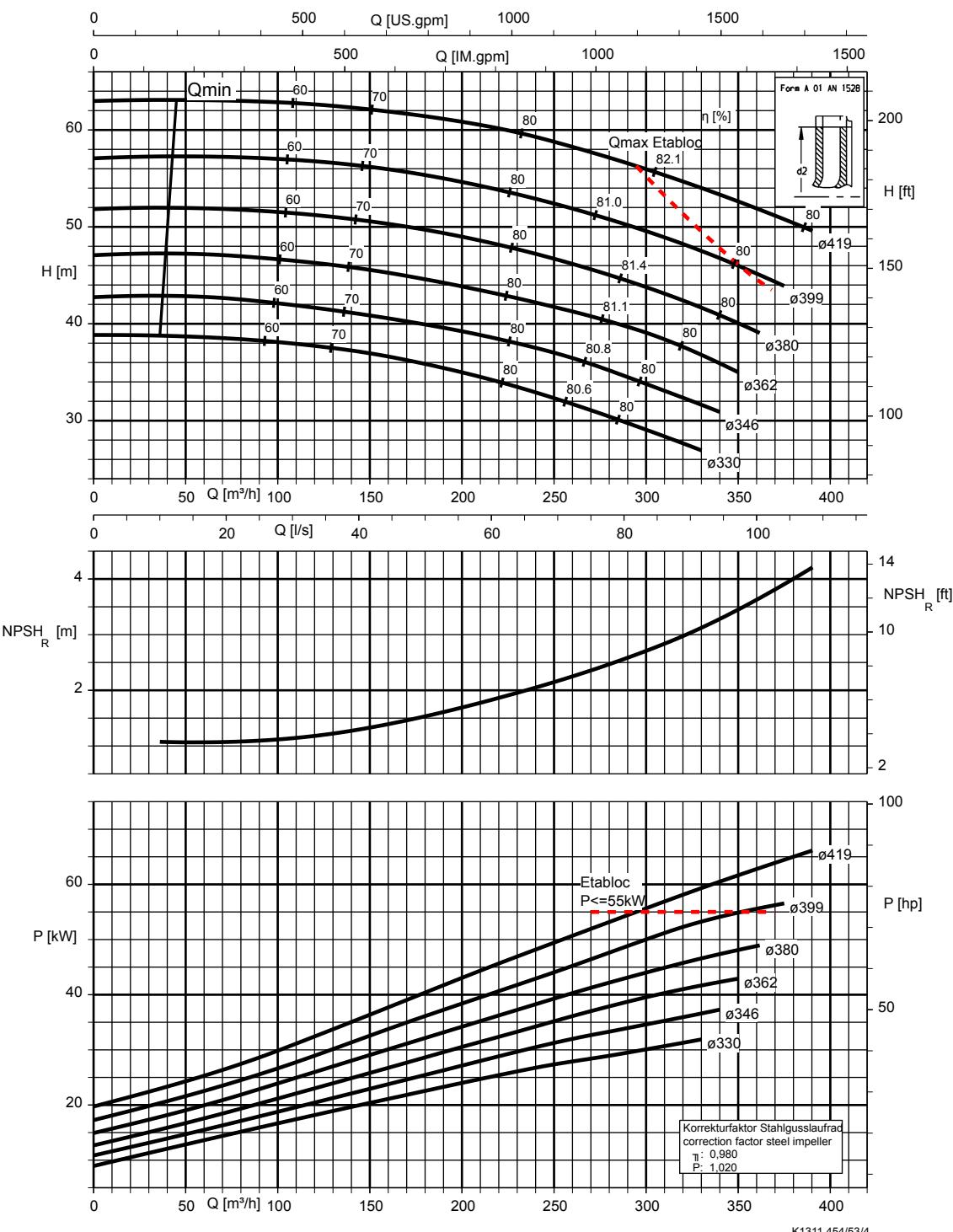
Etanorm SYT, Etanorm V, Etabloc



K1311.454/52/2

**Etanorm 150-125-400, n = 1 450 t/min**

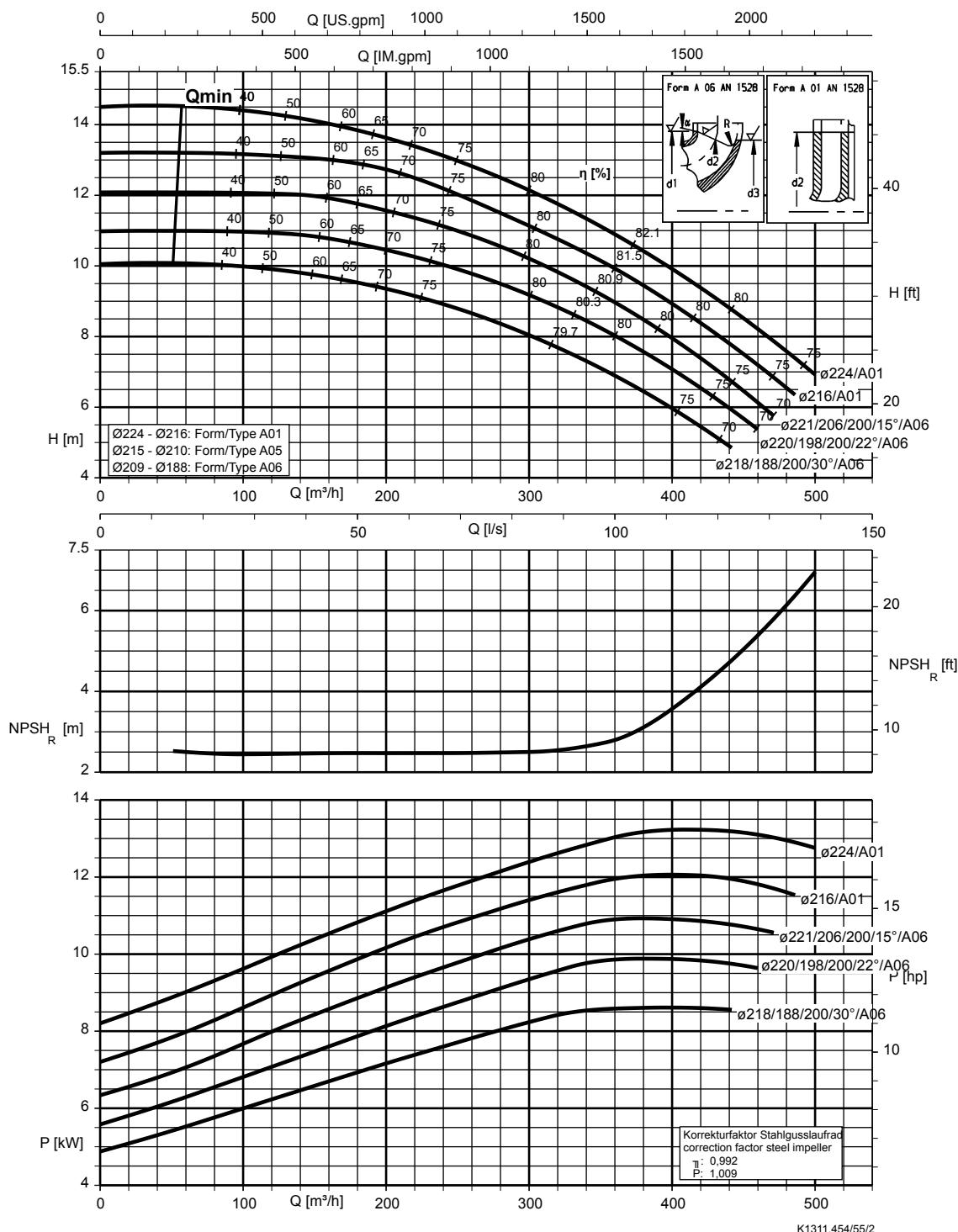
Etanorm SYT, Etanorm V, Etabloc



K1311.454/53/4

**Etanorm 200-150-200, n = 1 450 t/min**

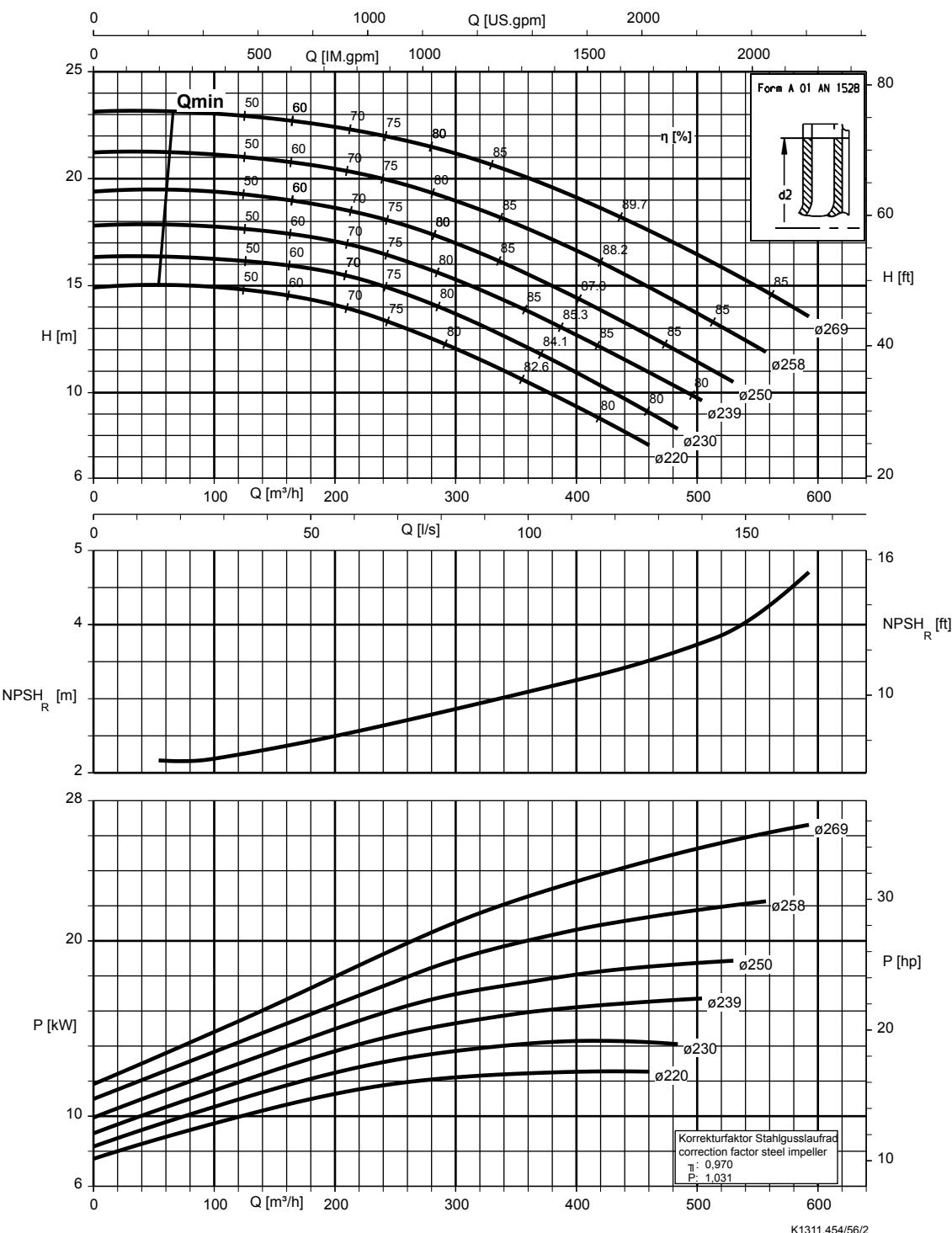
Etanorm V, Etabloc



K1311.454/55/2

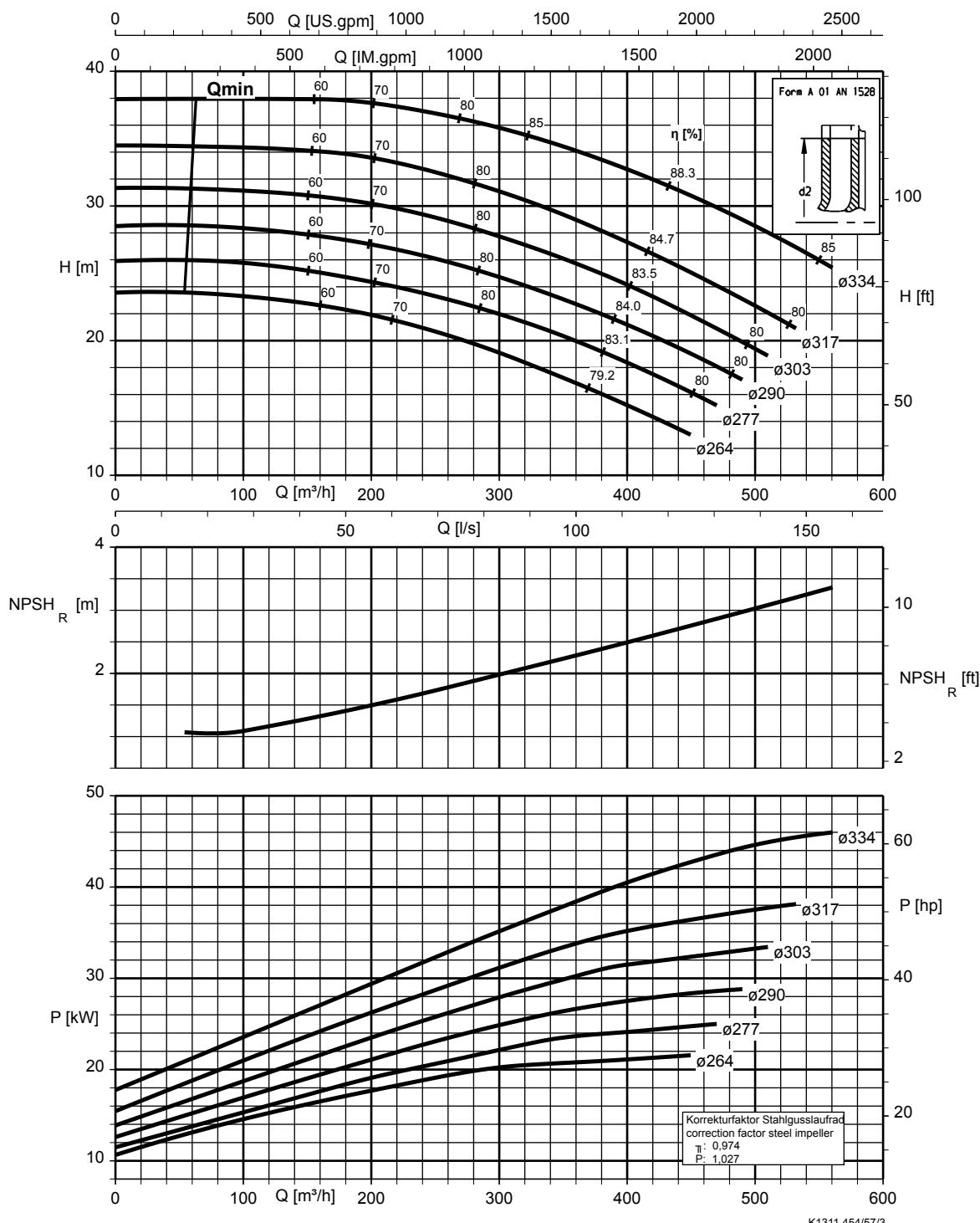
Etanorm 200-150-250,  $n = 1\,450$  t/min

Etanorm V, Etabloc



**Etanorm 200-150-315, n = 1 450 t/min**

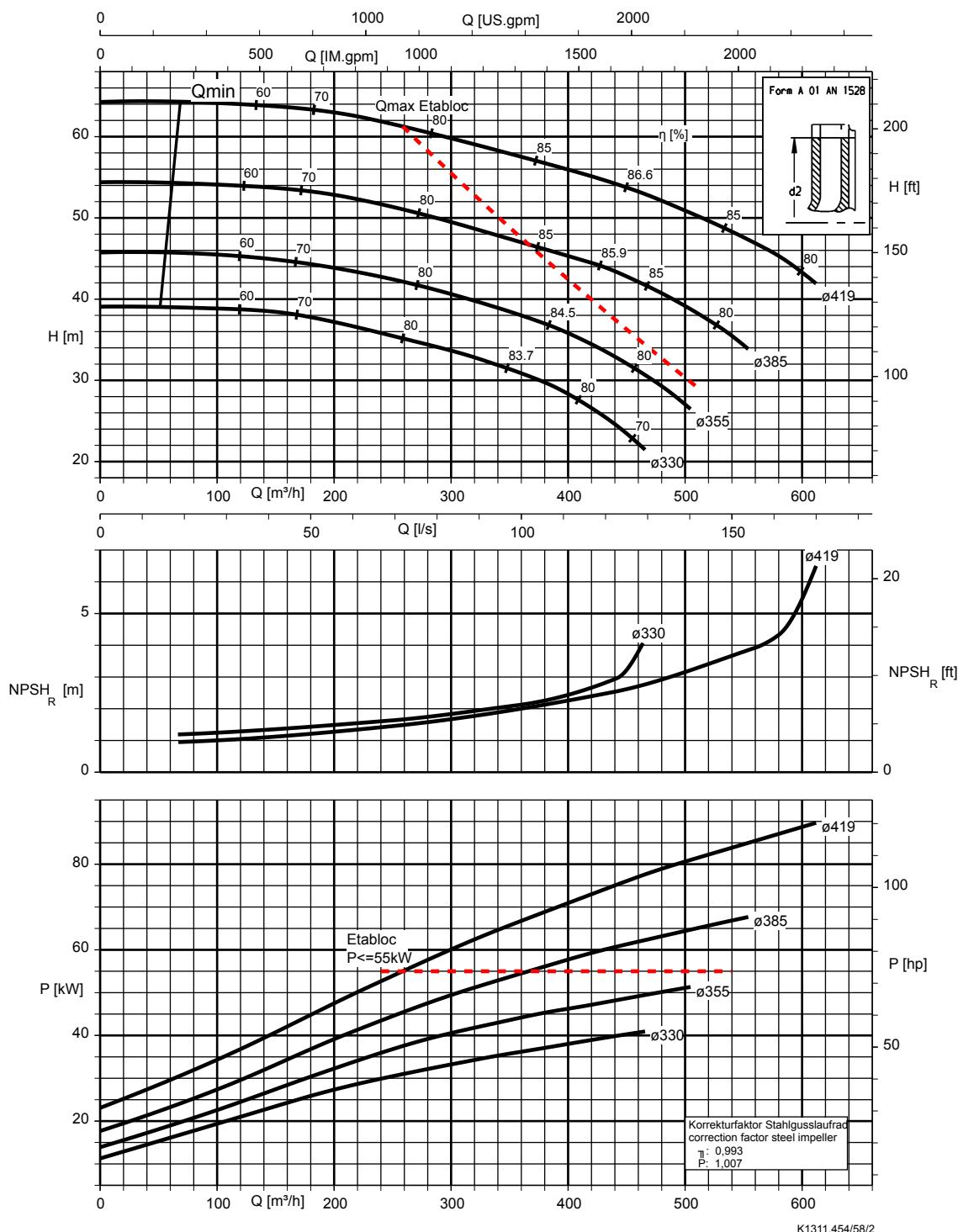
Etanorm SYT, Etanorm V, Etabloc



K1311.454/57/3

**Etanorm 200-150-400, n = 1 450 t/min**

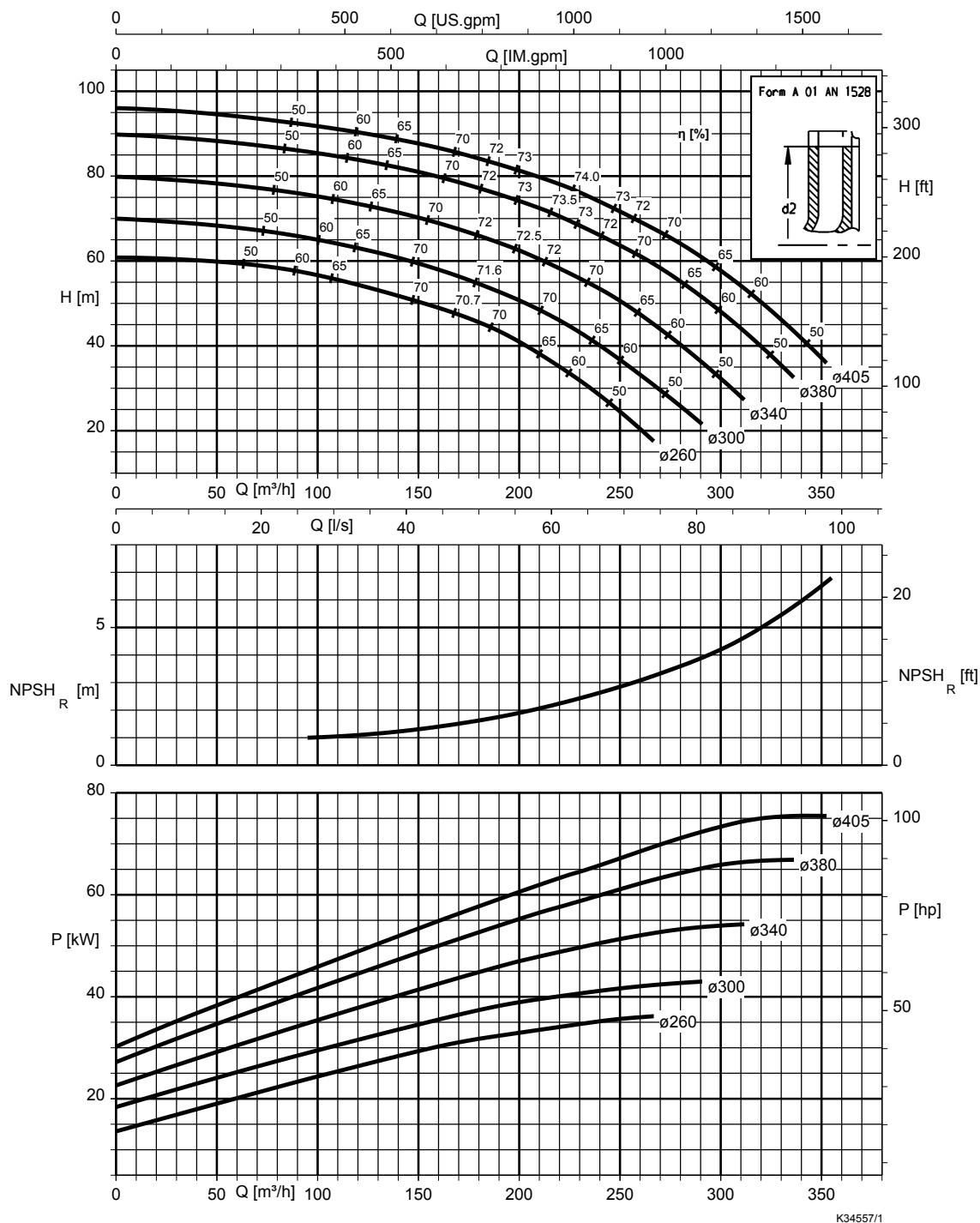
Etanorm SYT, Etanorm V, Etabloc



K1311.454/58/2

Etanorm-R 125-500.2, n = 1 450 t/min

Etanorm-RSY

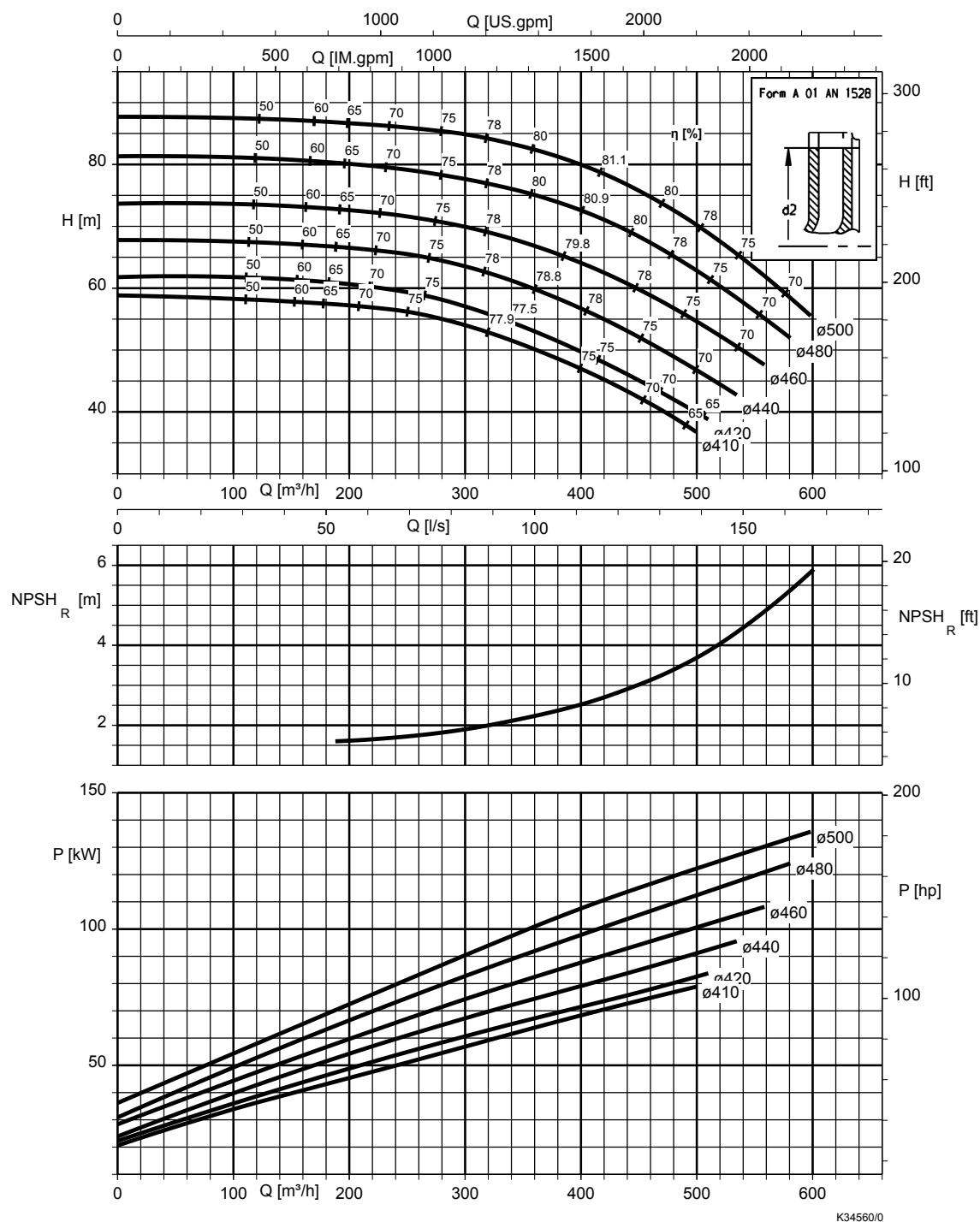


#### Valeurs de correction

Matériau de la roue	Valeur de correction S [m]	Calcul
EN-GJL-250	0,5	$\text{NPSH}_{\text{installation}} \geq \text{NPSH} + \text{valeur de correction } S$
CC480K-GS	0,5	
1.4408	0,5	

Etanorm-R 150-500.1, n = 1 450 t/min

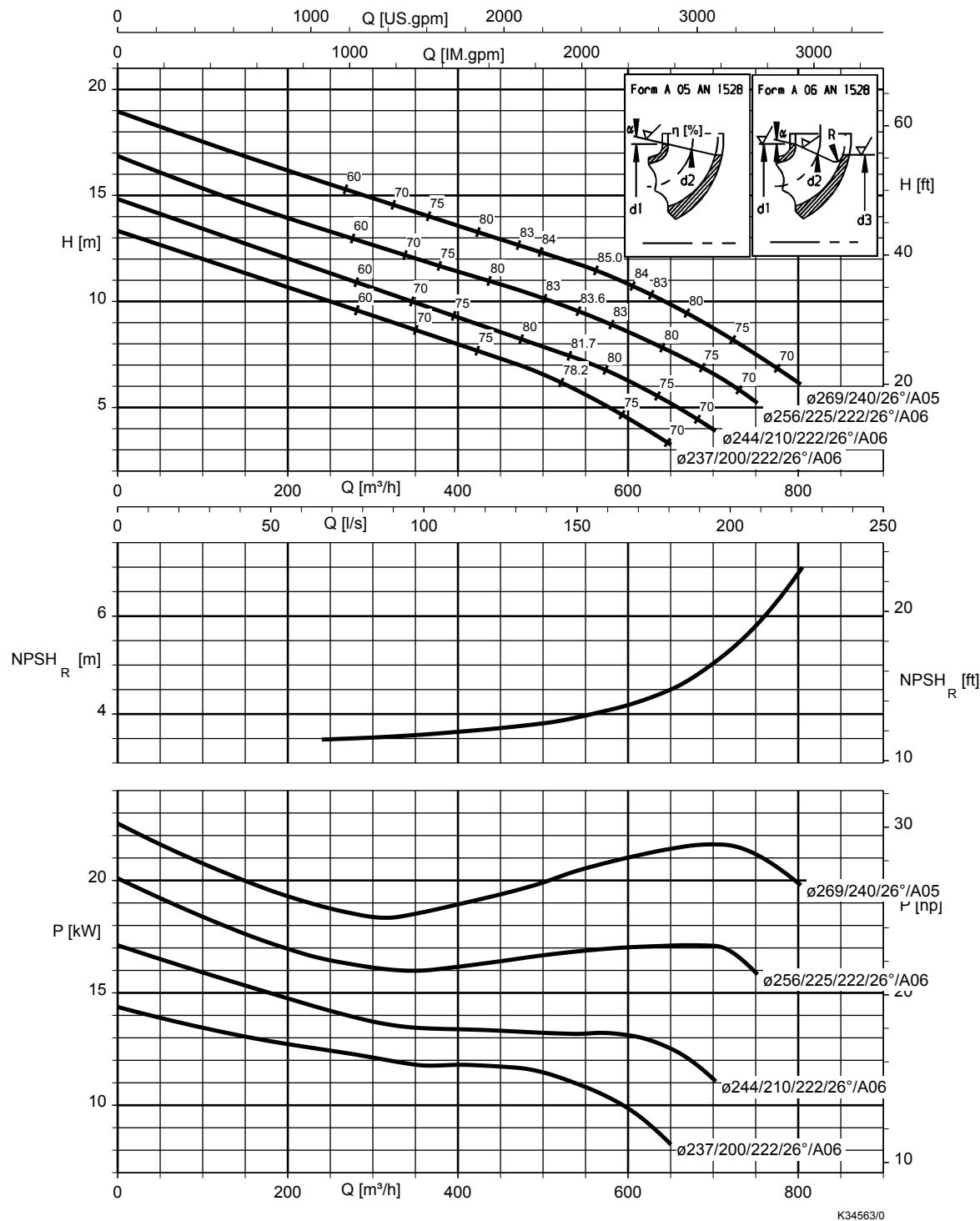
Etanorm-RSY



#### Valeurs de correction

Matériau de la roue	Valeur de correction S [m]	Calcul
EN-GJL-250	0,5	
CC480K-GS	0,5	
1.4408	0,5	$\text{NPSH}_{\text{installation}} \geq \text{NPSH} + \text{valeur de correction } S$

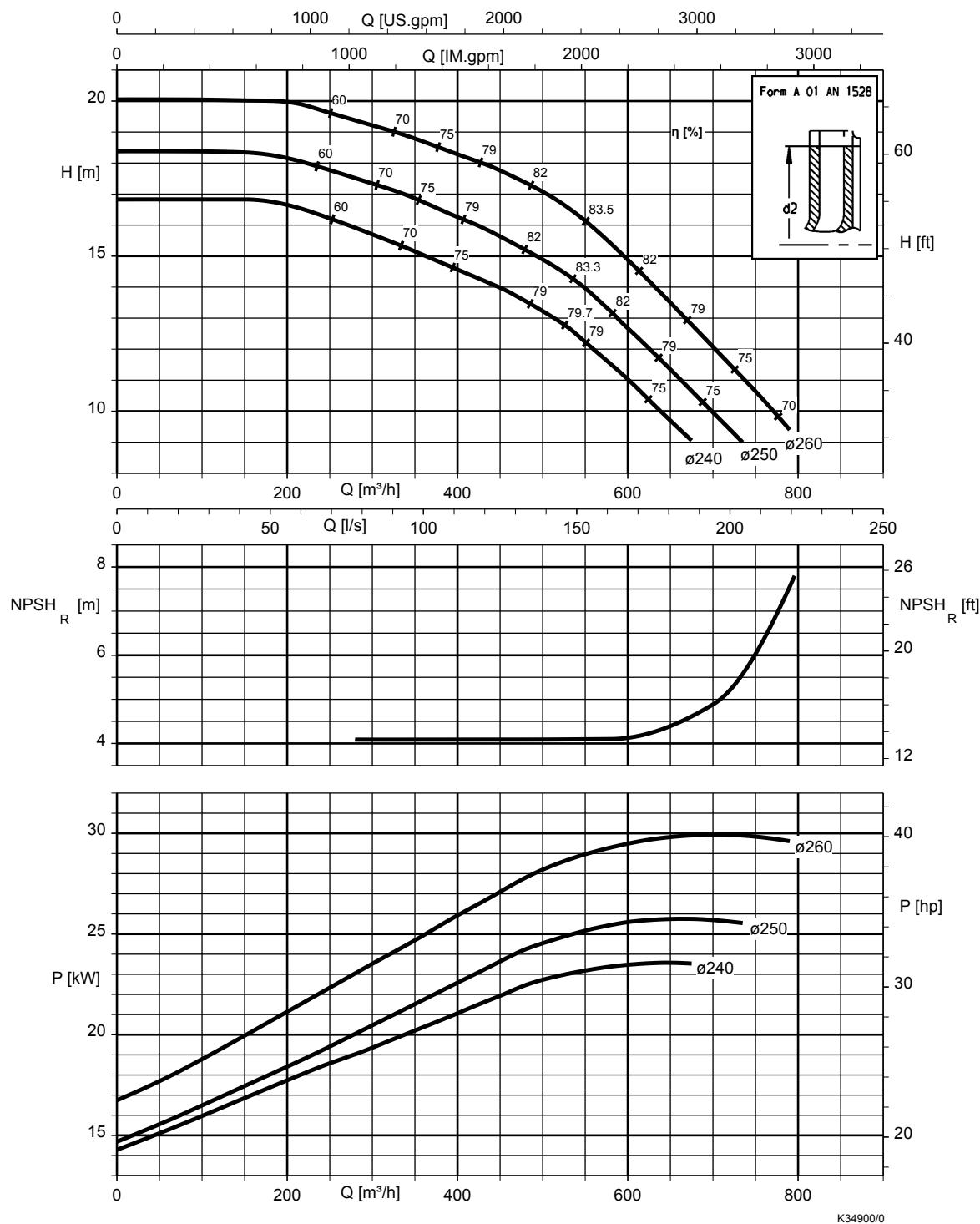
**Etanorm-R 200-250, n = 1 450 t/min**



Valeurs de correction

Matériau de la roue	Valeur de correction S [m]	Calcul
EN-GJL-250	2,6	NPSH <sub>installation</sub> ≥ NPSH + valeur de correction S
CC480K-GS	1,0	
1.4408	0,5	

**Etanorm-R 200-260, n = 1 450 t/min**

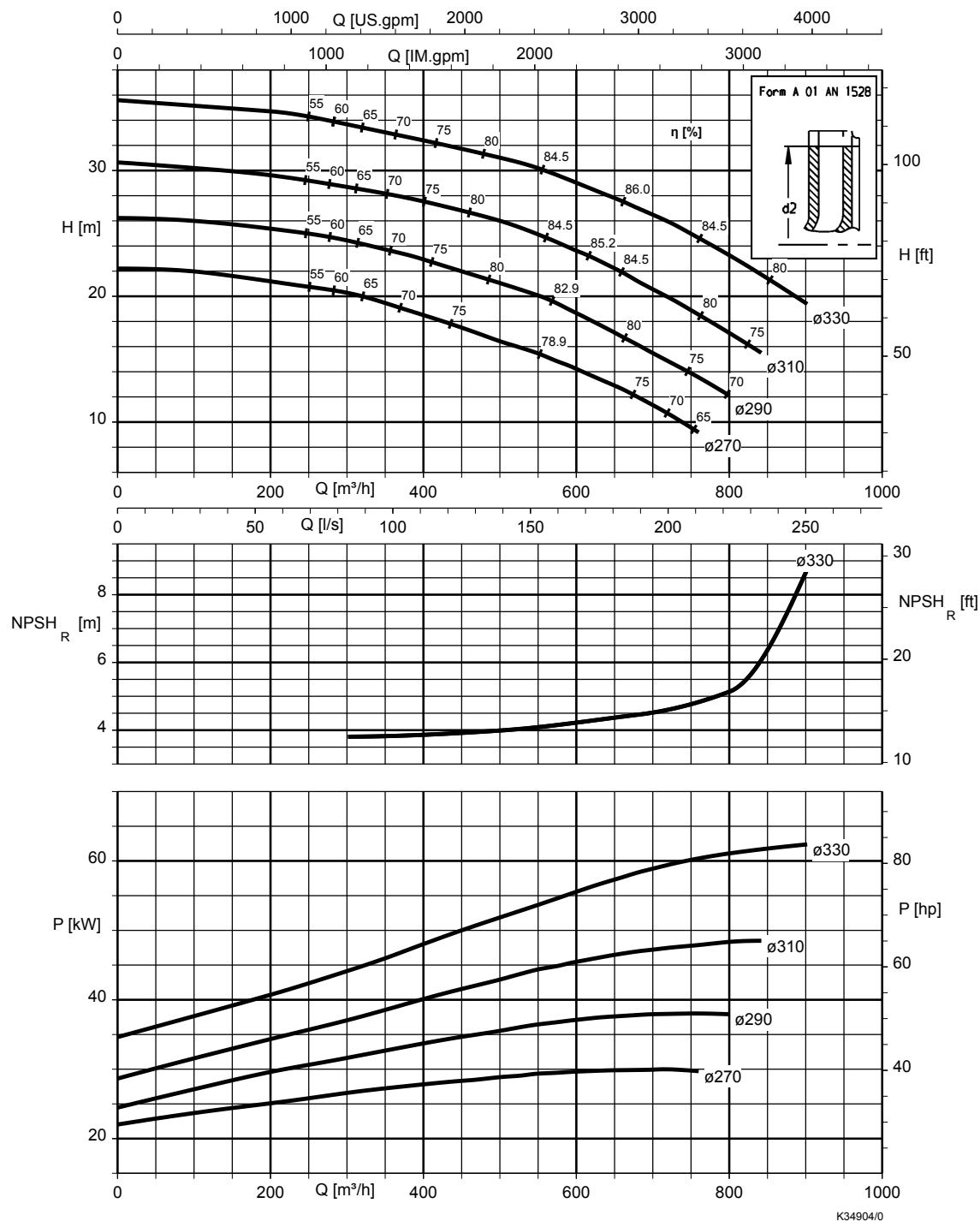


Valeurs de correction

Matériau de la roue	Valeur de correction S [m]	Calcul
EN-GJL-250	0,5	i $NPSH_{\text{installation}} \geq NPSH + \text{valeur de correction } S$
CC480K-GS	0,5	
1.4408	0,5	

Etanorm-R 200-330, n = 1 450 t/min

Etanorm-RSY

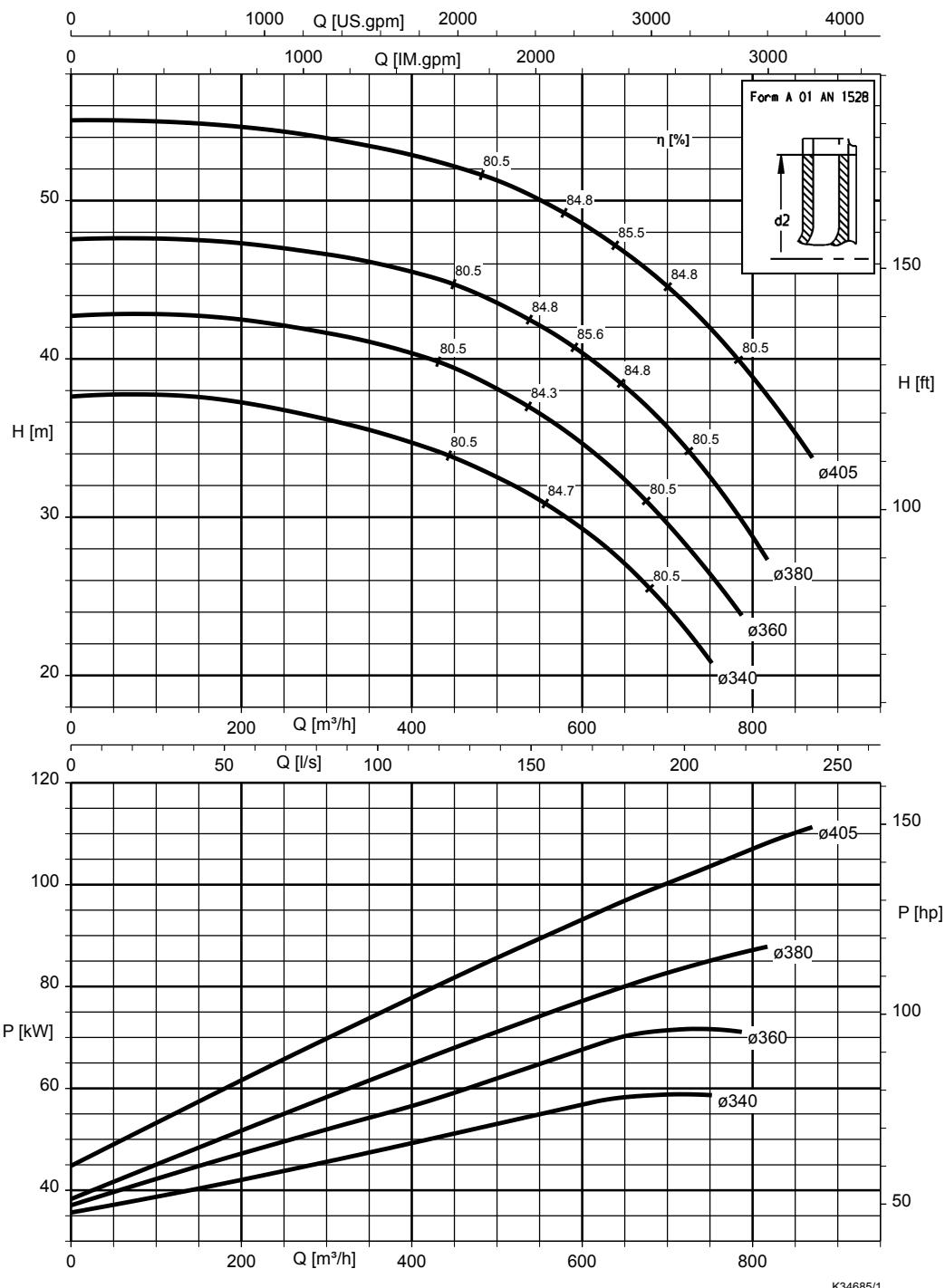


#### Valeurs de correction

Matériau de la roue	Valeur de correction S [m]	Calcul
EN-GJL-250	0,5	
CC480K-GS	0,5	
1.4408	0,5	$NPSH_{\text{installation}} \geq NPSH + \text{valeur de correction } S$

Etanorm-R 200-400, n = 1 450 t/min

Etanorm-RSY

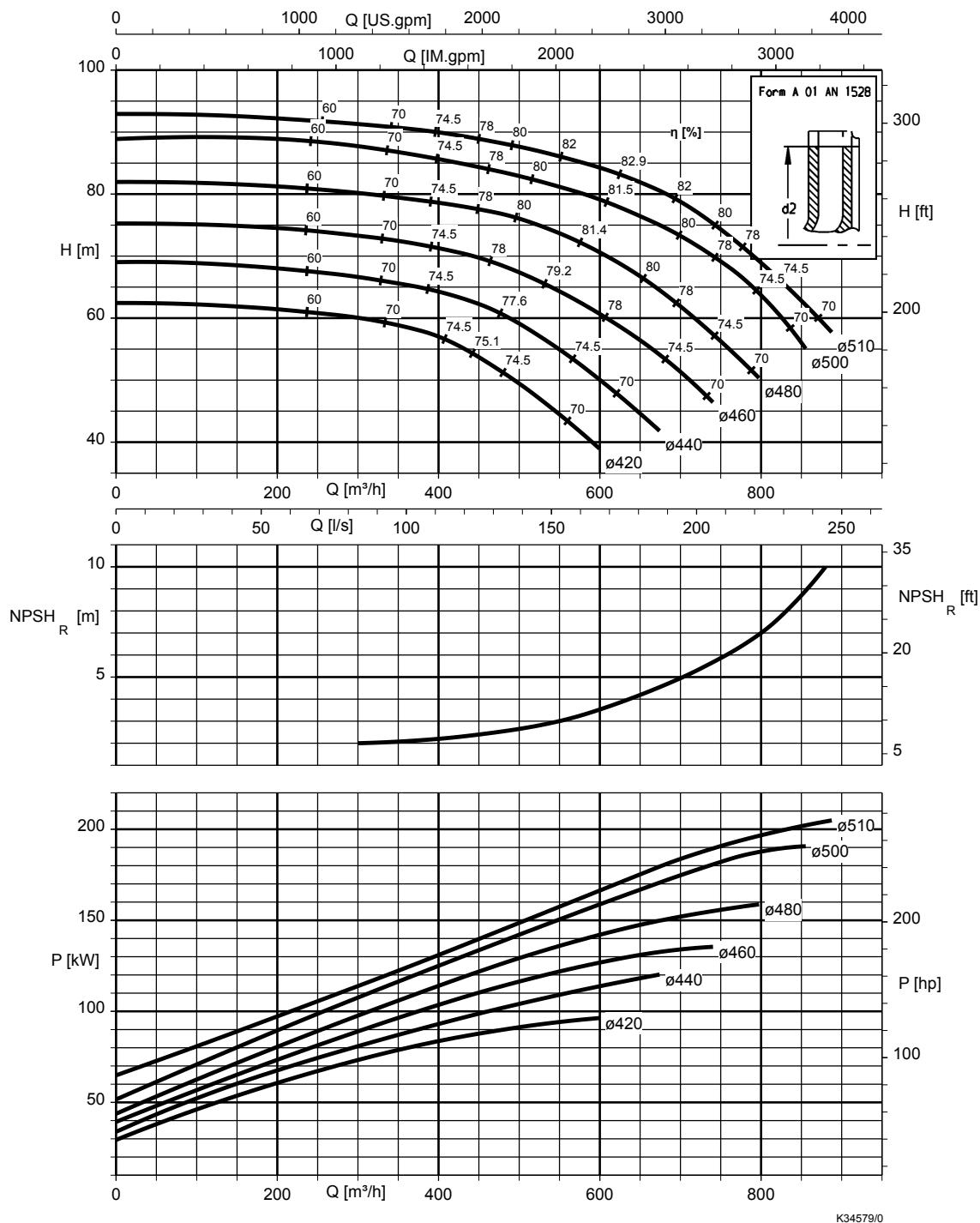


#### Valeurs de correction

Matériau de la roue	Valeur de correction S [m]	Calcul
EN-GJL-250	1,6	$NPSH_{\text{installation}} \geq NPSH + \text{valeur de correction } S$
CC480K-GS	1,0	
1.4408	0,5	

Etanorm-R 200-500, n = 1 450 t/min

Etanorm-RSY

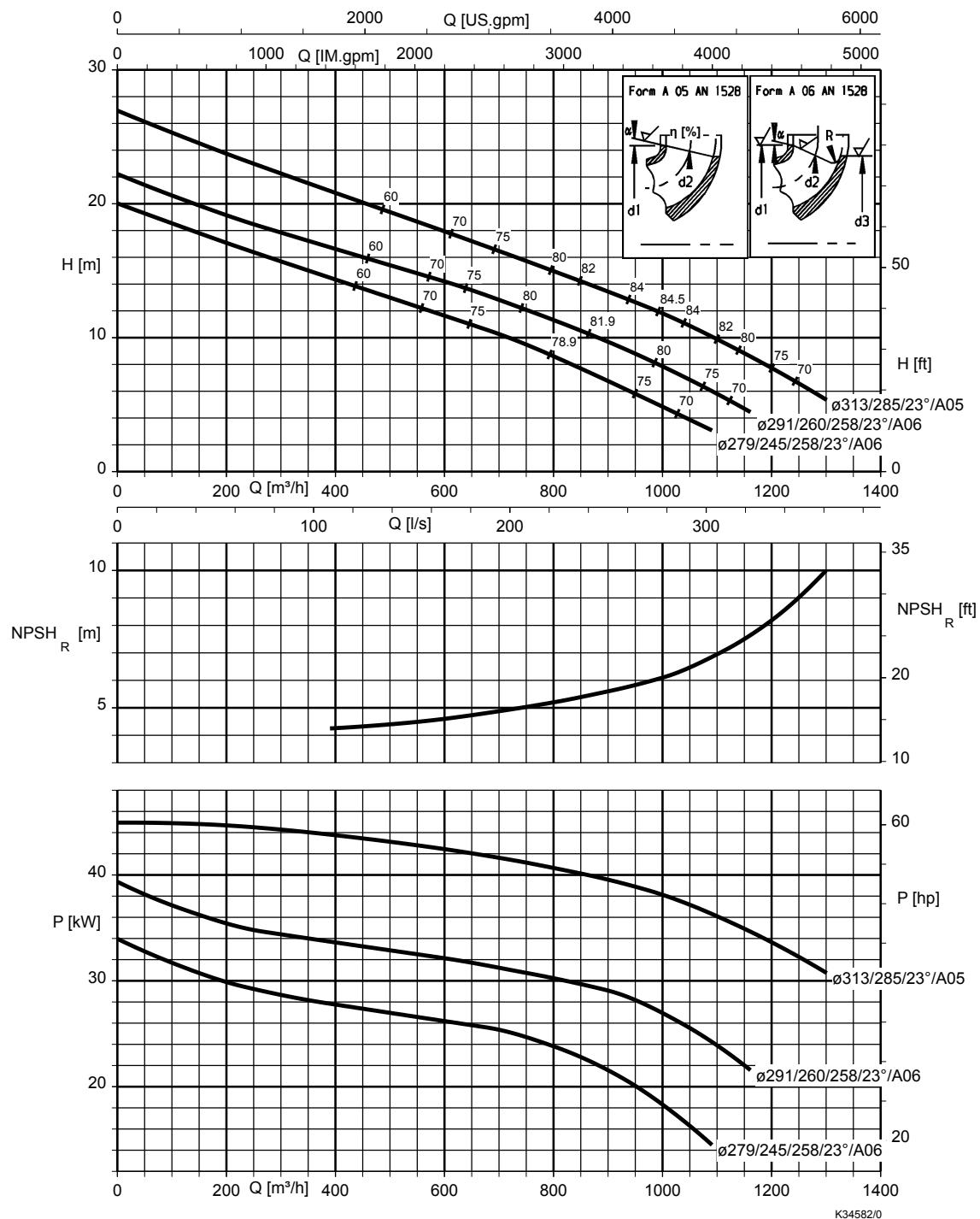


#### Valeurs de correction

Matériau de la roue	Valeur de correction $S$ [m]	Calcul
EN-GJL-250	1,8	$i$ $NPSH_{\text{installation}} \geq NPSH + \text{valeur de correction } S$
CC480K-GS	1,0	
1.4408	0,5	

Etanorm-R 250-300, n = 1 450 t/min

Etanorm-RSY

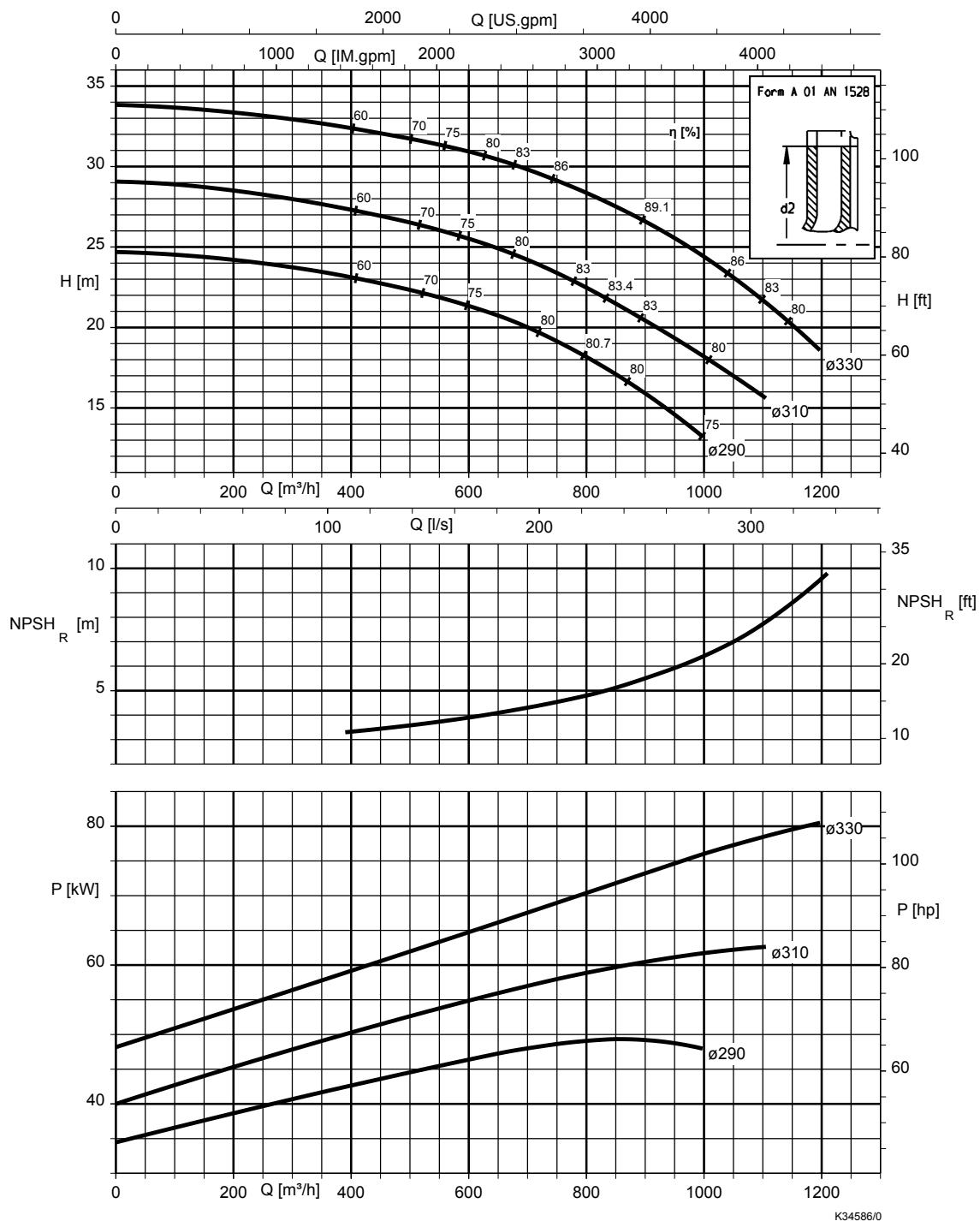


#### Valeurs de correction

Matériau de la roue	Valeur de correction S [m]	Calcul
EN-GJL-250	2,7	$NPSH_{disponible} \geq NPSH + \text{valeur de correction } S$
CC480K-GS	1,5	
1.4408	0,5	

Etanorm-R 250-330, n = 1 450 t/min

Etanorm-RSY

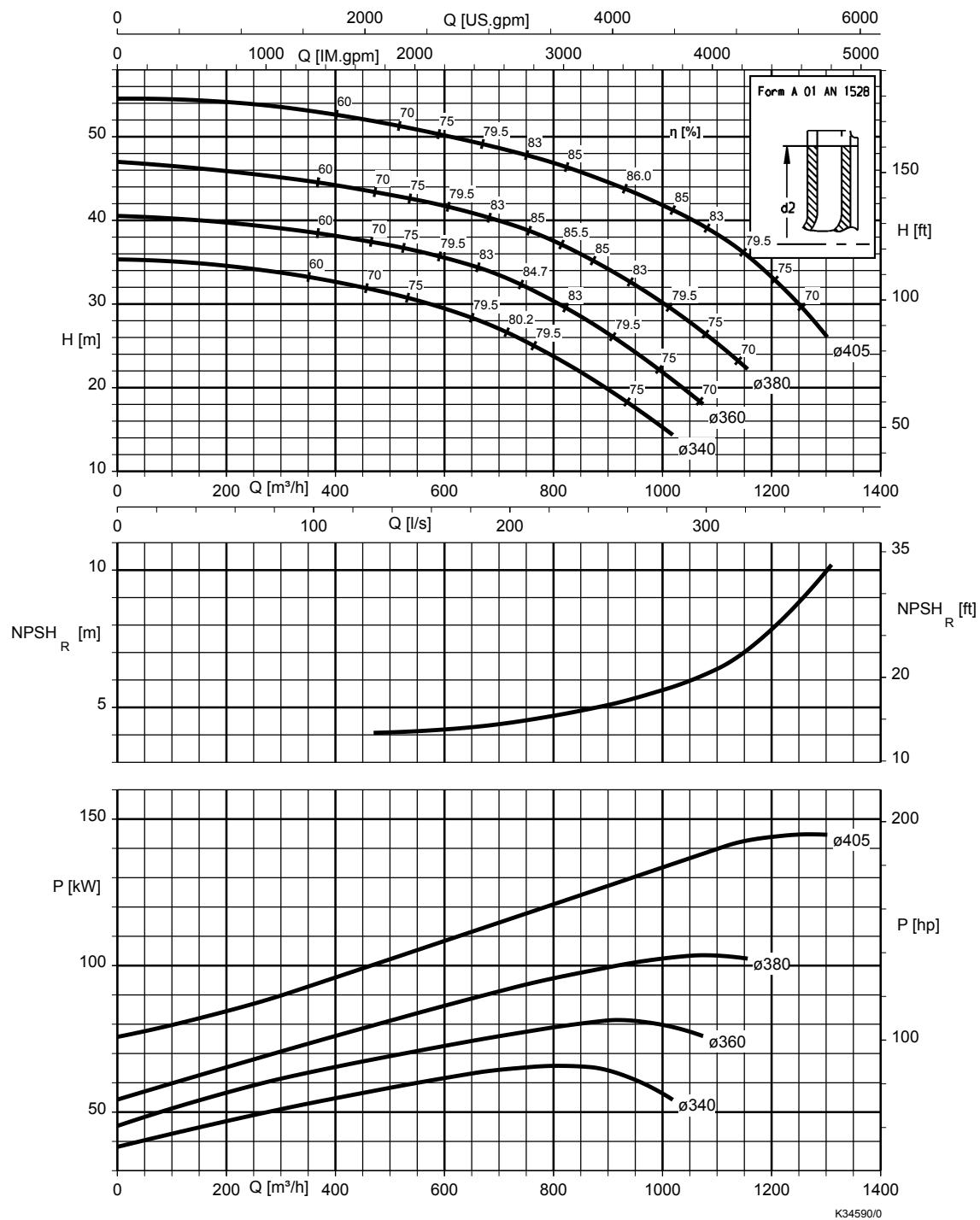


#### Valeurs de correction

Matériau de la roue	Valeur de correction S [m]	Calcul
EN-GJL-250	2,0	$\text{NPSH}_{\text{installation}} \geq \text{NPSH} + \text{valeur de correction } S$
CC480K-GS	1,0	
1.4408	0,5	

Etanorm-R 250-400, n = 1 450 t/min

Etanorm-RSY

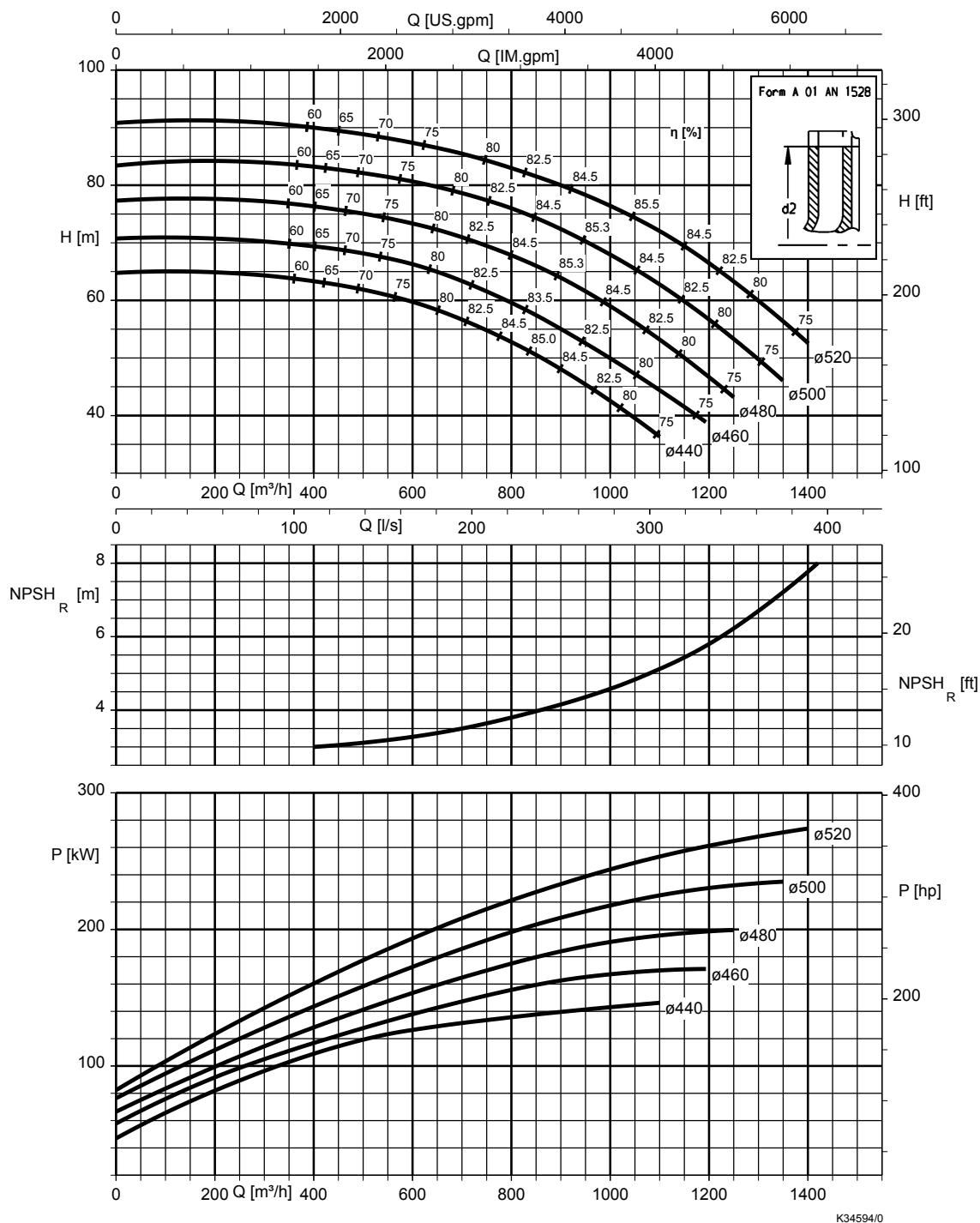


#### Valeurs de correction

Matériau de la roue	Valeur de correction S [m]	Calcul
EN-GJL-250	2,8	i $NPSH_{\text{installation}} \geq NPSH + \text{valeur de correction } S$
CC480K-GS	1,8	
1.4408	0,5	

Etanorm-R 250-500, n = 1 450 t/min

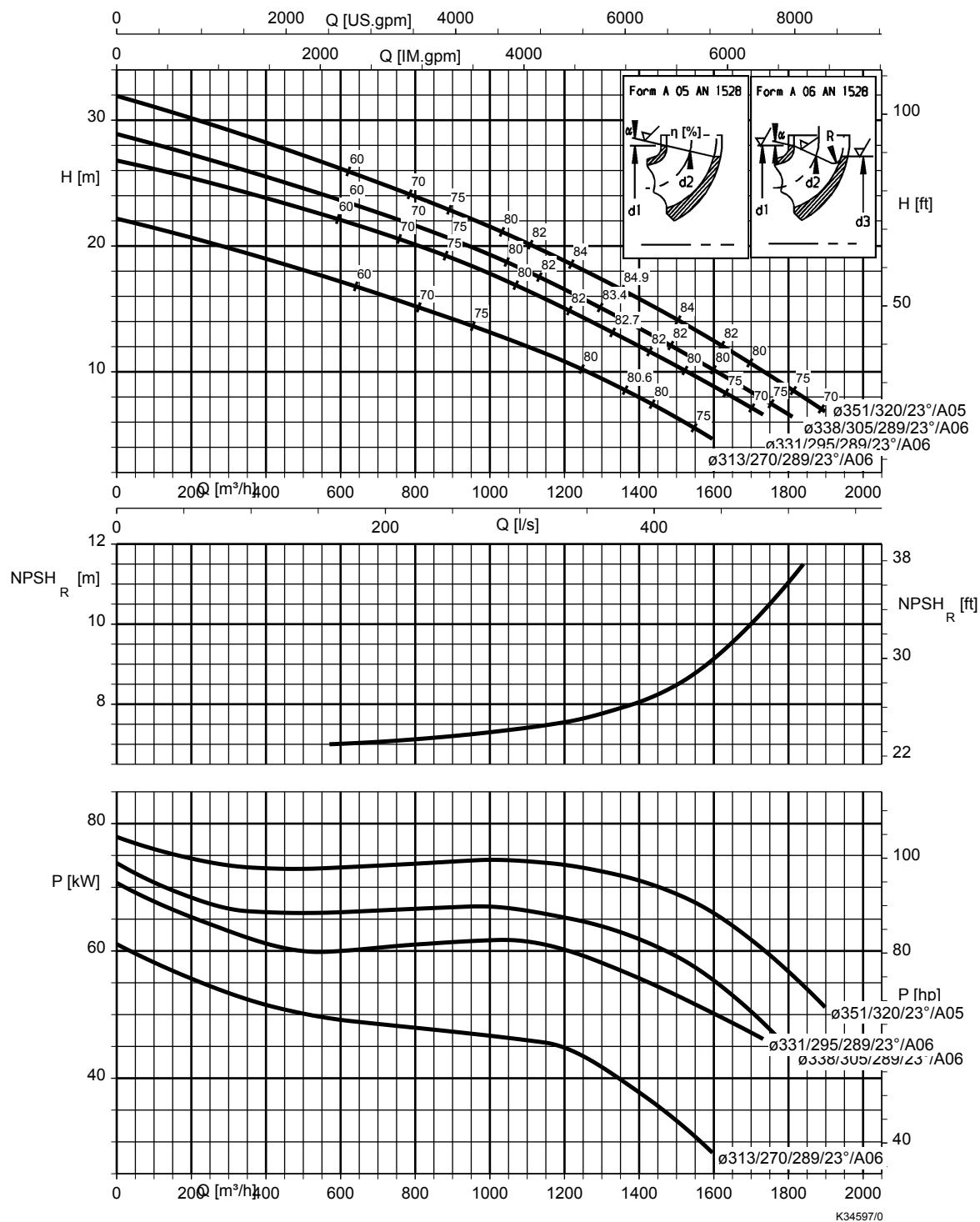
Etanorm-RSY



Valeurs de correction

Matériau de la roue	Valeur de correction S [m]	Calcul
EN-GJL-250	1,8	$i$ $NPSH_{\text{installation}} \geq NPSH + \text{valeur de correction } S$
CC480K-GS	1,0	
1.4408	0,5	

Etanorm-R 300-340, n = 1 450 t/min

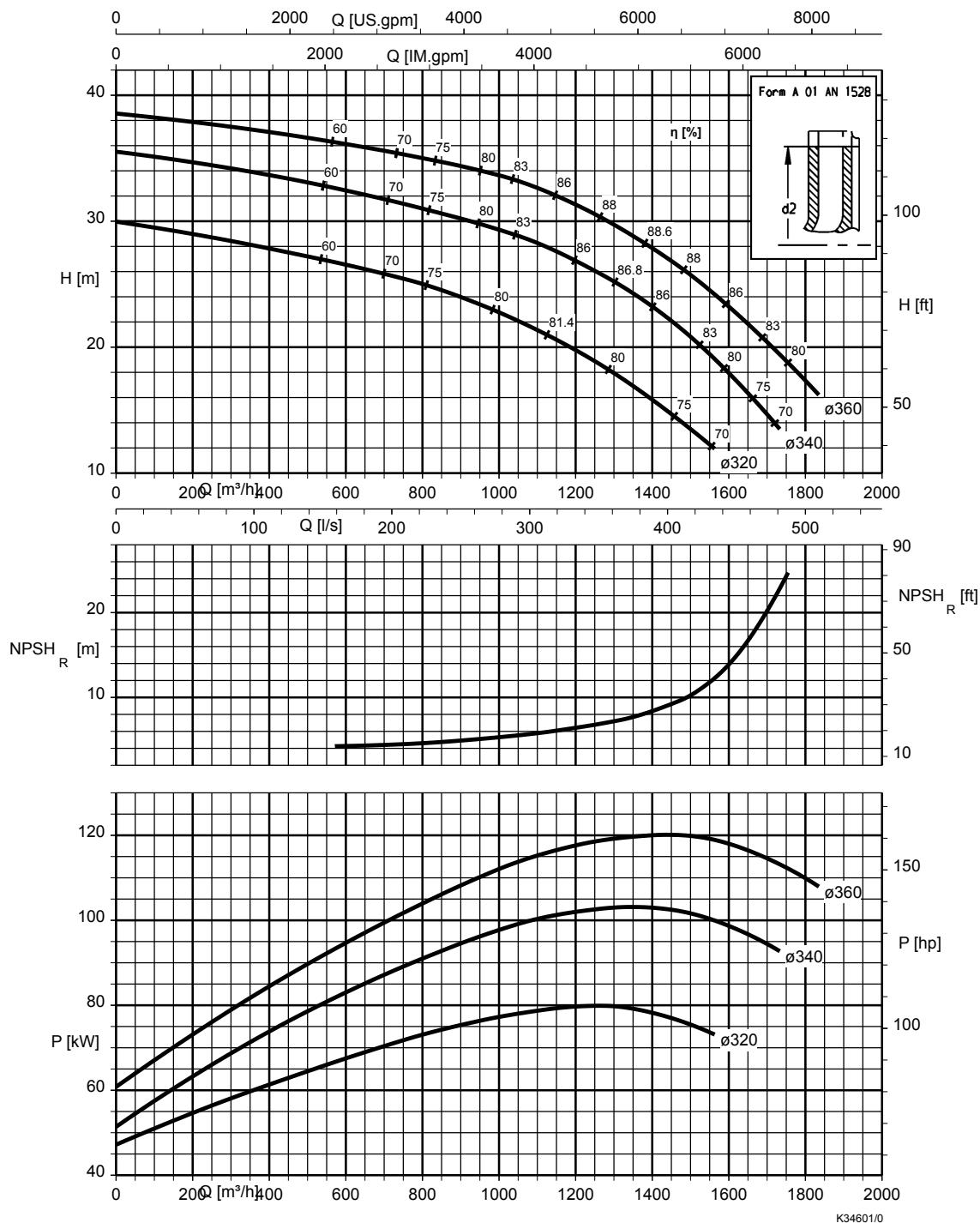


Valeurs de correction

Matériau de la roue	Valeur de correction S [m]	Calcul
EN-GJL-250	2,8	$\text{NPSH}_{\text{installation}} \geq \text{NPSH} + \text{valeur de correction } S$
CC480K-GS	1,8	
1.4408	0,5	

Etanorm-R 300-360, n = 1 450 t/min

Etanorm-RSY

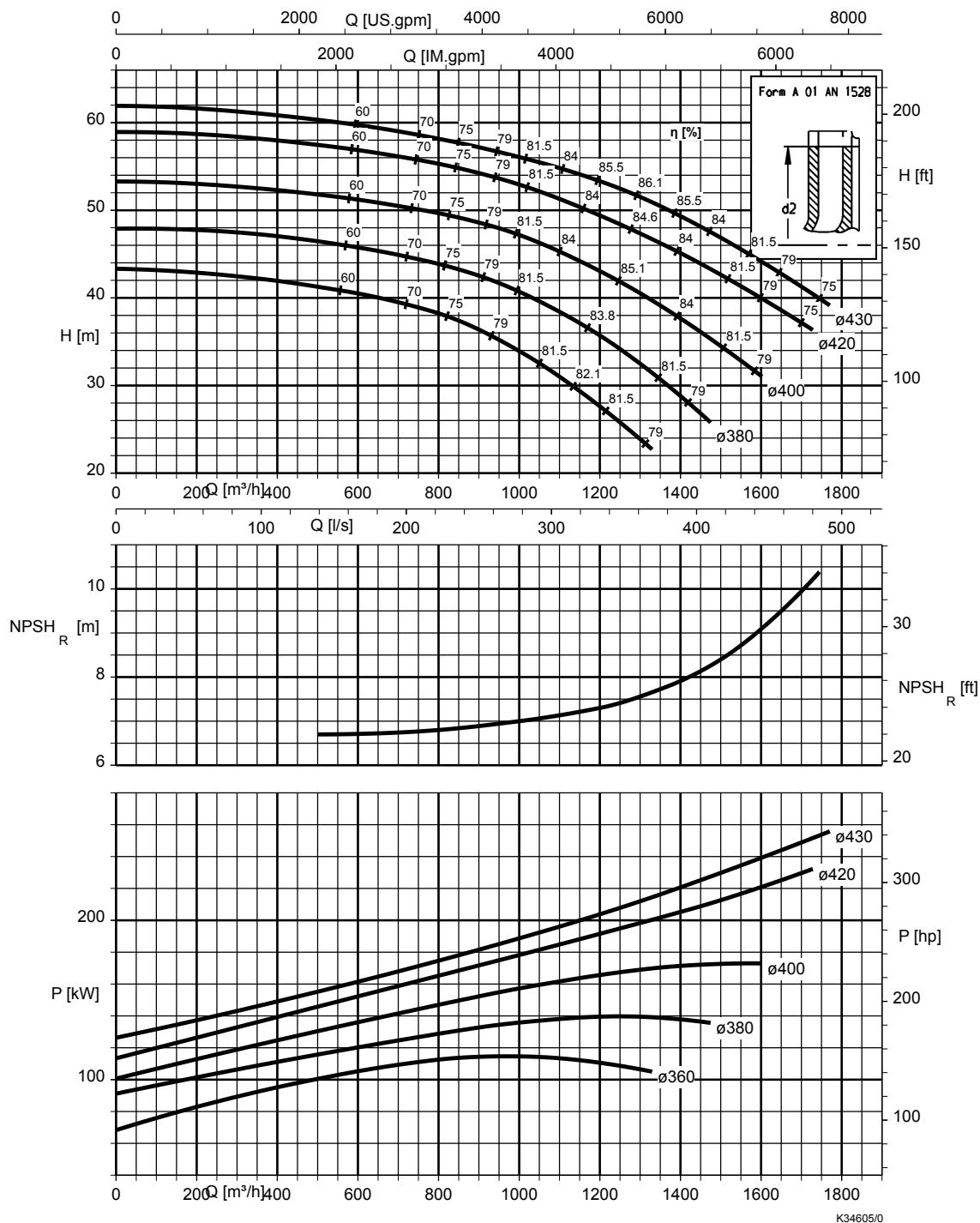


#### Valeurs de correction

Matériau de la roue	Valeur de correction S [m]	Calcul
EN-GJL-250	1,6	$NPSH_{\text{installation}} \geq NPSH + \text{valeur de correction } S$
CC480K-GS	1,0	
1.4408	0,5	

Etanorm-R 300-400, n = 1 450 t/min

Etanorm-RSY

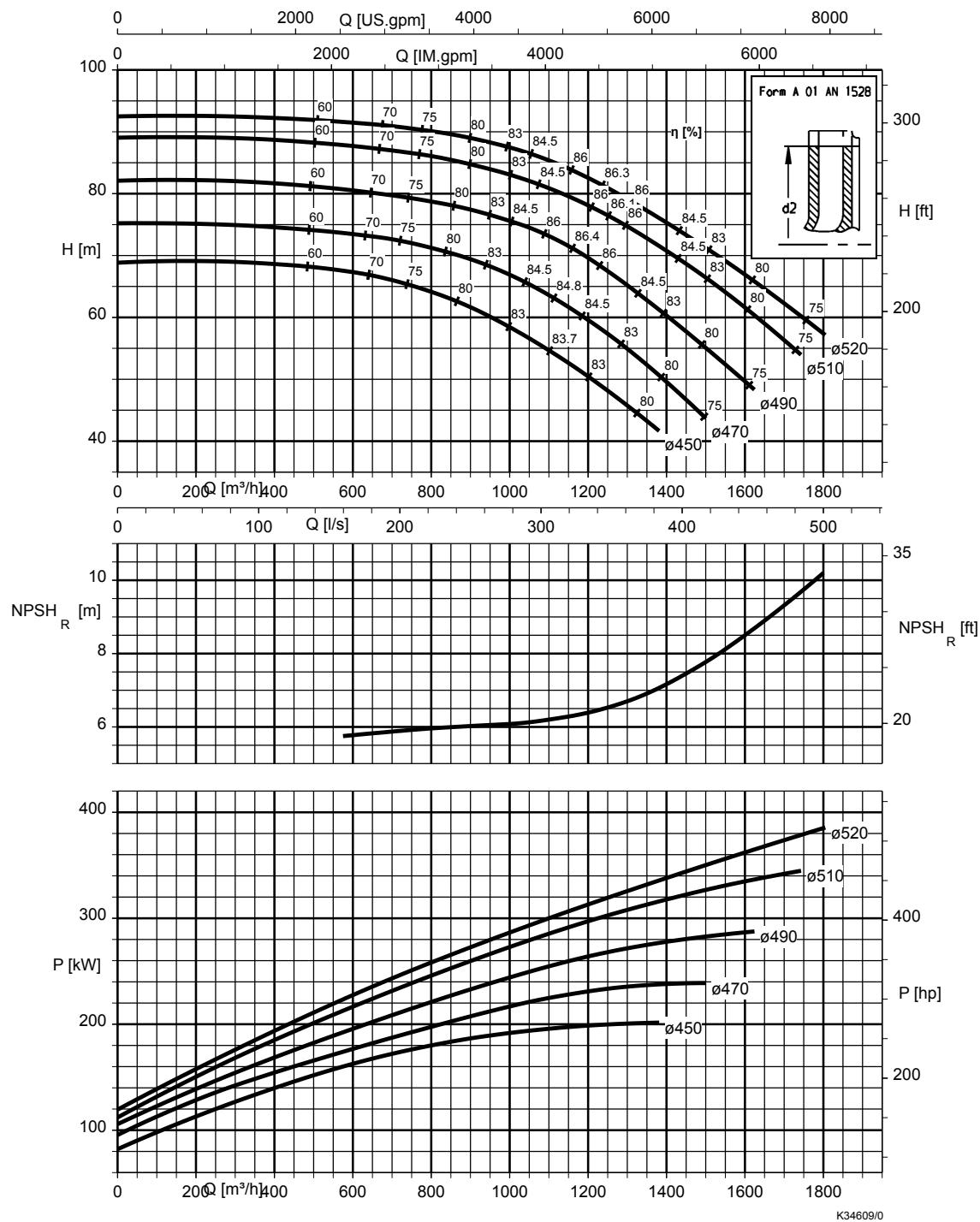


#### Valeurs de correction

Matériau de la roue	Valeur de correction S [m]
EN-GJL-250	1,5
CC480K-GS	1,0
1.4408	0,5
<b>i</b> NPSH <sub>disponible</sub> ≥ NPSH + valeur de correction S	

Etanorm-R 300-500, n = 1 450 t/min

Etanorm-RSY



#### Valeurs de correction

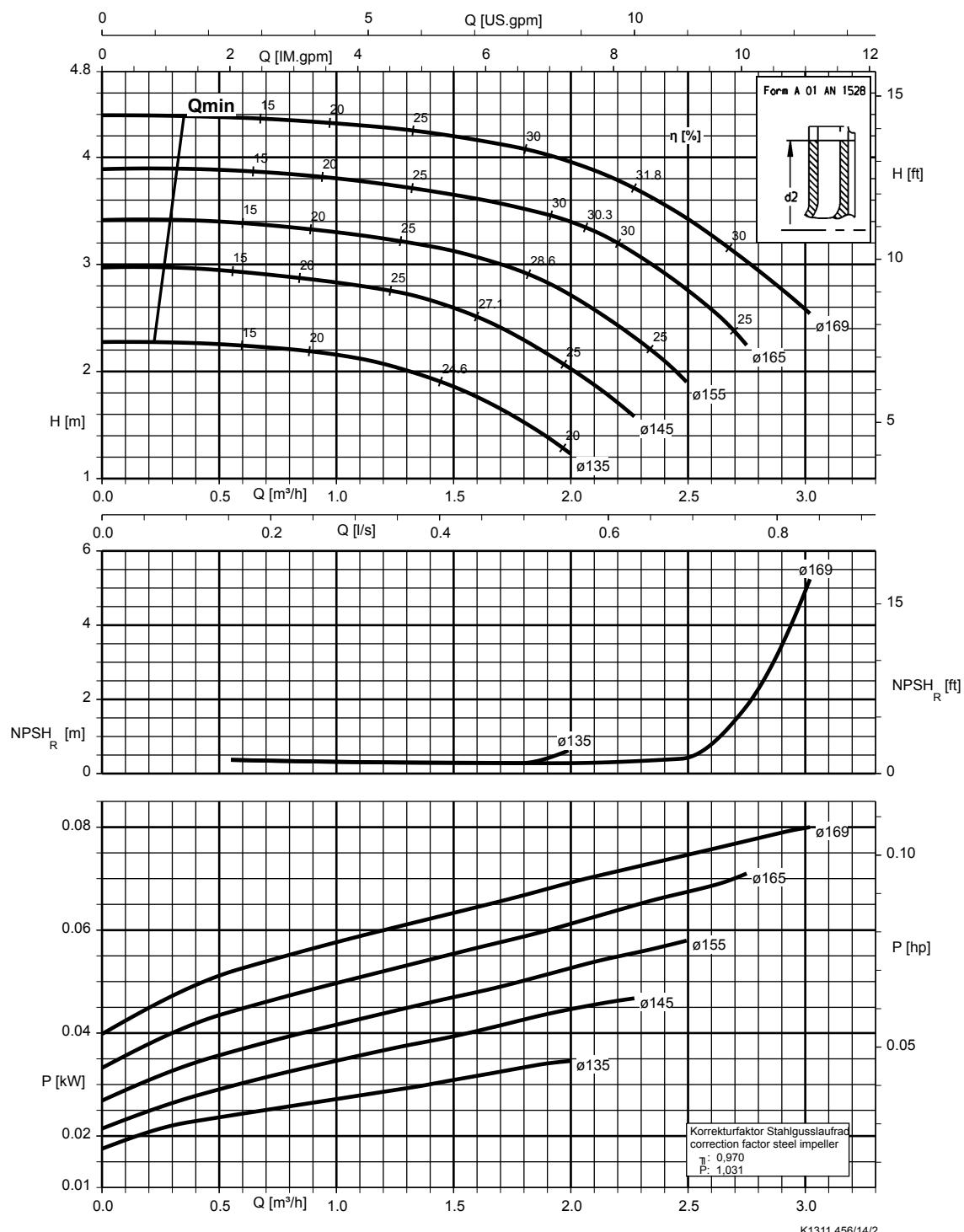
Matériau de la roue	Valeur de correction S [m]
EN-GJL-250	3,2
CC480K-GS	1,5
1.4408	0,5

$NPSH_{disponible} \geq NPSH + \text{valeur de correction } S$

$n = 960 \text{ t/min}$

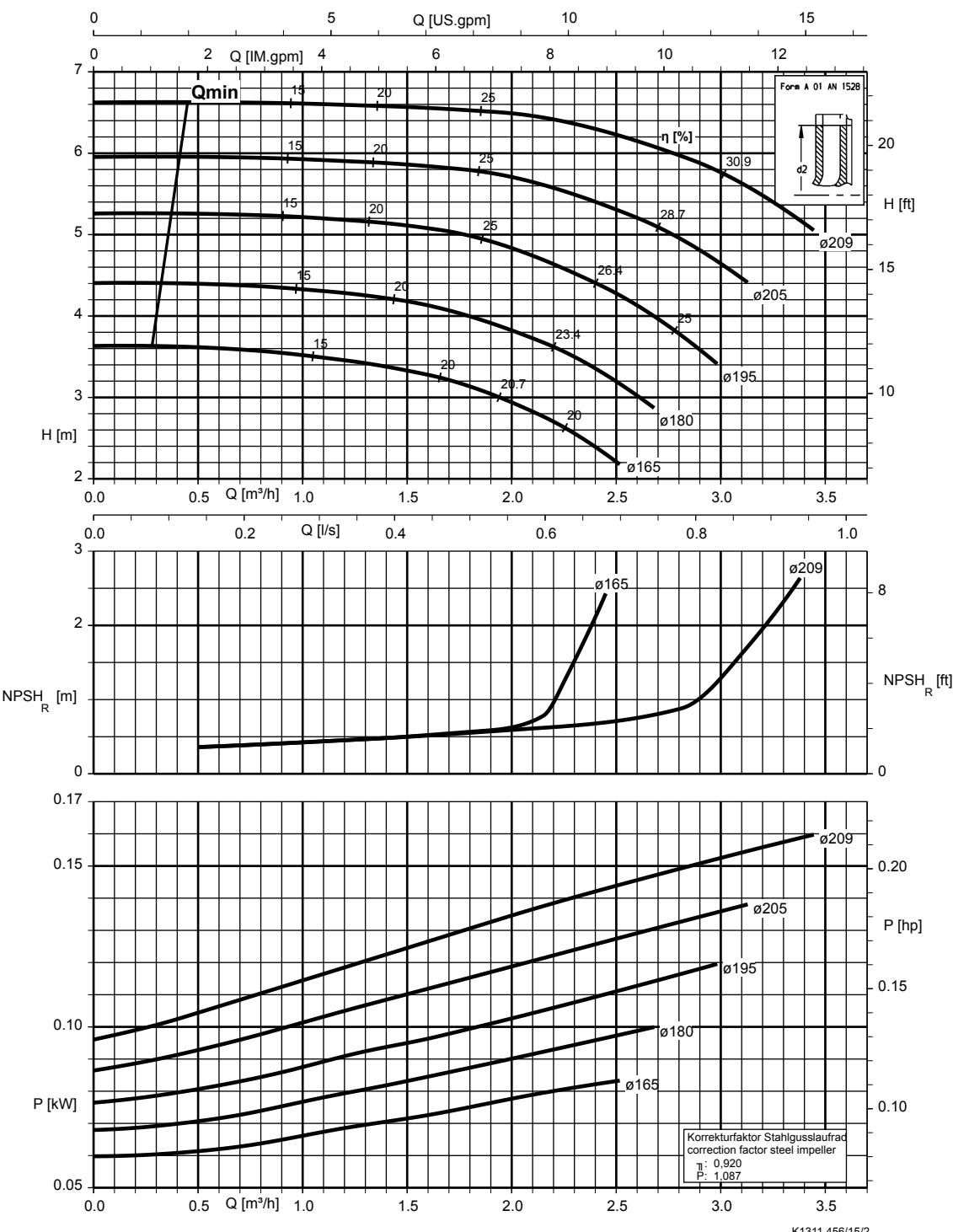
Etanorm 040-025-160,  $n = 960 \text{ t/min}$

Etanorm SYT, Etabloc



Etanorm 040-025-200,  $n = 960 \text{ t/min}$

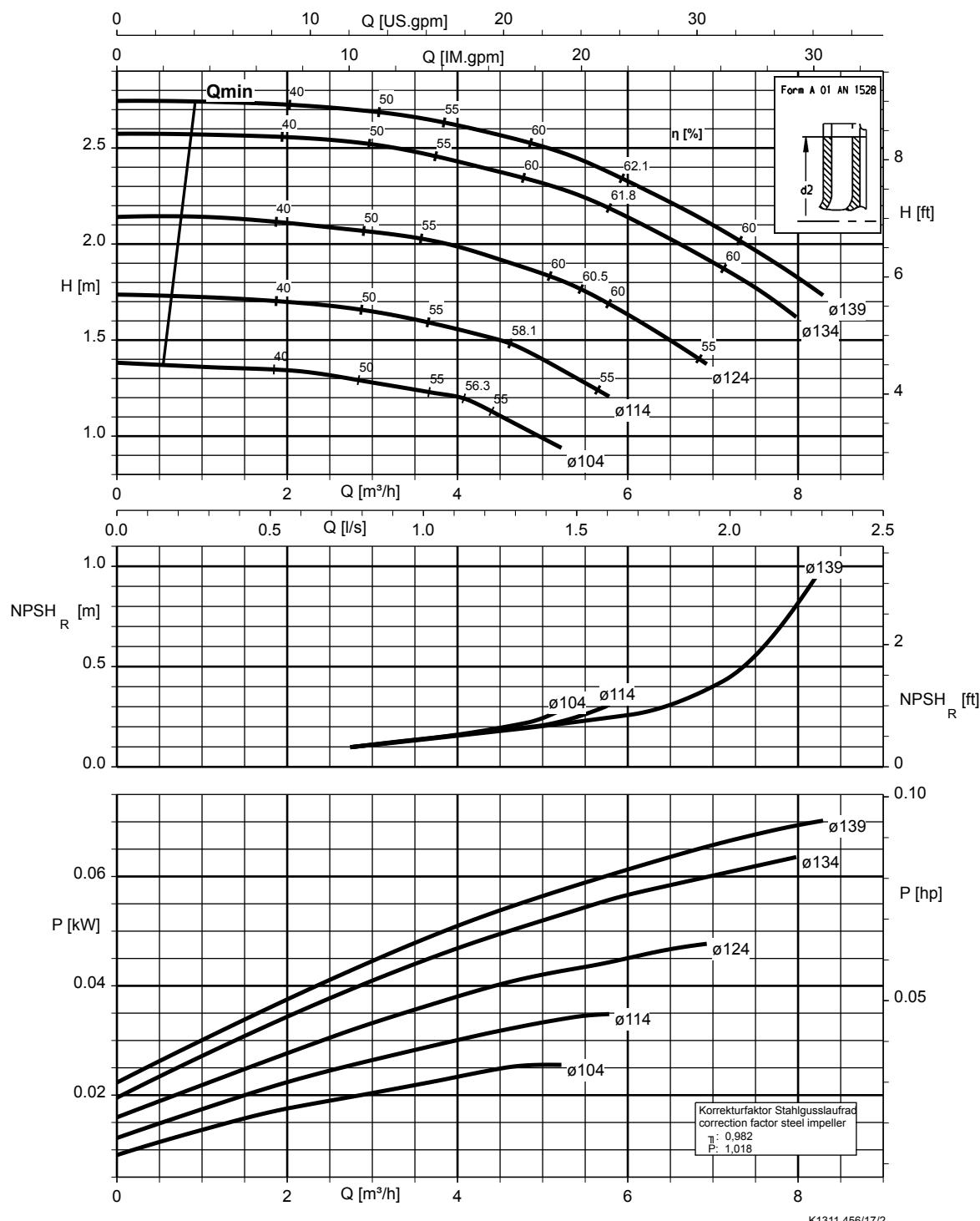
Etanorm SYT, Etabloc



K1311.456/15/2

Etanorm 050-032-125.1,  $n = 960 \text{ t/min}$

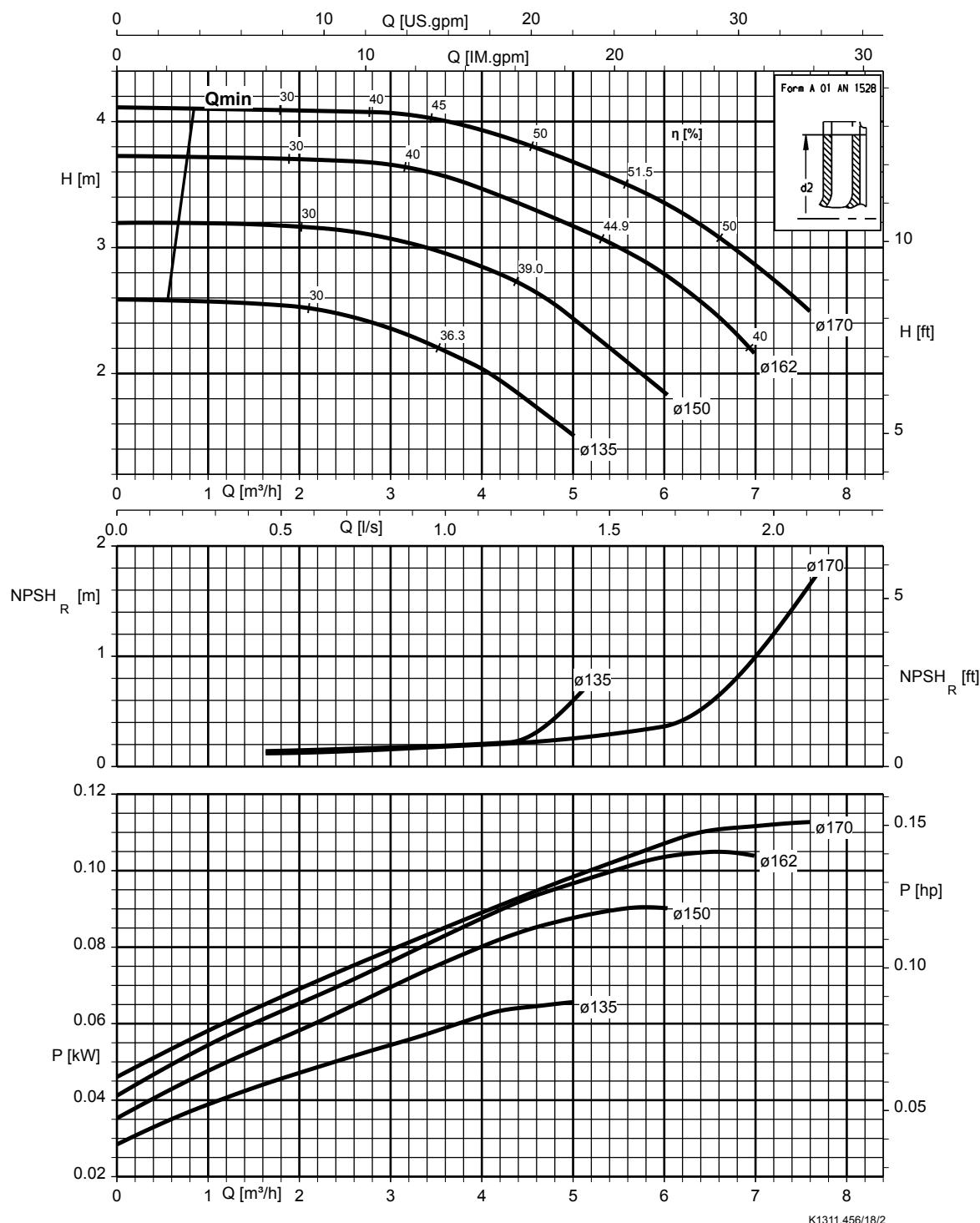
Etanorm SYT, Etabloc



K1311.456/17/2

Etanorm 050-032-160.1,  $n = 960 \text{ t/min}$

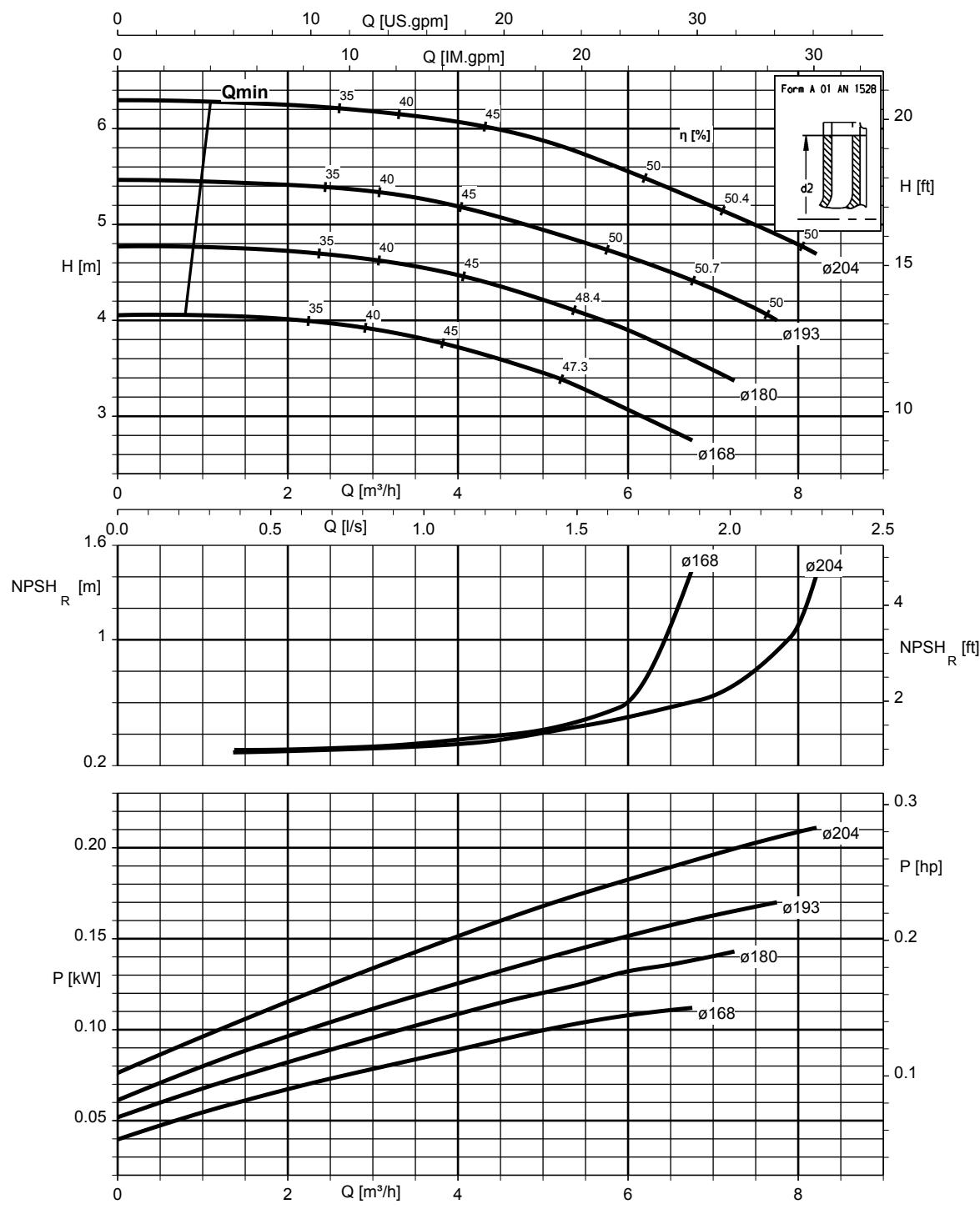
Etanorm SYT, Etabloc



K1311.456/18/2

Etanorm 050-032-200.1,  $n = 960 \text{ t/min}$

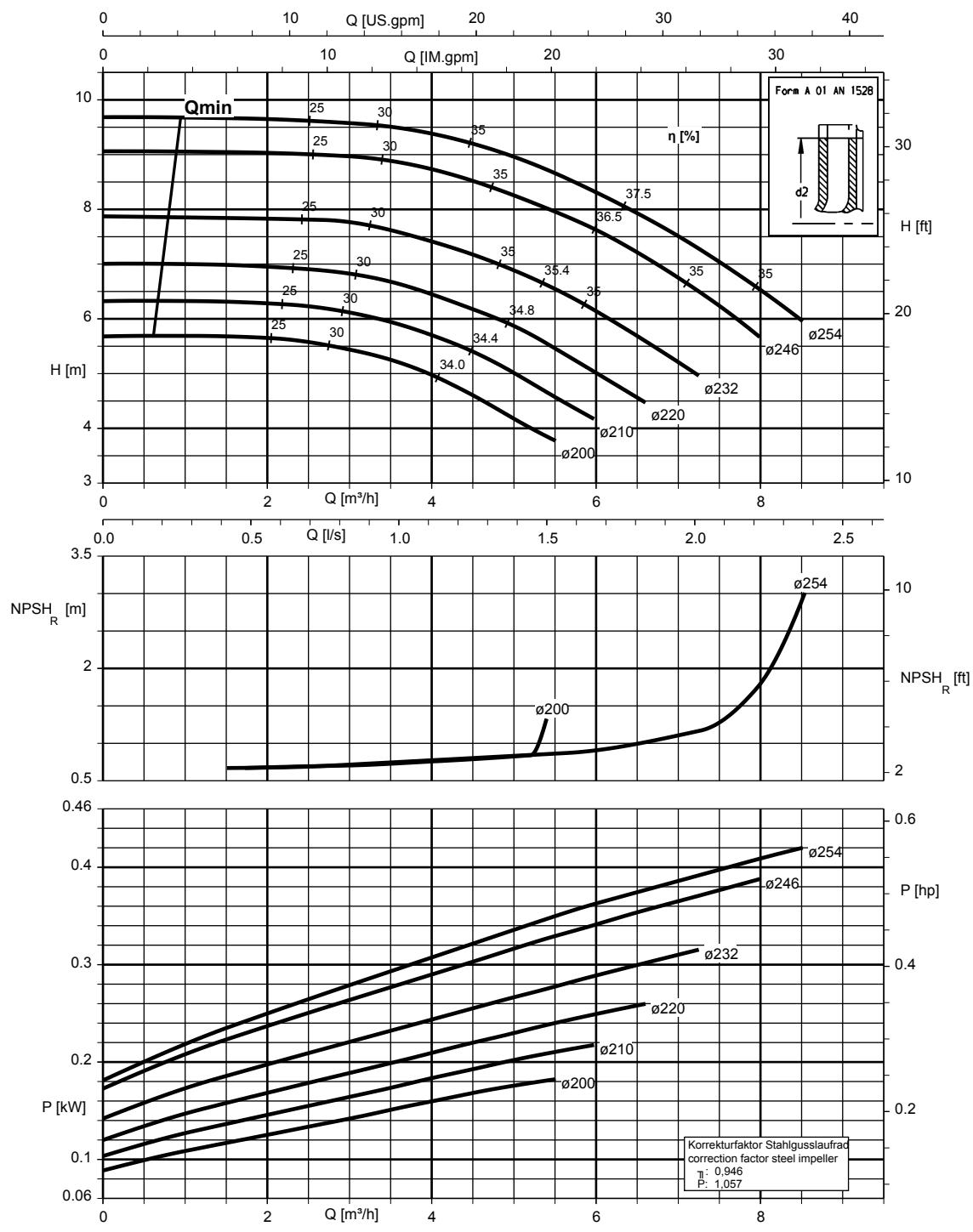
Etanorm SYT, Etabloc



K1311.456/19/2

Etanorm 050-032-250.1,  $n = 960 \text{ t/min}$

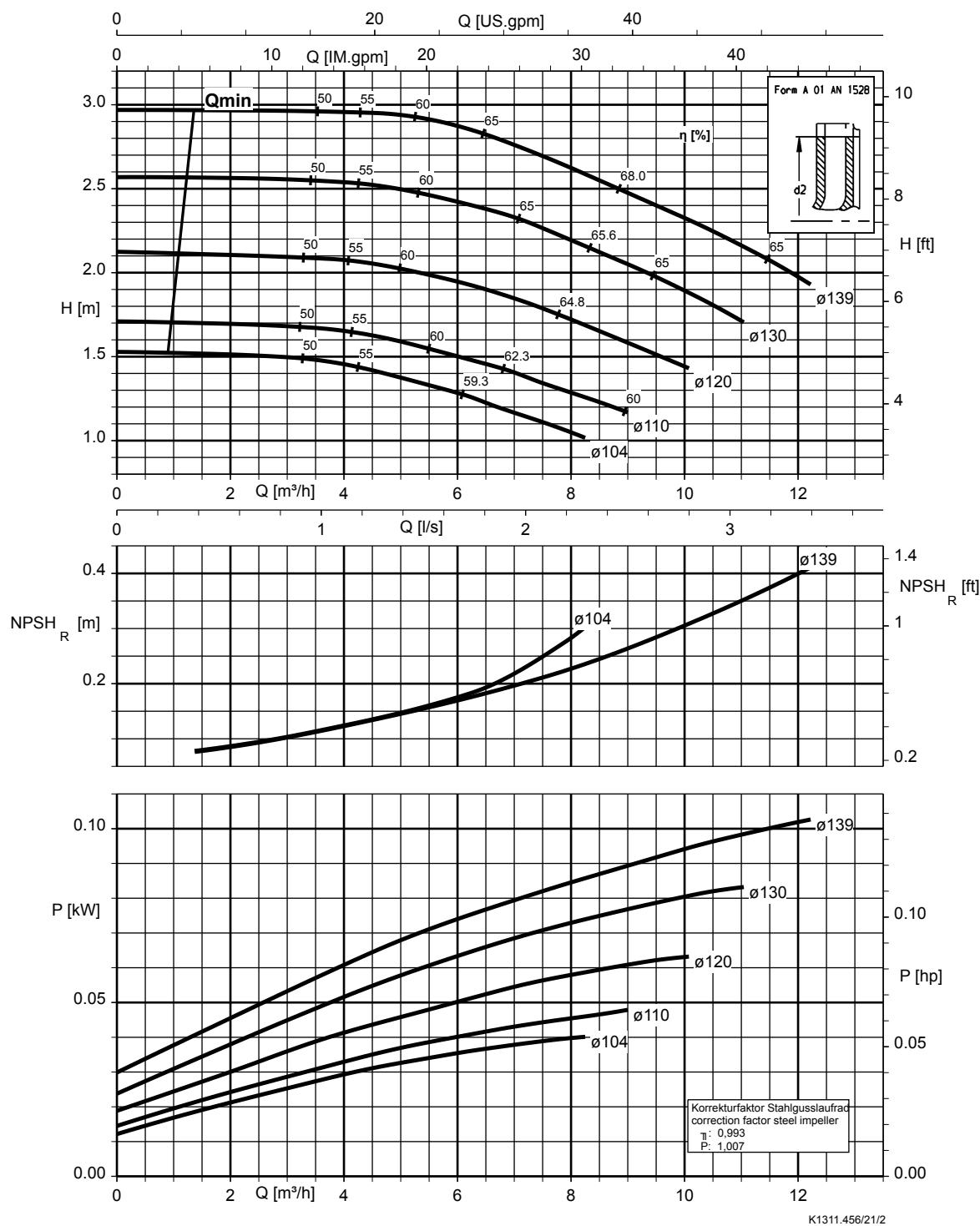
Etabloc



K1311.456/20/2

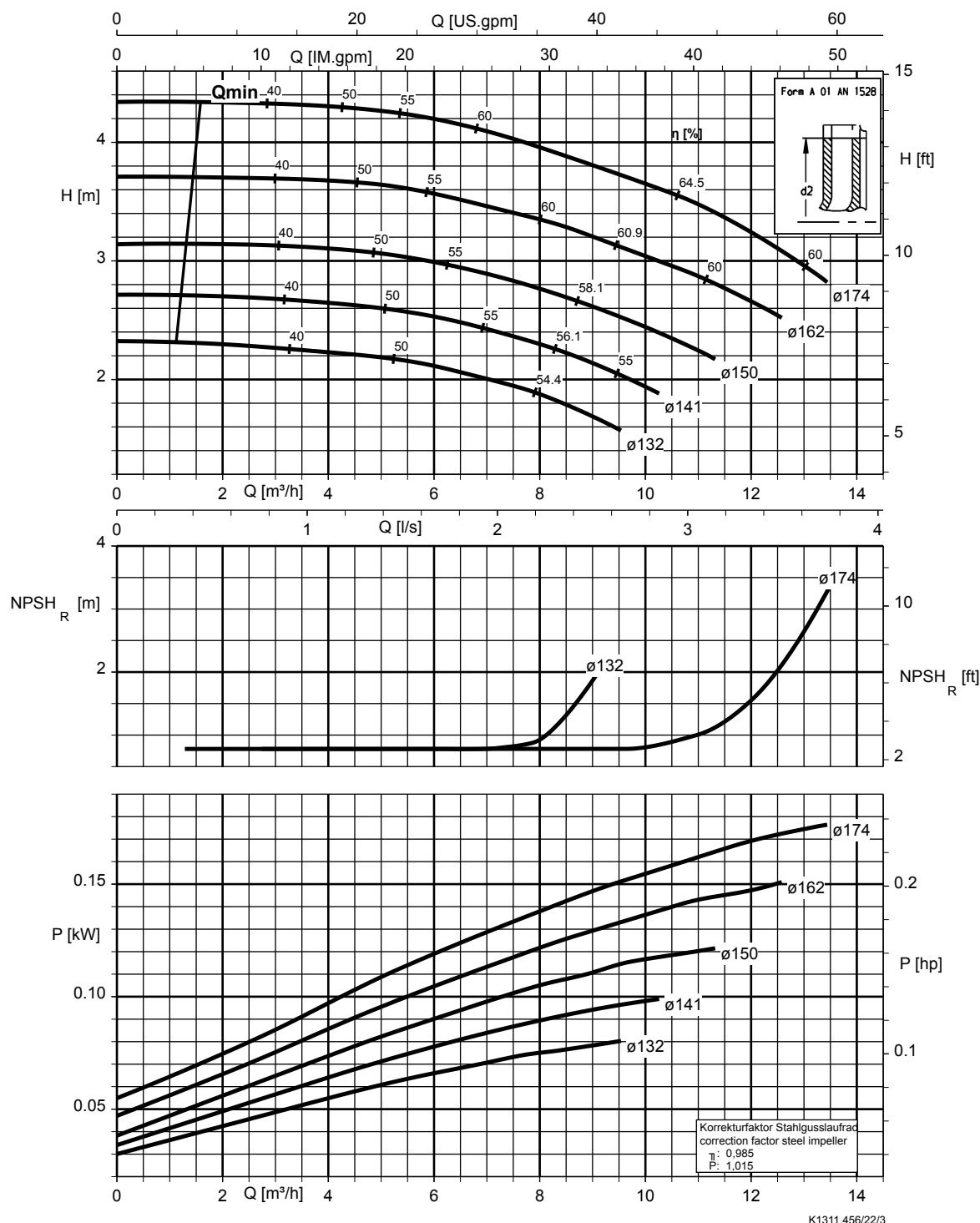
Etanorm 050-032-125, n = 960 t/min

Etabloc



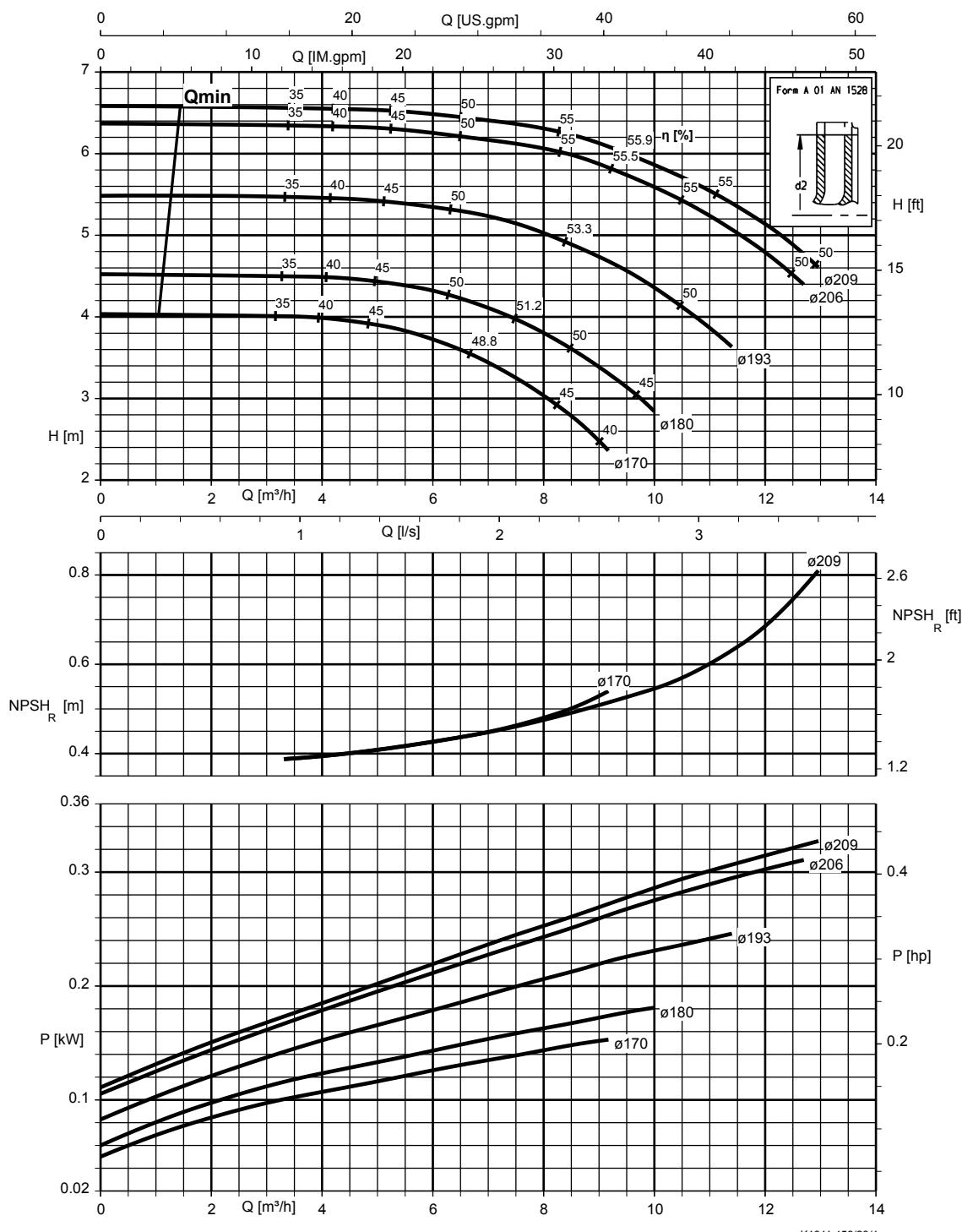
Etanorm 050-032-160, n = 960 t/min

Etanorm SYT, Etabloc



Etanorm 050-032-200, n = 960 t/min

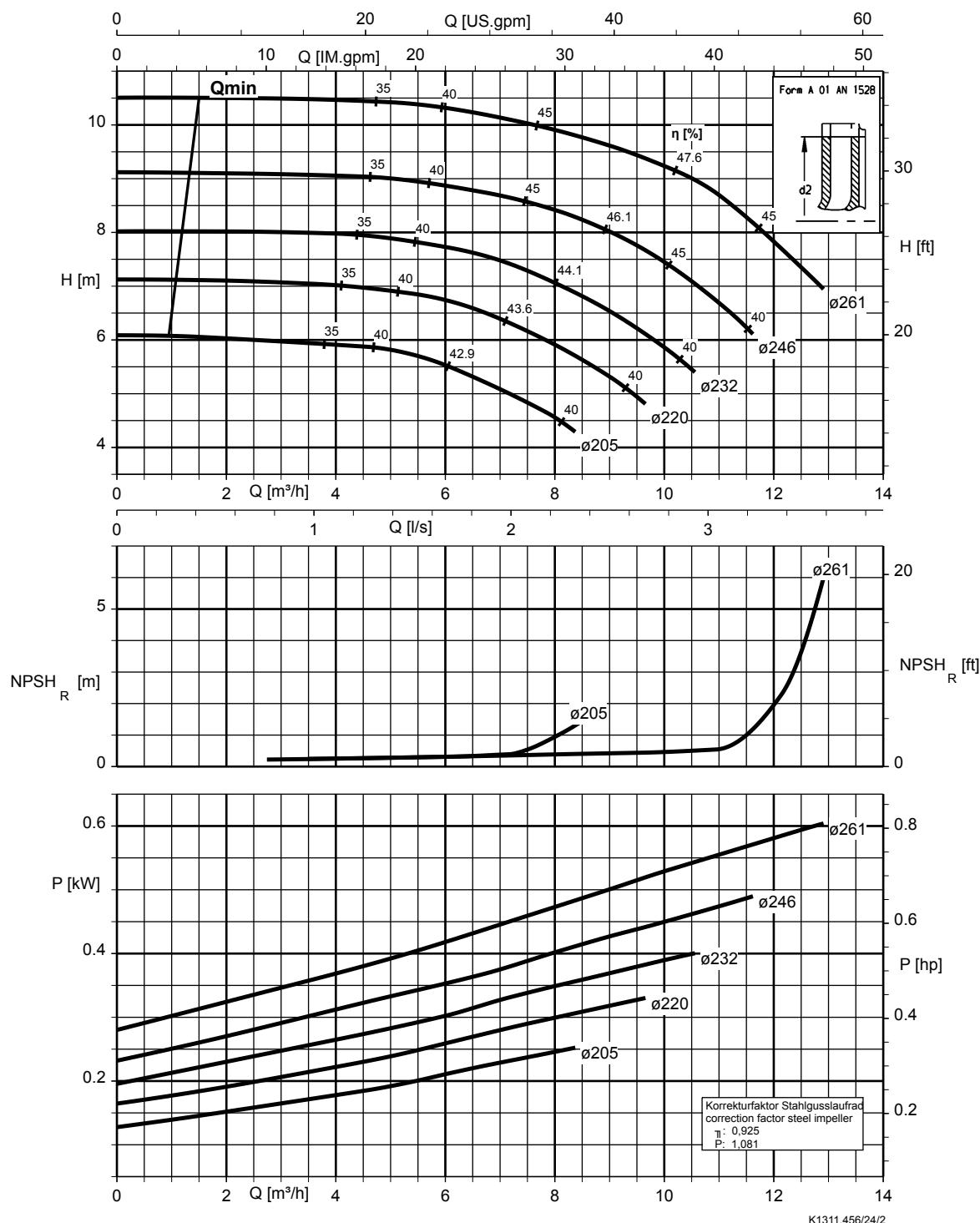
Etanorm SYT, Etabloc



K1311.456/23/1

Etanorm 050-032-250, n = 960 t/min

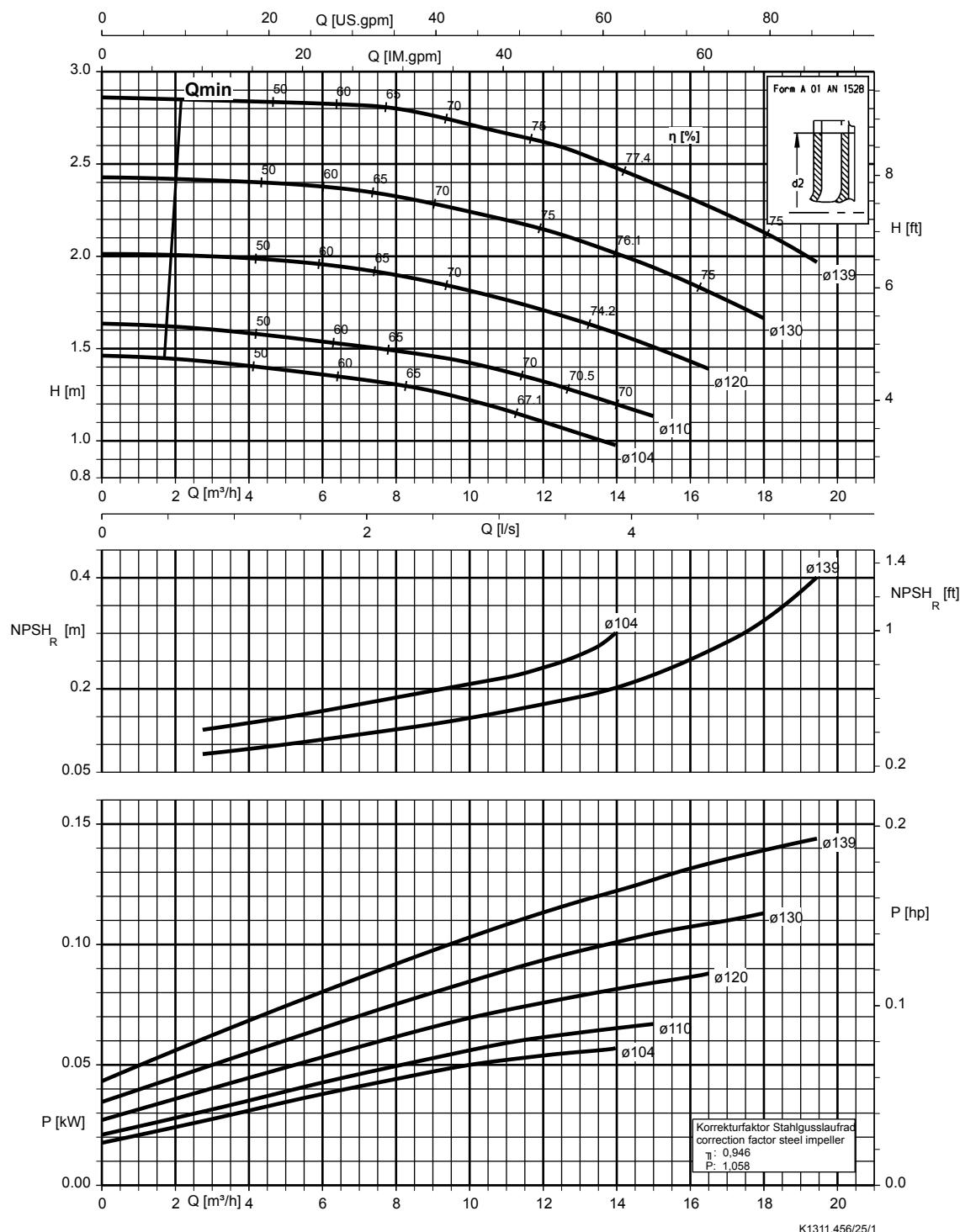
Etanorm SYT, Etabloc



K1311.456/24/2

Etanorm 065-040-125, n = 960 t/min

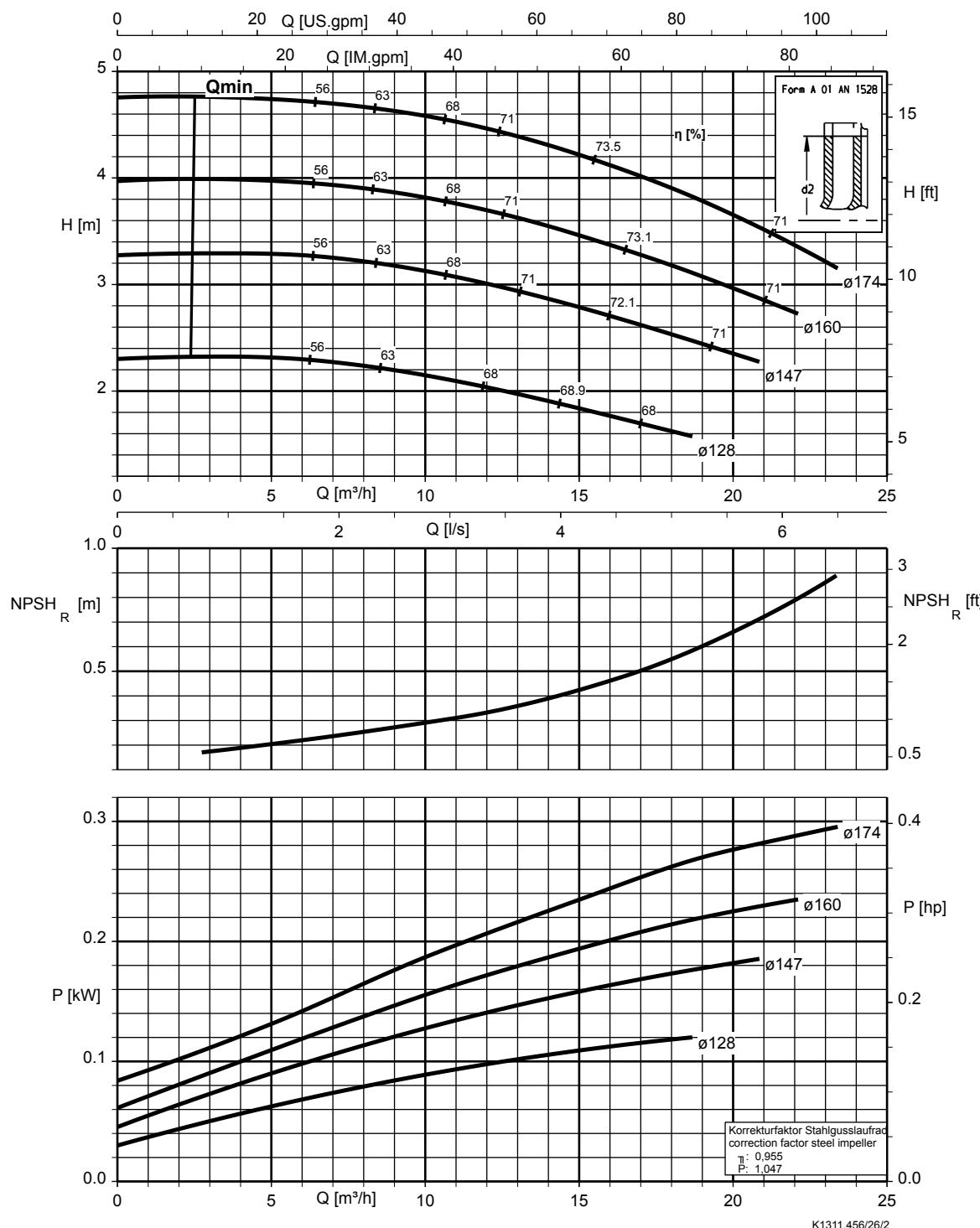
Etabloc



K1311.456/25/1

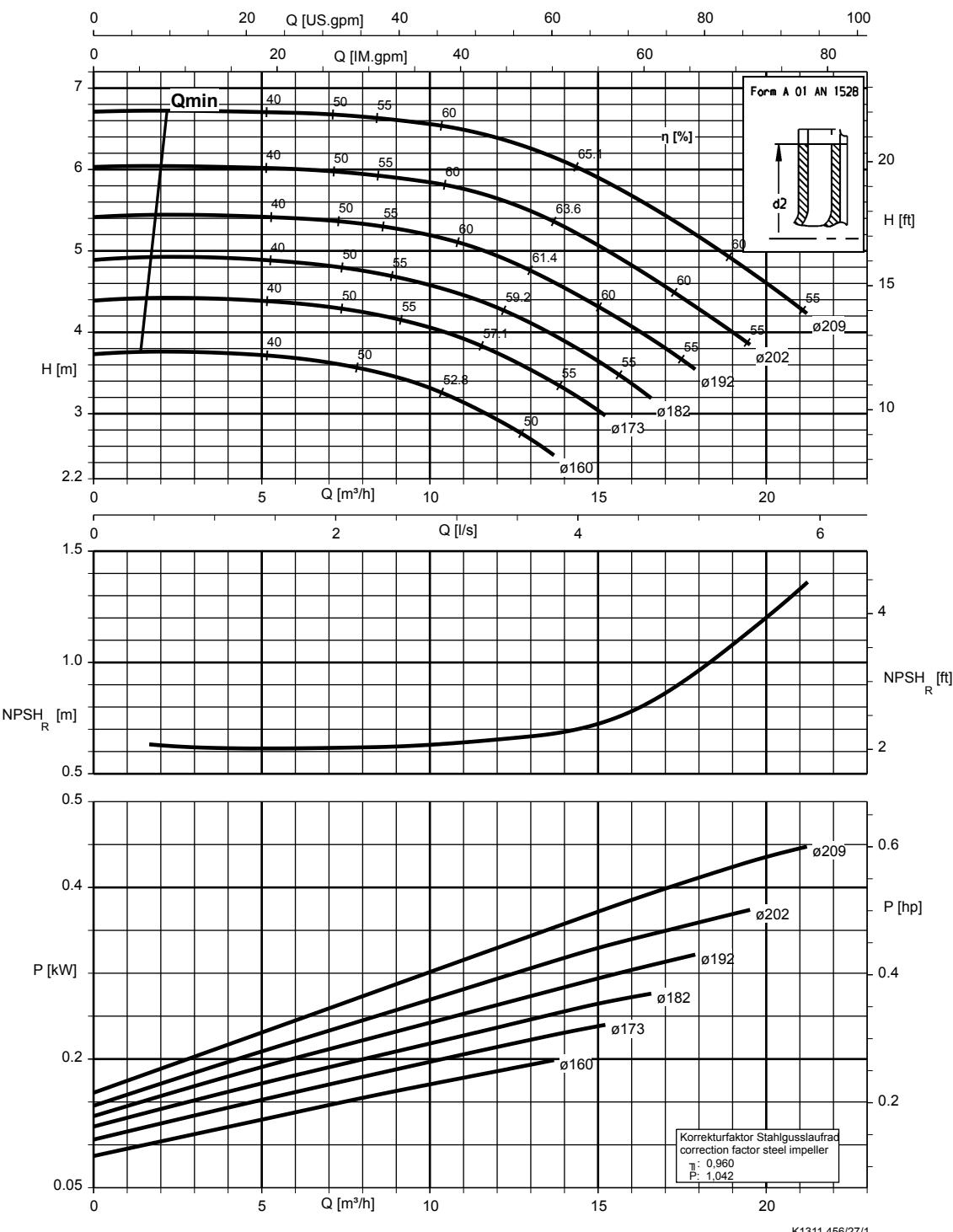
Etanorm 065-040-160, n = 960 t/min

Etanorm SYT, Etabloc



Etanorm 065-040-200, n = 960 t/min

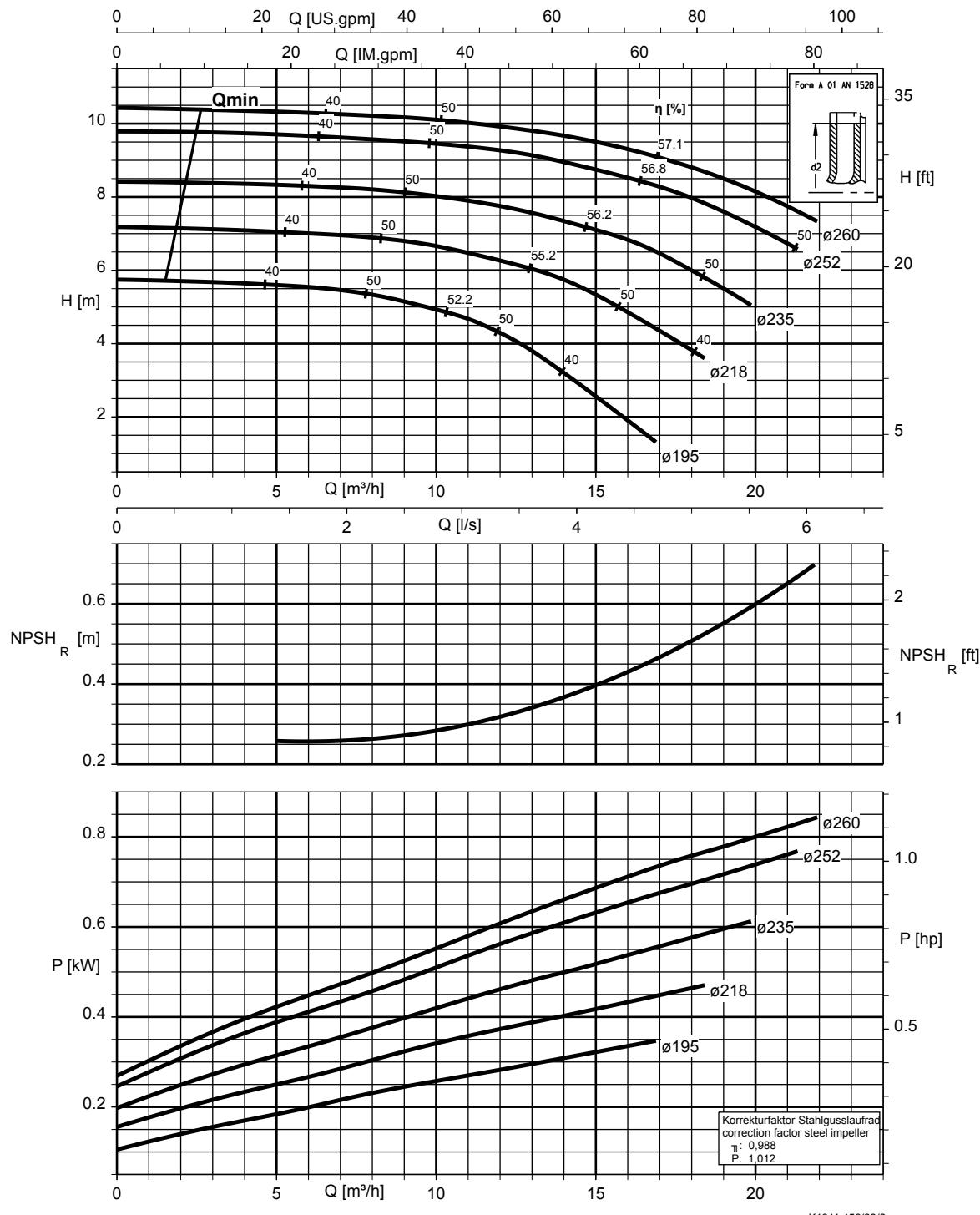
Etanorm SYT, Etabloc



K1311.456/27/1

Etanorm 065-040-250, n = 960 t/min

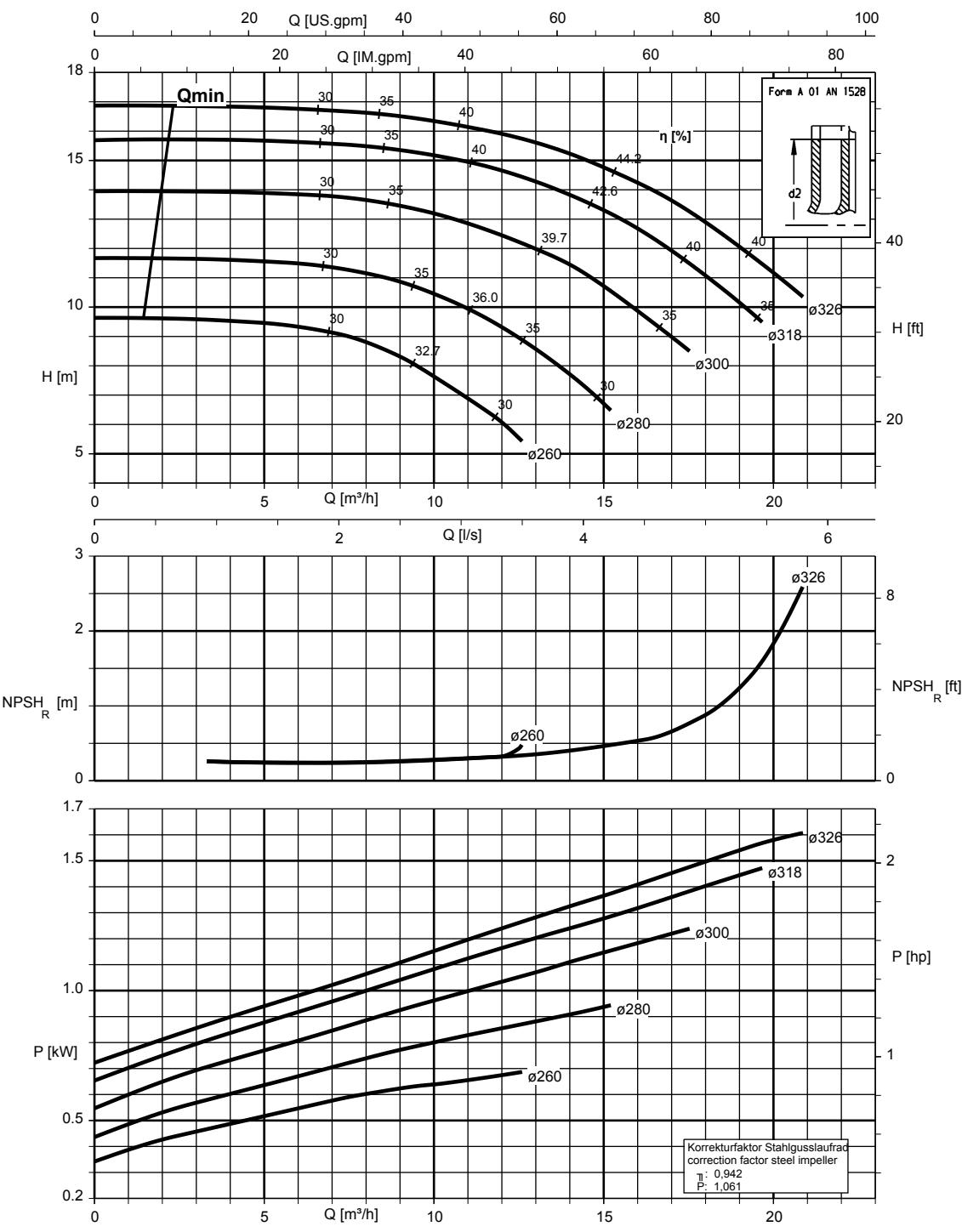
Etanorm SYT, Etabloc



K1311.456/28/2

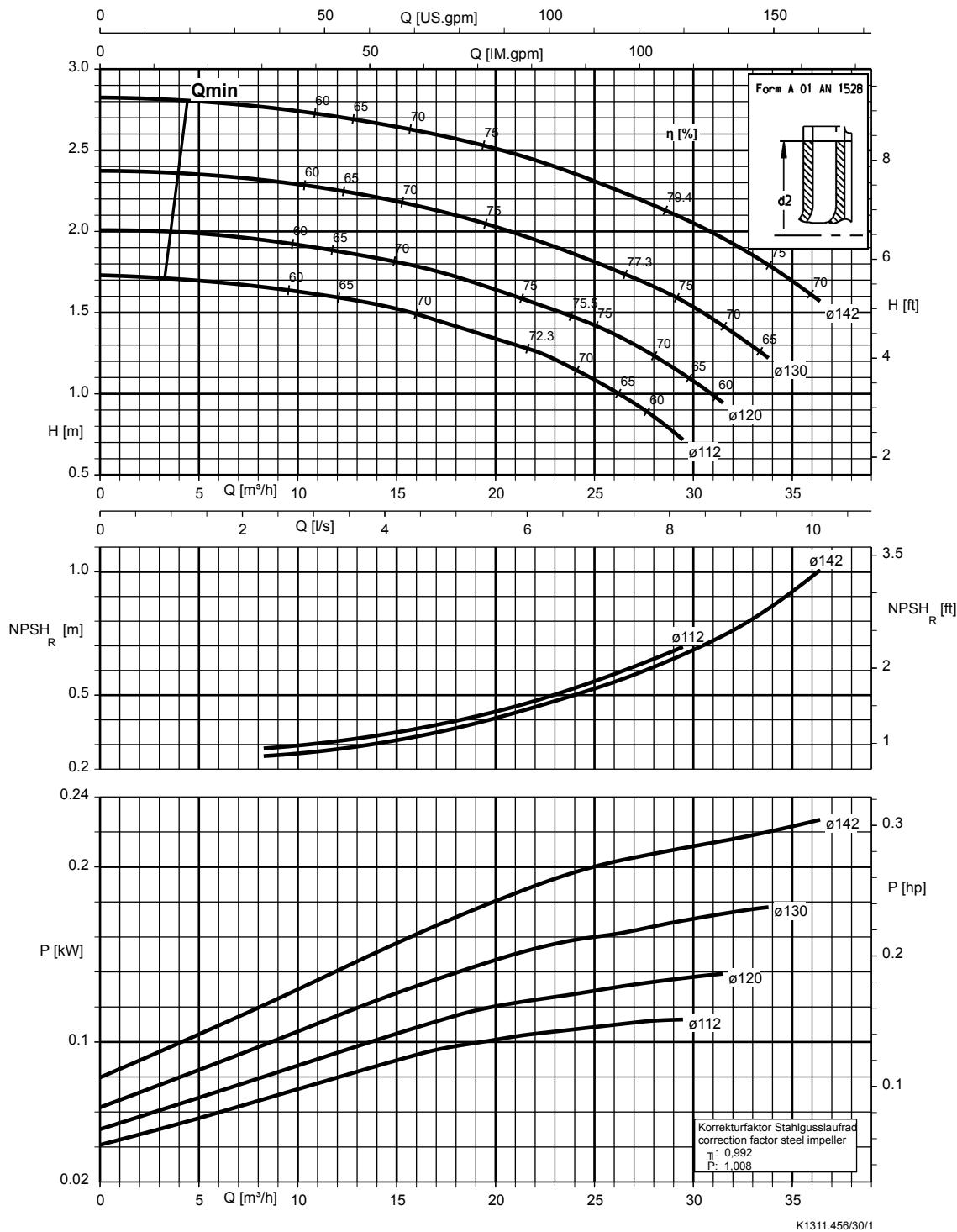
Etanorm 065-040-315, n = 960 t/min

Etanorm SYT, Etabloc



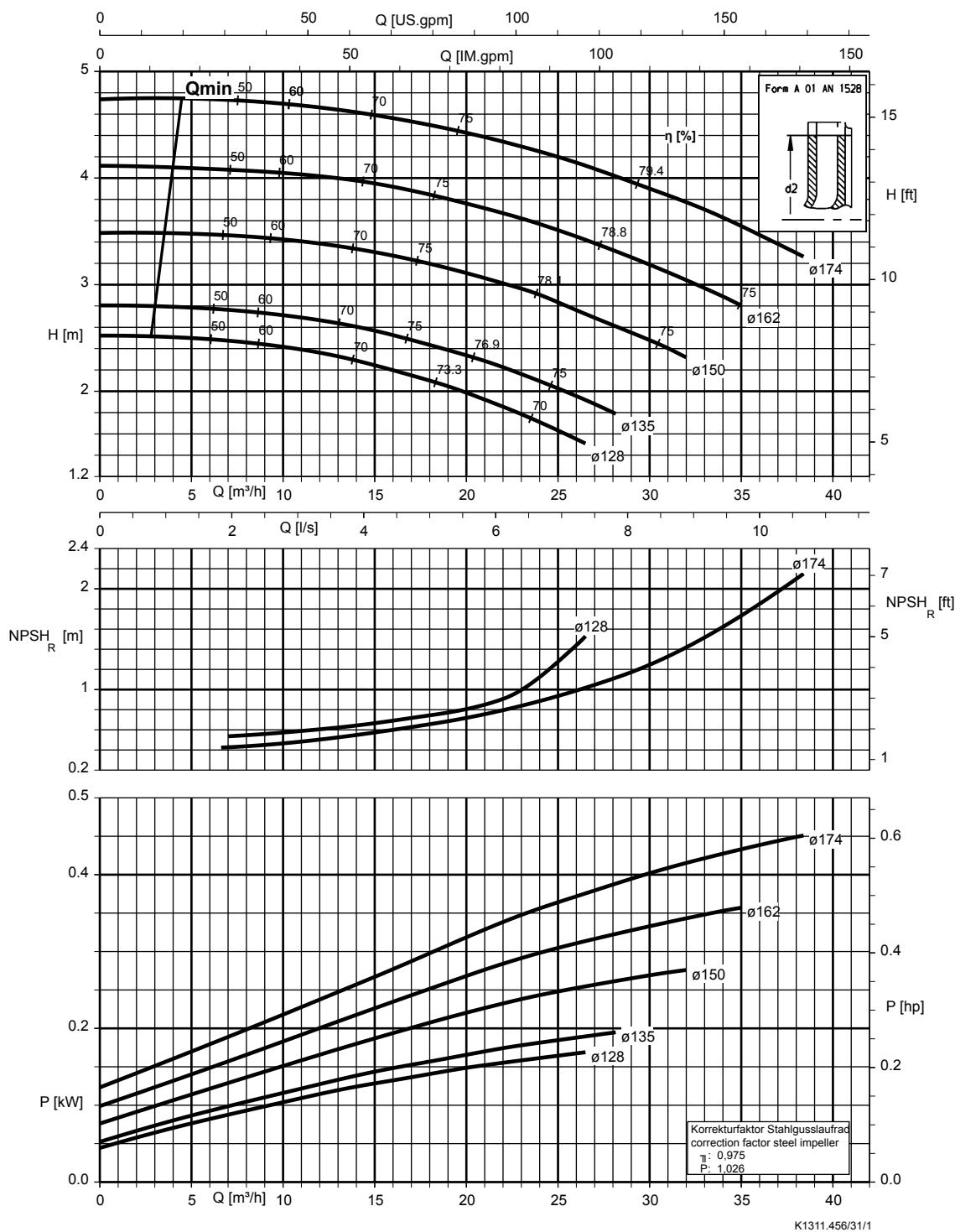
Etanorm 065-050-125, n = 960 t/min

Etabloc



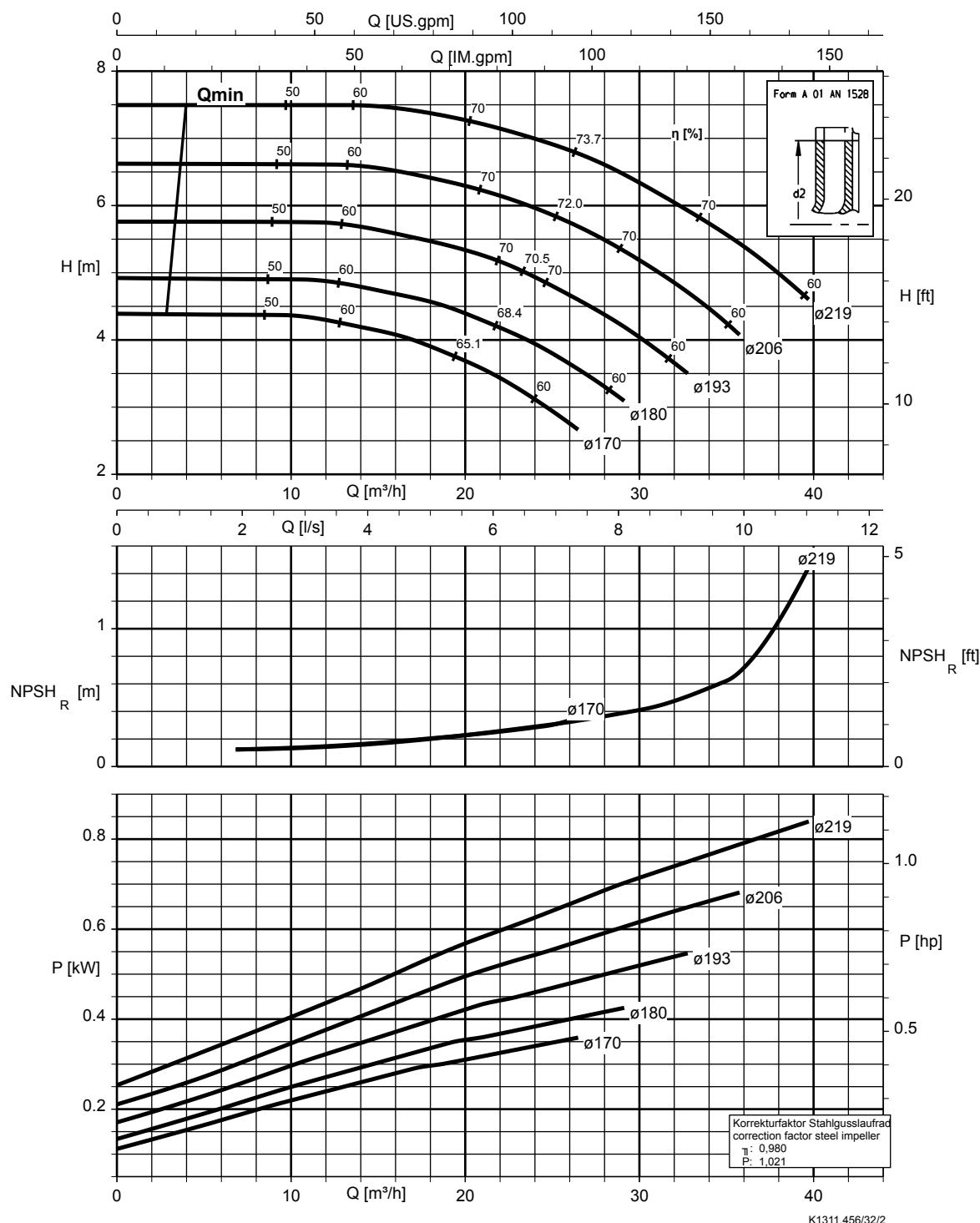
Etanorm 065-050-160,  $n = 960 \text{ t/min}$

Etanorm SYT, Etabloc



Etanorm 065-050-200, n = 960 t/min

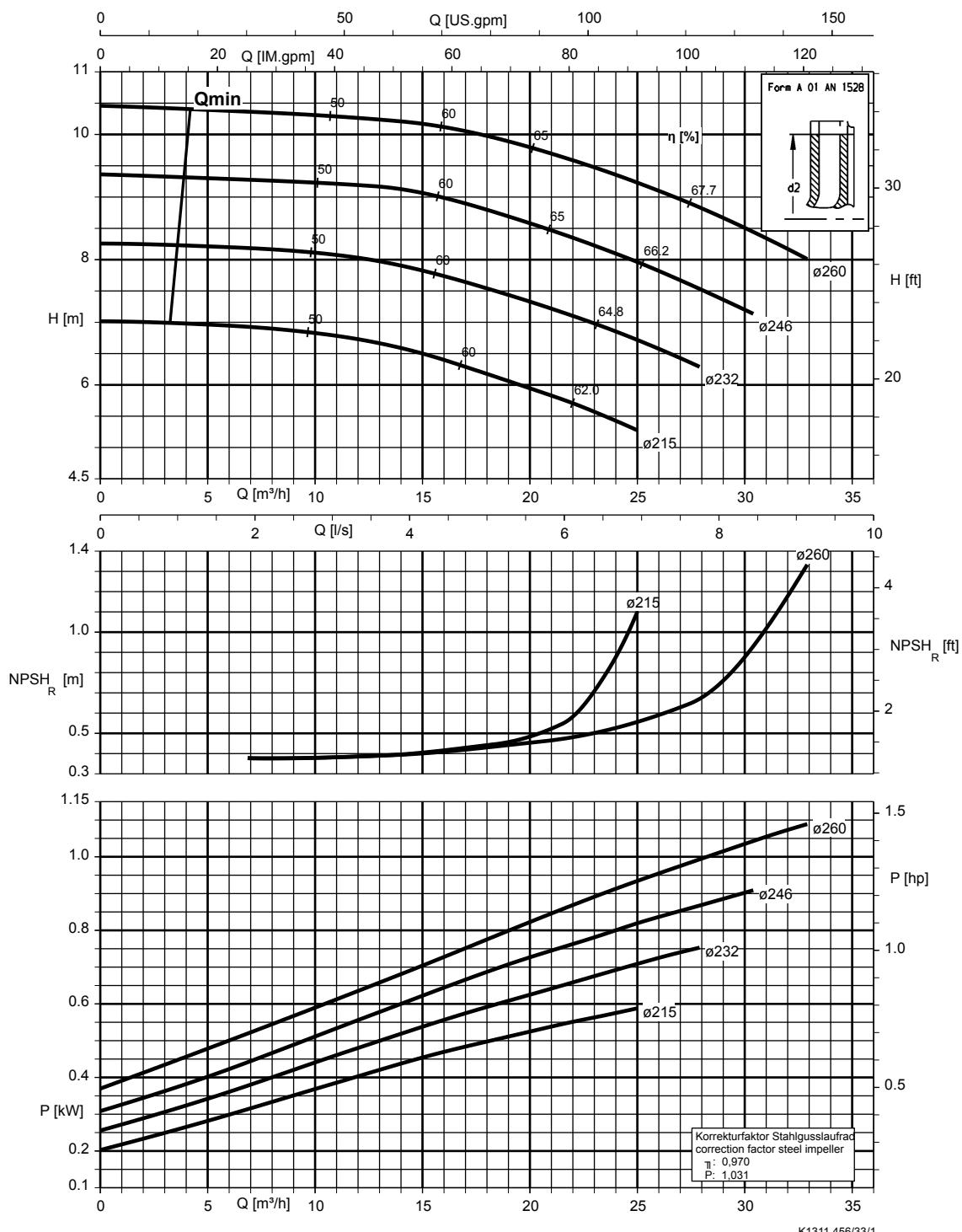
Etanorm SYT, Etabloc



K1311.456/32/2

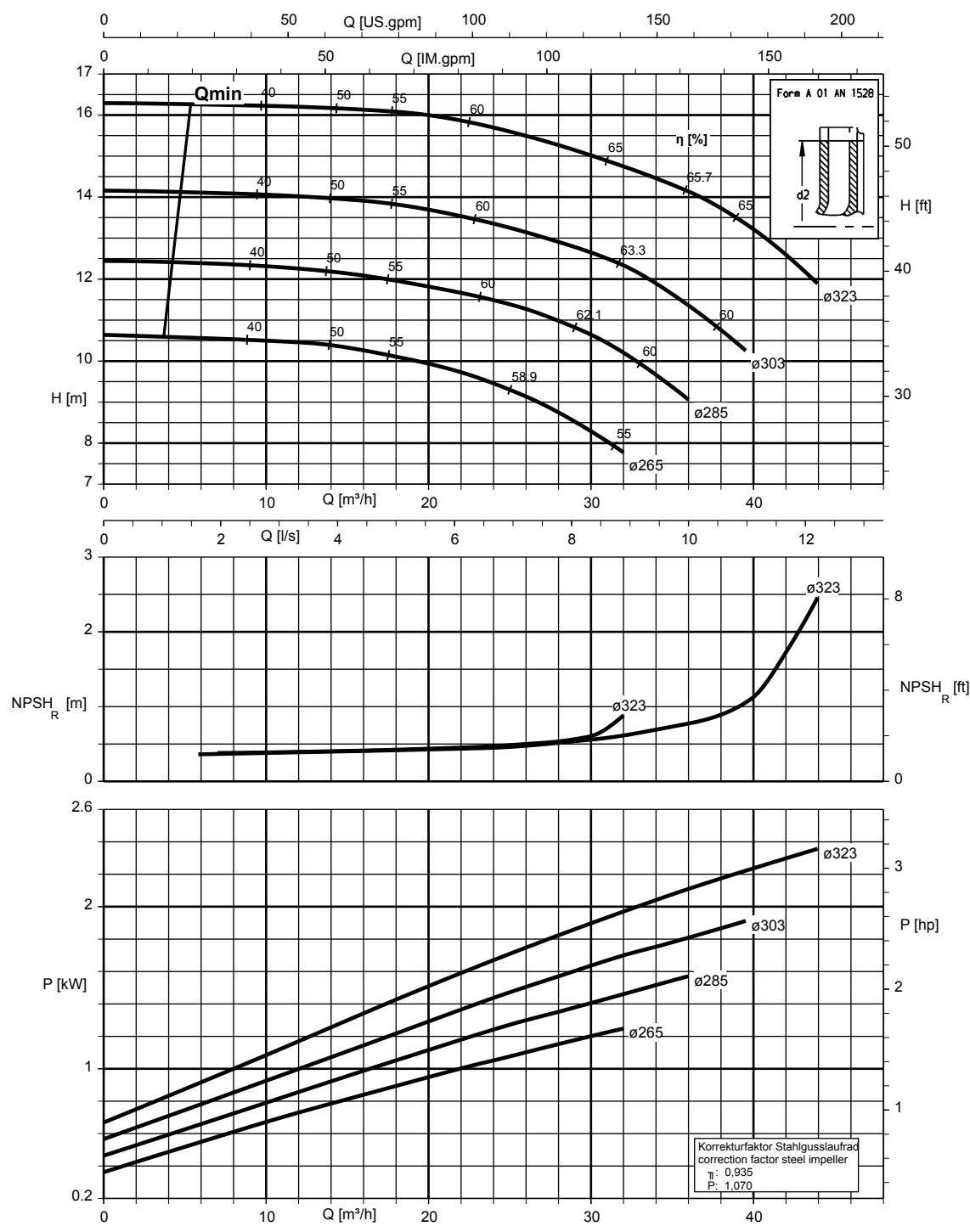
Etanorm 065-050-250, n = 960 t/min

Etanorm SYT, Etabloc



Etanorm 065-050-315, n = 960 t/min

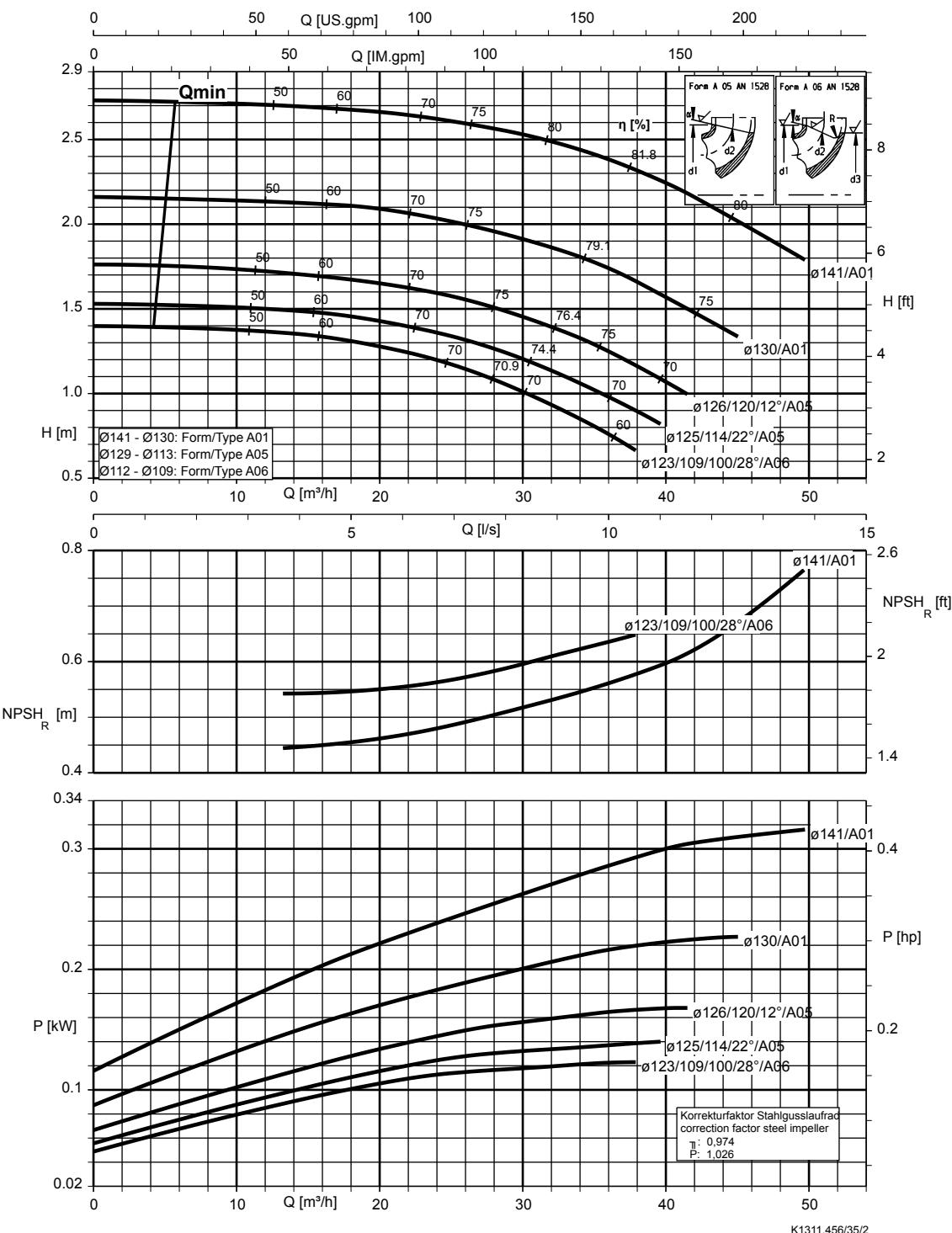
Etanorm SYT, Etabloc



K1311.456/34/2

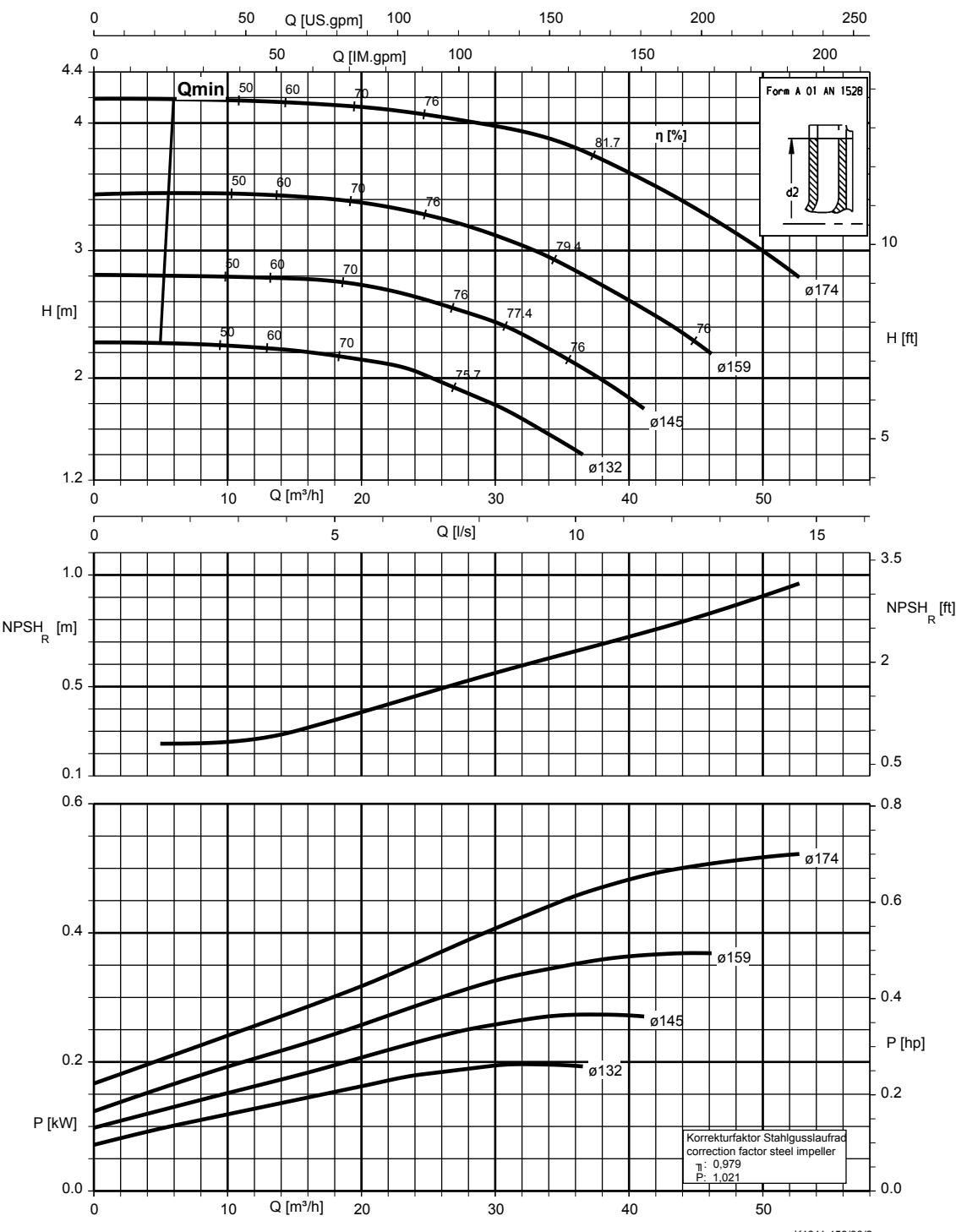
Etanorm 080-065-125, n = 960 t/min

Etabloc



Etanorm 080-065-160, n = 960 t/min

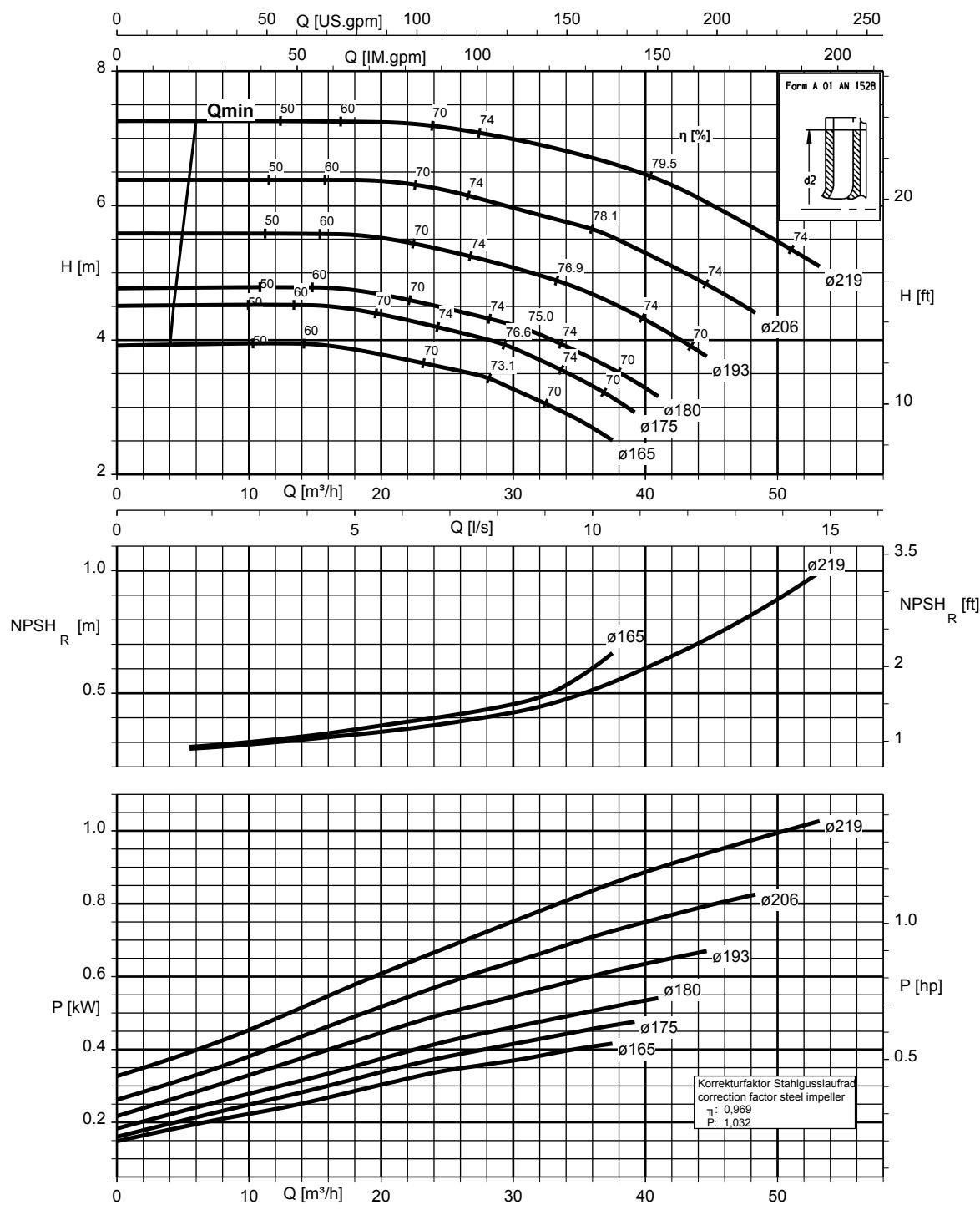
Etanorm SYT, Etabloc



K1311.456/36/2

Etanorm 080-065-200,  $n = 960 \text{ t/min}$

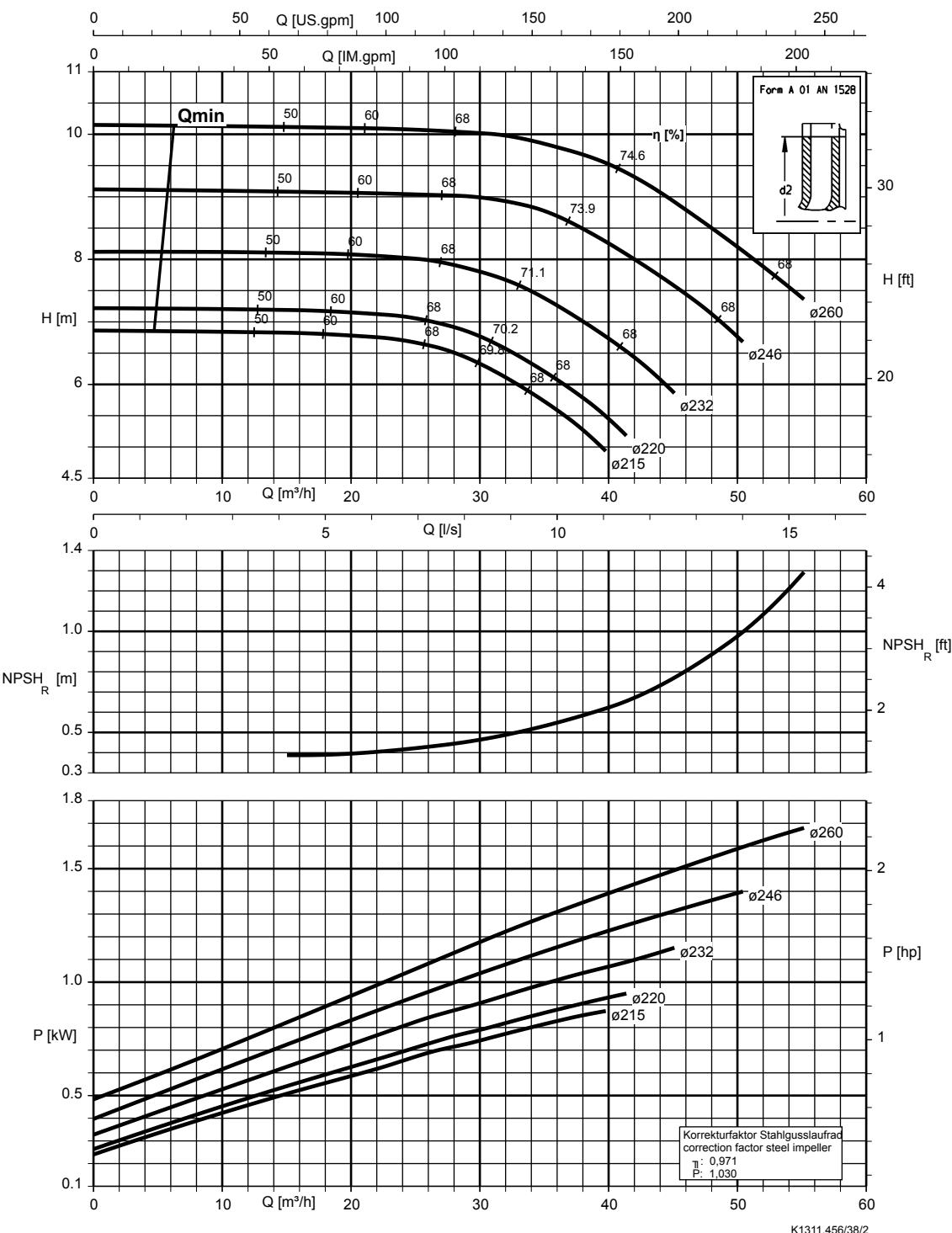
Etanorm SYT, Etabloc



K1311.456/37/2

Etanorm 080-065-250, n = 960 t/min

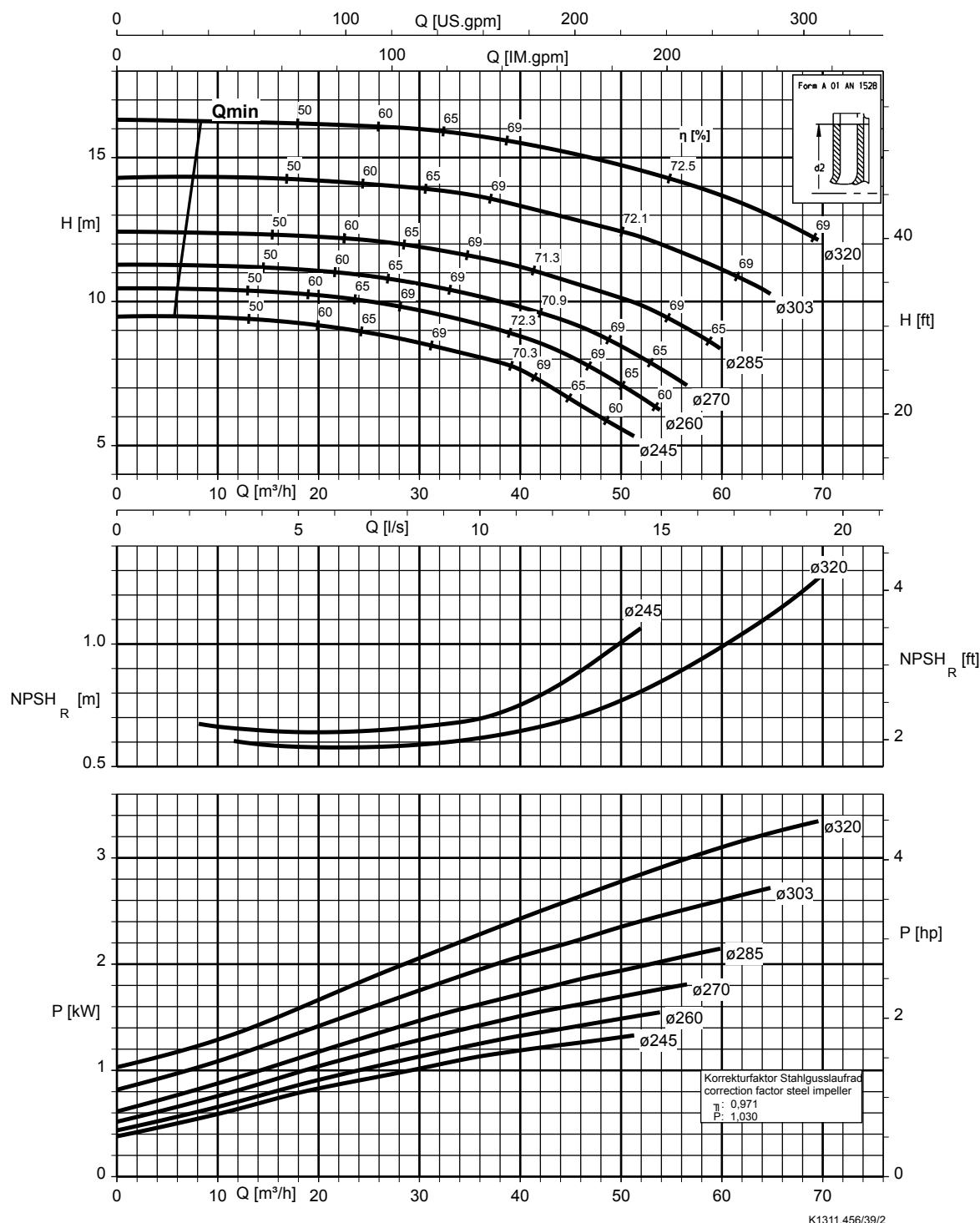
Etanorm SYT, Etabloc



K1311.456/38/2

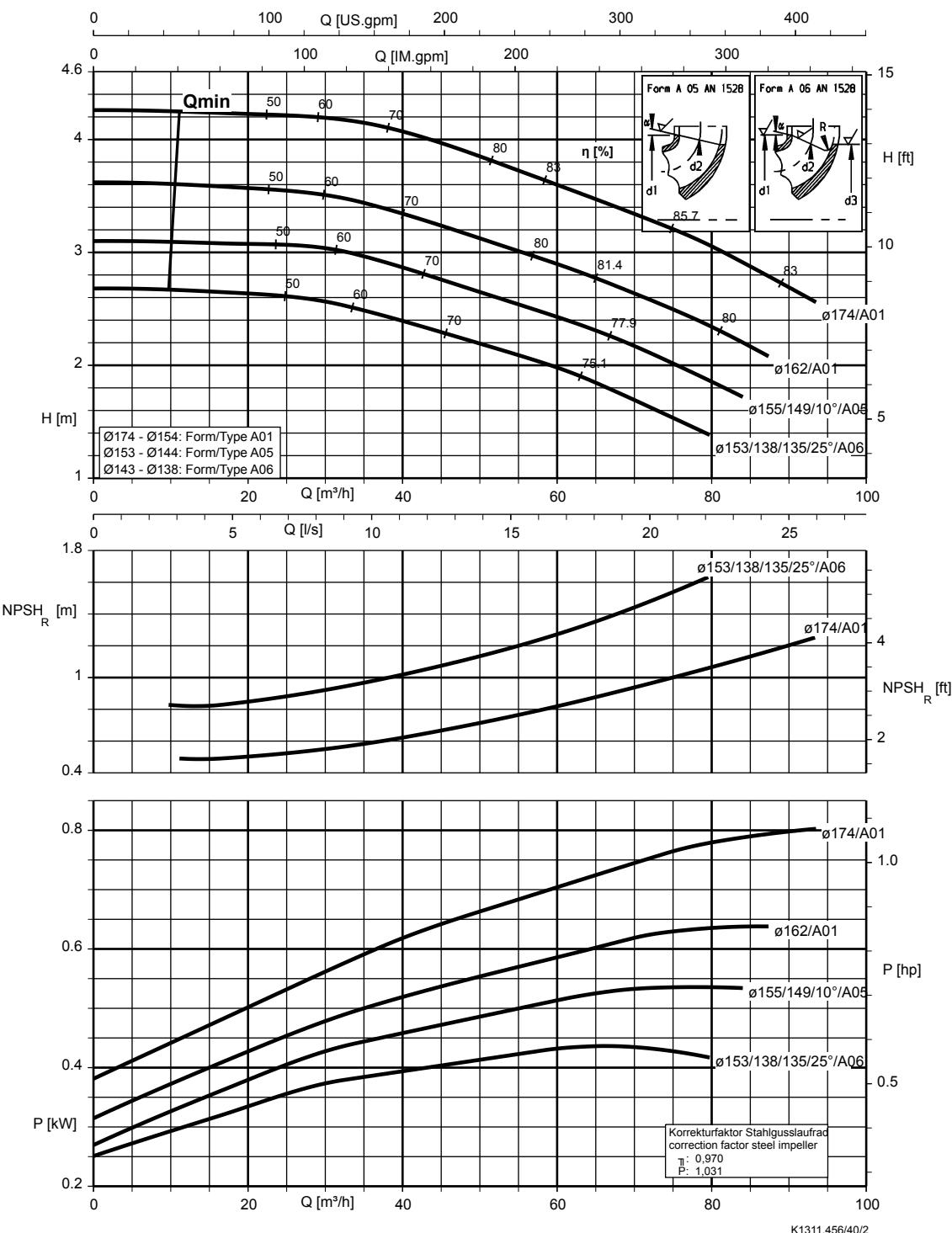
Etanorm 080-065-315, n = 960 t/min

Etanorm SYT, Etabloc



**Etanorm 100-080-160, n = 960 t/min**

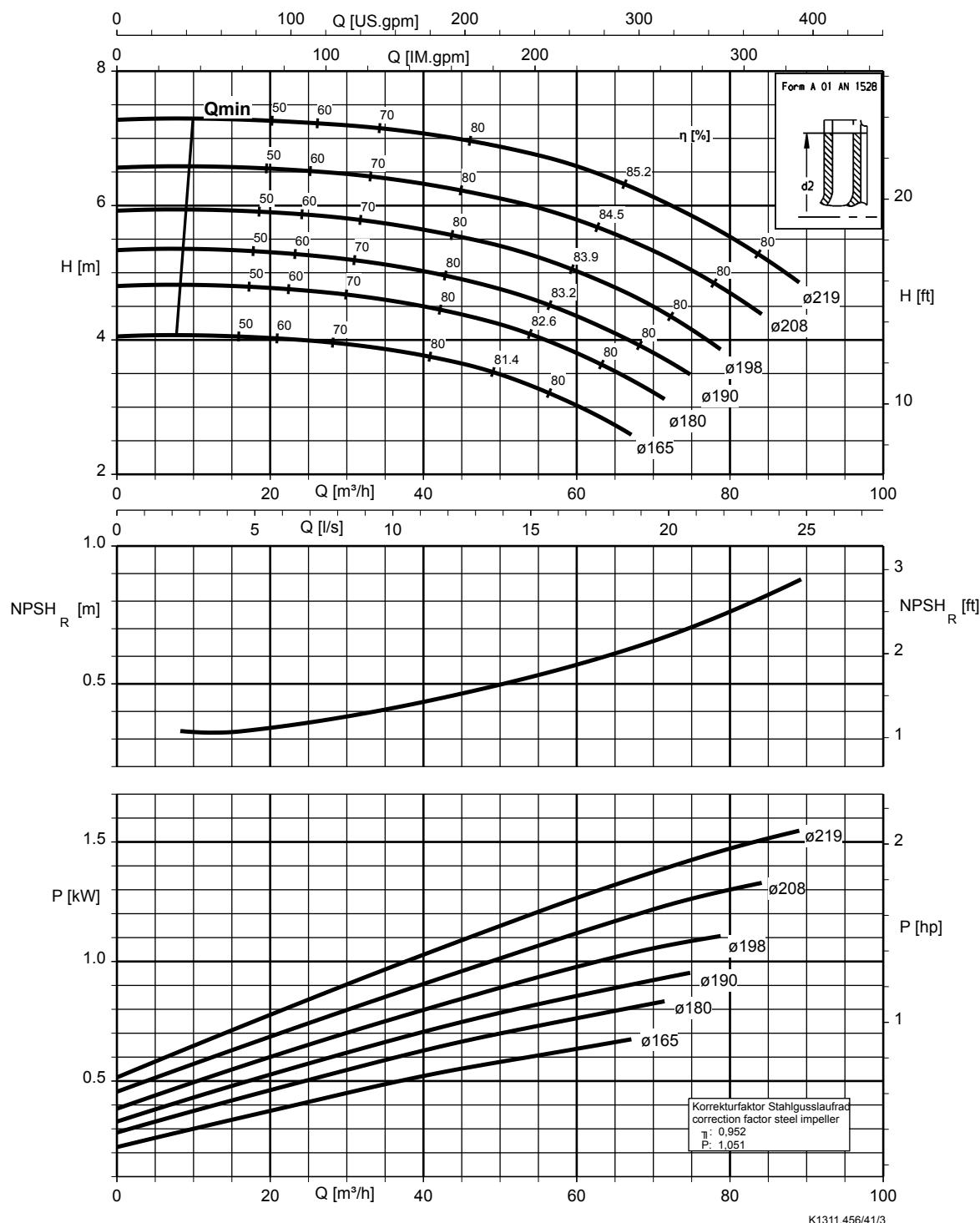
Etanorm SYT, Etabloc



K1311.456/40/2

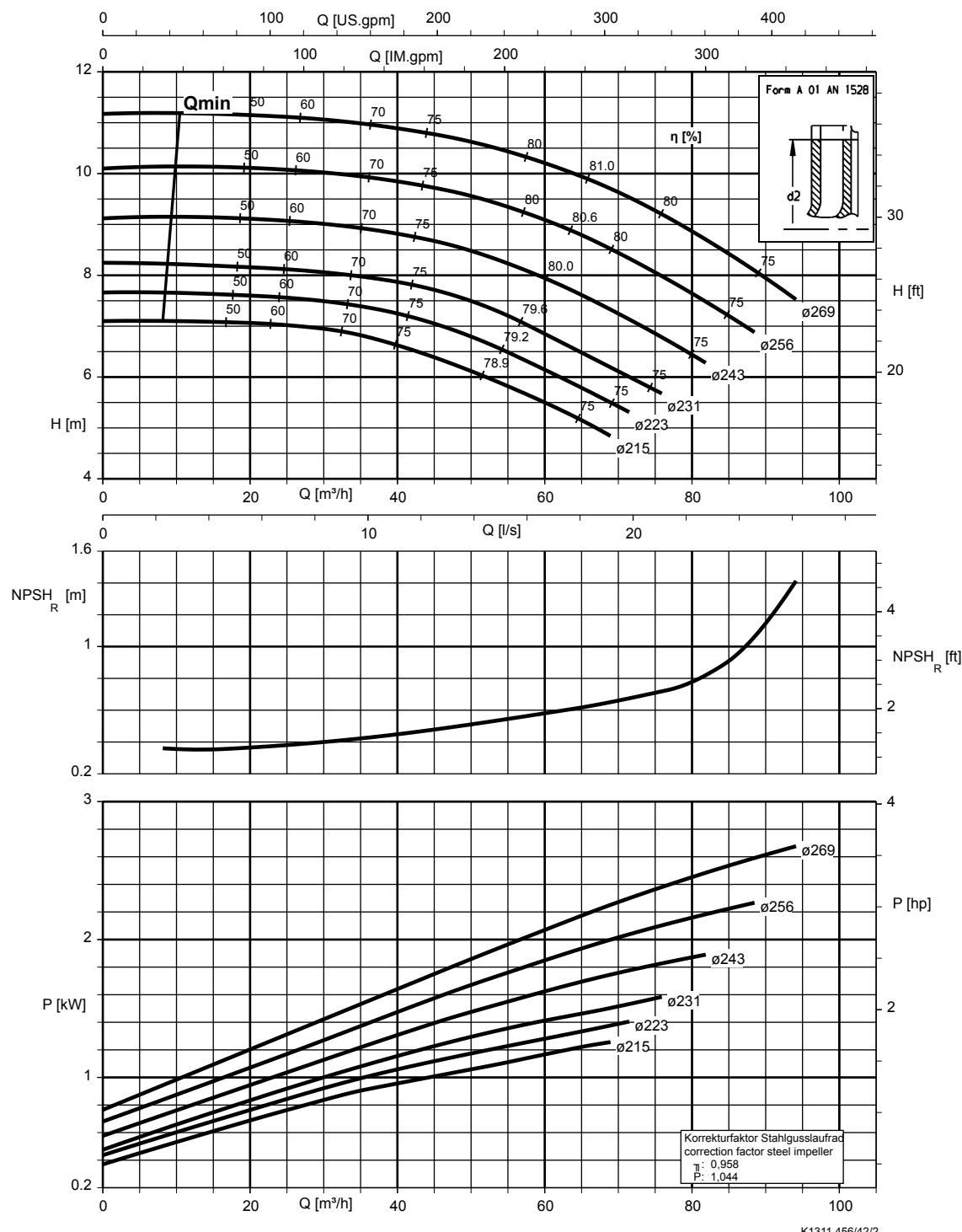
**Etanorm 100-080-200, n = 960 t/min**

Etanorm SYT, Etabloc



**Etanorm 100-080-250, n = 960 t/min**

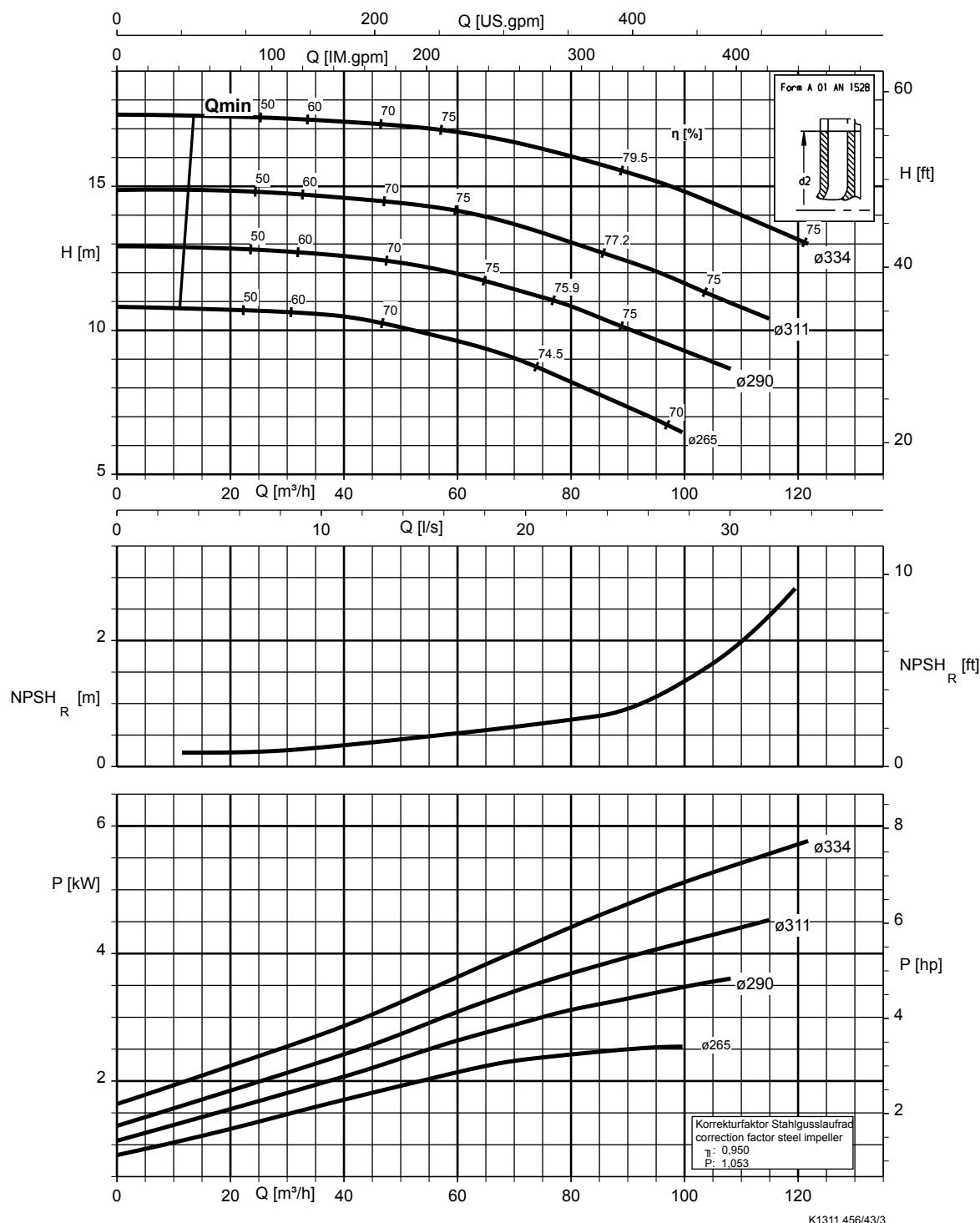
Etanorm SYT, Etabloc



K1311.456/42/2

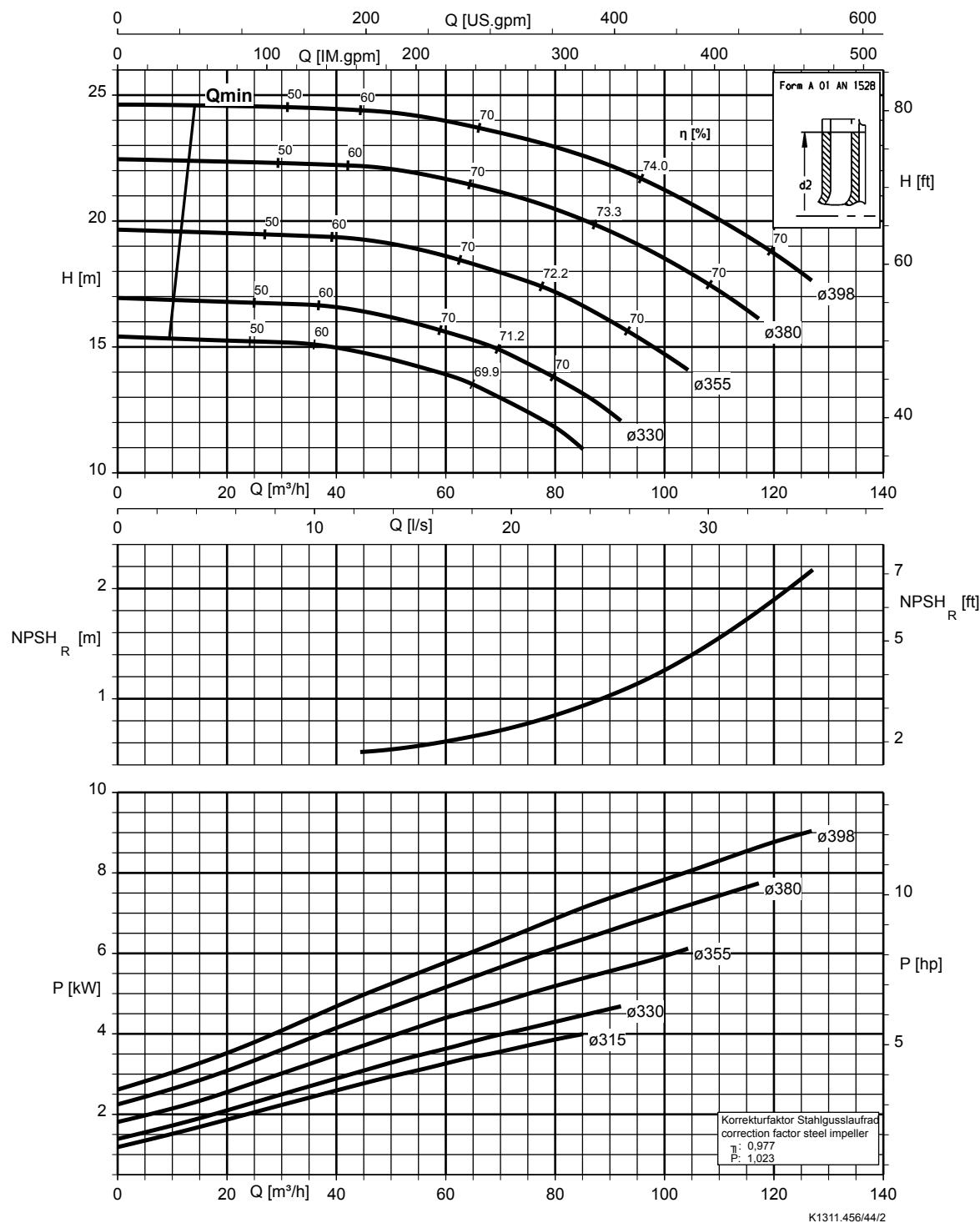
Etanorm 100-080-315, n = 960 t/min

Etanorm SYT, Etabloc



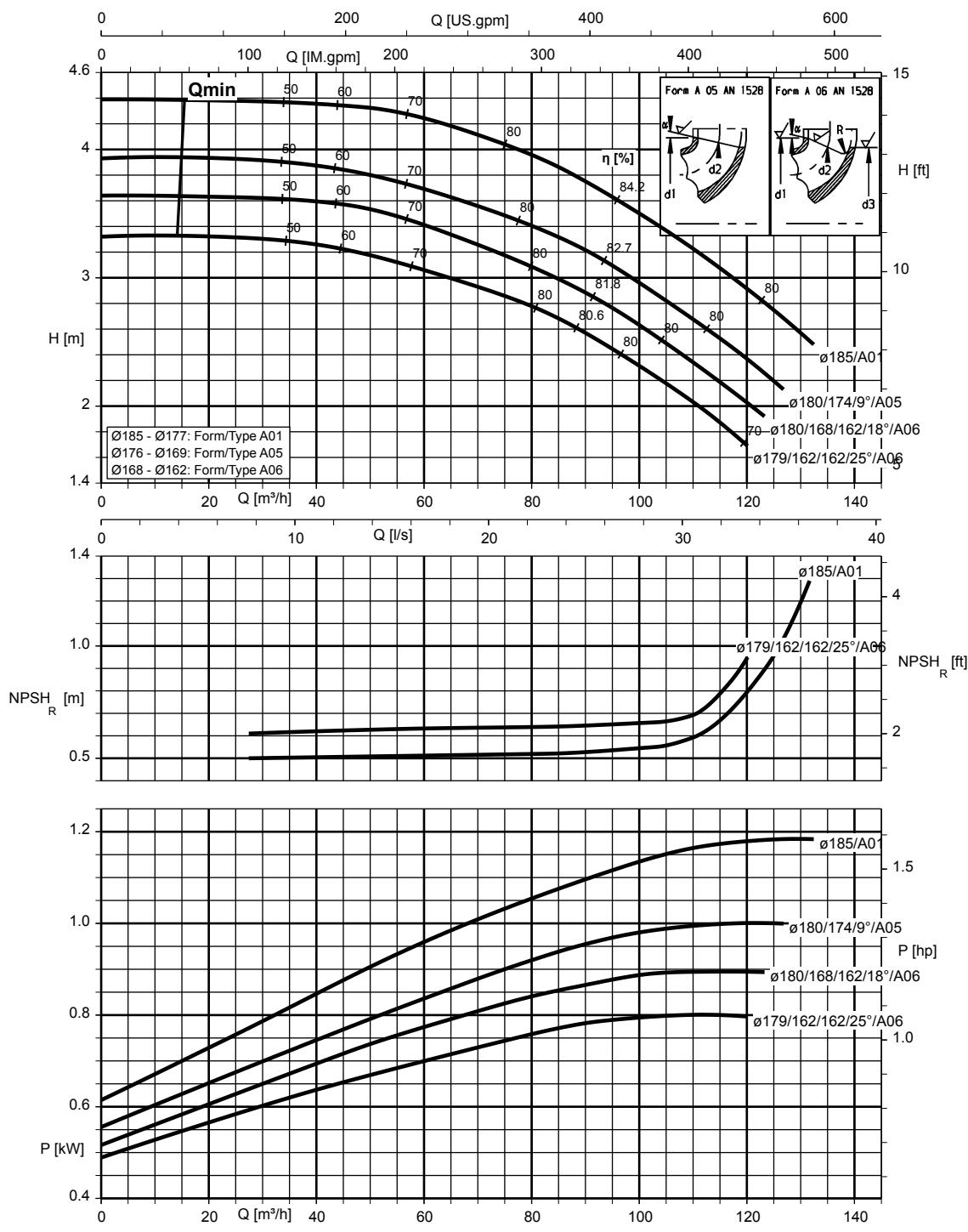
K1311.456/43/3

Etanorm 100-080-400, n = 960 t/min



**Etanorm 125-100-160, n = 960 t/min**

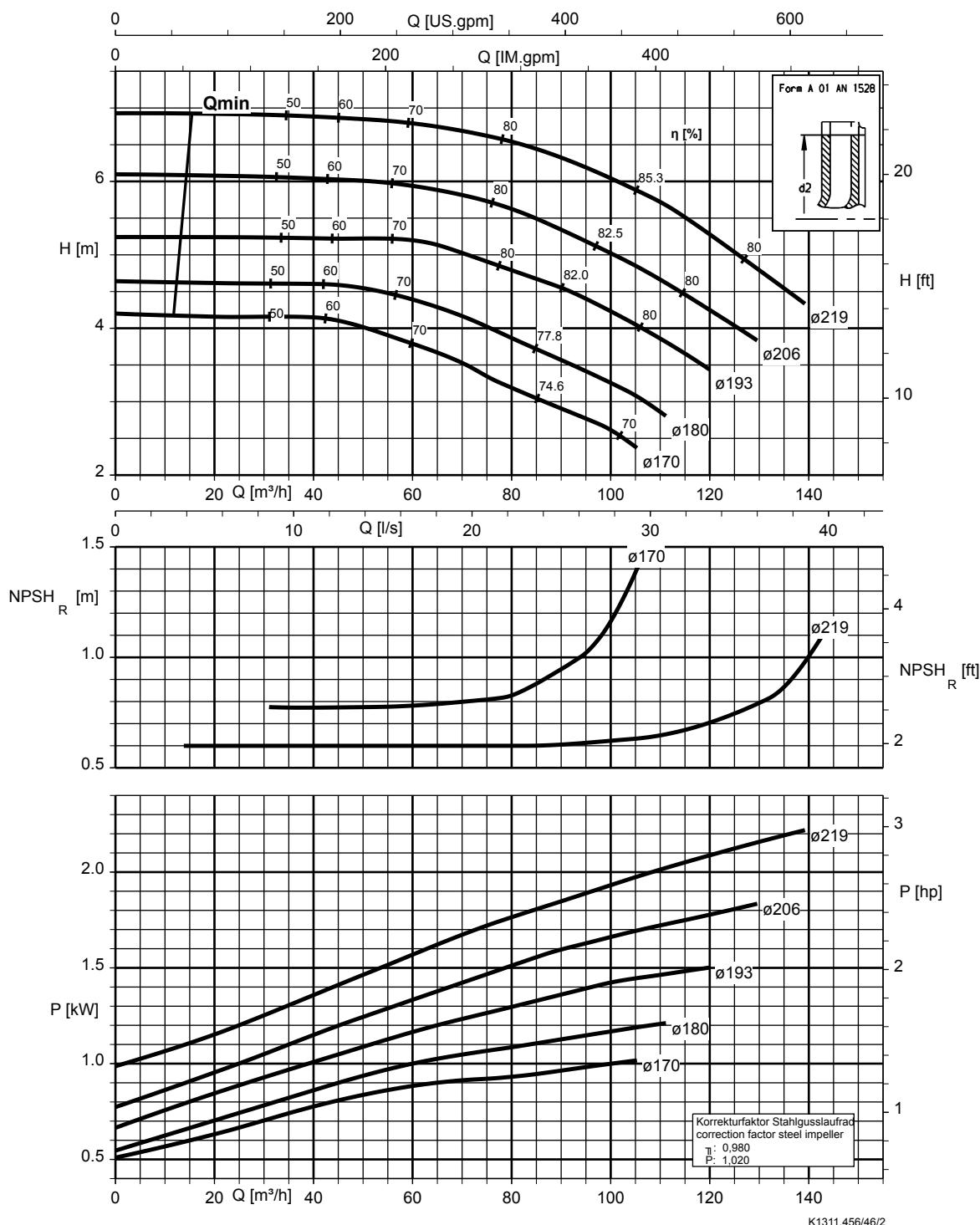
Etanorm SYT, Etabloc



K1311.456/45/2

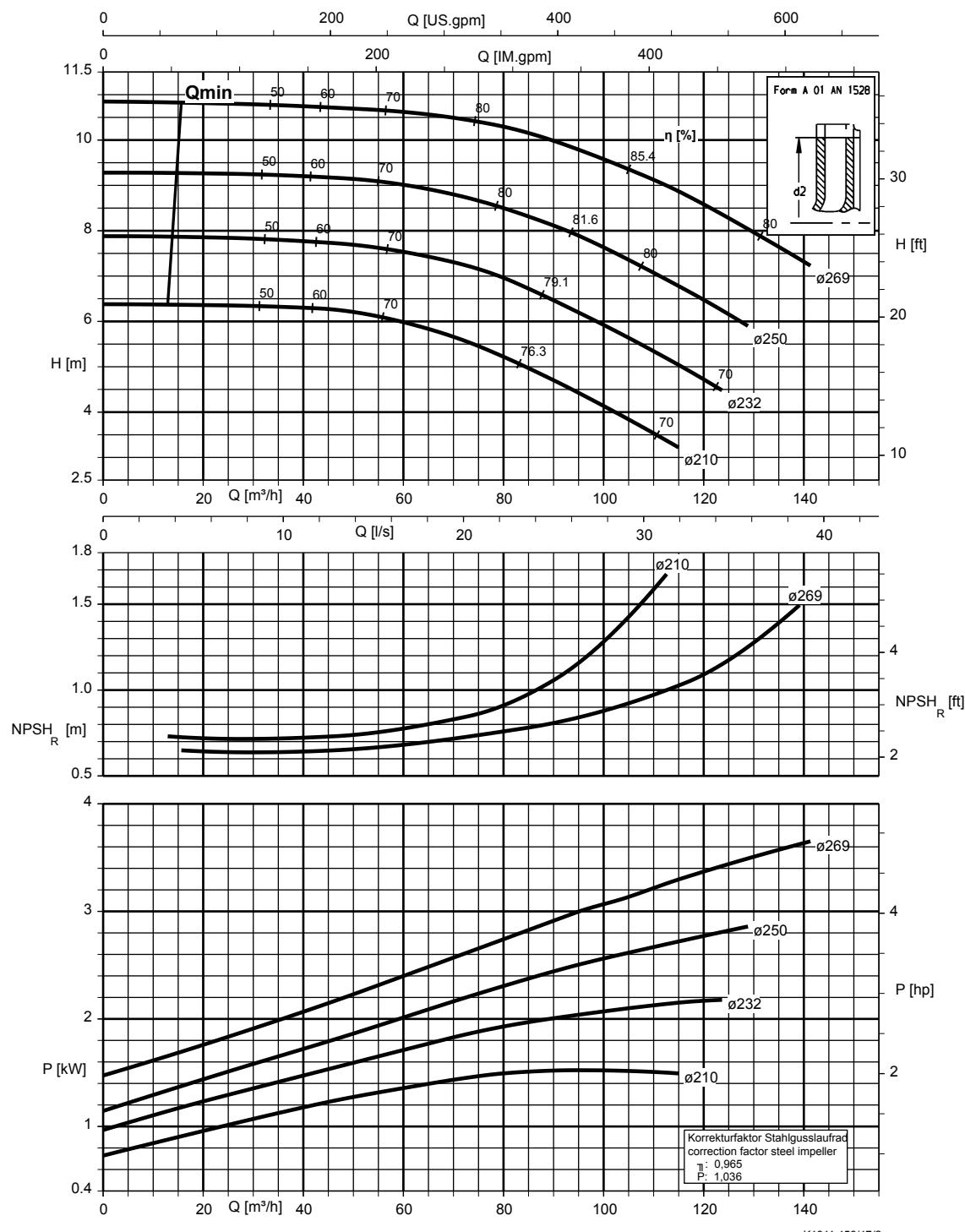
**Etanorm 125-100-200, n = 960 t/min**

Etanorm SYT, Etabloc



**Etanorm 125-100-250, n = 960 t/min**

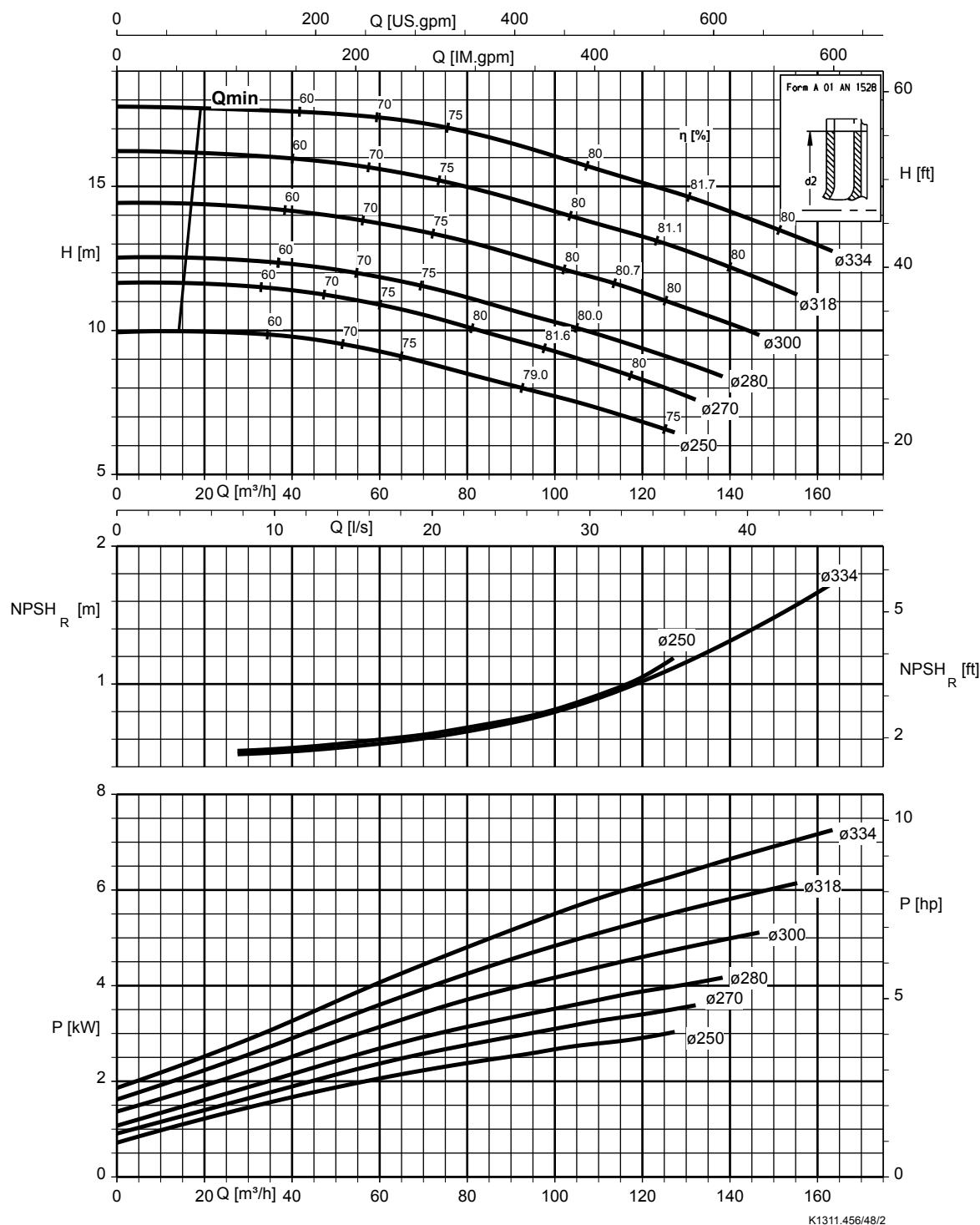
Etanorm SYT, Etabloc



K1311.456/47/2

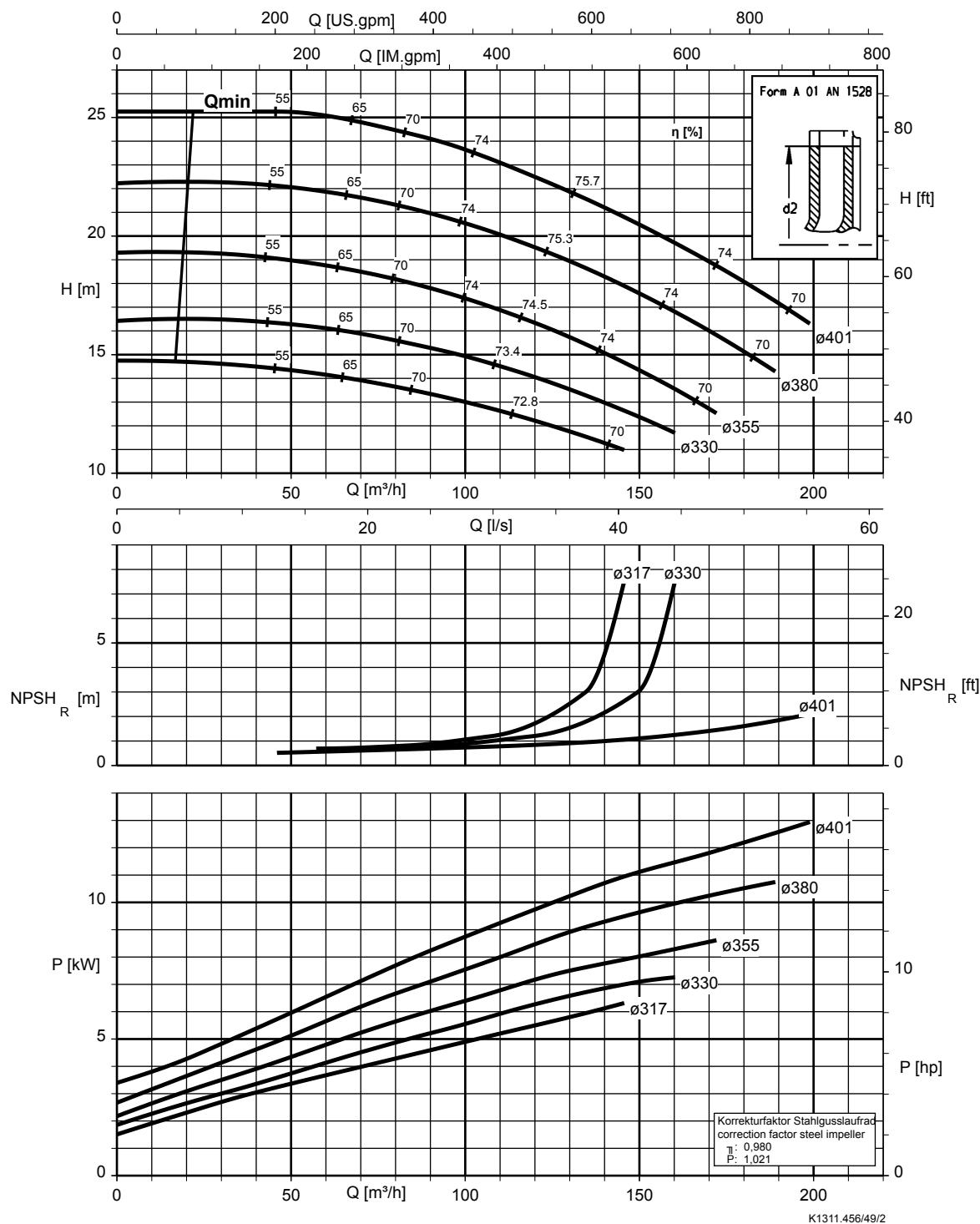
**Etanorm 125-100-315, n = 960 t/min**

Etanorm SYT, Etabloc



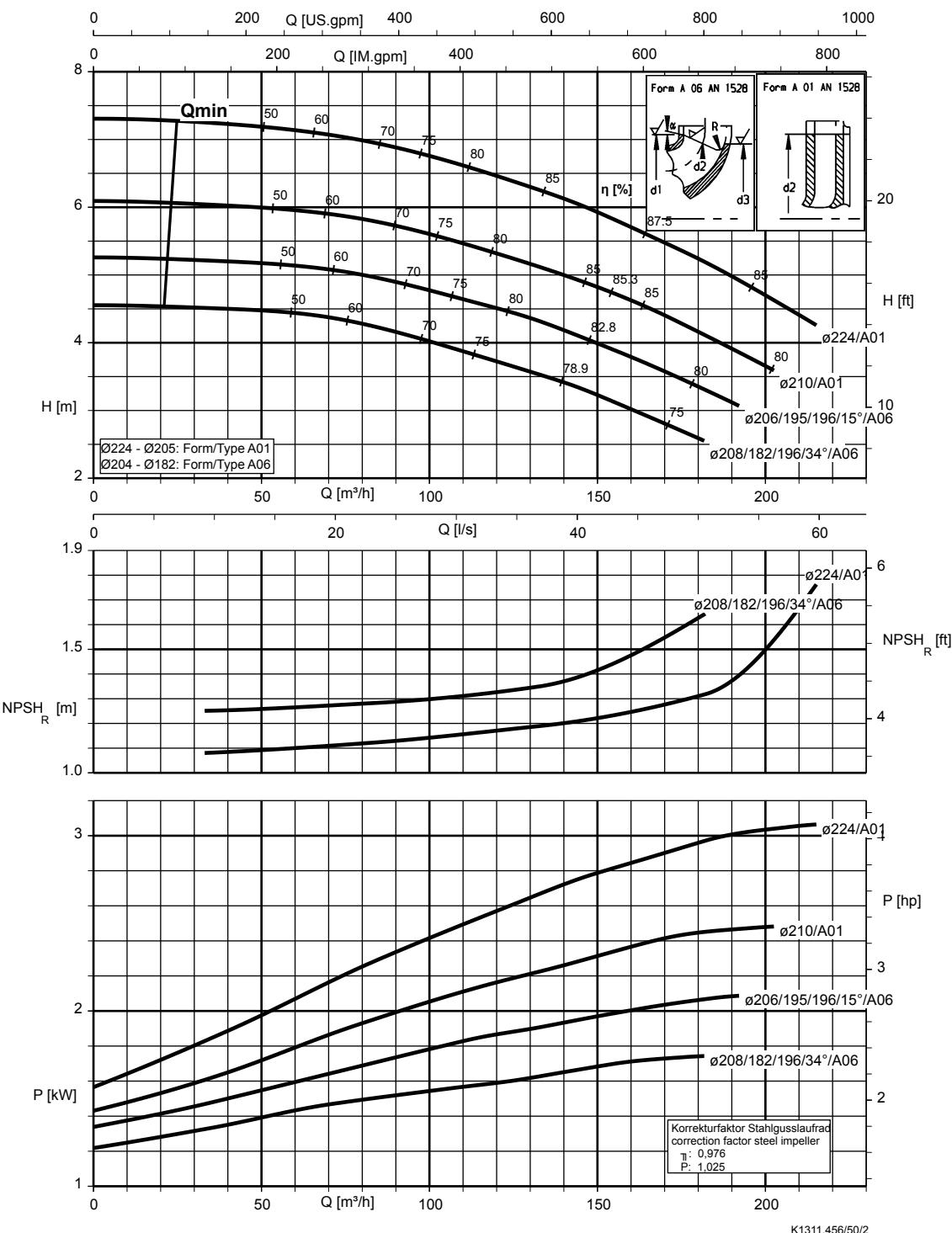
K1311.456/48/2

**Etanorm 125-100-400, n = 960 t/min**



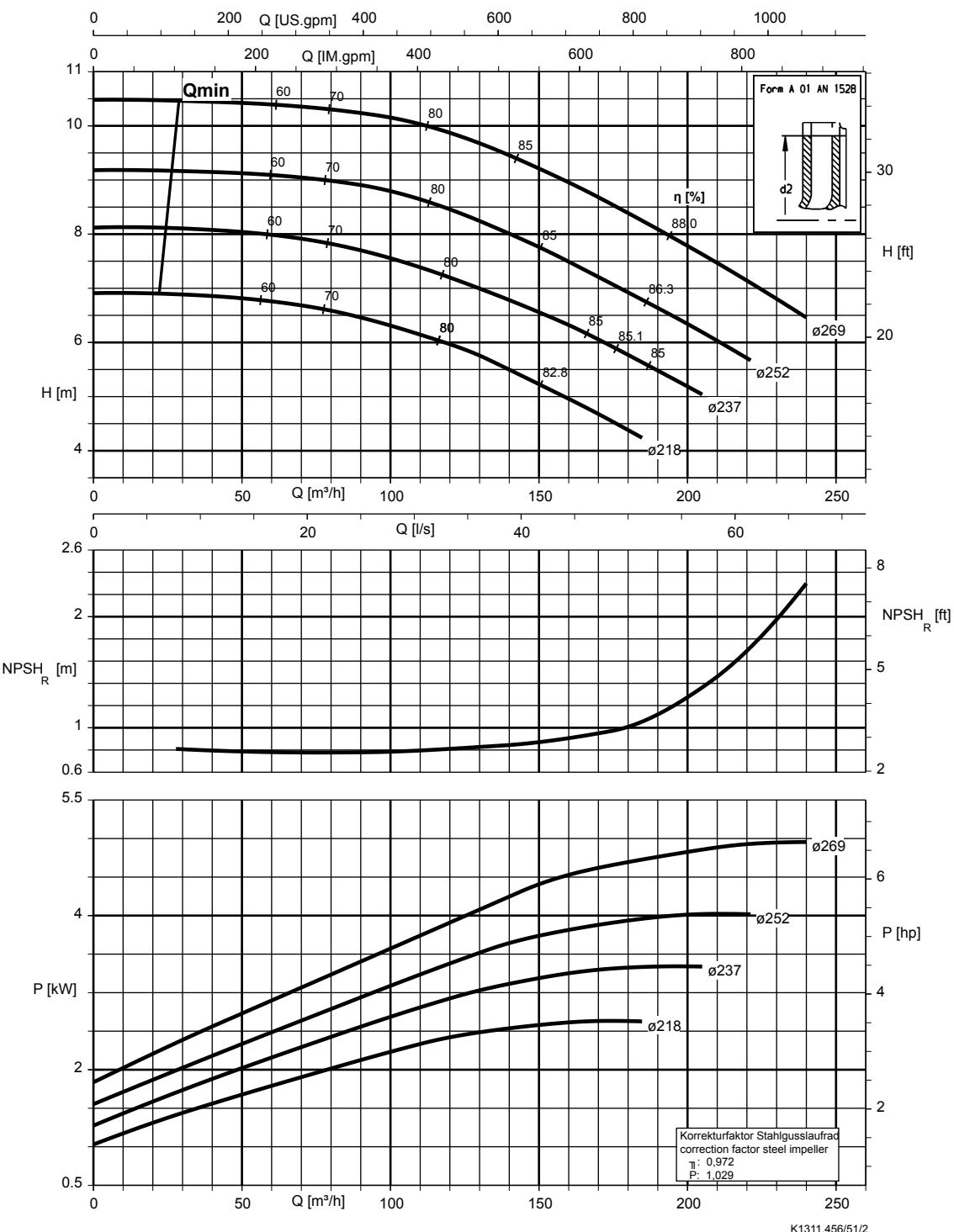
**Etanorm 150-125-200, n = 960 t/min**

Etanorm SYT, Etabloc



Etanorm 150-125-250, n = 960 t/min

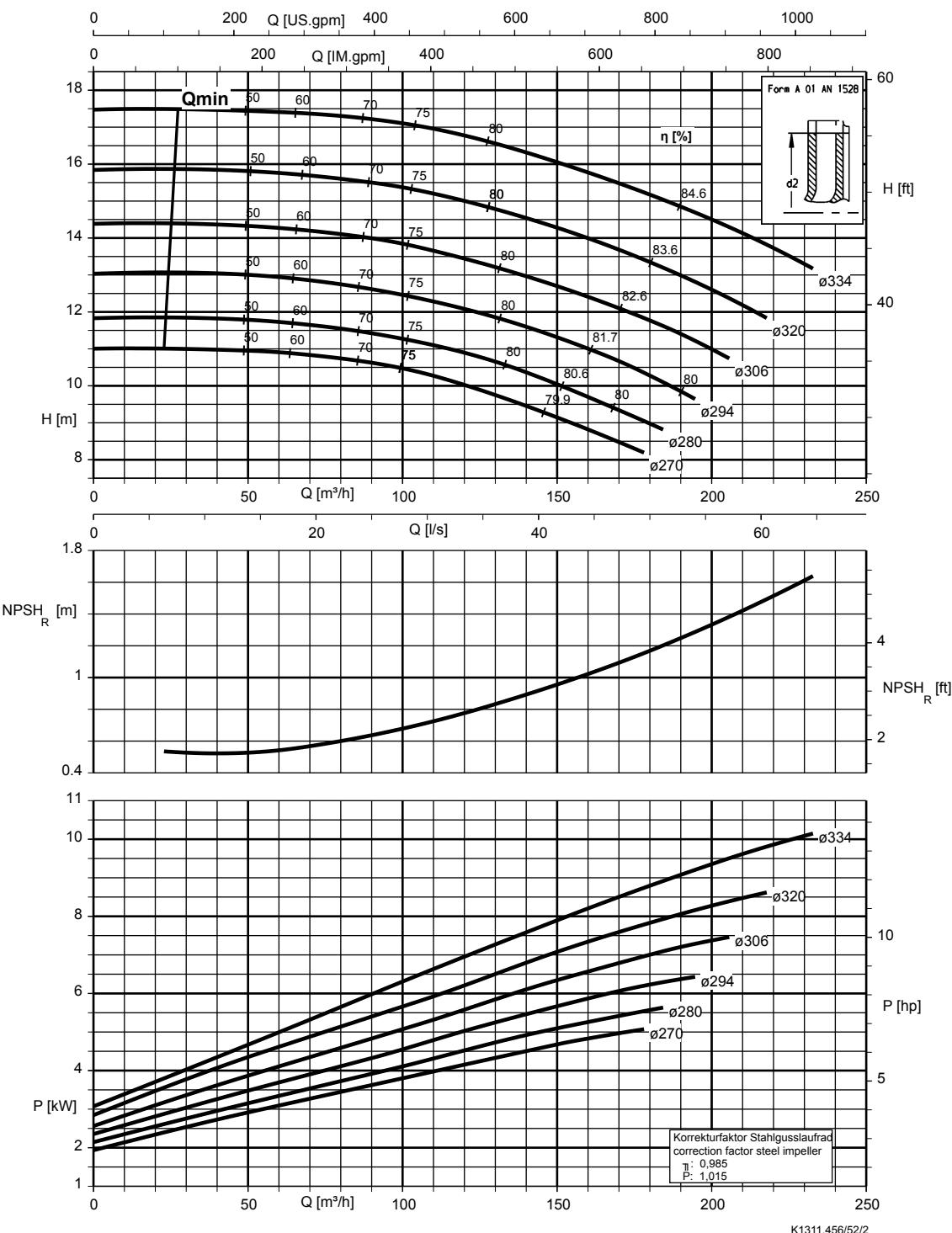
Etanorm SYT, Etabloc



K1311.456/51/2

**Etanorm 150-125-315, n = 960 t/min**

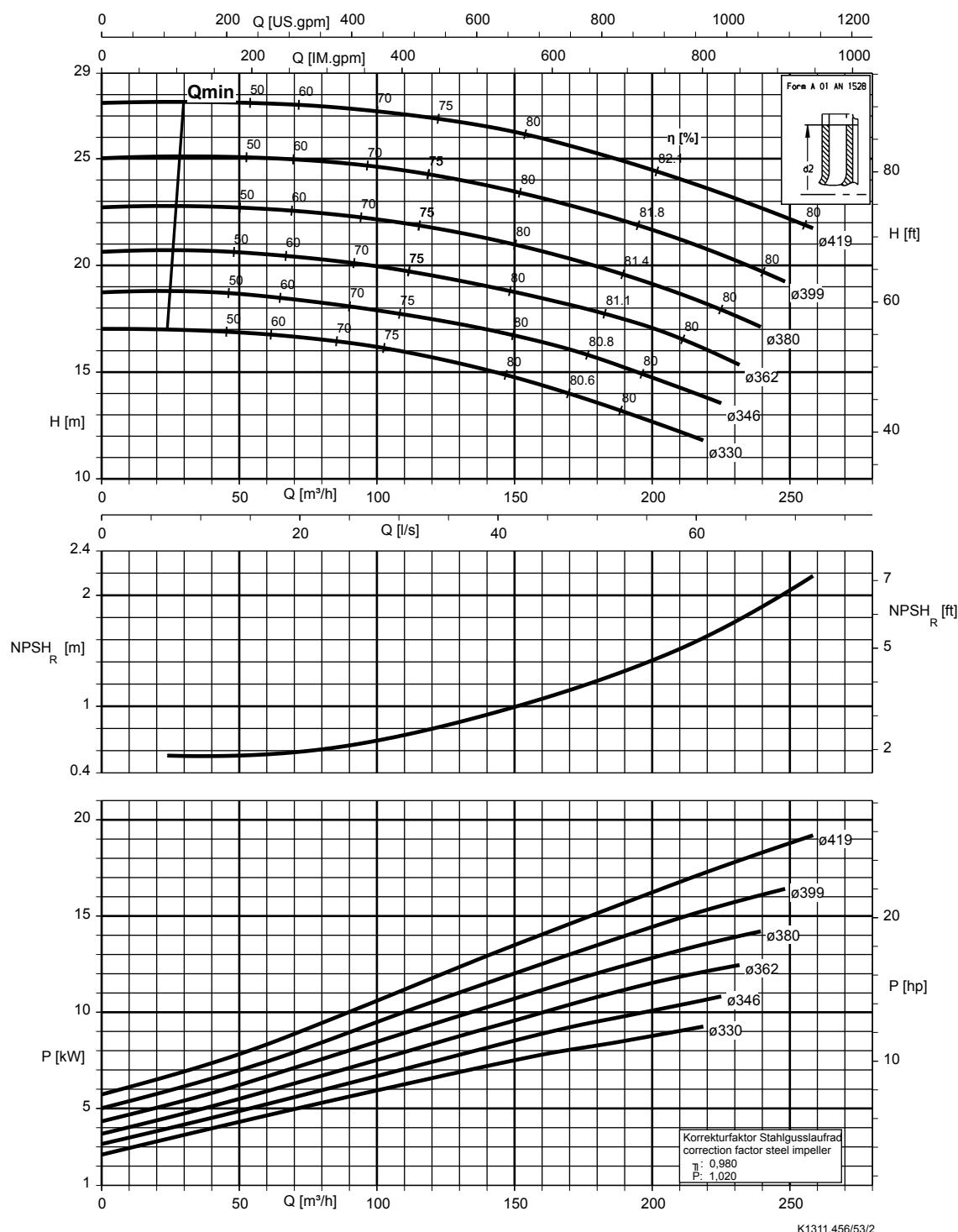
Etanorm SYT



K1311.456/52/2

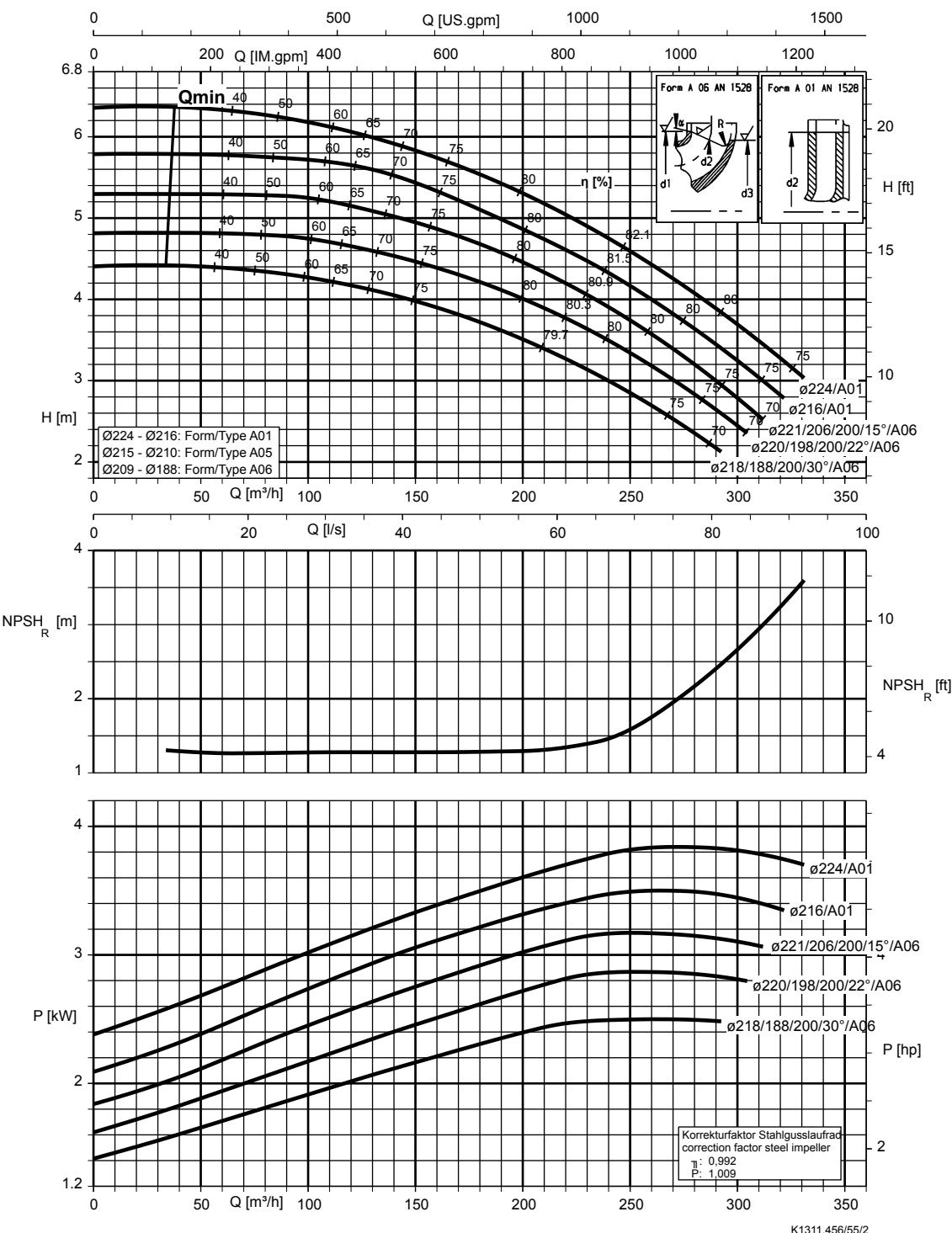
Etanorm 150-125-400, n = 960 t/min

Etanorm SYT



**Etanorm 200-150-200, n = 960 t/min**

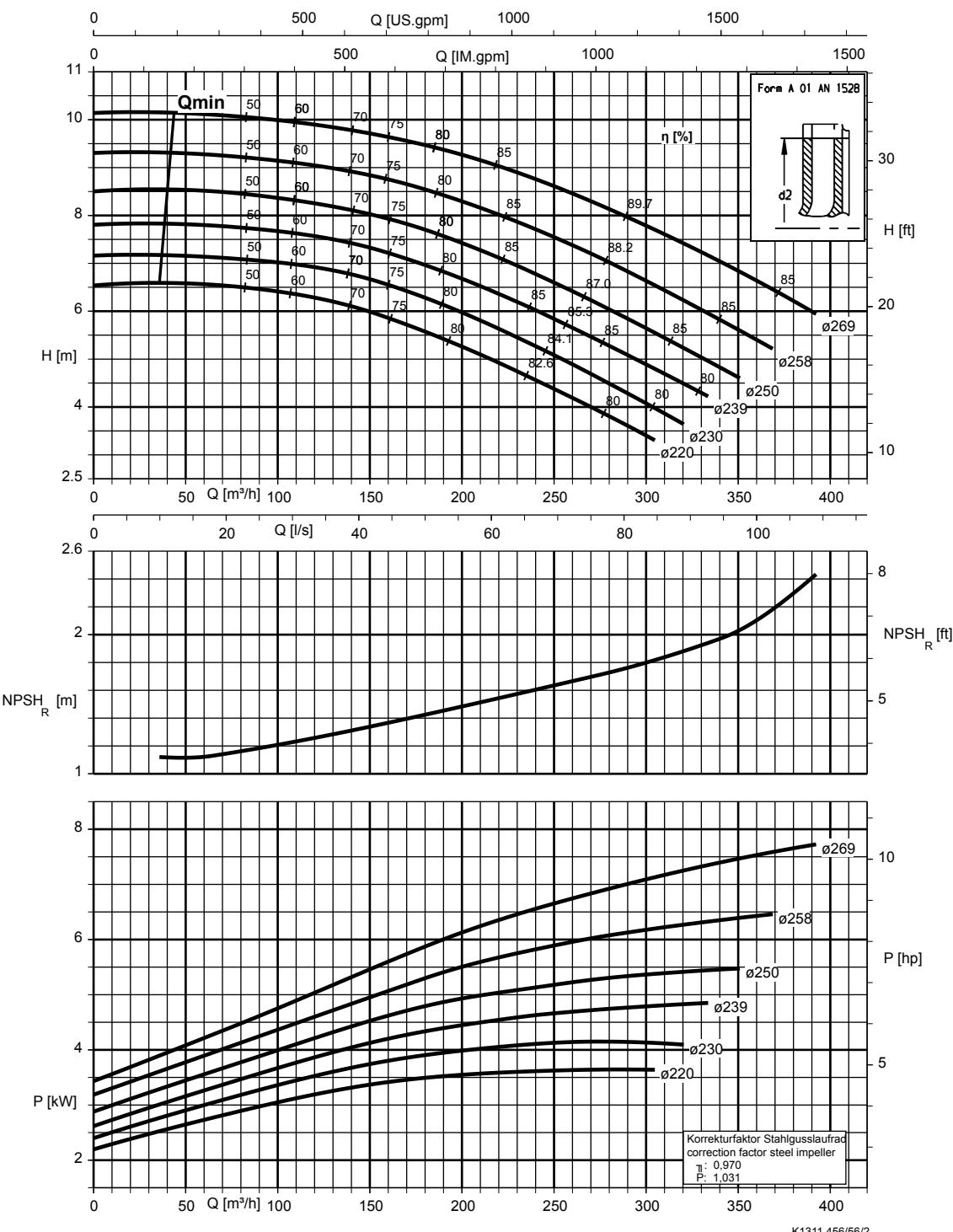
Etabloc



K1311.456/55/2

Etanorm 200-150-250, n = 960 t/min

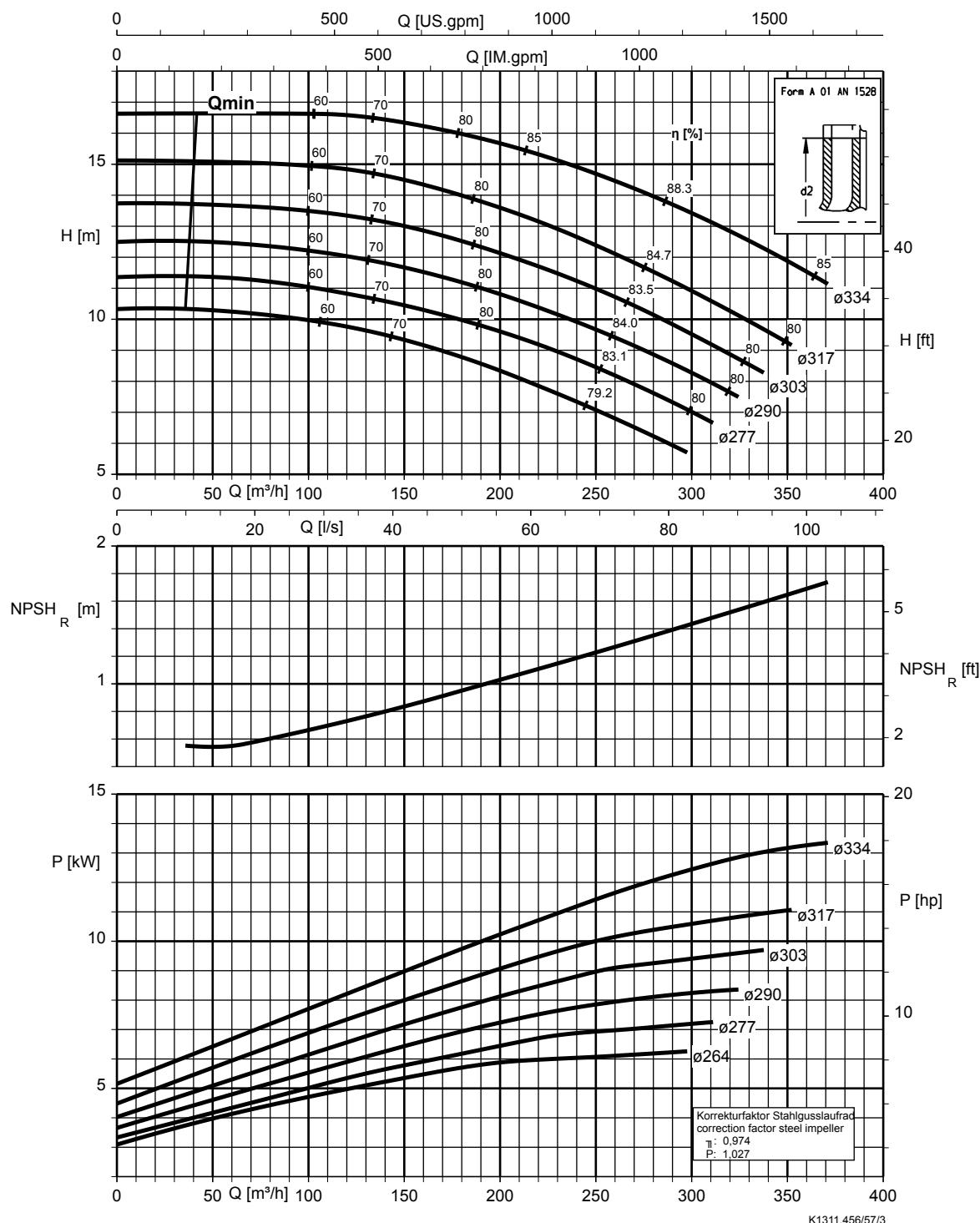
Etabloc



K1311.456/56/2

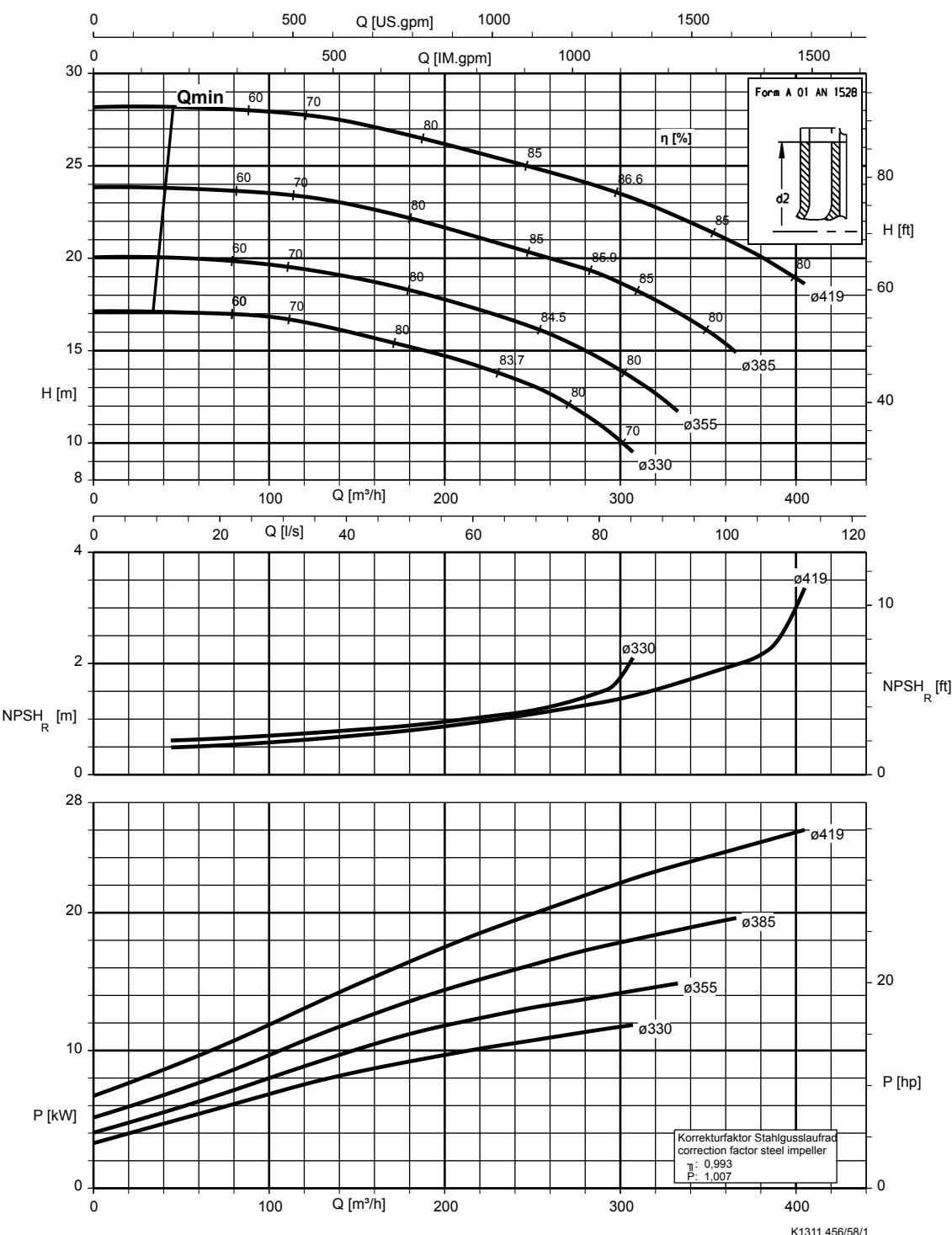
Etanorm 200-150-315, n = 960 t/min

Etanorm SYT



Etanorm 200-150-400, n = 960 t/min

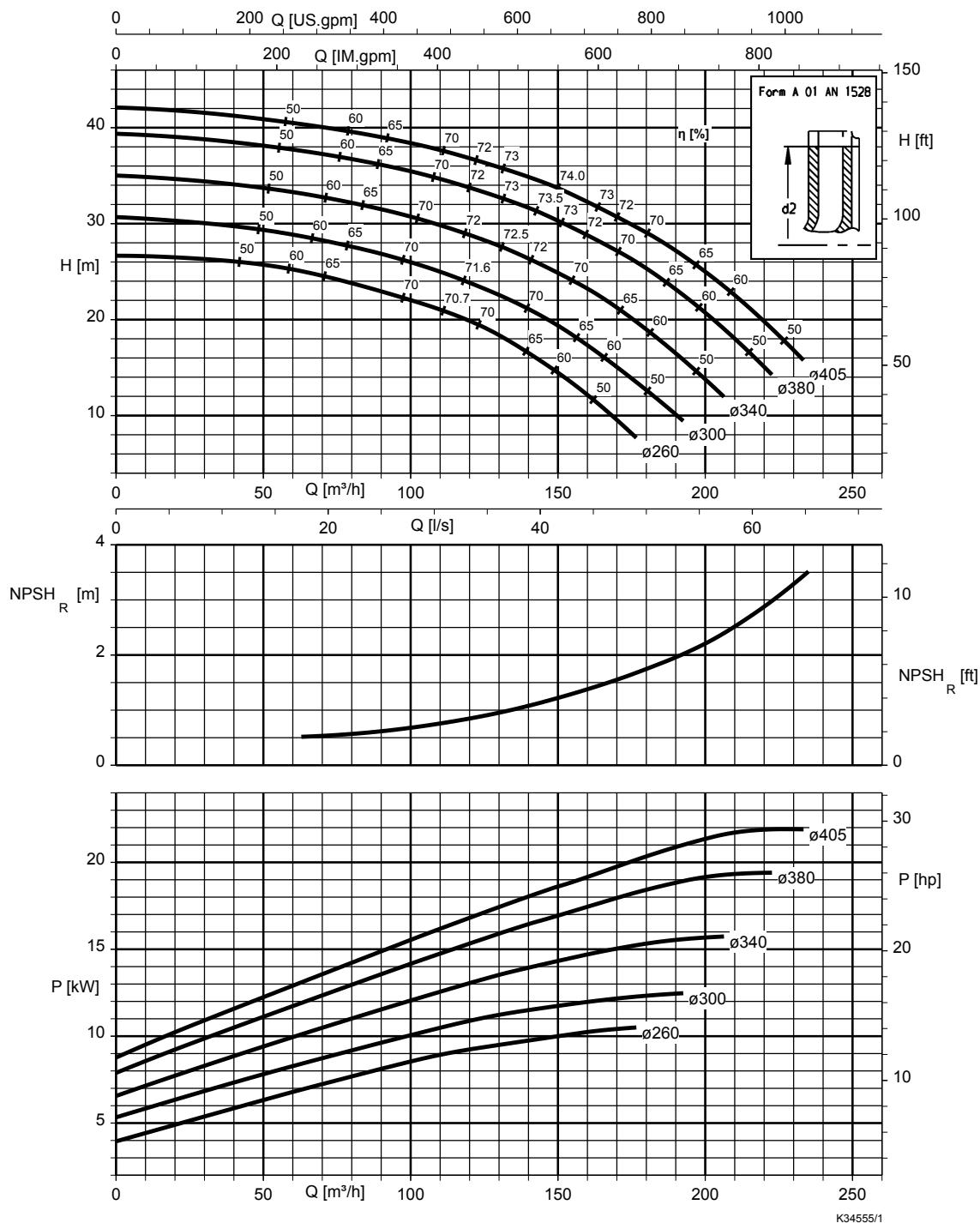
Etanorm SYT



K1311.456/58/1

Etanorm-R 125-500.2, n = 960 t/min

Etanorm-RSY

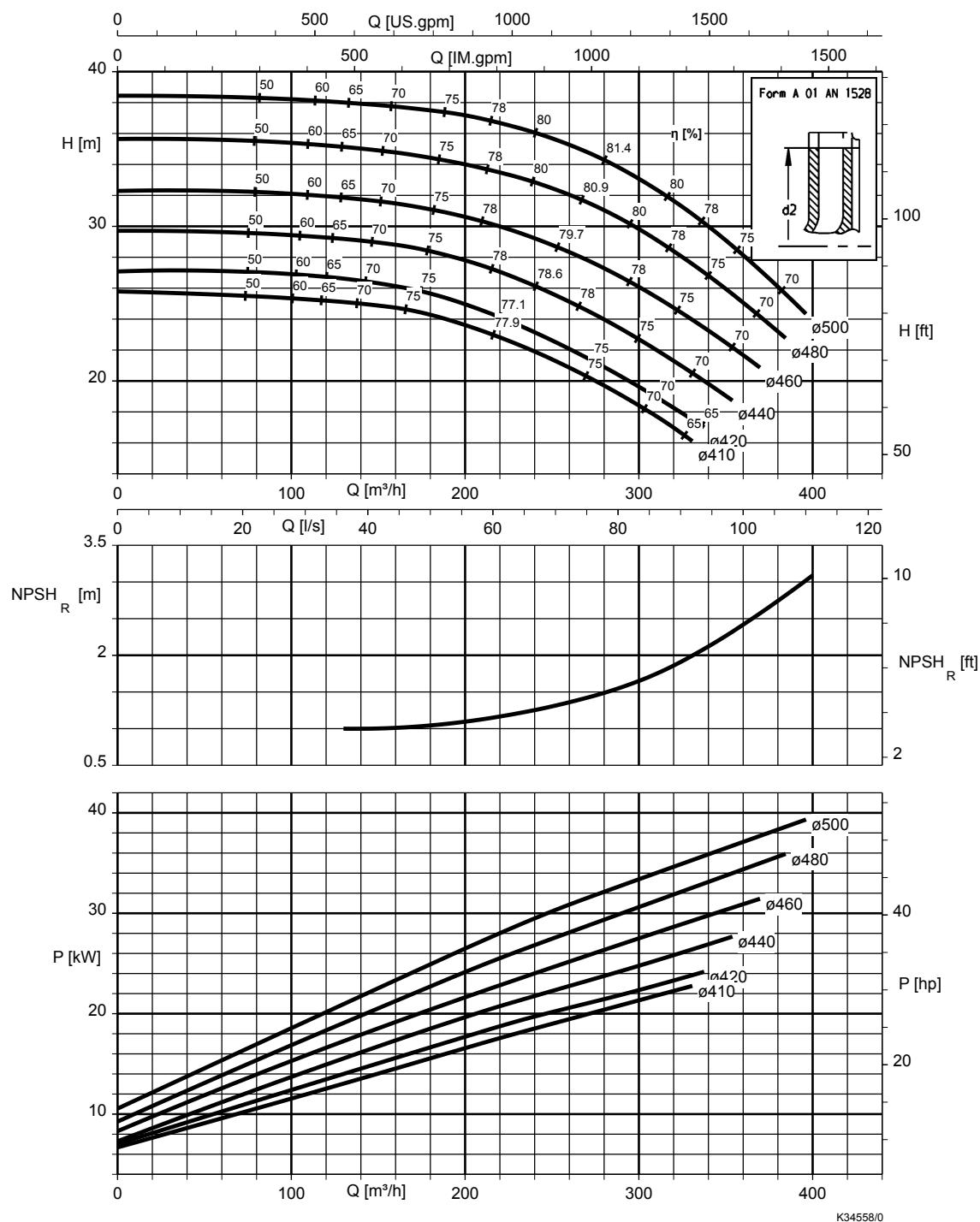


Valeurs de correction

Matériau de la roue	Valeur de correction S [m]	Calcul
EN-GJL-250	0,5	$NPSH_{\text{installation}} \geq NPSH + \text{valeur de correction } S$
CC480K-GS	0,5	
1.4408	0,5	

Etanorm-R 150-500.1, n = 960 t/min

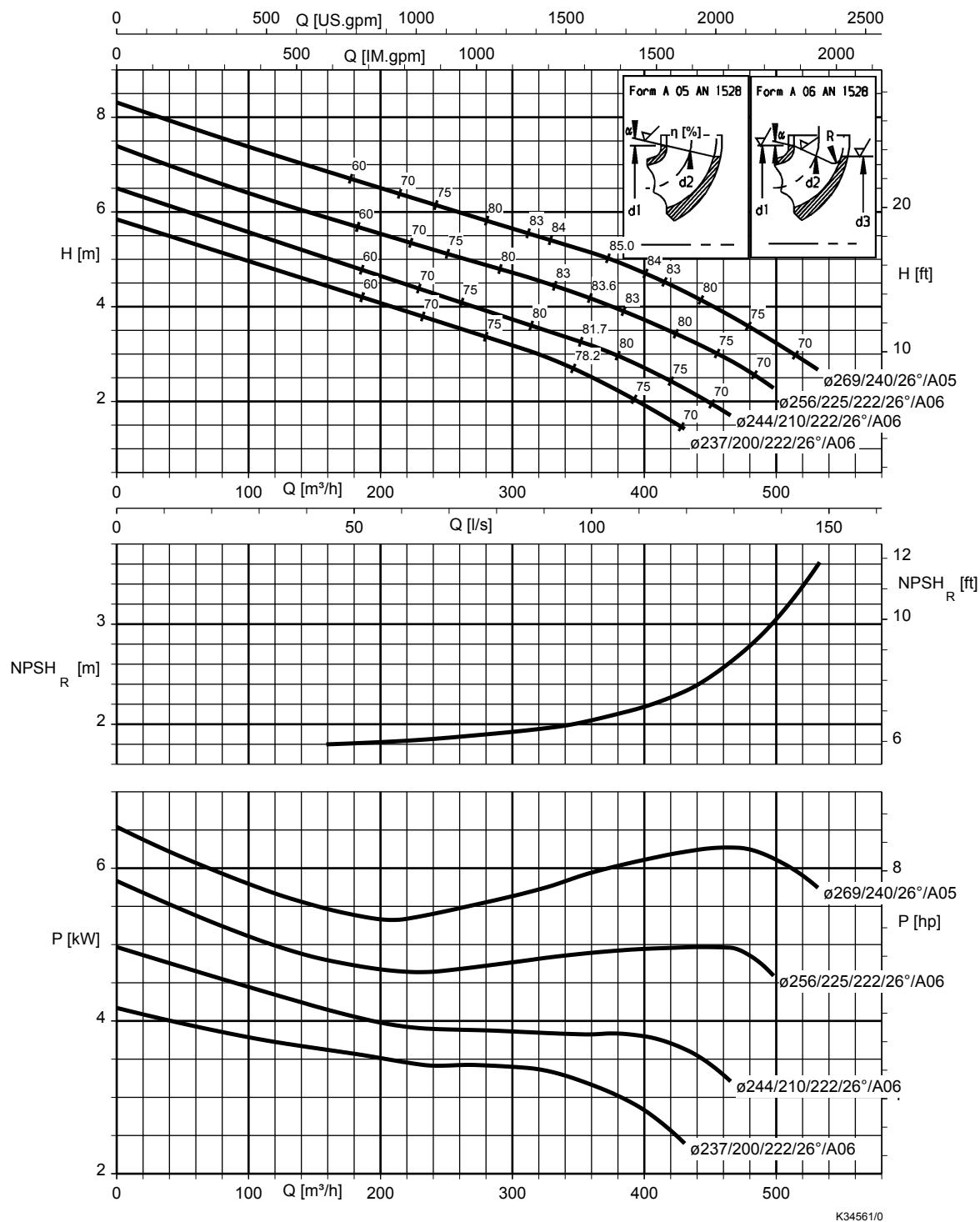
Etanorm-RSY



#### Valeurs de correction

Matériau de la roue	Valeur de correction S [m]	Calcul
EN-GJL-250	0,5	$\text{NPSH}_{\text{installation}} \geq \text{NPSH} + \text{valeur de correction } S$
CC480K-GS	0,5	
1.4408	0,5	

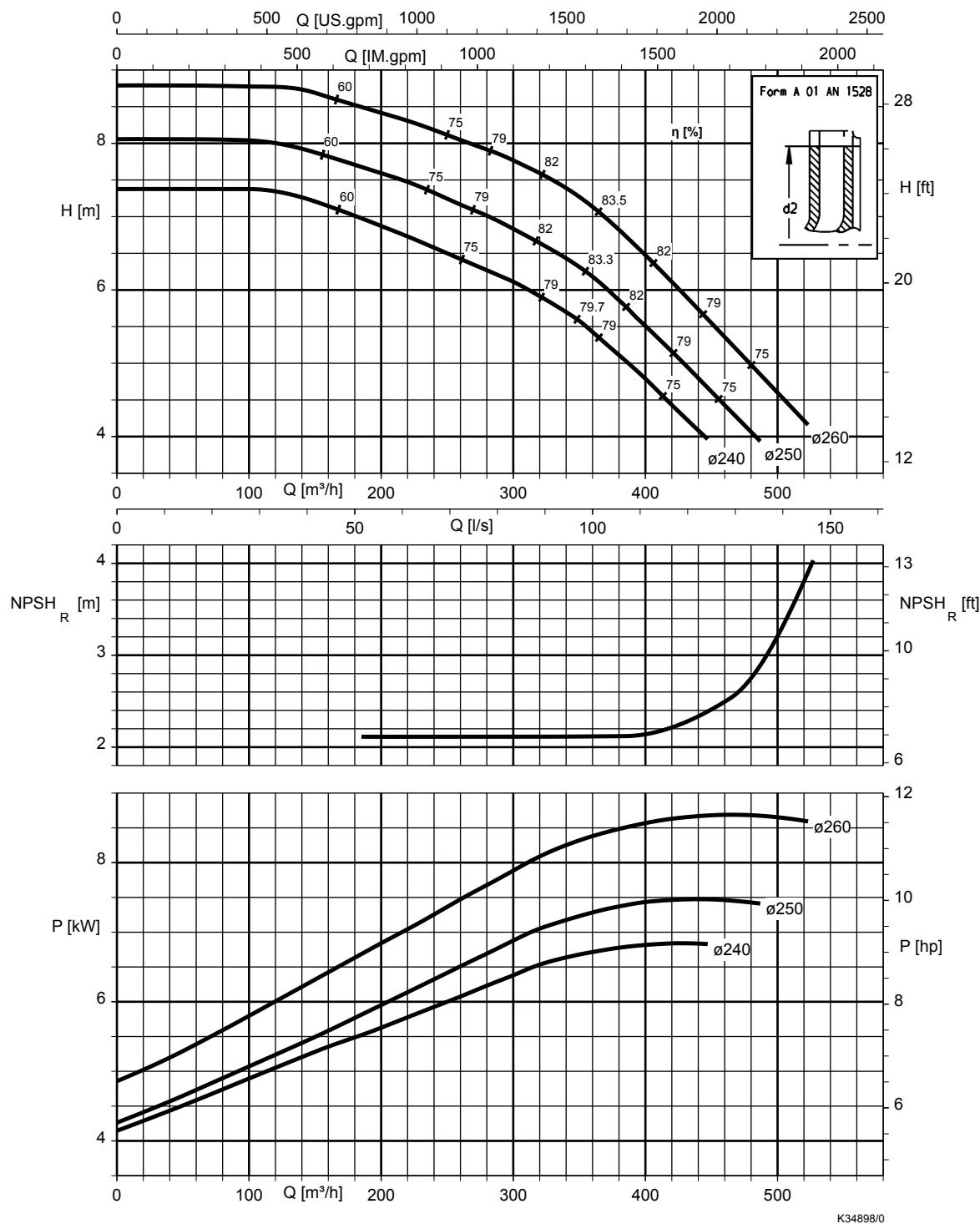
Etanorm-R 200-250, n = 960 t/min



Valeurs de correction

Matériau de la roue	Valeur de correction S [m]	Calcul
EN-GJL-250	0,5	i $NPSH_{\text{installation}} \geq NPSH + \text{valeur de correction } S$
CC480K-GS	0,5	
1.4408	0,5	

Etanorm-R 200-260, n = 960 t/min

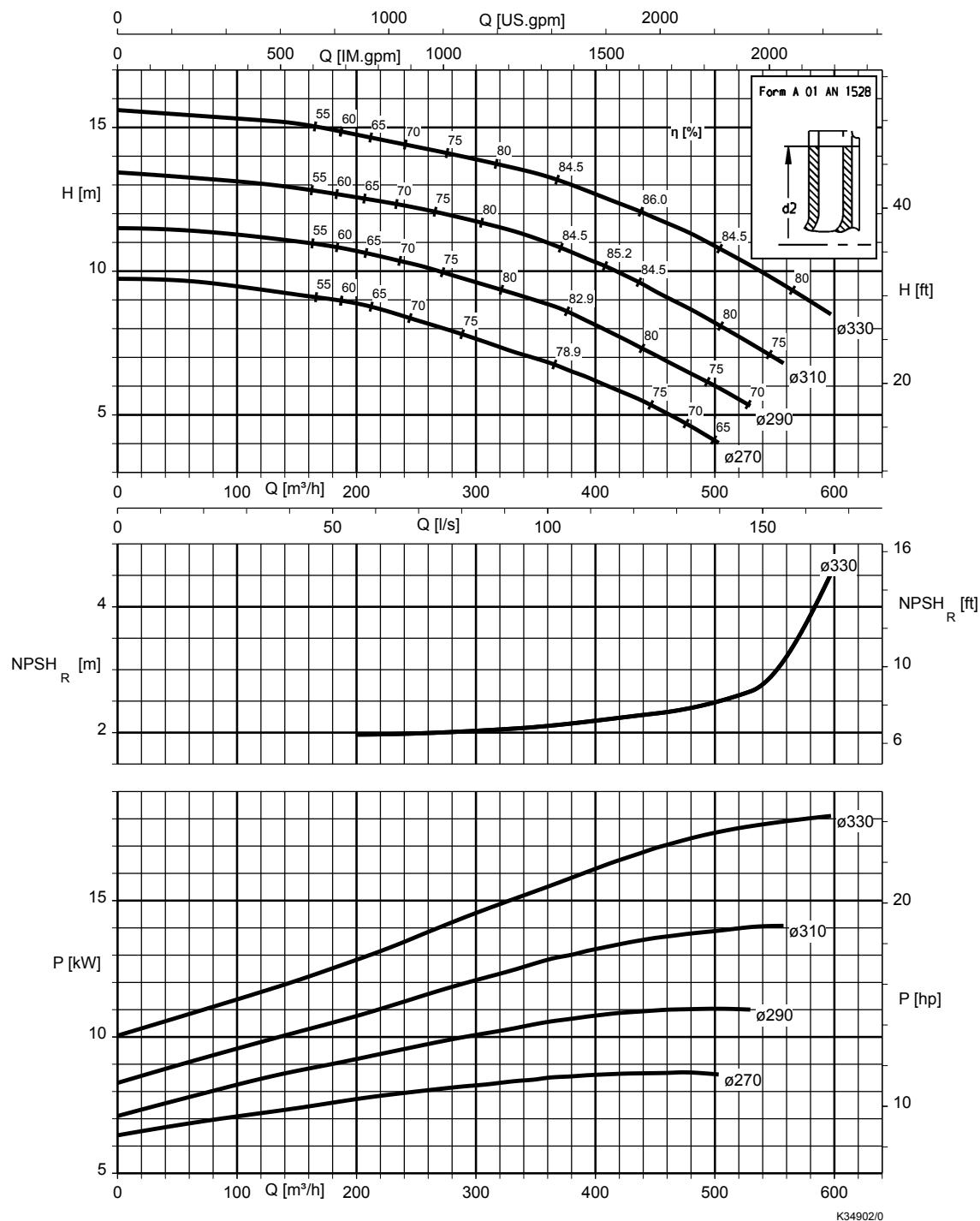


Valeurs de correction

Matériau de la roue	Valeur de correction S [m]	Calcul
EN-GJL-250	0,5	$NPSH_{\text{installation}} \geq NPSH + \text{valeur de correction } S$
CC480K-GS	0,5	
1.4408	0,5	

Etanorm-R 200-330, n = 960 t/min

Etanorm-RSY

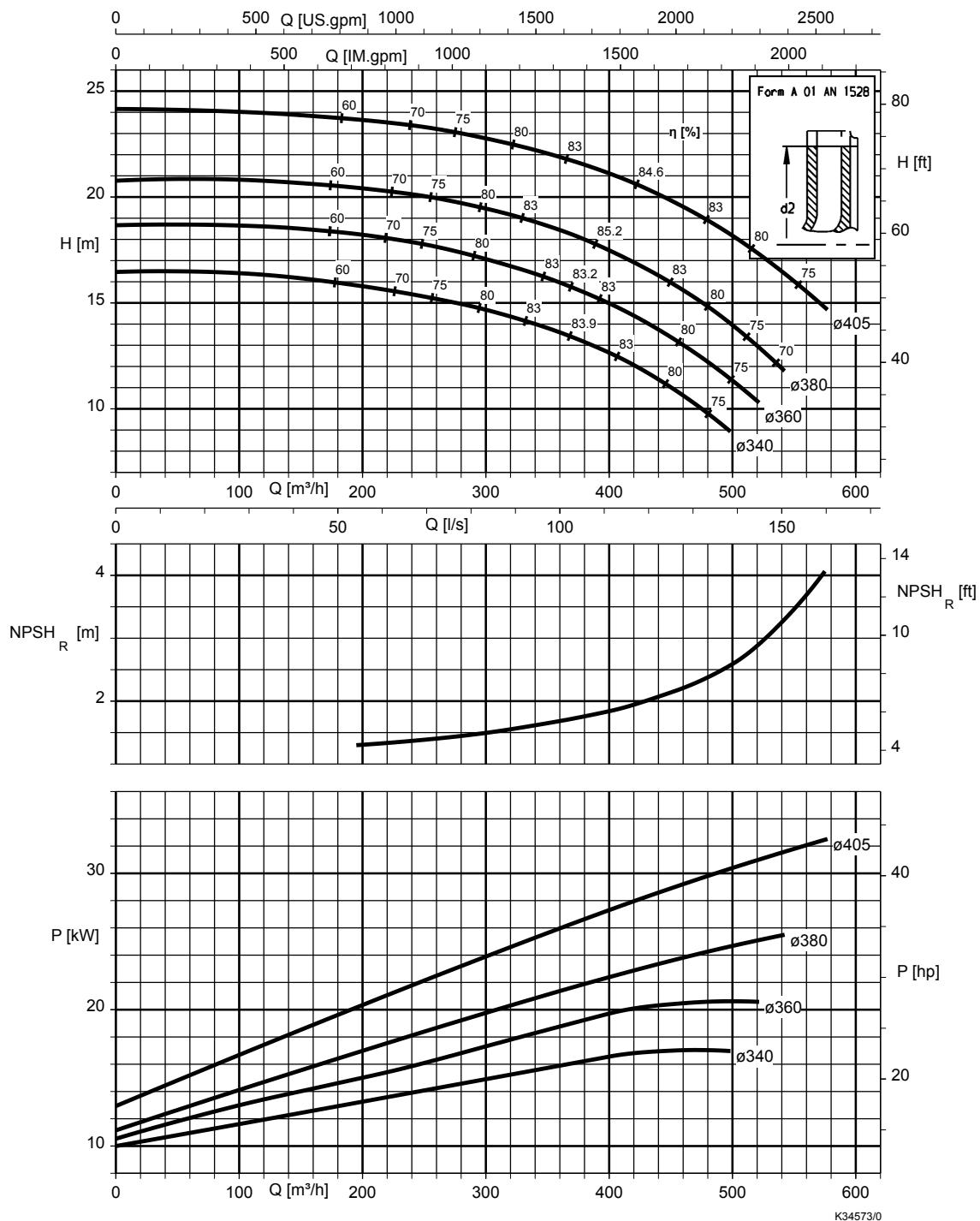


Valeurs de correction

Matériau de la roue	Valeur de correction S [m]	Calcul
EN-GJL-250	0,5	
CC480K-GS	0,5	
1.4408	0,5	NPSH <sub>installation</sub> ≥ NPSH + valeur de correction S

**Etanorm-R 200-400, n = 960 t/min**

Etanorm-RSY

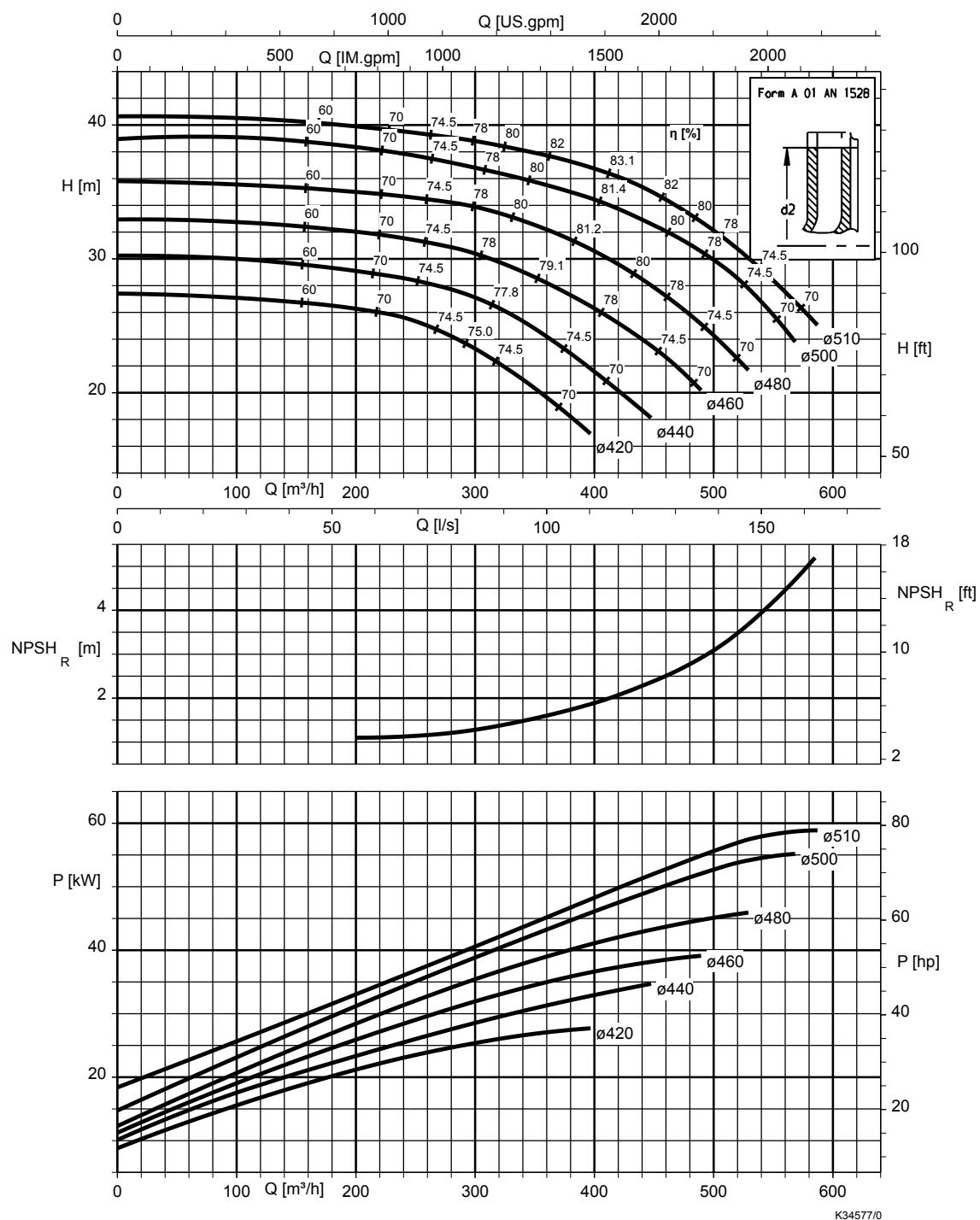


Valeurs de correction

Matériau de la roue	Valeur de correction S [m]	Calcul
EN-GJL-250	0,5	i $NPSH_{\text{installation}} \geq NPSH + \text{valeur de correction } S$
CC480K-GS	0,5	
1.4408	0,5	

Etanorm-R 200-500, n = 960 t/min

Etanorm-RSY

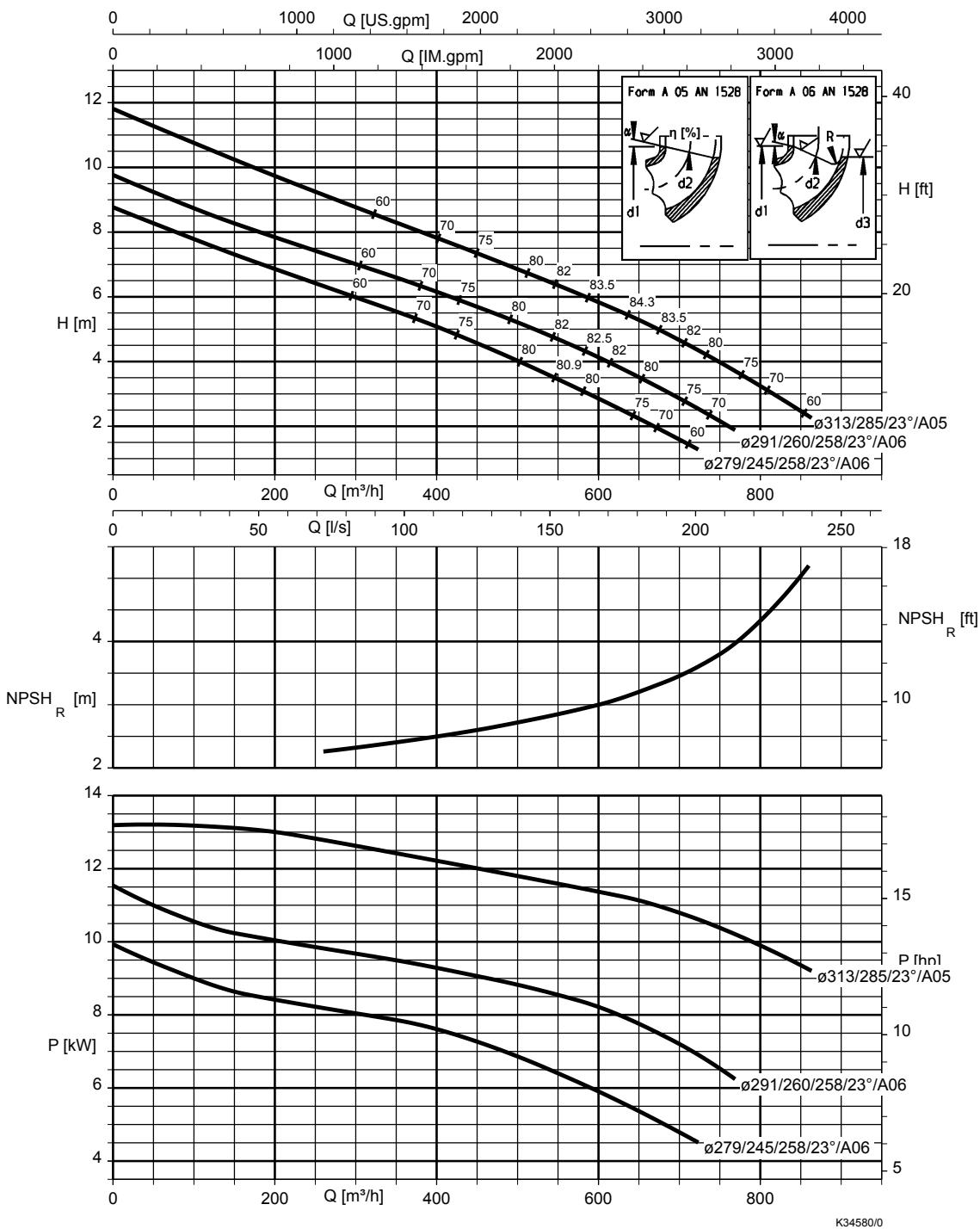


#### Valeurs de correction

Matériau de la roue	Valeur de correction S [m]	Calcul
EN-GJL-250	0,5	$NPSH_{\text{installation}} \geq NPSH + \text{valeur de correction } S$
CC480K-GS	0,5	
1.4408	0,5	

Etanorm-R 250-300, n = 960 t/min

Etanorm-RSY

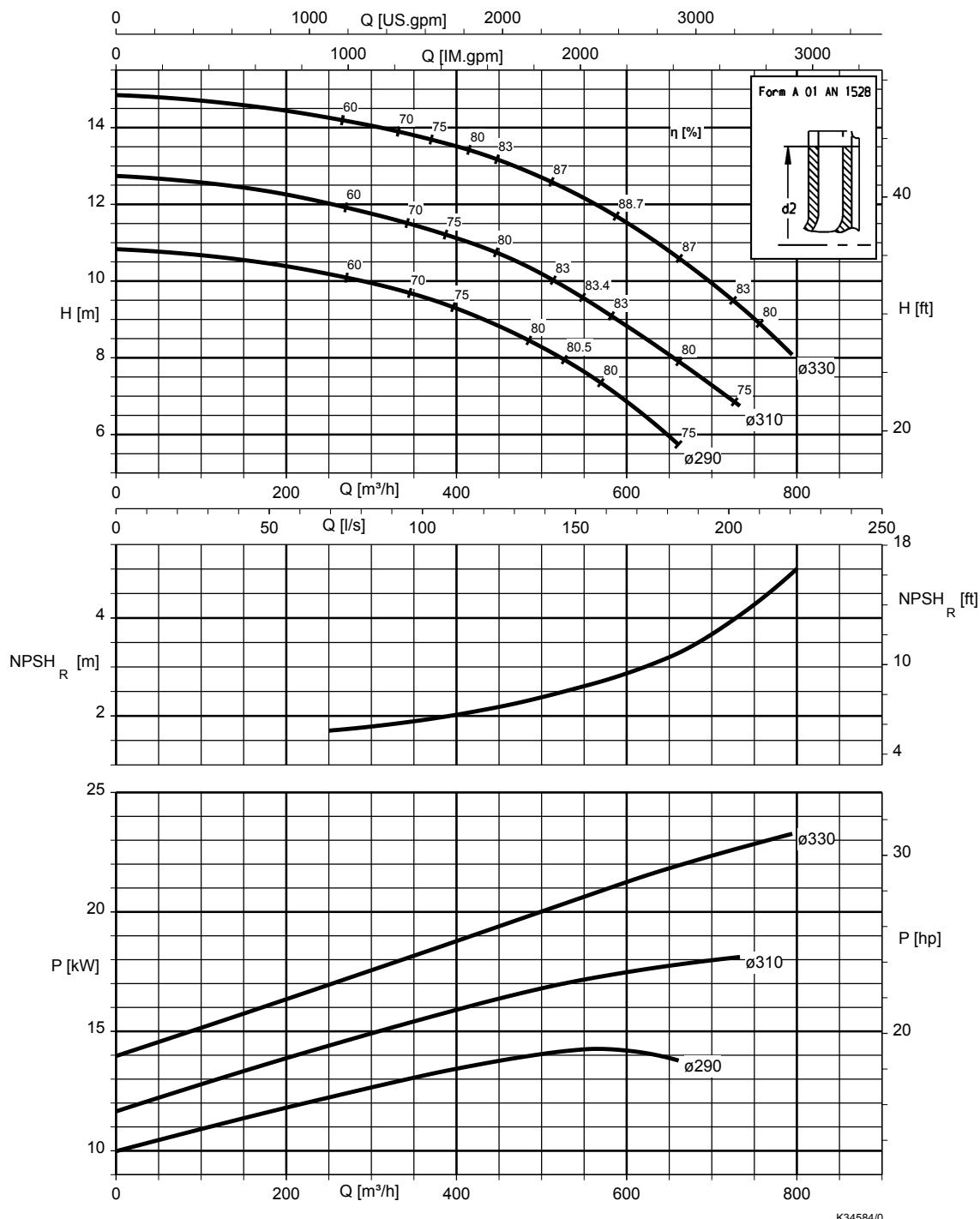


#### Valeurs de correction

Matériau de la roue	Valeur de correction S [m]	Calcul
EN-GJL-250	0,5	$\text{NPSH}_{\text{installation}} \geq \text{NPSH} + \text{valeur de correction } S$
CC480K-GS	0,5	
1.4408	0,5	

Etanorm-R 250-330, n = 960 t/min

Etanorm-RSY

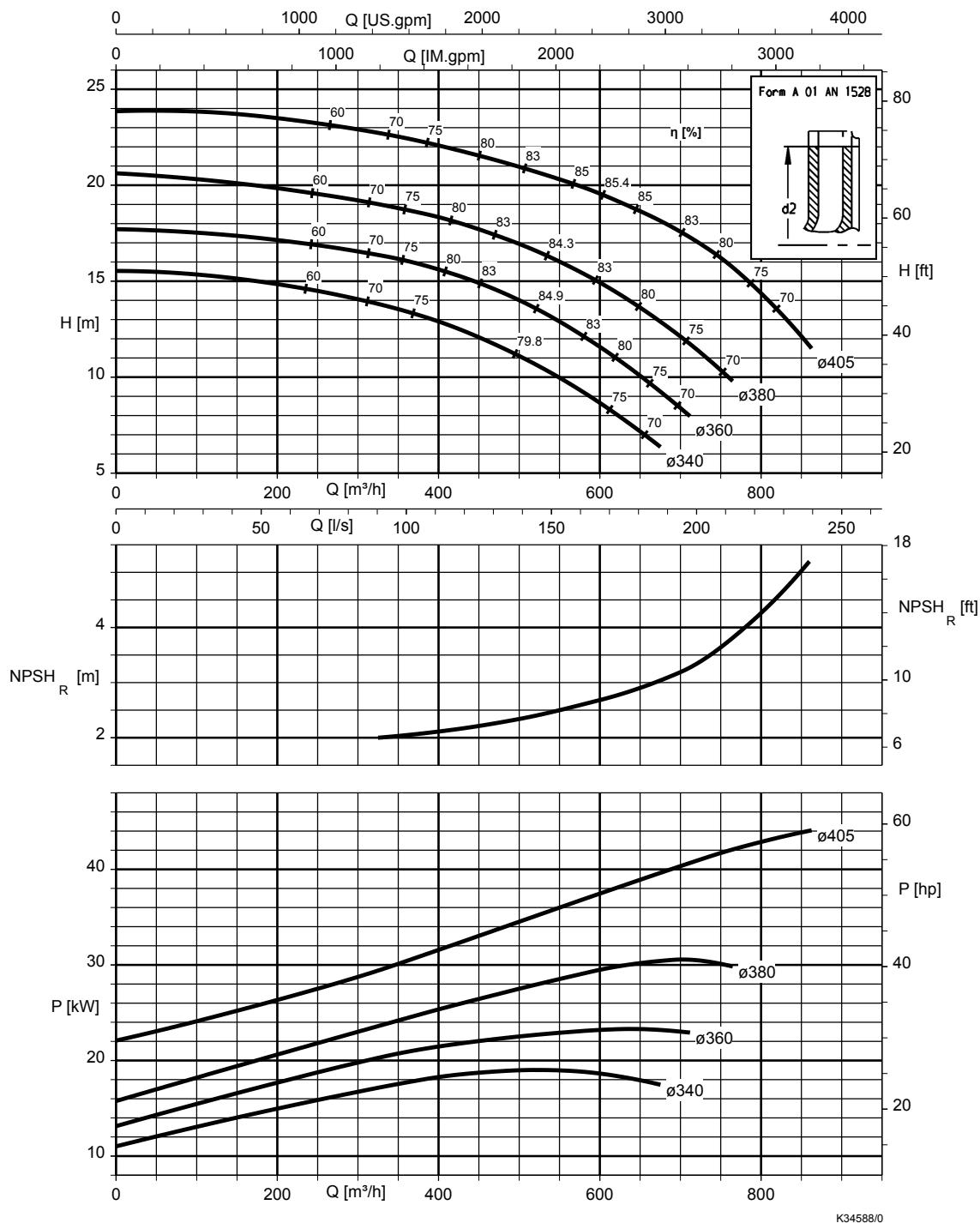


#### Valeurs de correction

Matériau de la roue	Valeur de correction S [m]	Calcul
EN-GJL-250	0,5	$NPSH_{\text{installation}} \geq NPSH + \text{valeur de correction } S$
CC480K-GS	0,5	
1.4408	0,5	

Etanorm-R 250-400, n = 960 t/min

Etanorm-RSY

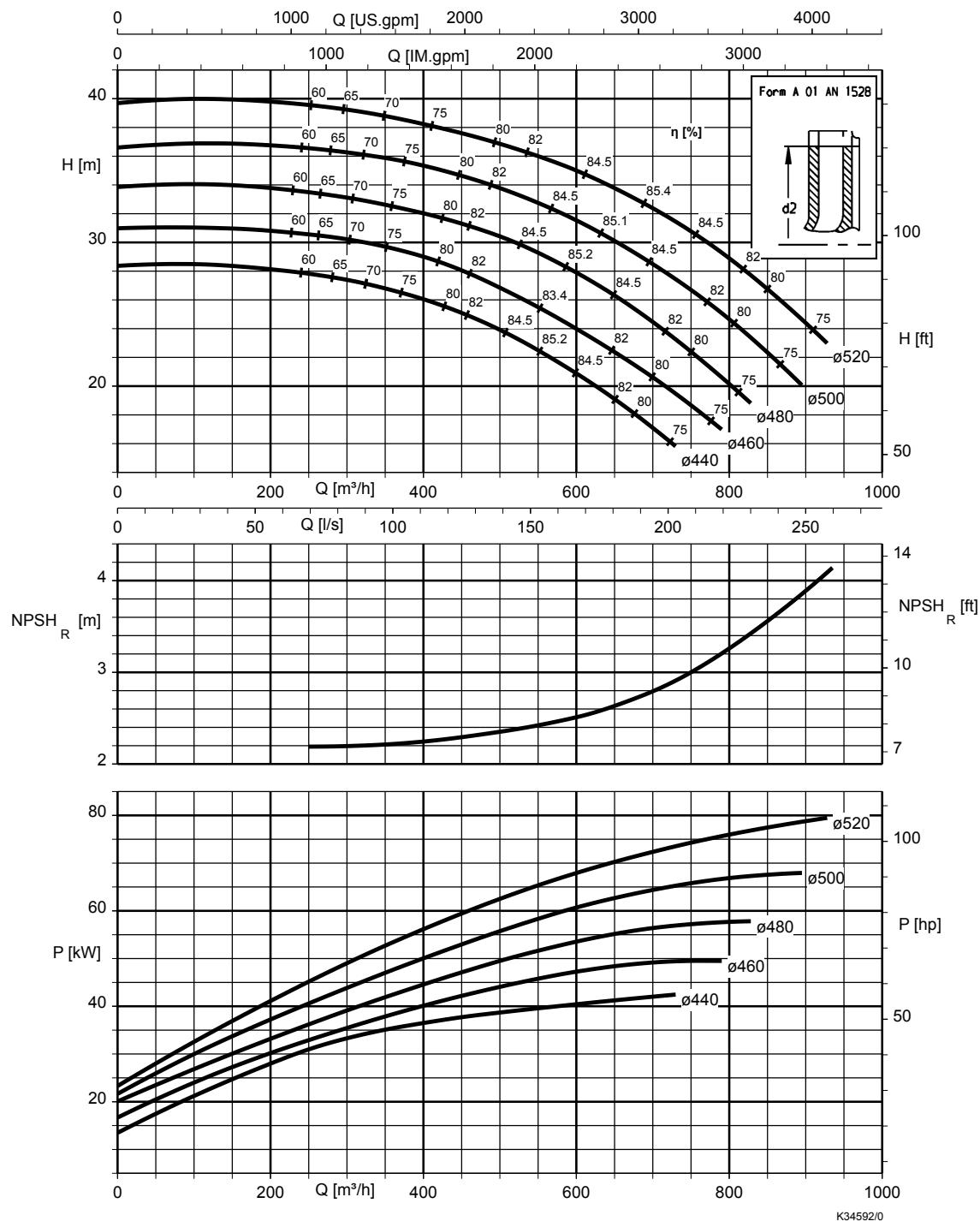


Valeurs de correction

Matériau de la roue	Valeur de correction S [m]	Calcul
EN-GJL-250	0,5	$\text{NPSH}_{\text{installation}} \geq \text{NPSH} + \text{valeur de correction } S$
CC480K-GS	0,5	
1.4408	0,5	

**Etanorm-R 250-500, n = 960 t/min**

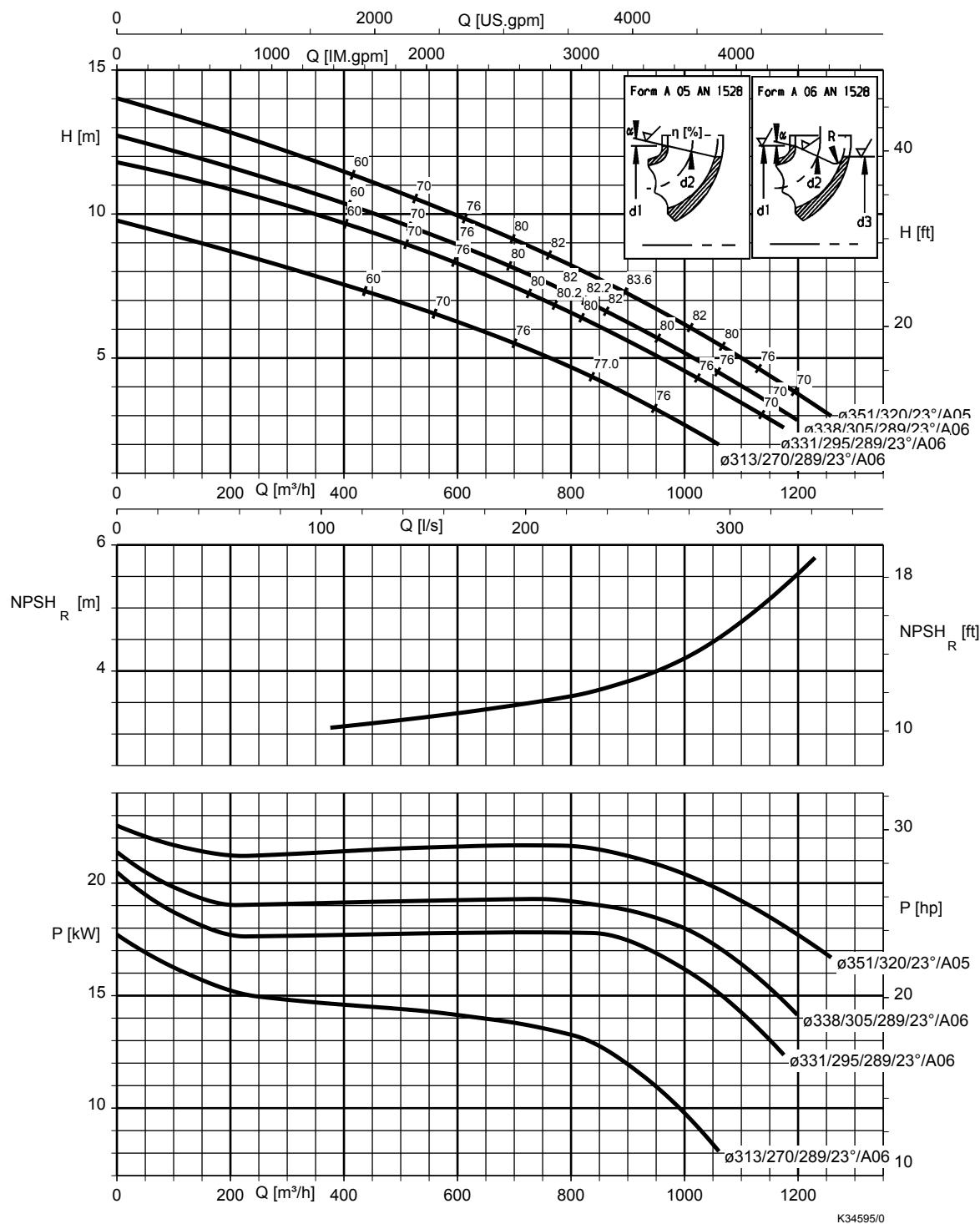
Etanorm-RSY



Valeurs de correction

Matériau de la roue	Valeur de correction $S$ [m]	Calcul
EN-GJL-250	0,5	
CC480K-GS	0,5	
1.4408	0,5	$i \quad NPSH_{\text{installation}} \geq NPSH + \text{valeur de correction } S$

Etanorm-R 300-340, n = 960 t/min



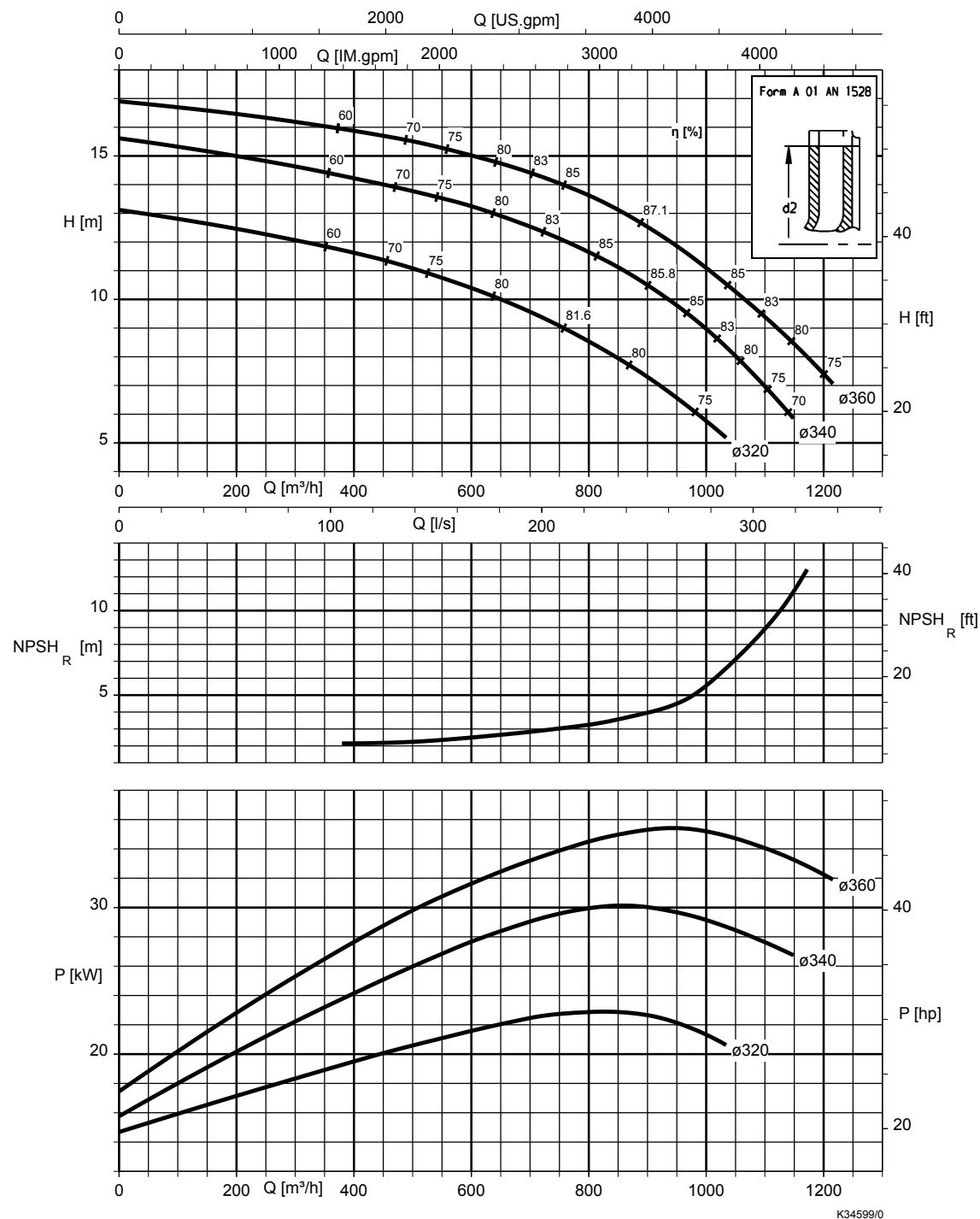
Valeurs de correction

Matériau de la roue	Valeur de correction S [m]
EN-GJL-250	1,2
CC480K-GS	0,5
1.4408	0,5

NPSH<sub>disponible</sub> ≥ NPSH + valeur de correction S

Etanorm-R 300-360, n = 960 t/min

Etanorm-RSY

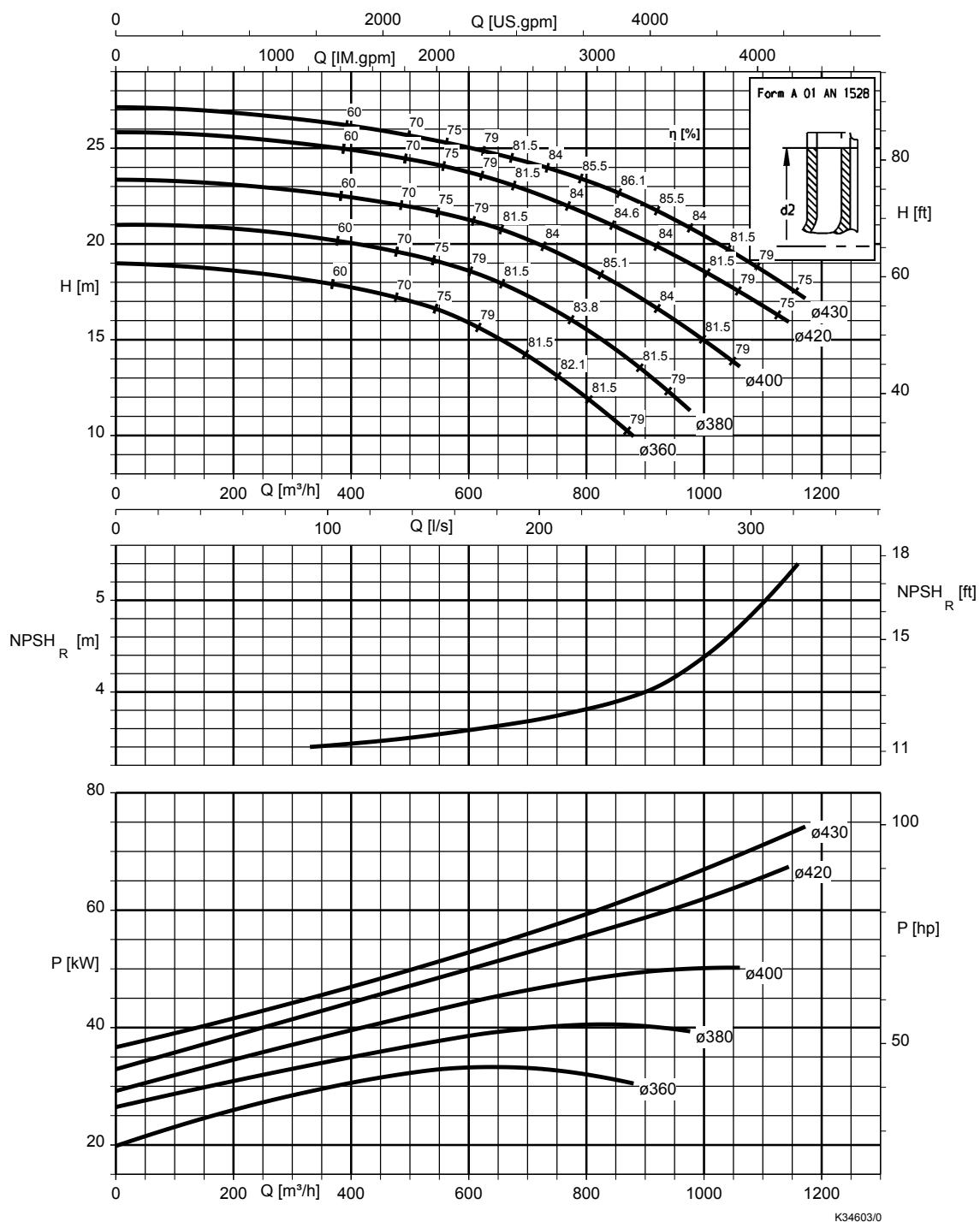


#### Valeurs de correction

Matériau de la roue	Valeur de correction S [m]	Calcul
EN-GJL-250	0,5	i $NPSH_{installation} \geq NPSH + \text{valeur de correction } S$
CC480K-GS	0,5	
1.4408	0,5	

**Etanorm-R 300-400, n = 960 t/min**

Etanorm-RSY

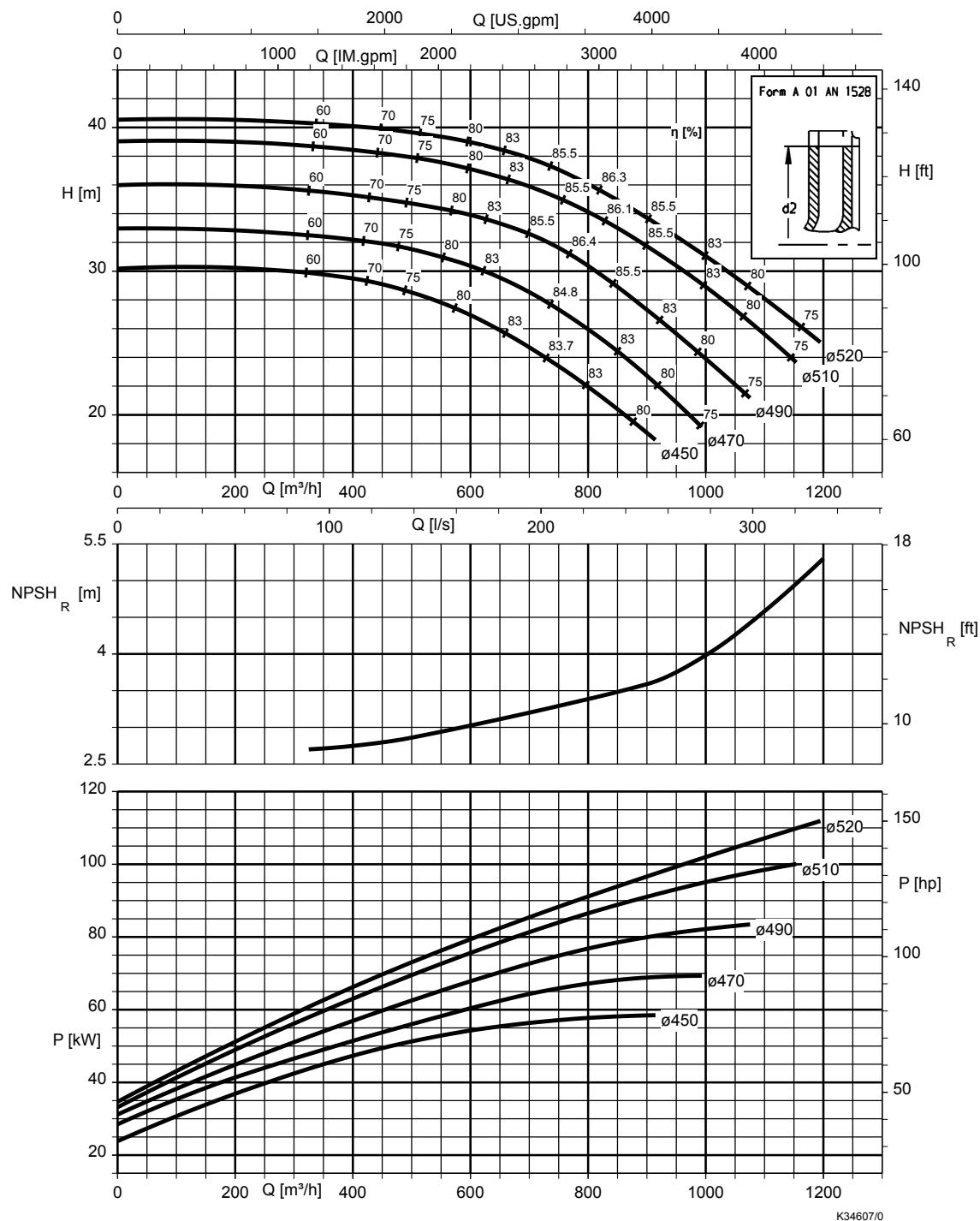


Valeurs de correction

Matériau de la roue	Valeur de correction S [m]	Calcul
EN-GJL-250	0,5	$\text{NPSH}_{\text{installation}} \geq \text{NPSH} + \text{valeur de correction } S$
CC480K-GS	0,5	
1.4408	0,5	

Etanorm-R 300-500, n = 960 t/min

Etanorm-RSY



Valeurs de correction

Matériau de la roue	Valeur de correction S [m]	Calcul
EN-GJL-250	0,5	i $NPSH_{\text{installation}} \geq NPSH + \text{valeur de correction } S$
CC480K-GS	0,5	
1.4408	0,5	





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