

Standardized Water Pump / Thermal Oil Pump / Hot Water Pump

60 Hz

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

Characteristic Curves Booklet



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Characteristic Curves Booklet 60 Hz

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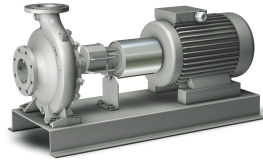
Centrifugal Pumps with Shaft Seal

Standardized Water Pump / Thermal Oil Pump / Hot Water Pump

Etanorm/ SYT/ V, Etabloc/ SYT, Etanorm-RSY



Etanorm



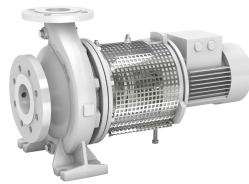
Etanorm SYT



Etanorm V



Etabloc



Etabloc SYT



Etanorm-RSY

General

Acceptance grade: Characteristic curves to ISO 9906 Class 3B

NPSH values

The NPSH values indicated in the characteristic curves correspond to a head drop of 3 %.

NPSH values in low-flow conditions

NPSH values for flow rates below $Q = 0.3 \times Q_{opt}$ can only be measured with intense technical efforts. Evidence of NPSH values in the low-flow range cannot be provided.

Density of fluid handled

The indicated heads and performance data apply to fluids handled with a density $\rho = 1.0 \text{ kg/dm}^3$ and a kinematic viscosity ν of up to $20 \text{ mm}^2/\text{s}$. If the density $\neq 1.0$, the performance data must be multiplied by ρ . For viscosities $> 20 \text{ mm}^2/\text{s}$ the corresponding data for cold water has to be calculated and the impact on the pump's performance has to be determined.

Friction loss

For some design variants (reinforced bearings, specific shaft seals) friction losses must be considered and indicated as additional power requirement in the data sheet.

Correction factors

The characteristic curves apply to pumps with cast iron or bronze impellers.

- **Etanorm/SYT, Etabloc/SYT**
When using an impeller made of cast steel materials the efficiency and power of the corresponding pump sizes have to be multiplied by the correction factors indicated in the characteristic curves.
- **Etanorm-RSY**
When using an impeller made of 1.4408 the efficiency percentages indicated in the characteristic curves have to be reduced by 2 percentage points each.

Overview of sizes

Table 1: Overview of sizes

Size	Type series						Speed [rpm]		
	Etanorm	Etanorm SYT	Etanorm V	Etabloc	Etabloc SYT	Etanorm-RSY	3500	1750	1160
040-025-160	X	X	-	X	X	-	(⇒ Page 22)	(⇒ Page 51)	(⇒ Page 123)
040-025-200	X	X	-	X	X	-	(⇒ Page 23)	(⇒ Page 52)	(⇒ Page 124)
050-032-125.1	X	X	X	X	X	-	(⇒ Page 24)	(⇒ Page 53)	(⇒ Page 125)
050-032-160.1	X	X	X	X	X	-	(⇒ Page 25)	(⇒ Page 54)	(⇒ Page 126)
050-032-200.1	X	X	X	X	X	-	(⇒ Page 26)	(⇒ Page 55)	(⇒ Page 127)
050-032-250.1	X	-	X	X	-	-	(⇒ Page 27)	(⇒ Page 56)	(⇒ Page 128)
050-032-125	X	-	X	X	-	-	(⇒ Page 28)	(⇒ Page 57)	(⇒ Page 129)
050-032-160	X	X	X	X	X	-	(⇒ Page 29)	(⇒ Page 58)	(⇒ Page 130)
050-032-200	X	X	X	X	X	-	(⇒ Page 30)	(⇒ Page 59)	(⇒ Page 131)
050-032-250	X	X	X	X	-	-	(⇒ Page 31)	(⇒ Page 60)	(⇒ Page 132)
065-040-125	X	-	X	X	-	-	(⇒ Page 32)	(⇒ Page 61)	(⇒ Page 133)
065-040-160	X	X	X	X	X	-	(⇒ Page 33)	(⇒ Page 62)	(⇒ Page 134)
065-040-200	X	X	X	X	X	-	(⇒ Page 34)	(⇒ Page 63)	(⇒ Page 135)
065-040-250	X	X	X	X	-	-	(⇒ Page 35)	(⇒ Page 64)	(⇒ Page 136)
065-040-315	X	X	X	X	-	-	-	(⇒ Page 65)	(⇒ Page 137)
065-050-125	X	-	X	X	-	-	(⇒ Page 36)	(⇒ Page 66)	(⇒ Page 138)
065-050-160	X	X	X	X	X	-	(⇒ Page 37)	(⇒ Page 67)	(⇒ Page 139)
065-050-200	X	X	X	X	X	-	(⇒ Page 38)	(⇒ Page 68)	(⇒ Page 140)
065-050-250	X	X	X	X	-	-	(⇒ Page 39)	(⇒ Page 69)	(⇒ Page 141)
065-050-315	X	X	X	X	-	-	-	(⇒ Page 70)	(⇒ Page 142)
080-065-125	X	-	X	X	-	-	(⇒ Page 40)	(⇒ Page 71)	(⇒ Page 143)
080-065-160	X	X	X	X	X	-	(⇒ Page 41)	(⇒ Page 72)	(⇒ Page 144)
080-065-200	X	X	X	X	X	-	(⇒ Page 42)	(⇒ Page 73)	(⇒ Page 145)
080-065-250	X	X	X	X	-	-	(⇒ Page 43)	(⇒ Page 74)	(⇒ Page 146)
080-065-315	X	X	X	X	-	-	-	(⇒ Page 75)	(⇒ Page 147)
100-080-160	X	X	X	X	X	-	(⇒ Page 44)	(⇒ Page 76)	(⇒ Page 148)
100-080-200	X	X	X	X	-	-	(⇒ Page 45)	(⇒ Page 77)	(⇒ Page 149)
100-080-250	X	X	X	X	-	-	(⇒ Page 46)	(⇒ Page 78)	(⇒ Page 150)
100-080-315	X	X	X	X	-	-	-	(⇒ Page 79)	(⇒ Page 151)
100-080-400	X	-	X	X	-	-	-	(⇒ Page 80)	(⇒ Page 152)
125-100-160	X	X	X	X	-	-	(⇒ Page 47)	(⇒ Page 81)	(⇒ Page 153)
125-100-200	X	X	X	X	-	-	(⇒ Page 48)	(⇒ Page 82)	(⇒ Page 154)
125-100-250	X	X	X	X	-	-	(⇒ Page 49)	(⇒ Page 83)	(⇒ Page 155)
125-100-315	X	X	X	X	-	-	-	(⇒ Page 84)	(⇒ Page 156)
125-100-400	X	-	X	X	-	-	-	(⇒ Page 85)	(⇒ Page 157)
150-125-200	X	X	X	X	-	-	(⇒ Page 50)	(⇒ Page 86)	(⇒ Page 158)
150-125-250	X	X	X	X	-	-	-	(⇒ Page 87)	(⇒ Page 159)
150-125-315	X	X	X	X	-	-	-	(⇒ Page 88)	(⇒ Page 160)
150-125-400	X	X	X	-	-	-	-	(⇒ Page 89)	(⇒ Page 161)
150-125-510	X	-	-	-	-	-	-	(⇒ Page 90)	(⇒ Page 162)
200-150-200	X	-	X	X	-	-	-	(⇒ Page 91)	(⇒ Page 163)
200-150-250	X	-	X	X	-	-	-	(⇒ Page 92)	(⇒ Page 164)
200-150-315	X	X	X	X	-	-	-	(⇒ Page 93)	(⇒ Page 165)
200-150-400	X	X	X	-	-	-	-	(⇒ Page 94)	(⇒ Page 166)
200-150-510	X	-	-	-	-	-	-	(⇒ Page 95)	(⇒ Page 167)
200-200-250	X	-	-	-	-	-	-	(⇒ Page 96)	(⇒ Page 168)
250-200-275	X	-	-	-	-	-	-	(⇒ Page 97)	(⇒ Page 169)
250-200-320	X	-	-	-	-	-	-	(⇒ Page 98)	(⇒ Page 170)
250-200-375	X	-	-	-	-	-	-	(⇒ Page 99)	(⇒ Page 171)
250-200-435	X	-	-	-	-	-	-	(⇒ Page 100)	(⇒ Page 172)
250-200-510	X	-	-	-	-	-	-	(⇒ Page 101)	(⇒ Page 173)
300-250-295	X	-	-	-	-	-	-	(⇒ Page 102)	(⇒ Page 174)

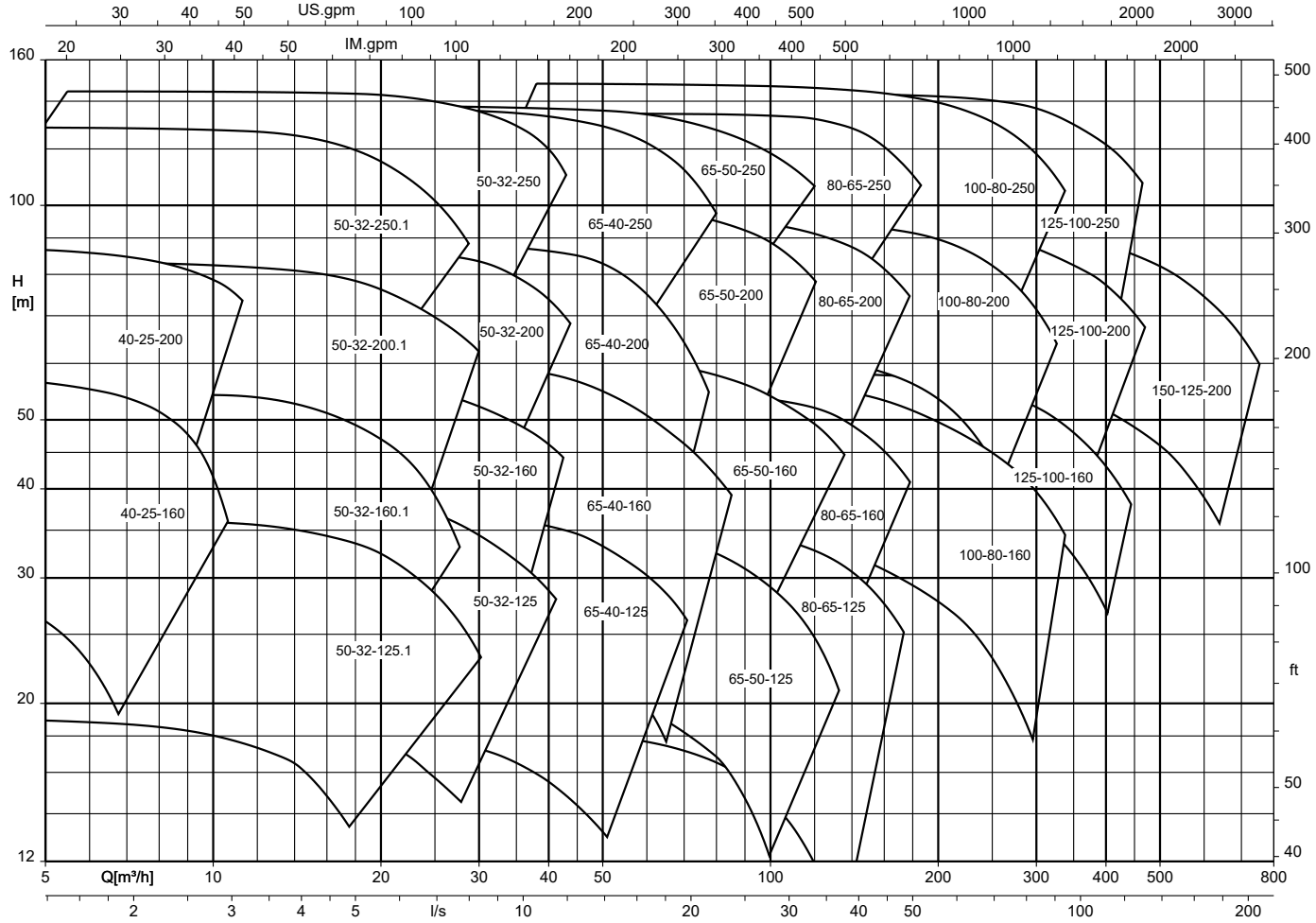
Size	Type series						Speed [rpm]		
	Etanorm	Etanorm SYT	Etanorm V	Etabloc	Etabloc SYT	Etanorm-RSY	3500	1750	1160
300-250-295.1	X	-	-	-	-	-	-	(⇒ Page 103)	(⇒ Page 175)
300-250-320	X	-	-	-	-	-	-	(⇒ Page 104)	(⇒ Page 176)
300-250-375	X	-	-	-	-	-	-	(⇒ Page 105)	(⇒ Page 177)
300-250-435	X	-	-	-	-	-	-	(⇒ Page 106)	(⇒ Page 178)
300-250-510	X	-	-	-	-	-	-	(⇒ Page 107)	(⇒ Page 179)
350-300-350	X	-	-	-	-	-	-	(⇒ Page 108)	(⇒ Page 180)
350-300-350.1	X	-	-	-	-	-	-	(⇒ Page 109)	(⇒ Page 181)
350-300-375	X	-	-	-	-	-	-	(⇒ Page 110)	(⇒ Page 182)
350-300-435	X	-	-	-	-	-	-	(⇒ Page 111)	(⇒ Page 183)
350-300-510	X	-	-	-	-	-	-	(⇒ Page 112)	(⇒ Page 184)

Table 2: Overview of sizes

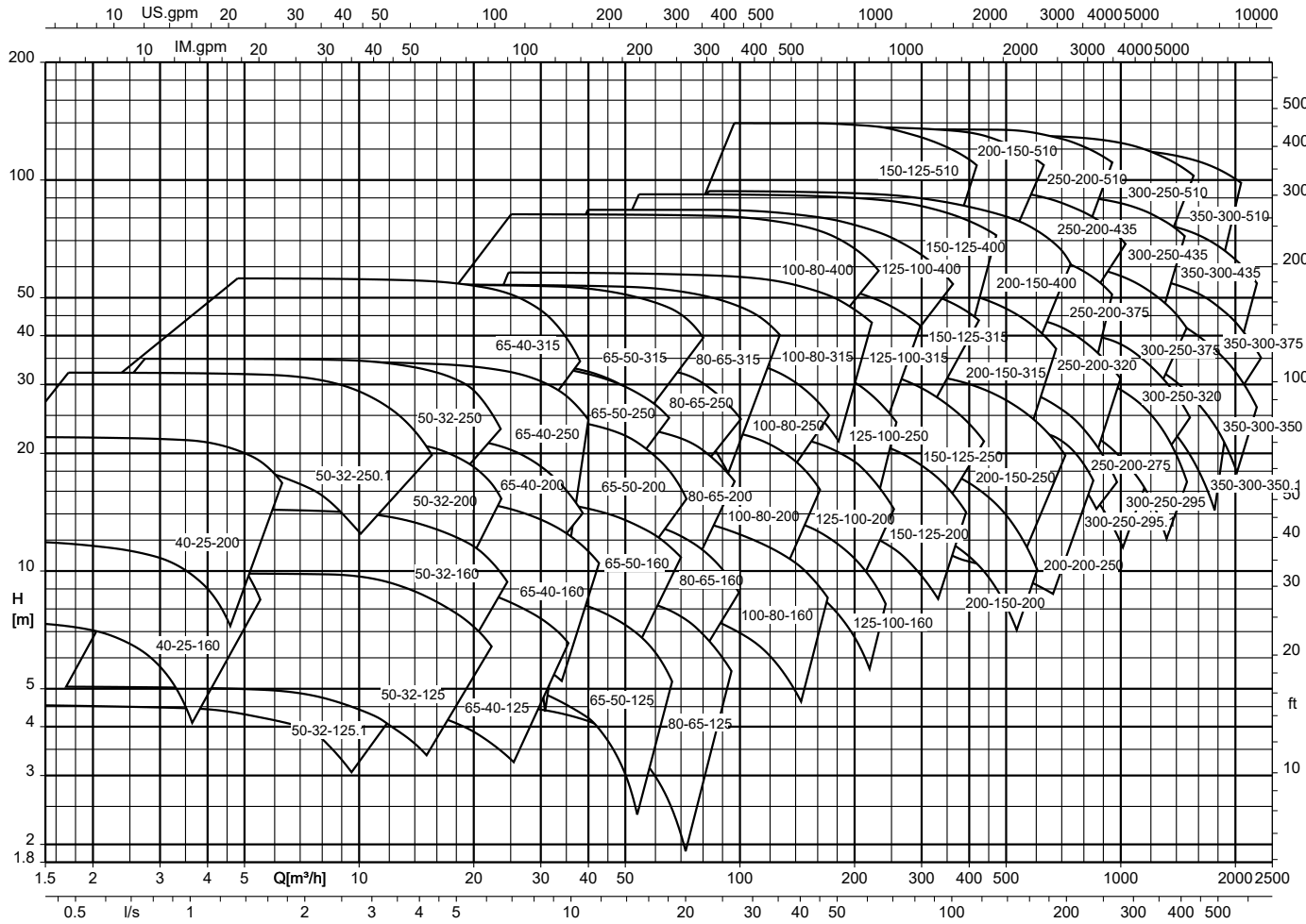
Size	Type series						Speed [rpm]		
	Etanorm	Etanorm SYT	Etanorm V	Etabloc	Etabloc SYT	Etanorm-RSY	3500	1750	1160
125-500.2	-	-	-	-	-	X	-	-	(⇒ Page 185)
150-500.1	-	-	-	-	-	X	-	-	(⇒ Page 186)
200-330	-	-	-	-	-	X	-	(⇒ Page 115)	(⇒ Page 187)
200-400	-	-	-	-	-	X	-	(⇒ Page 116)	(⇒ Page 188)
200-500	-	-	-	-	-	X	-	-	(⇒ Page 189)
250-300	-	-	-	-	-	-	-	(⇒ Page 117)	-
250-330	-	-	-	-	-	X	-	(⇒ Page 118)	(⇒ Page 190)
250-400	-	-	-	-	-	X	-	(⇒ Page 119)	(⇒ Page 191)
250-500	-	-	-	-	-	X	-	-	(⇒ Page 192)
300-360	-	-	-	-	-	X	-	(⇒ Page 121)	(⇒ Page 194)
300-400	-	-	-	-	-	-	-	(⇒ Page 122)	-
300-500	-	-	-	-	-	X	-	-	(⇒ Page 195)

Selection charts

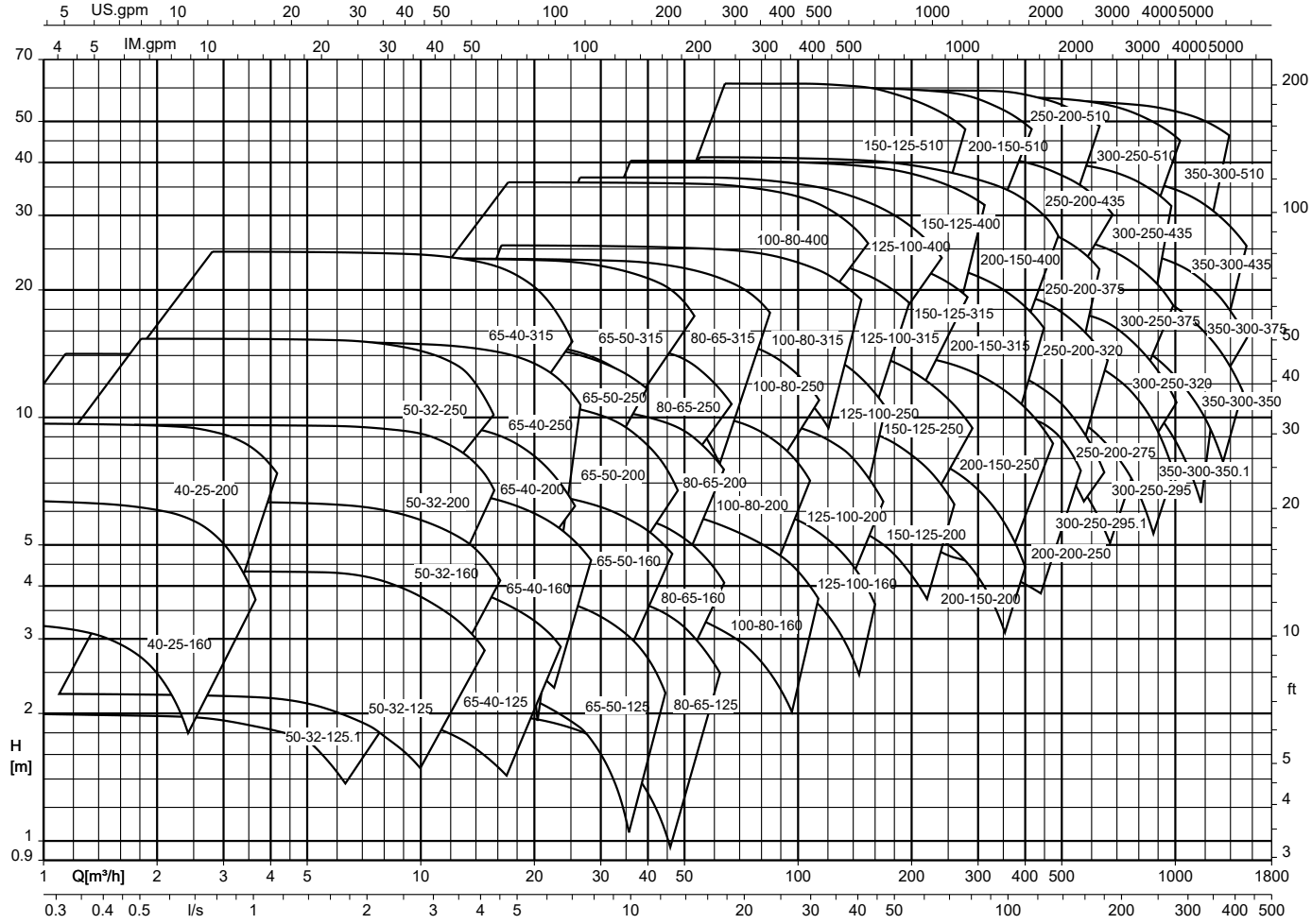
Etanorm, n = 3500 rpm



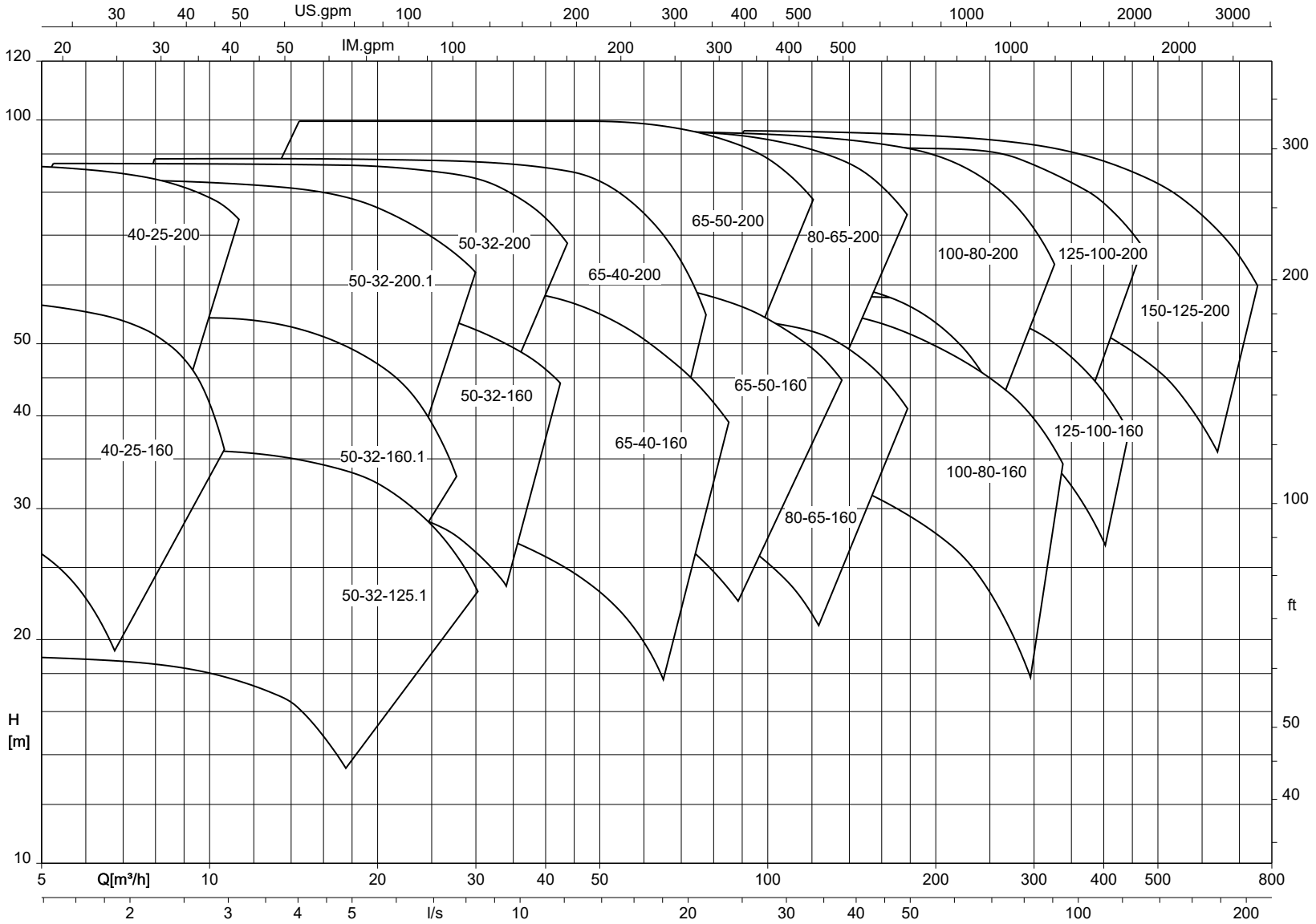
Etanorm, n = 1750 rpm



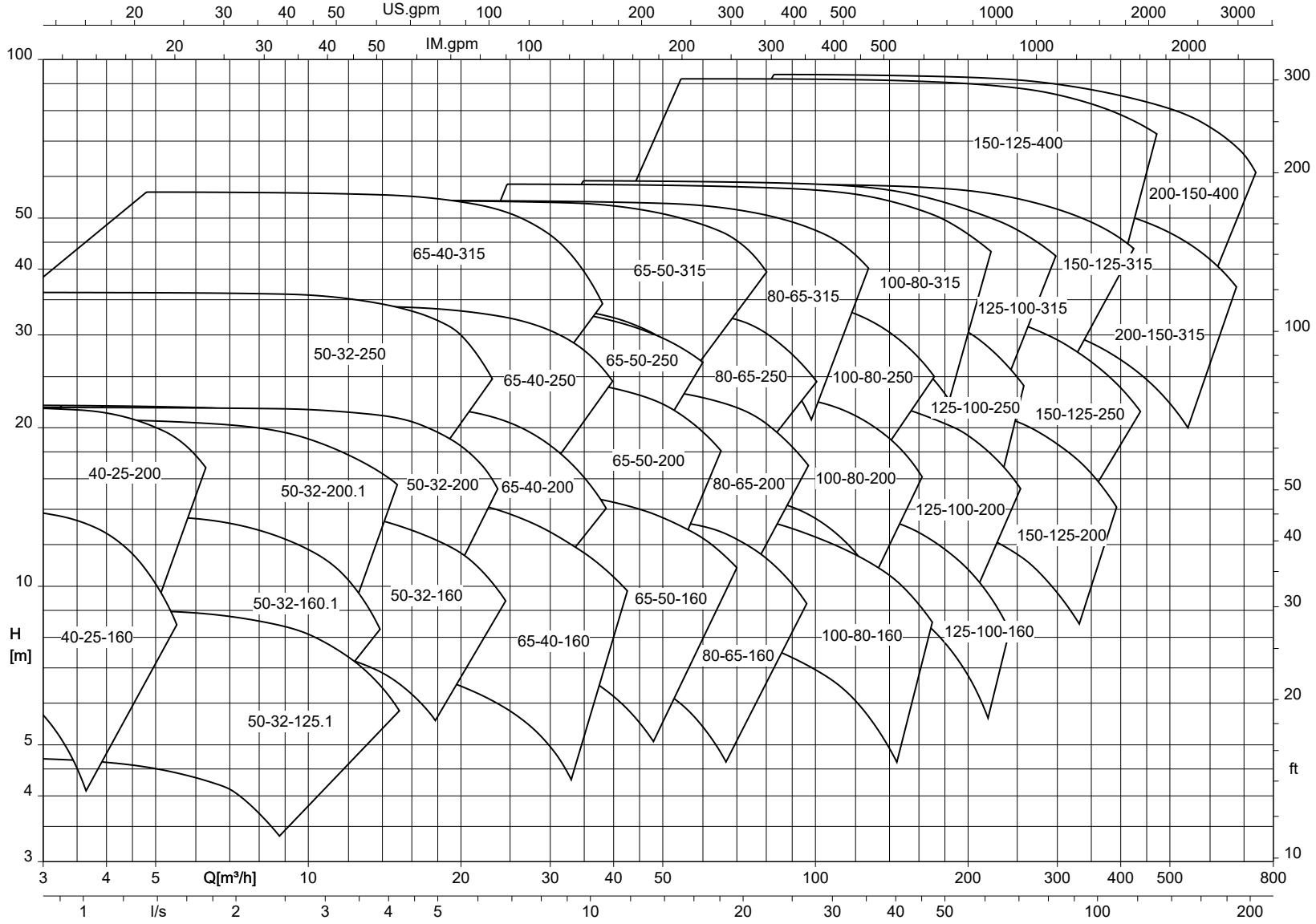
Etanorm, n = 1160 rpm



Etanorm SYT, n = 3500 rpm



Etanorm SYT, n = 1750 rpm

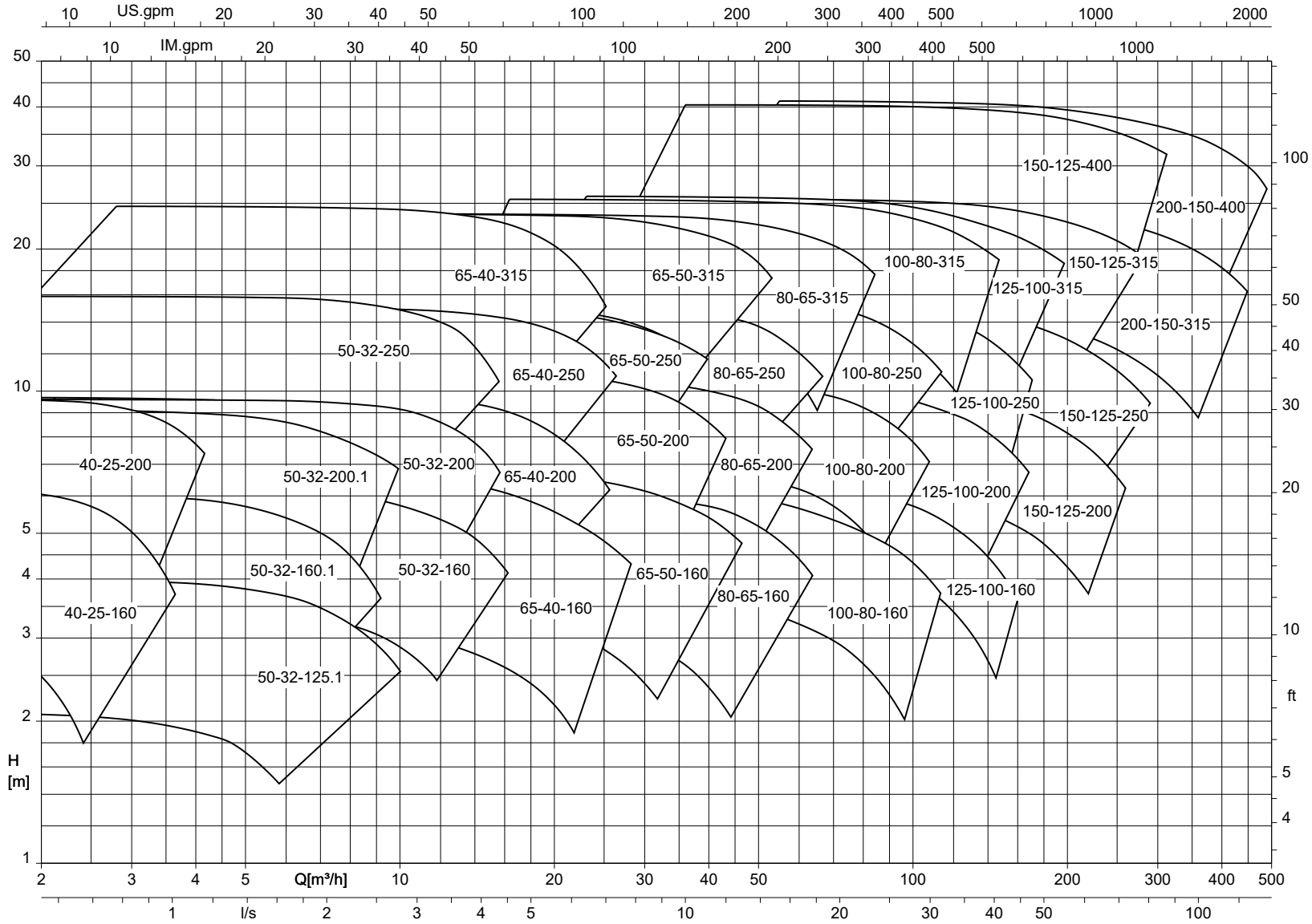


Etanorm/ SYT/ V, Etablo/ SYT, Etanorm-RSY

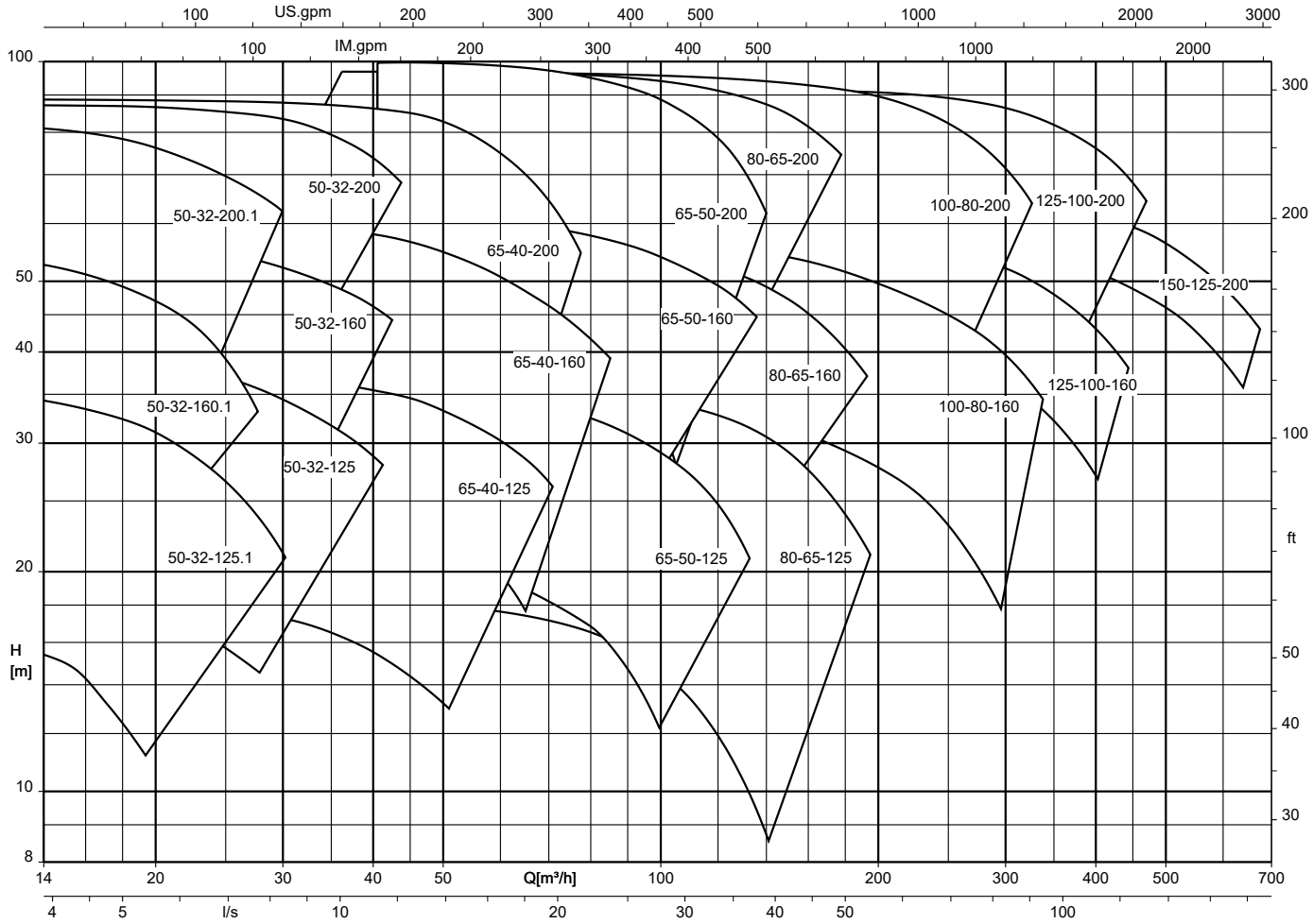


Standardized Water Pump / Centrifugal Pumps with Shaft Seal / Thermal Oil Pump / Hot Water Pump

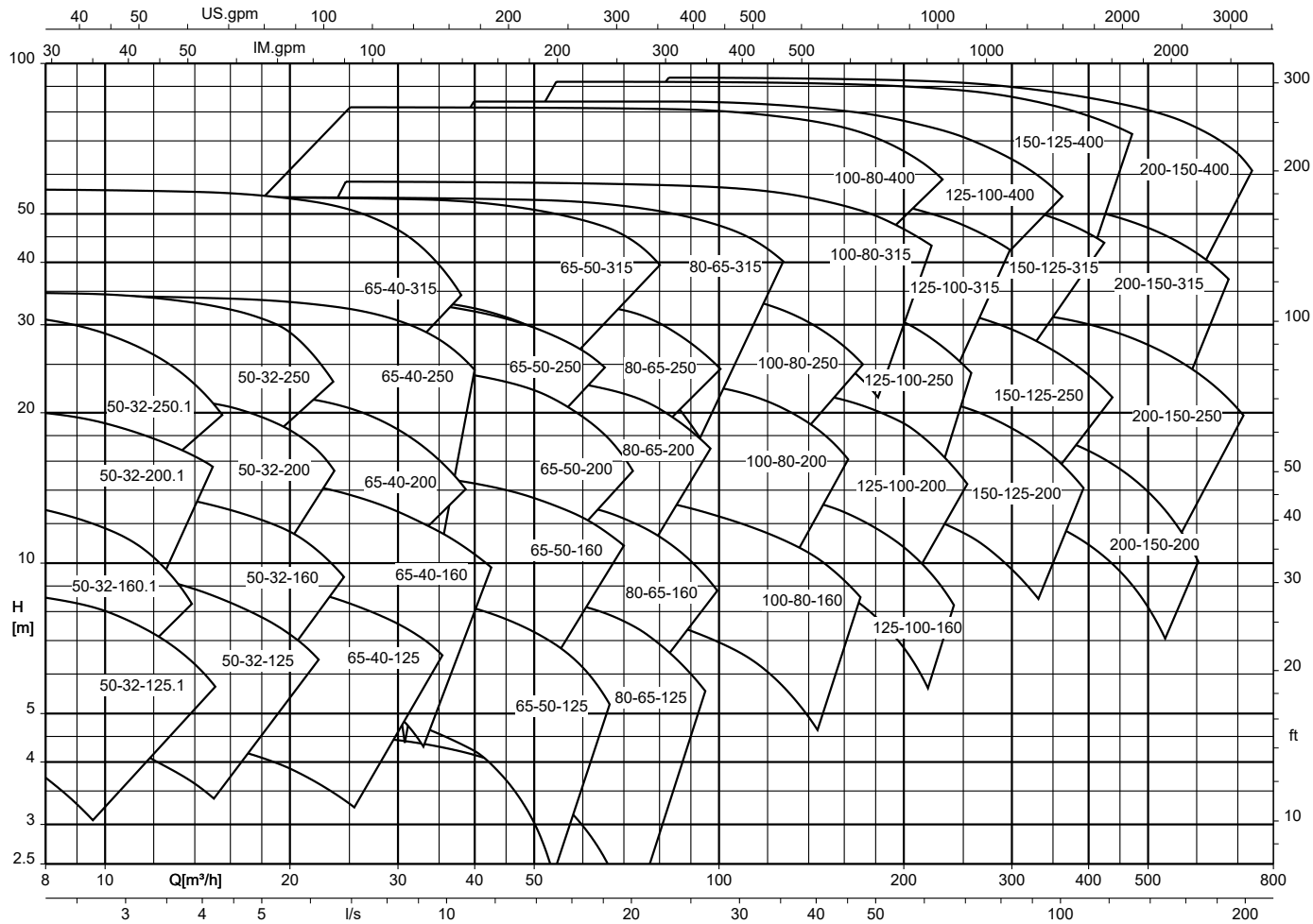
Etanorm SYT, n = 1160 rpm



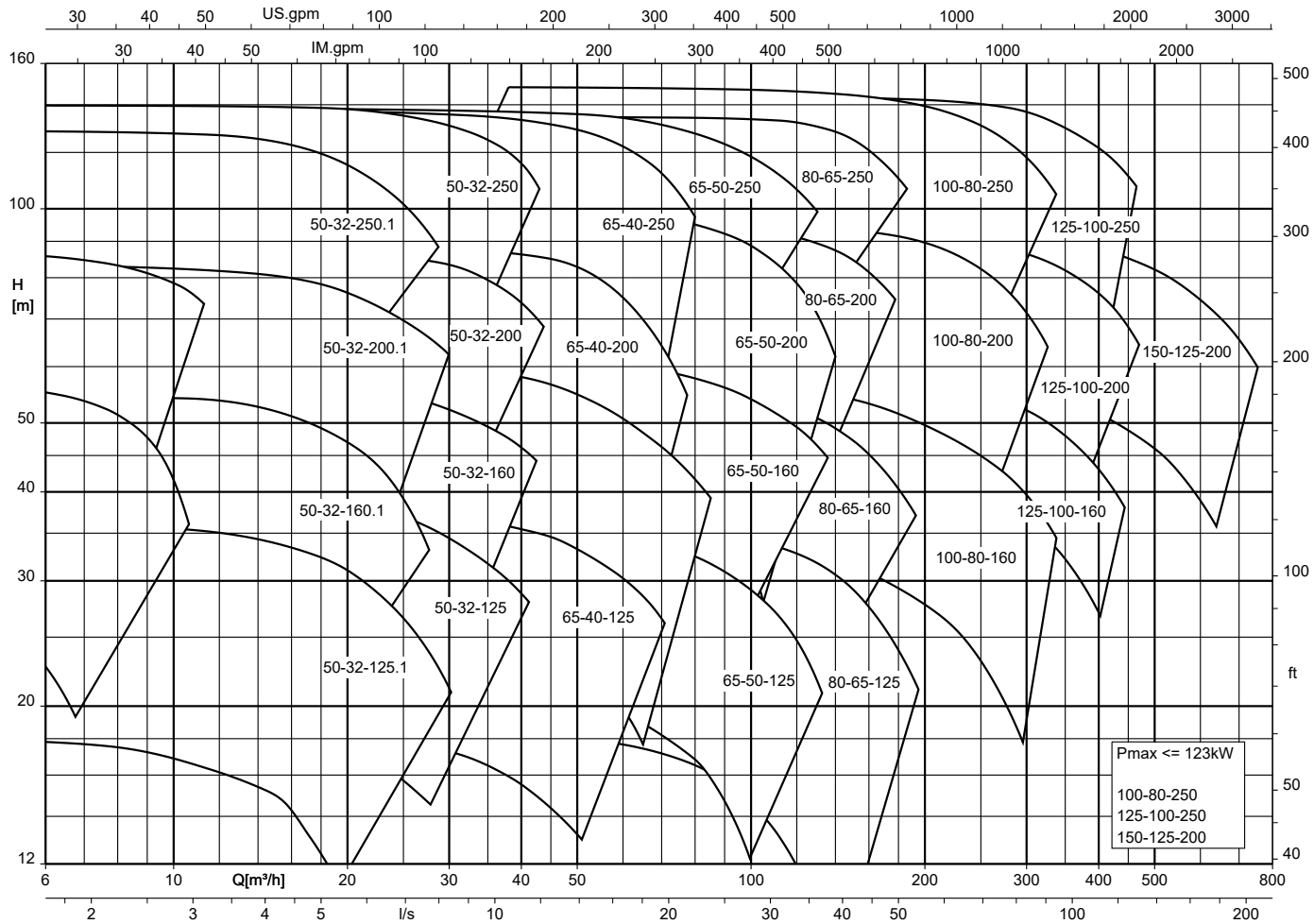
Etanorm V (fixed speed version), n = 3500 rpm



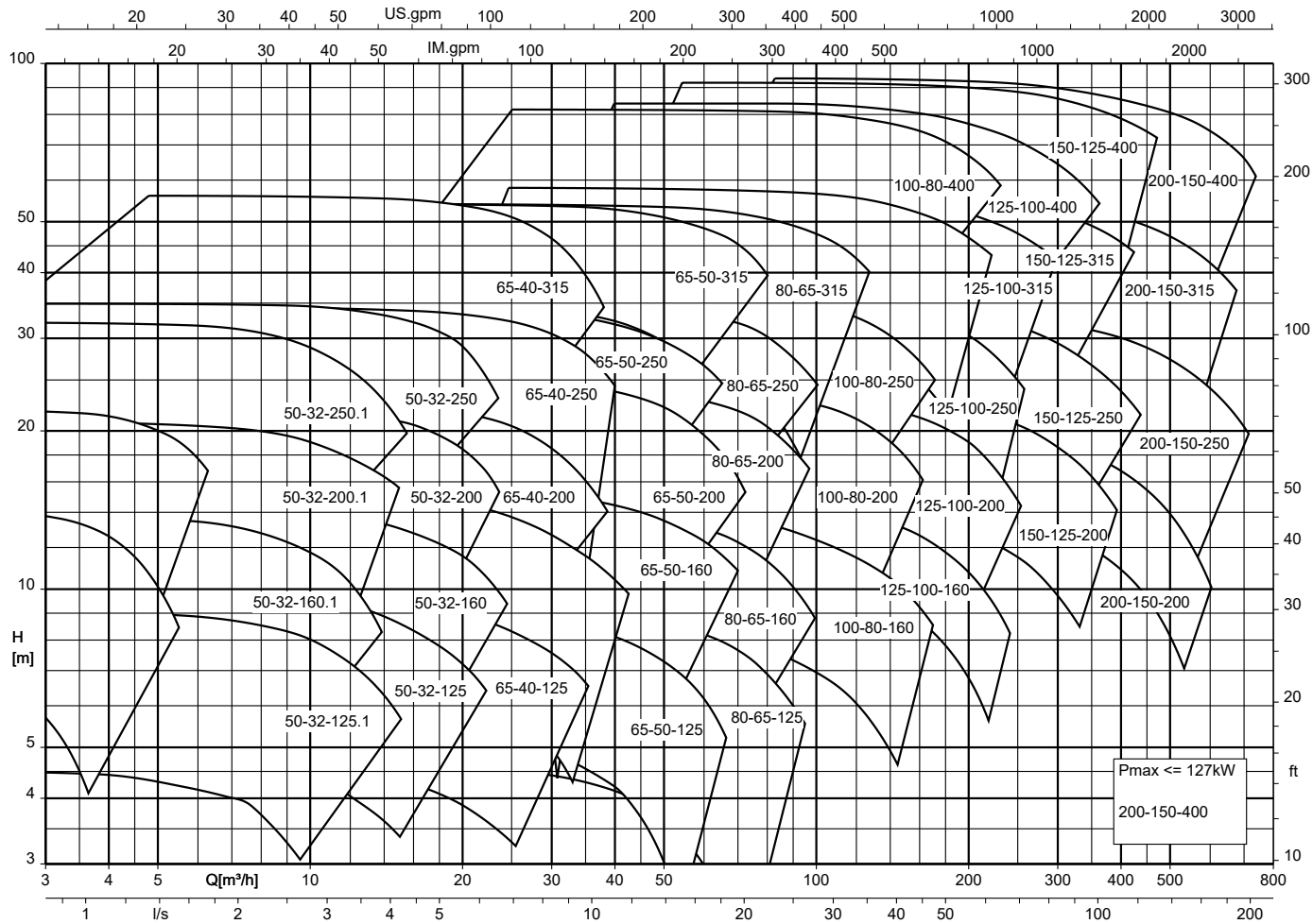
Etanorm V (fixed speed version), n = 1750 rpm



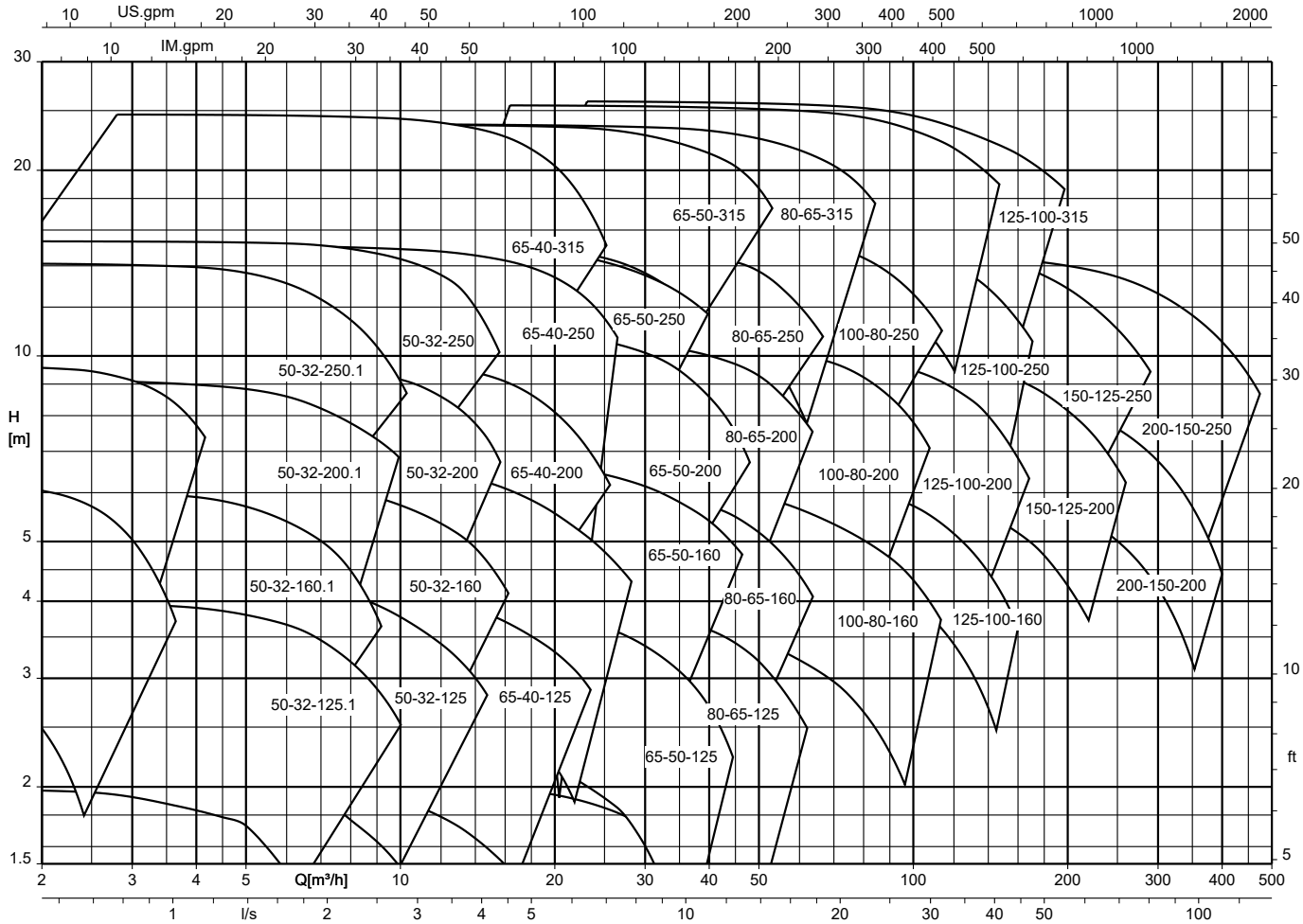
Etabloc, n = 3500 rpm (fixed speed version)



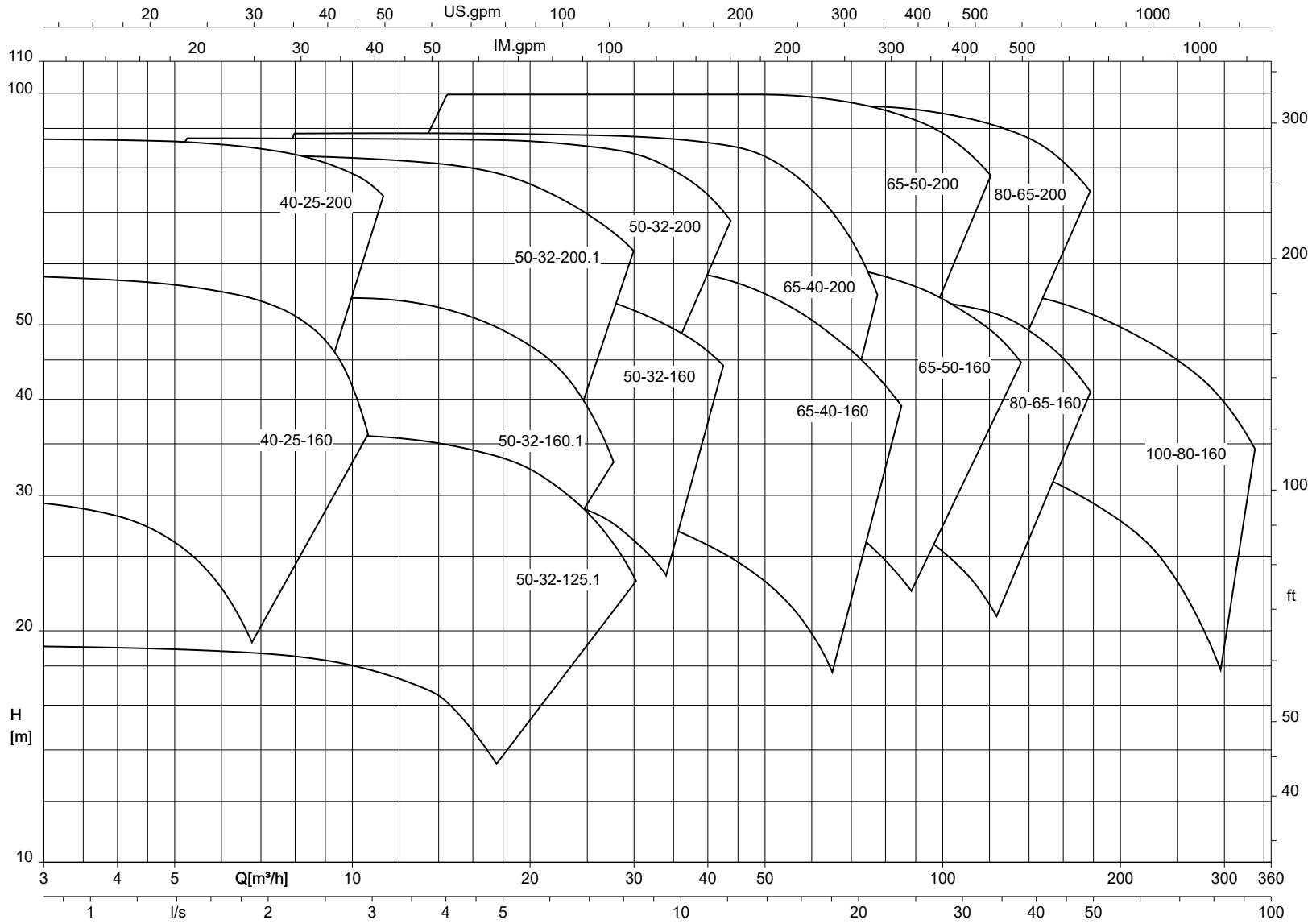
Etabloc, n = 1750 rpm (fixed speed version)



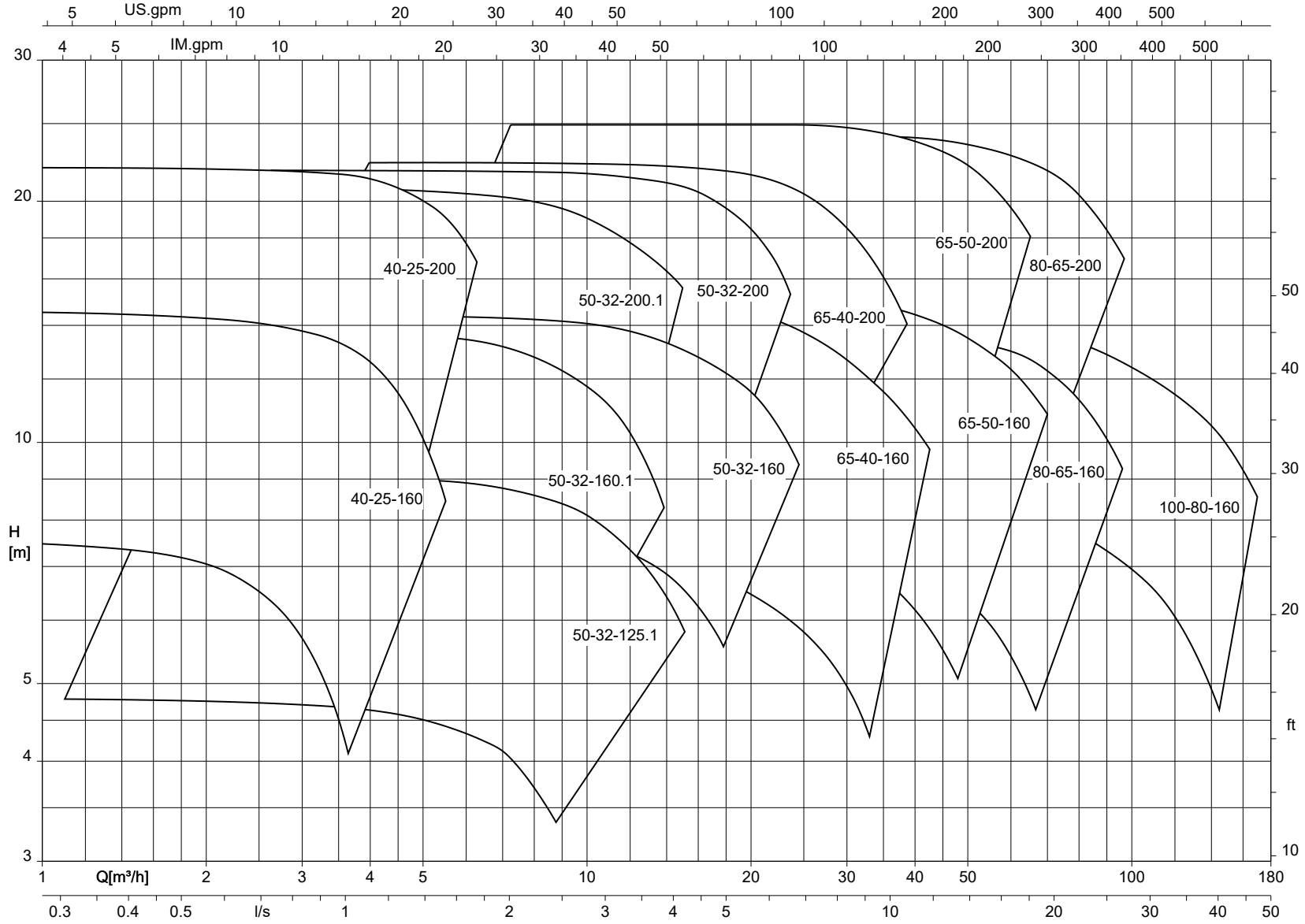
Etabloc, n = 1160 rpm (fixed speed version)



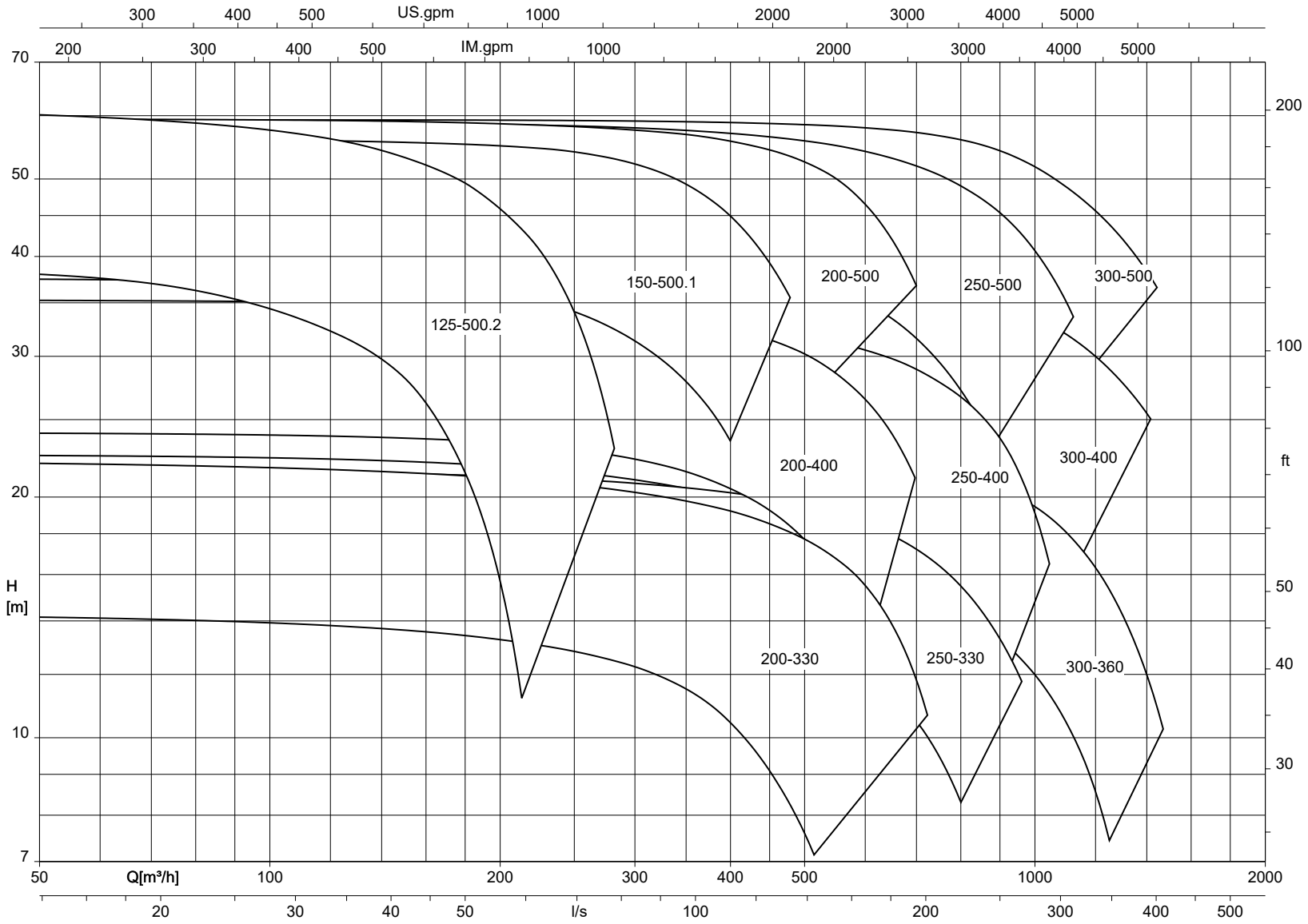
Etabloc SYT, n = 3500 rpm



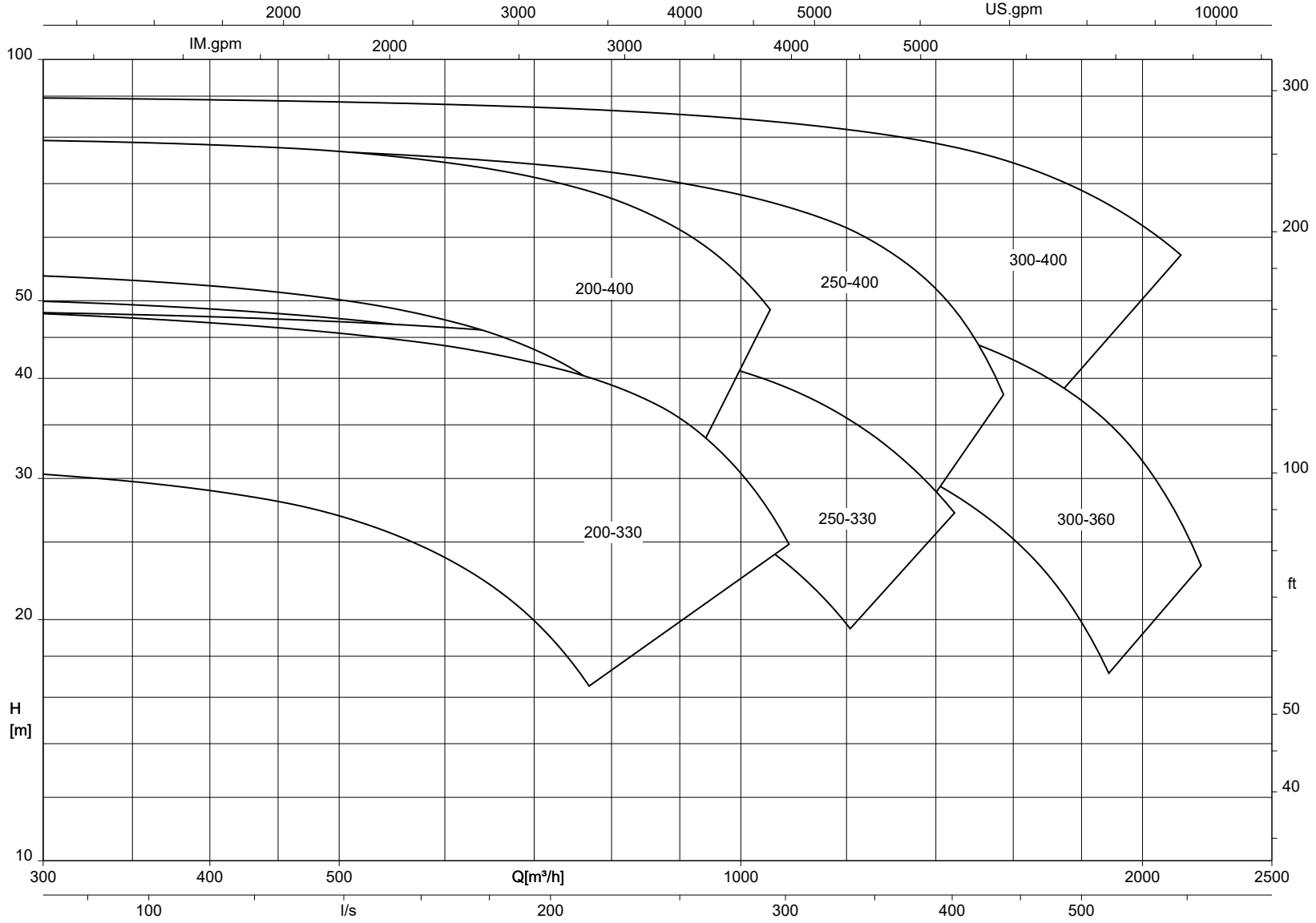
Etabloc SYT, n = 1750 rpm



Etanorm-RSY, n = 1160 rpm



Etanorm-RSY, n = 1750 rpm

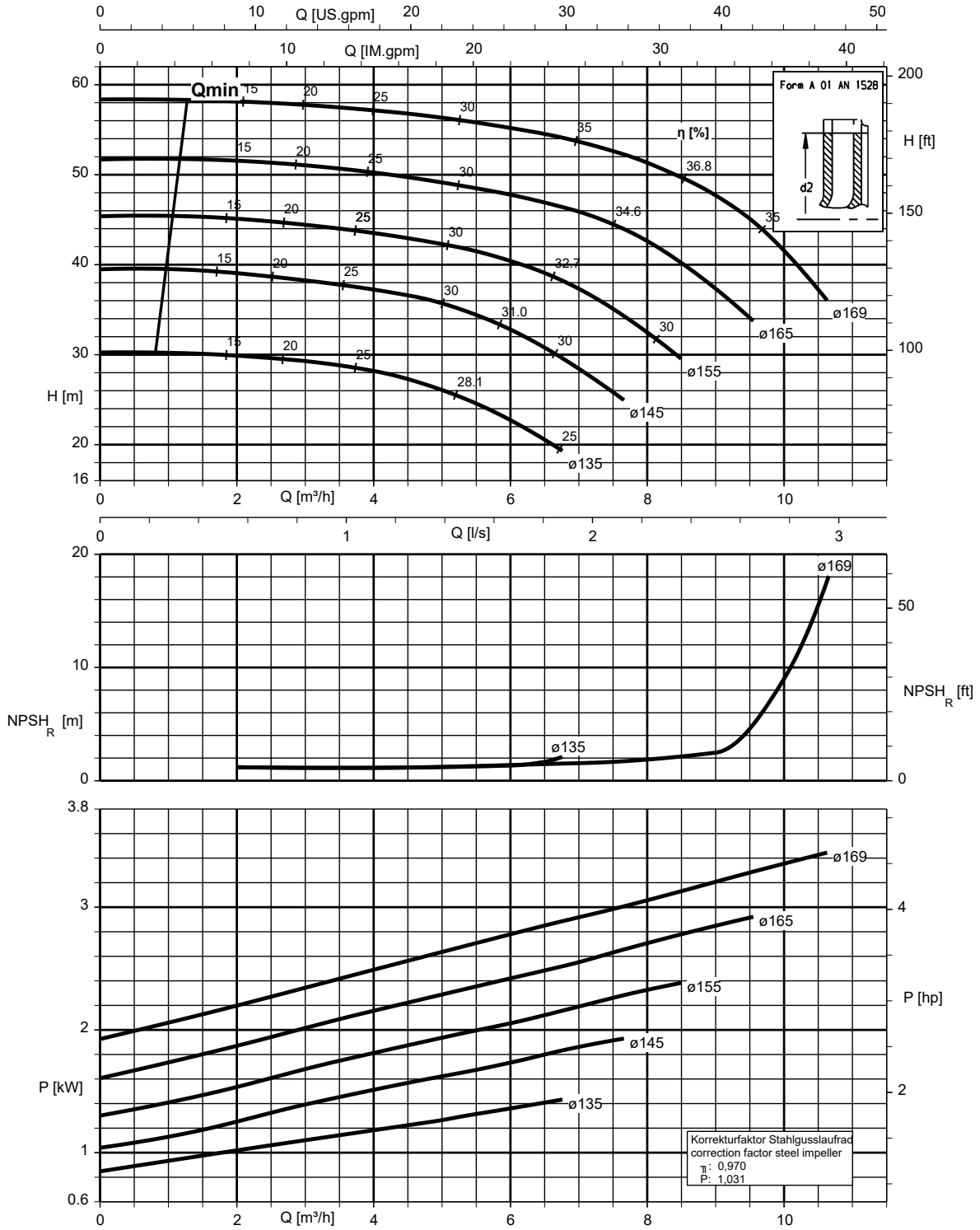


Characteristic curves

n = 3500 rpm

Etanorm 040-025-160, n = 3500 rpm

Etanorm SYT, Etabloc, Etabloc SYT

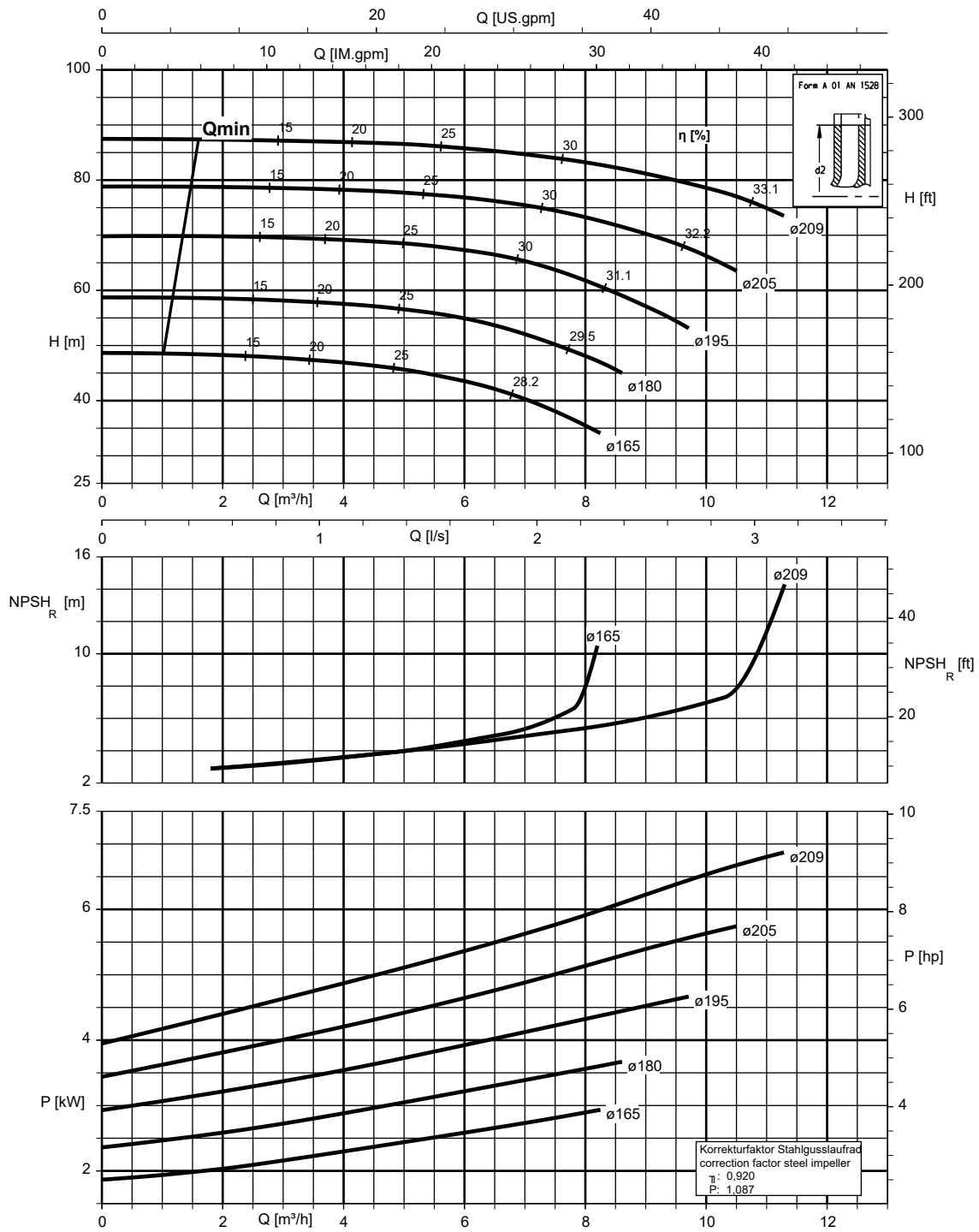


K1311.462/14/2

1311.46/11-EN-US

Etanorm 040-025-200, n = 3500 rpm

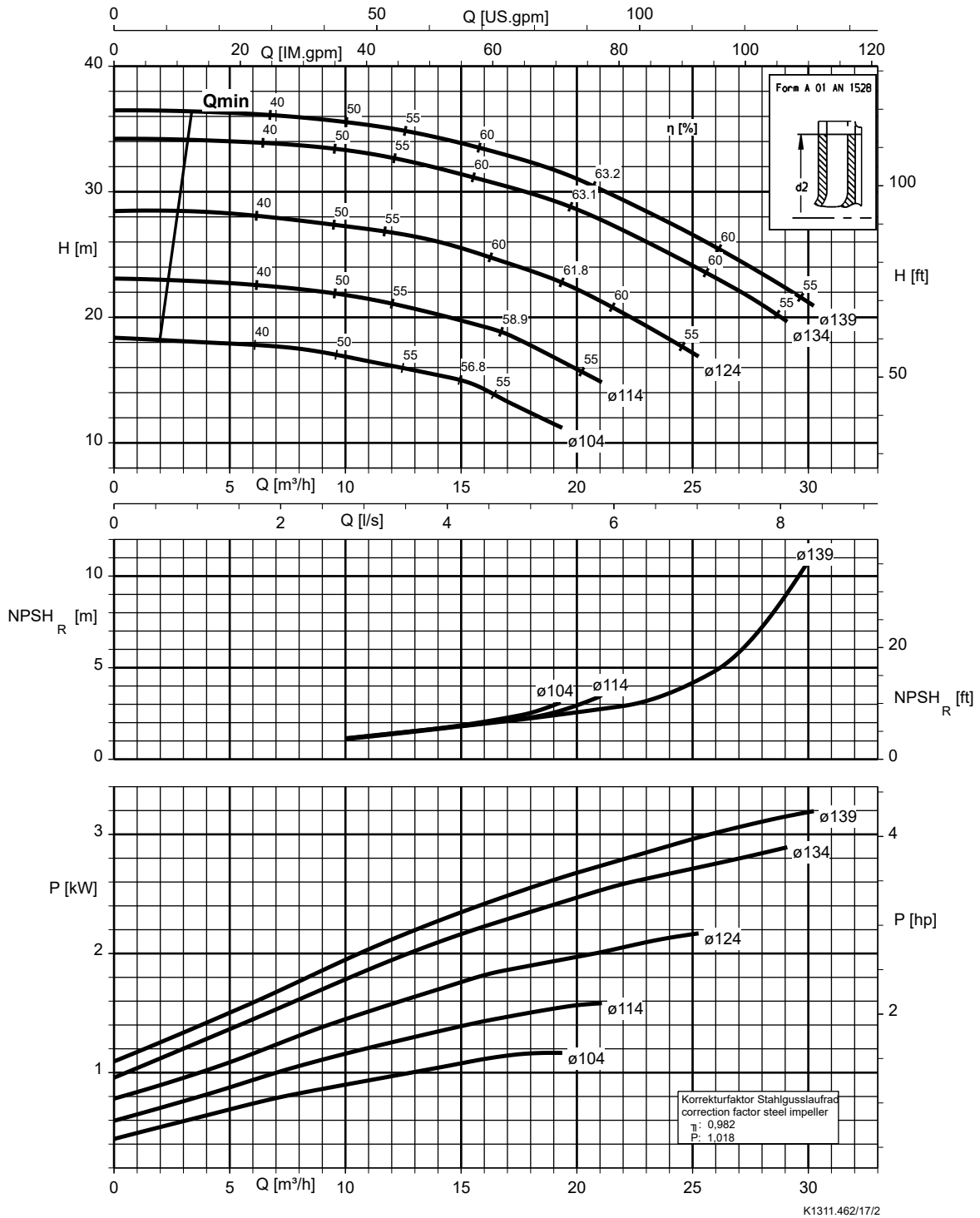
Etanorm SYT, Etabloc, Etabloc SYT



K1311.462/15/2

Etanorm 050-032-125.1, n = 3500 rpm

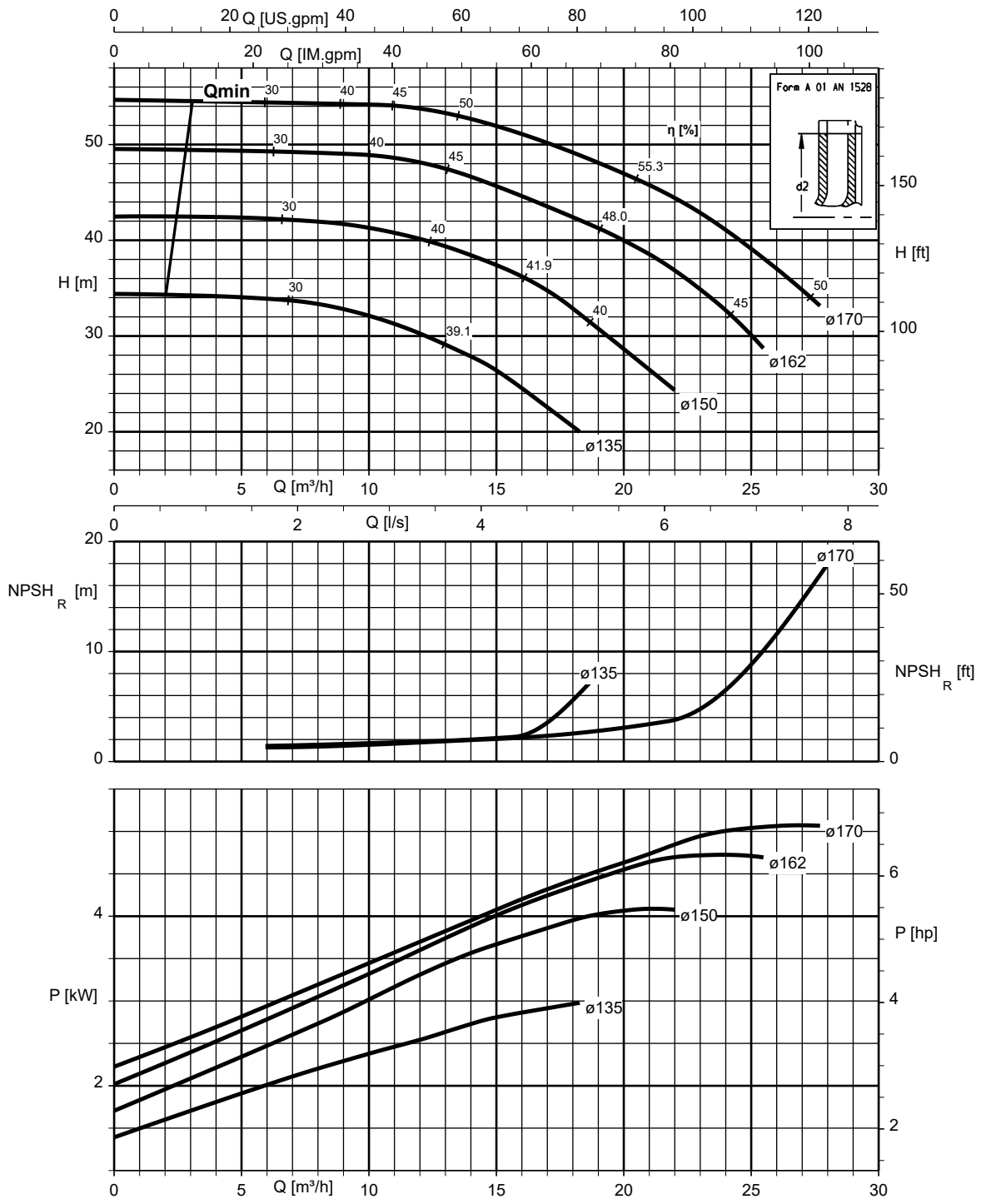
Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



K1311.462/17/2

Etanorm 050-032-160.1, n = 3500 rpm

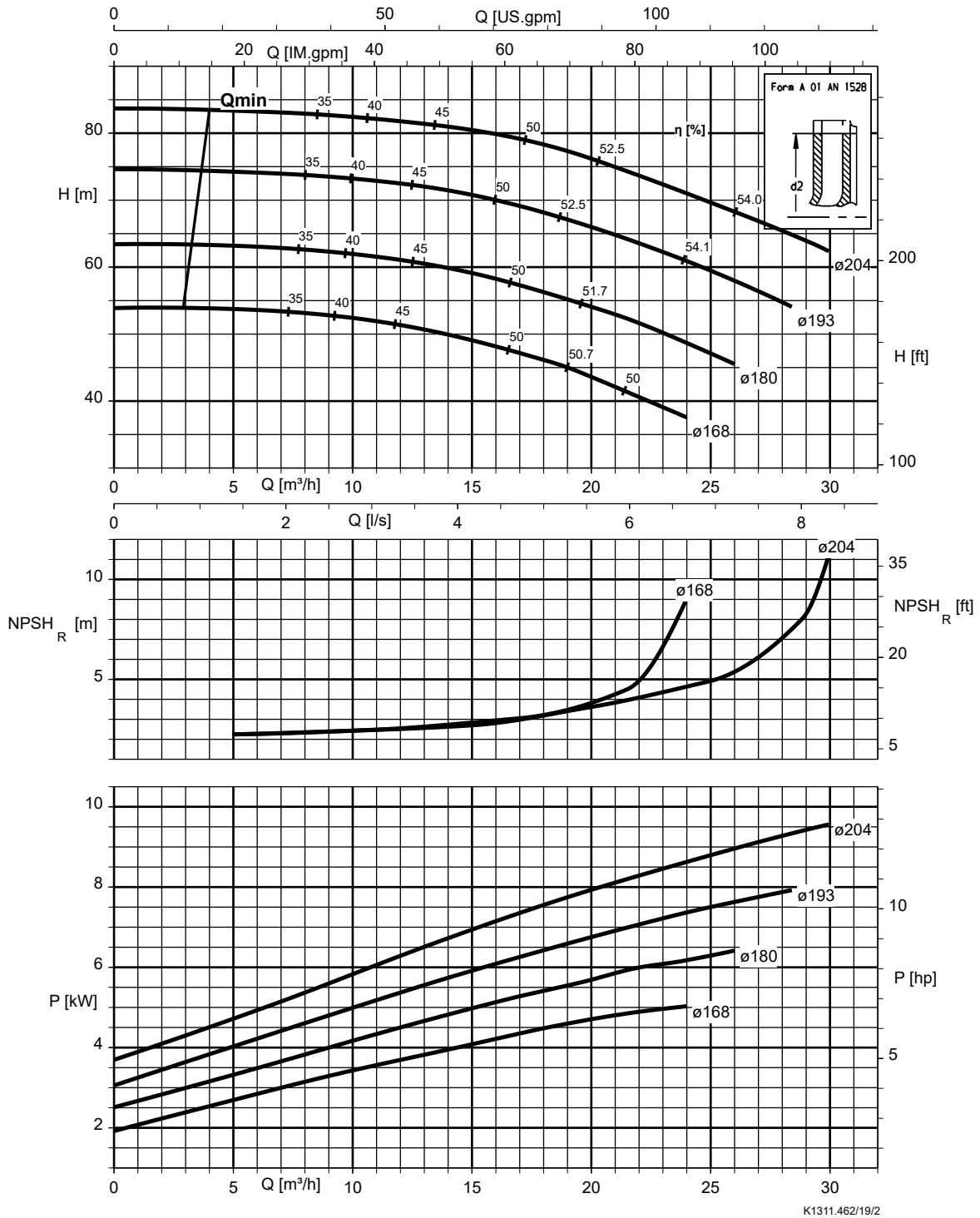
Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



1311.46/11-EN-US

Etanorm 050-032-200.1, n = 3500 rpm

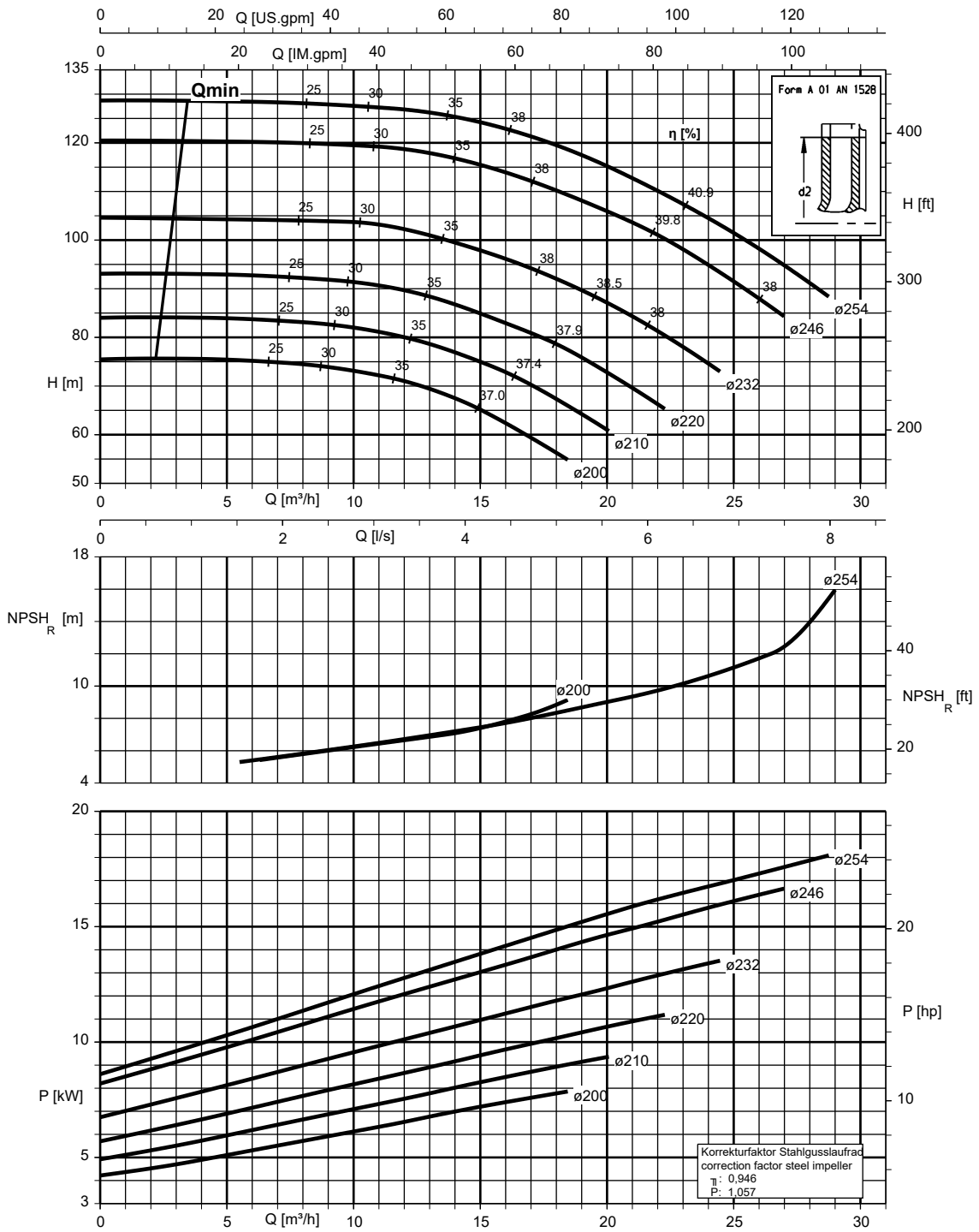
Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



K1311.462/19/2

Etanorm 050-032-250.1, n = 3500 rpm

Etabloc

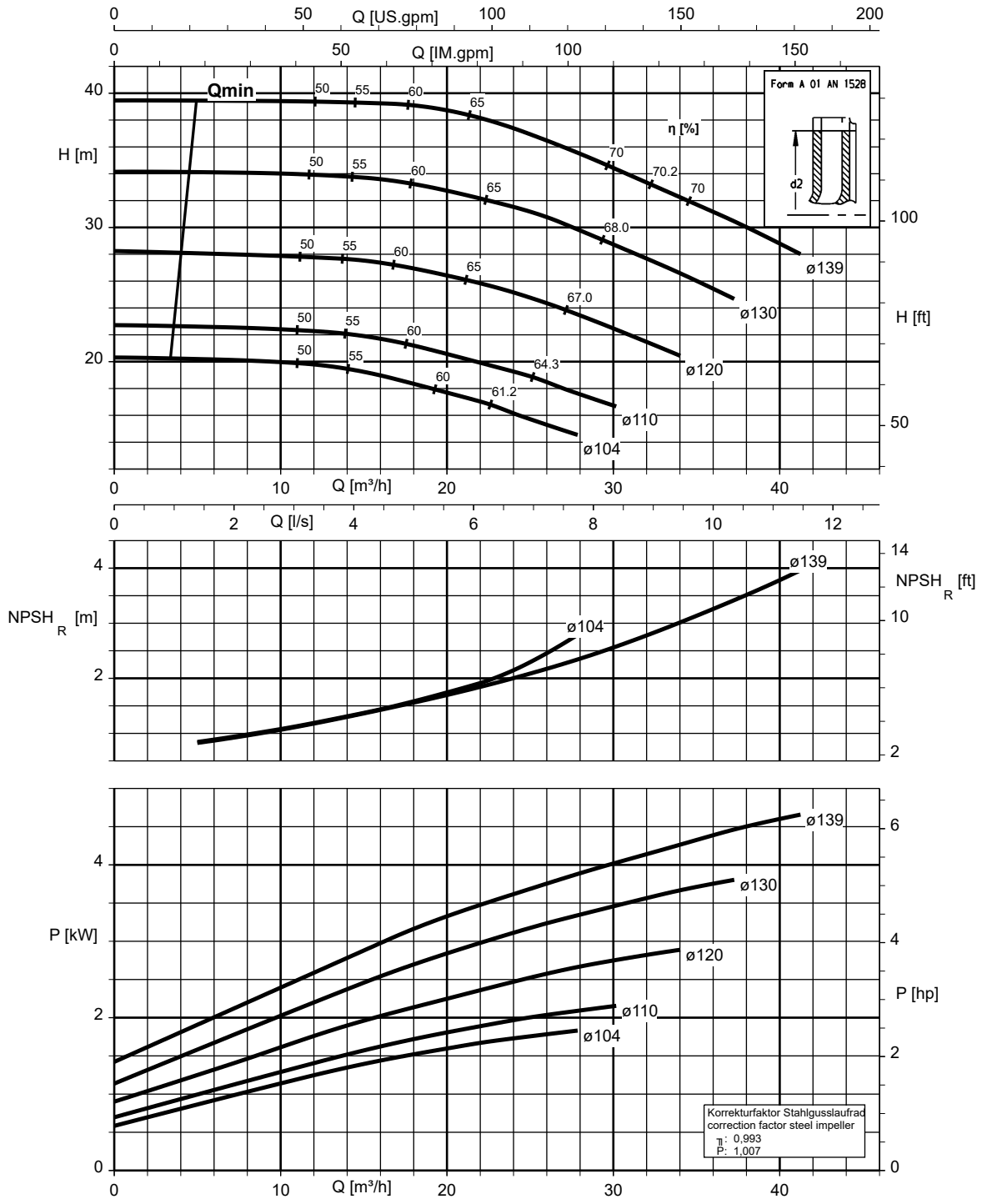


K1311.462/20/2

1311.46/11-EN-US

Etanorm 050-032-125, n = 3500 rpm

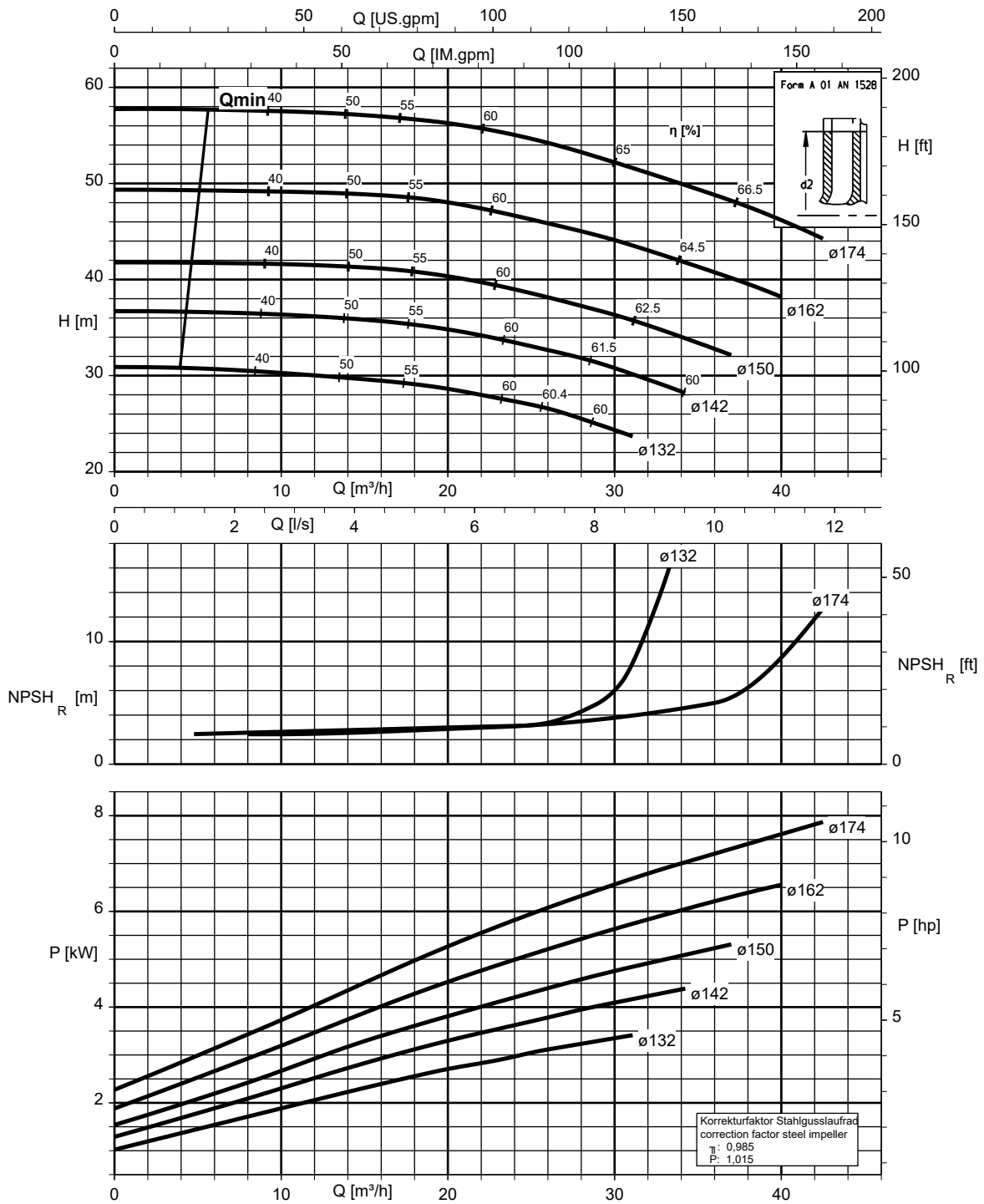
Etanorm V, Etabloc



K1311.462/21/2

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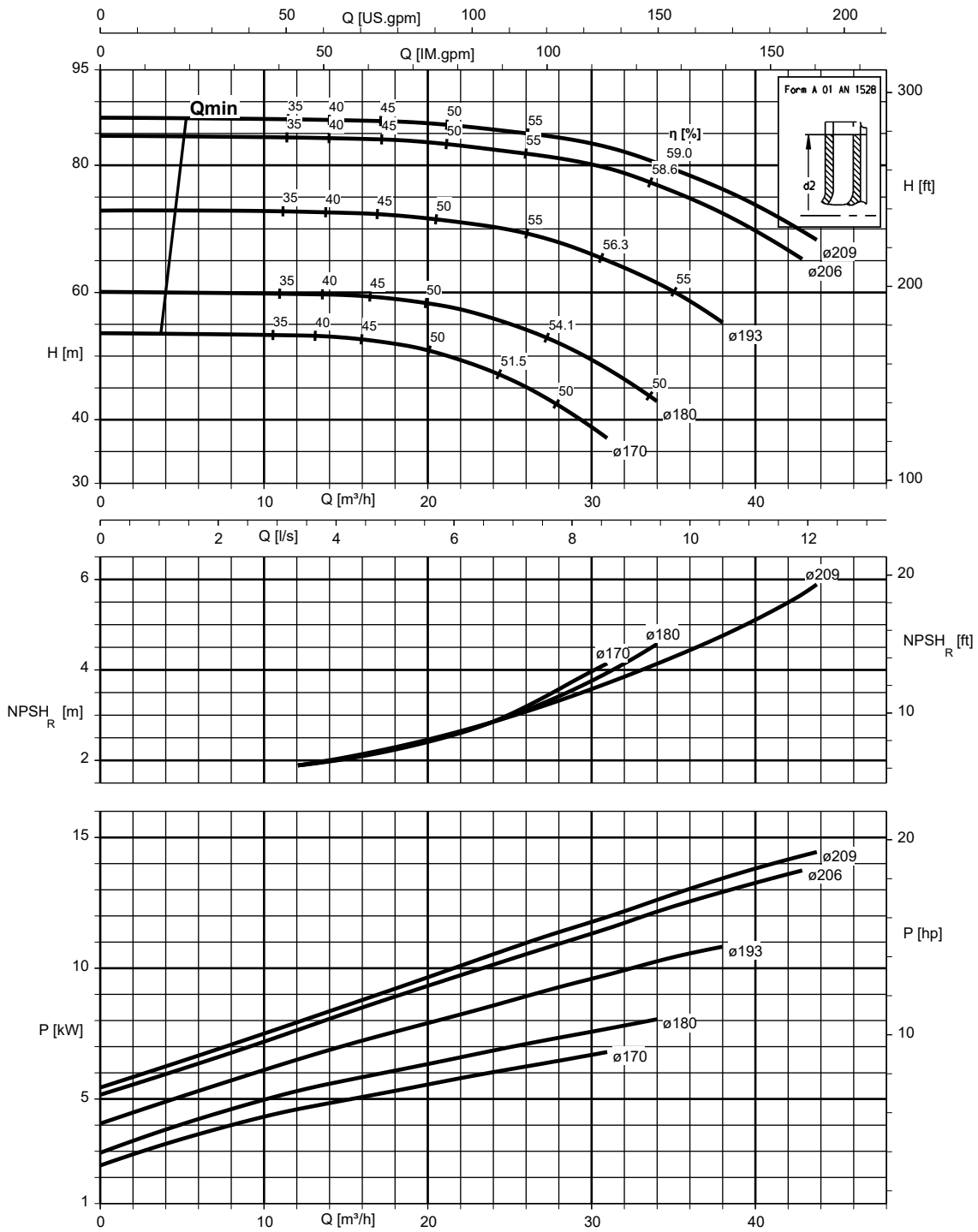
Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



K1311.462/22/3

Etanorm 050-032-200, n = 3500 rpm

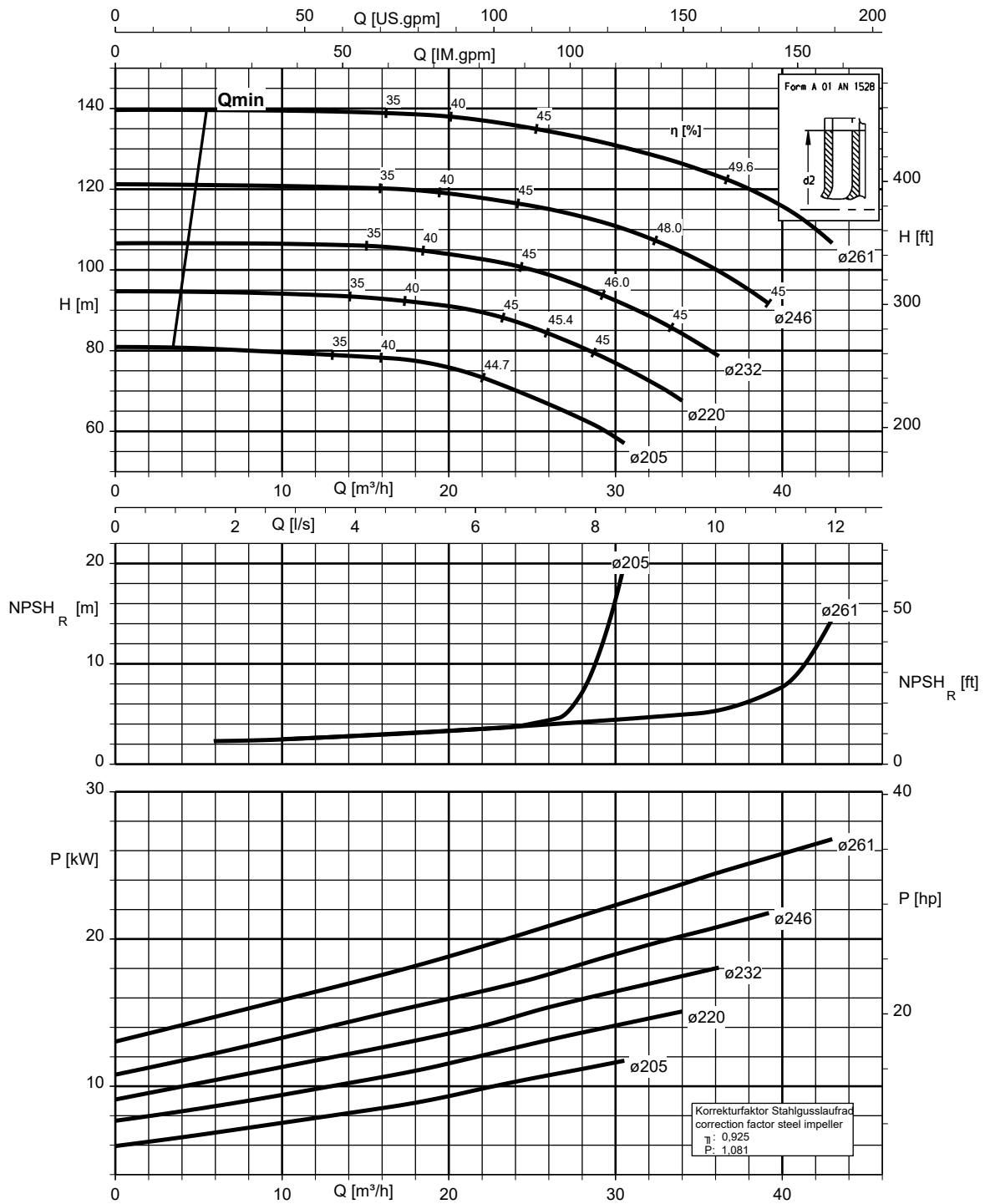
Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



K1311.462/23/1

Etanorm 050-032-250, n = 3500 rpm

Etabloc

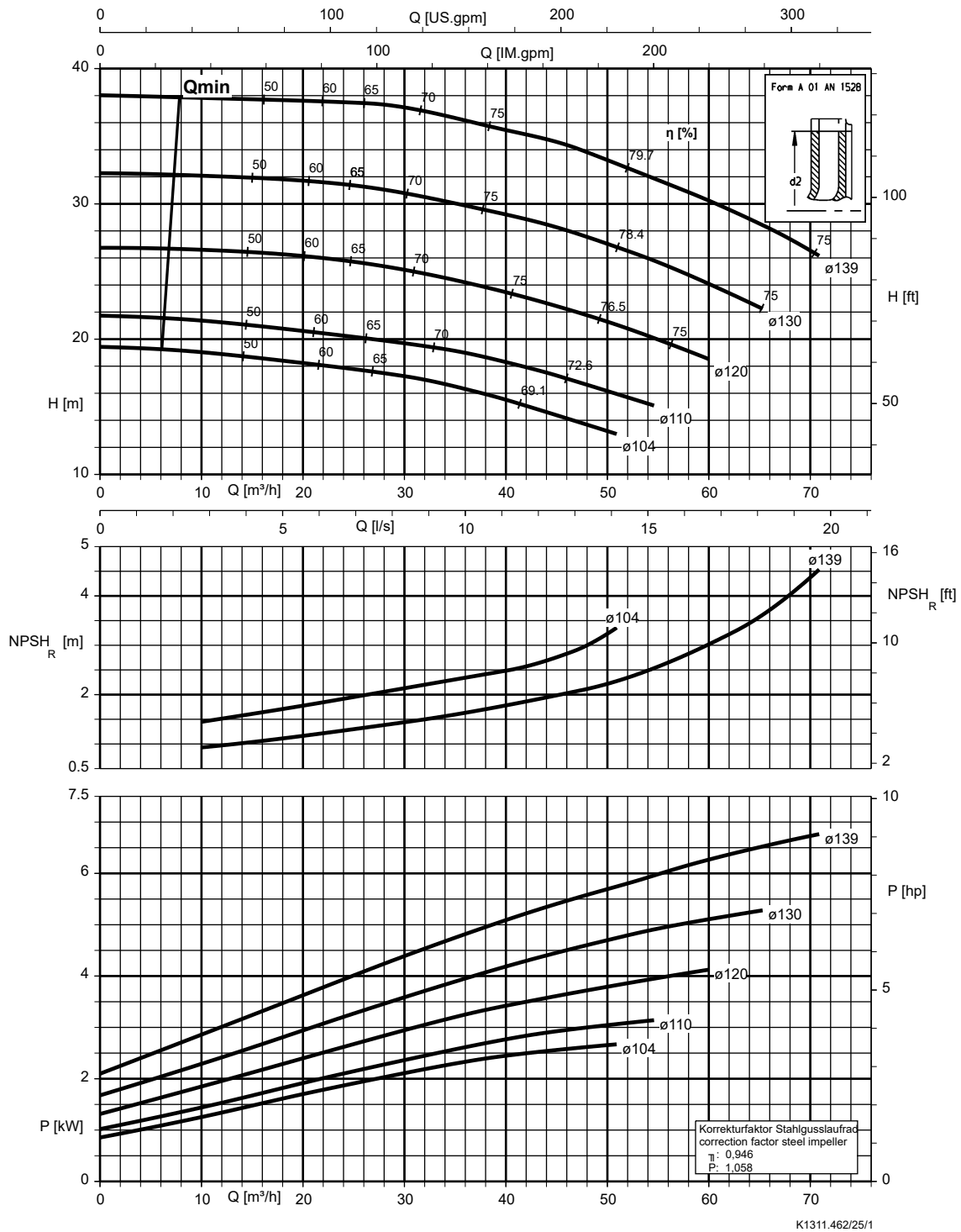


K1311.462/24/2

1311.46/11-EN-US

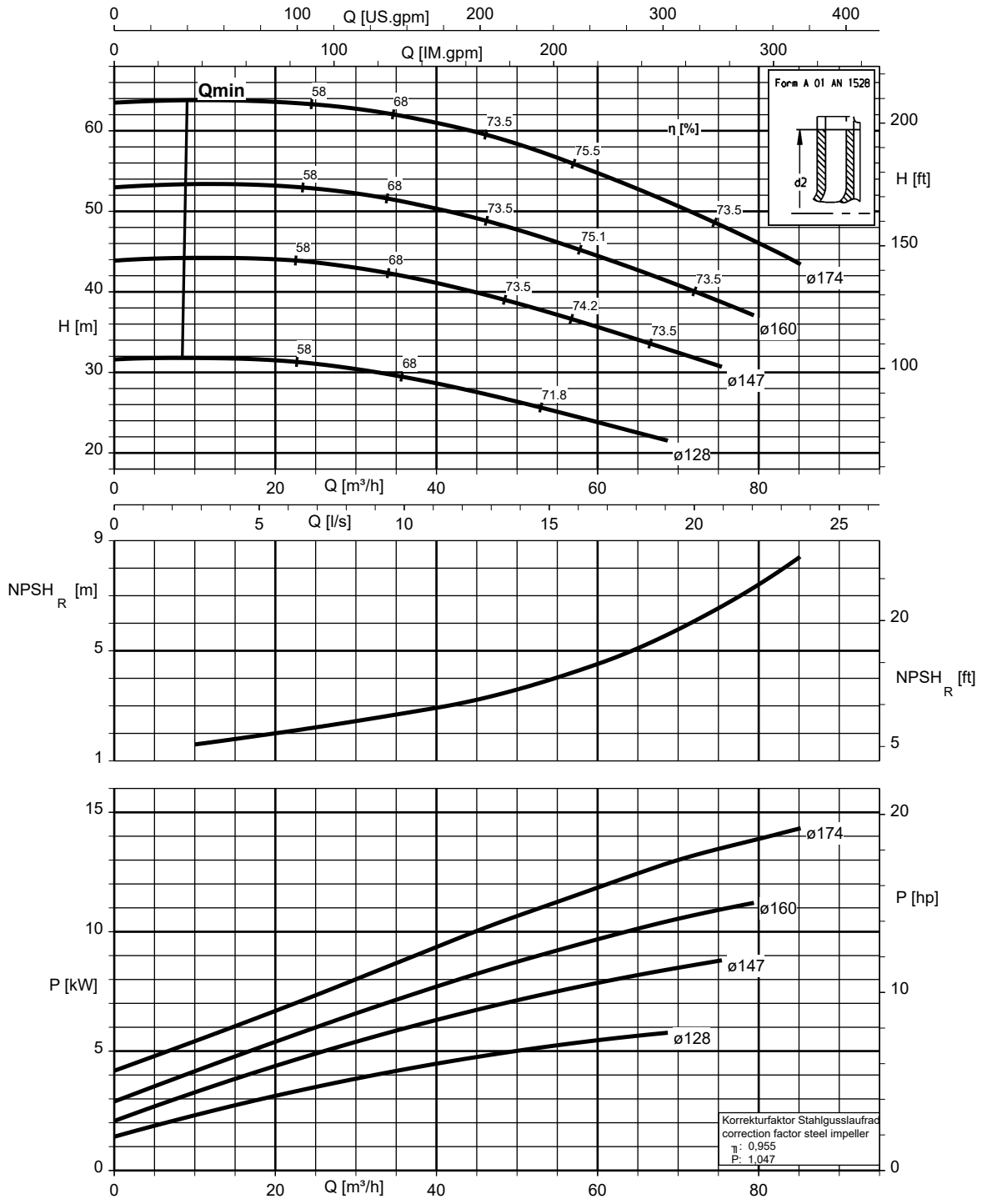
Etanorm 065-040-125, n = 3500 rpm

Etanorm V, Etabloc



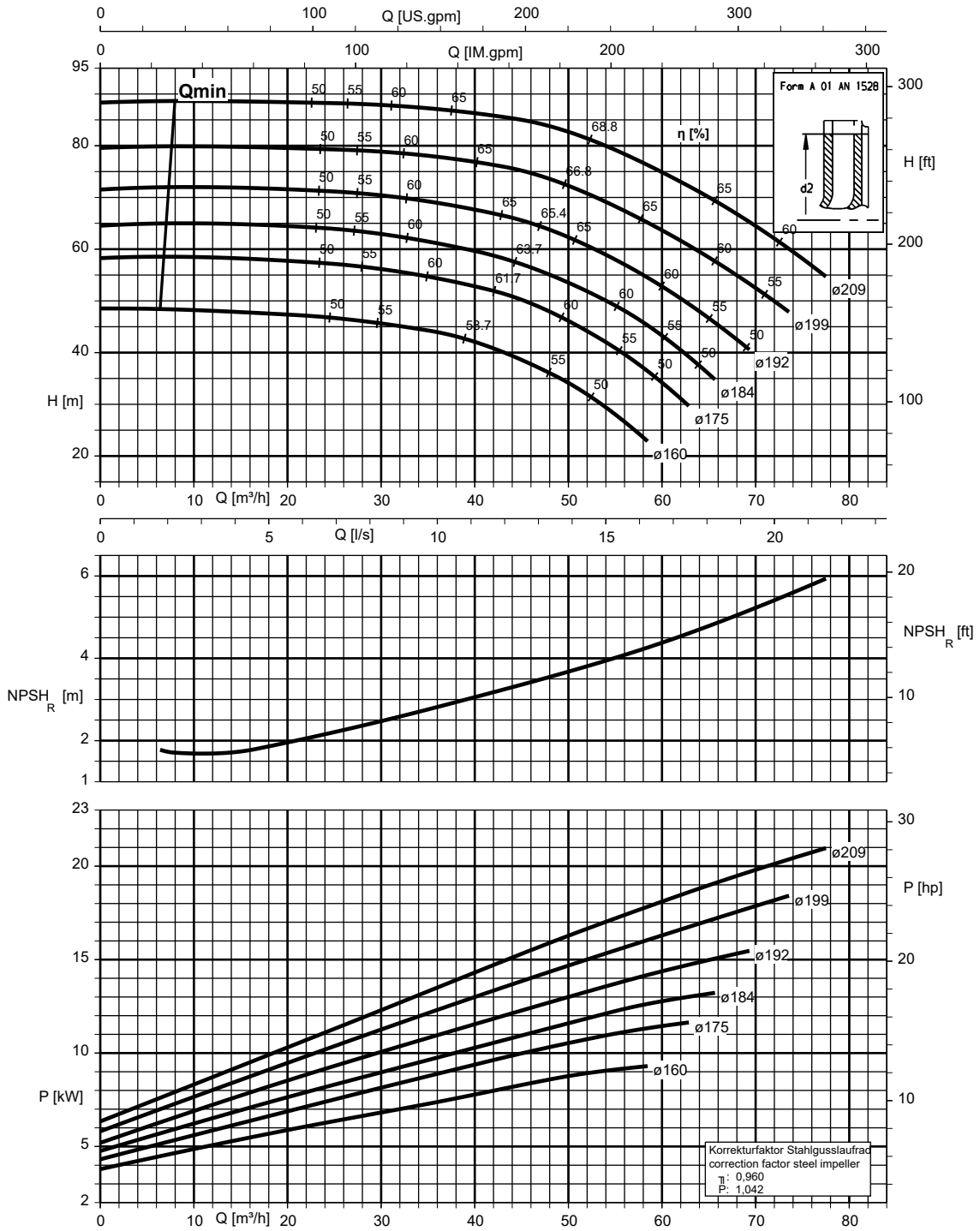
Etanorm 065-040-160, n = 3500 rpm

Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



Etanorm 065-040-200, n = 3500 rpm

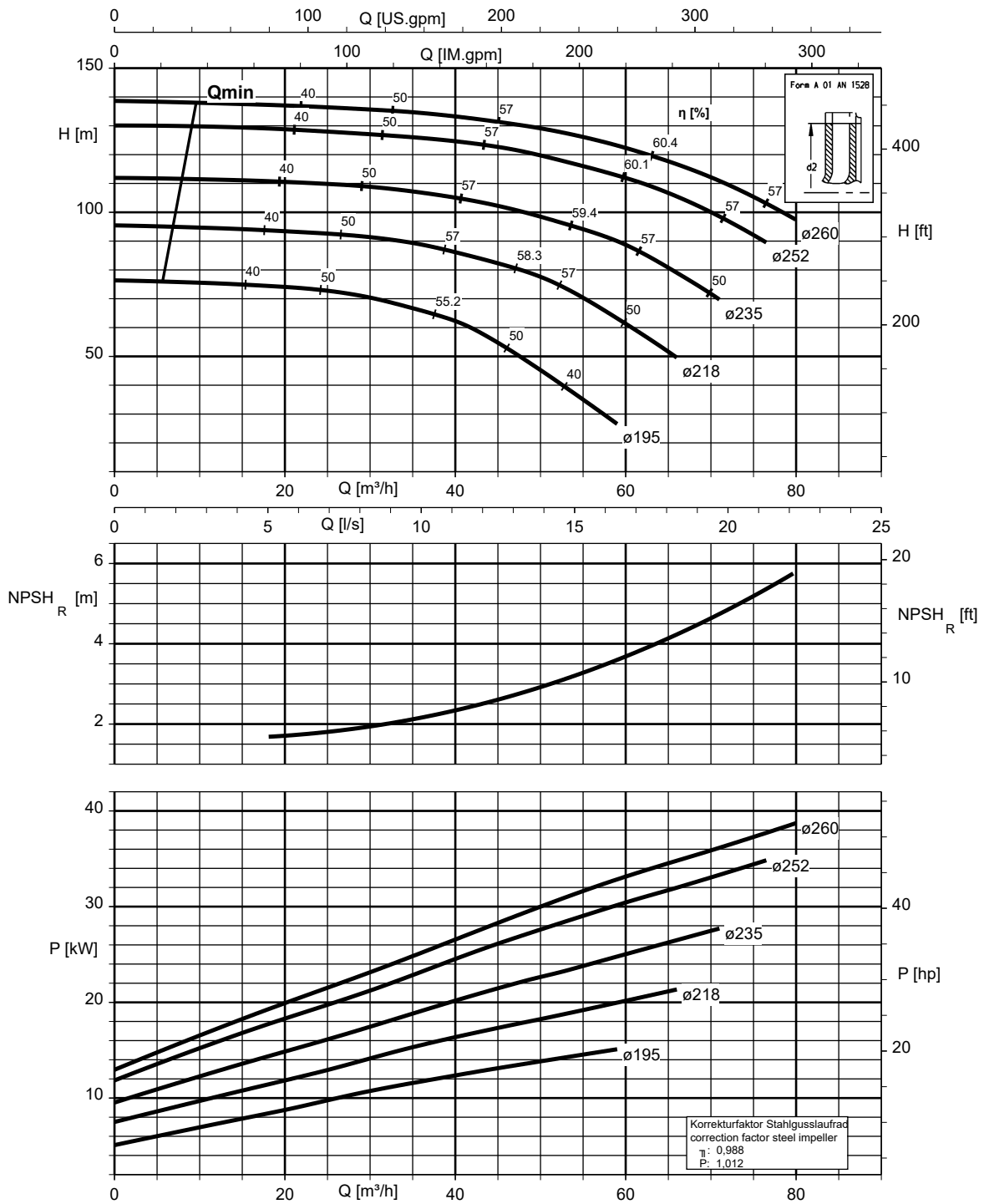
Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



K1311.462/27/1

Etanorm 065-040-250, n = 3500 rpm

Etabloc

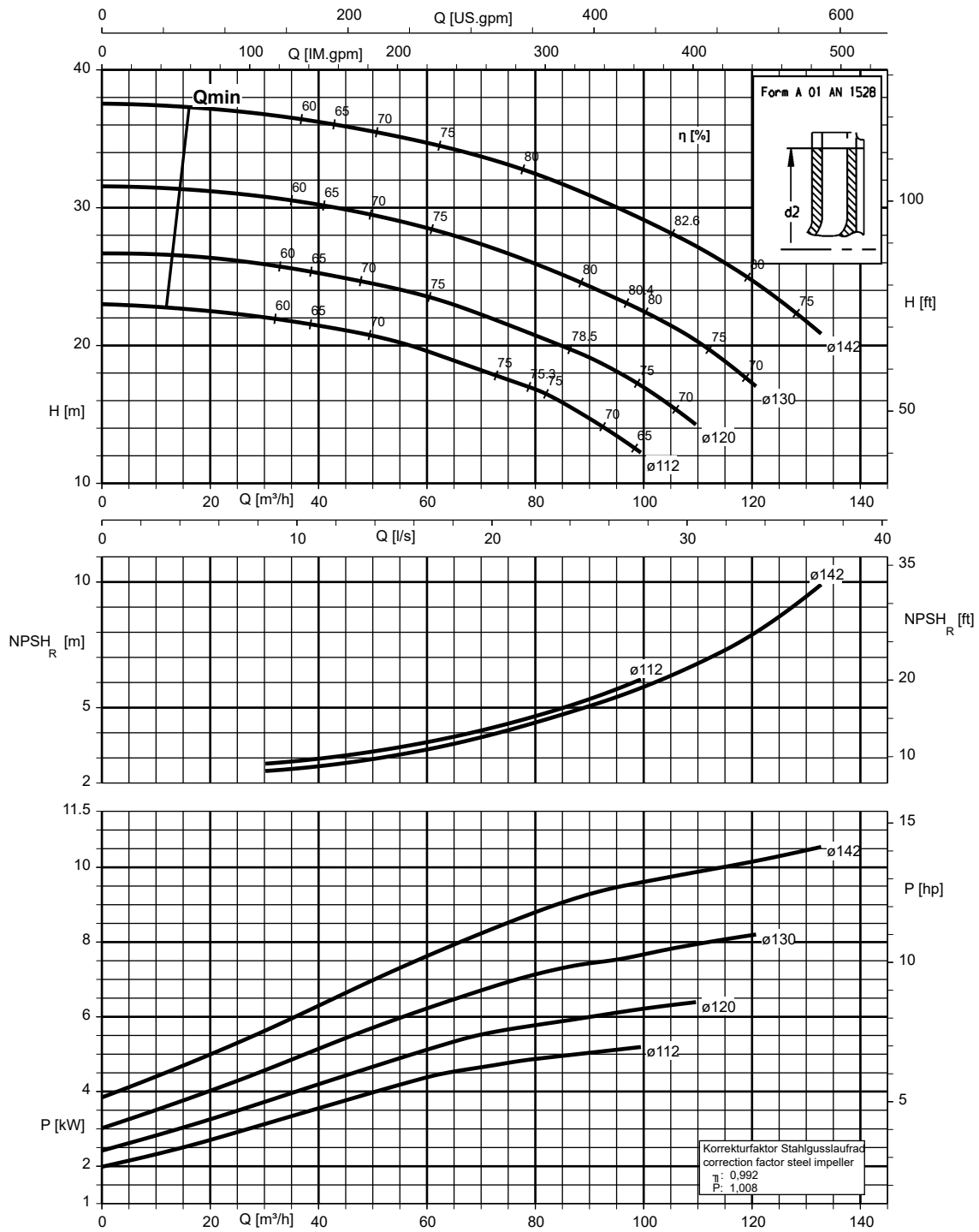


K1311.462/28/2

1311.46/11-EN-US

Etanorm 065-050-125, n = 3500 rpm

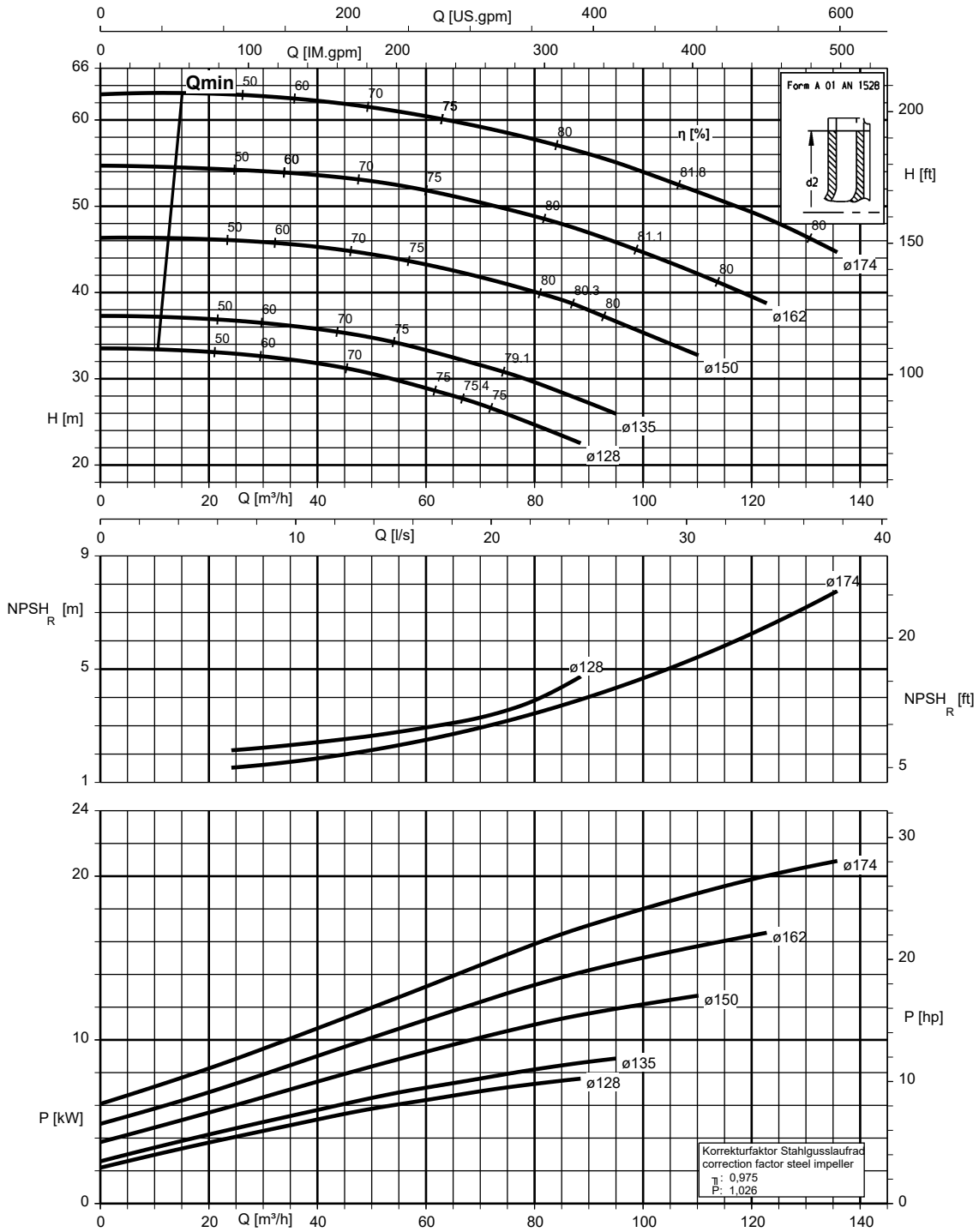
Etanorm V, Etabloc



K1311.462/30/1

Etanorm 065-050-160, n = 3500 rpm

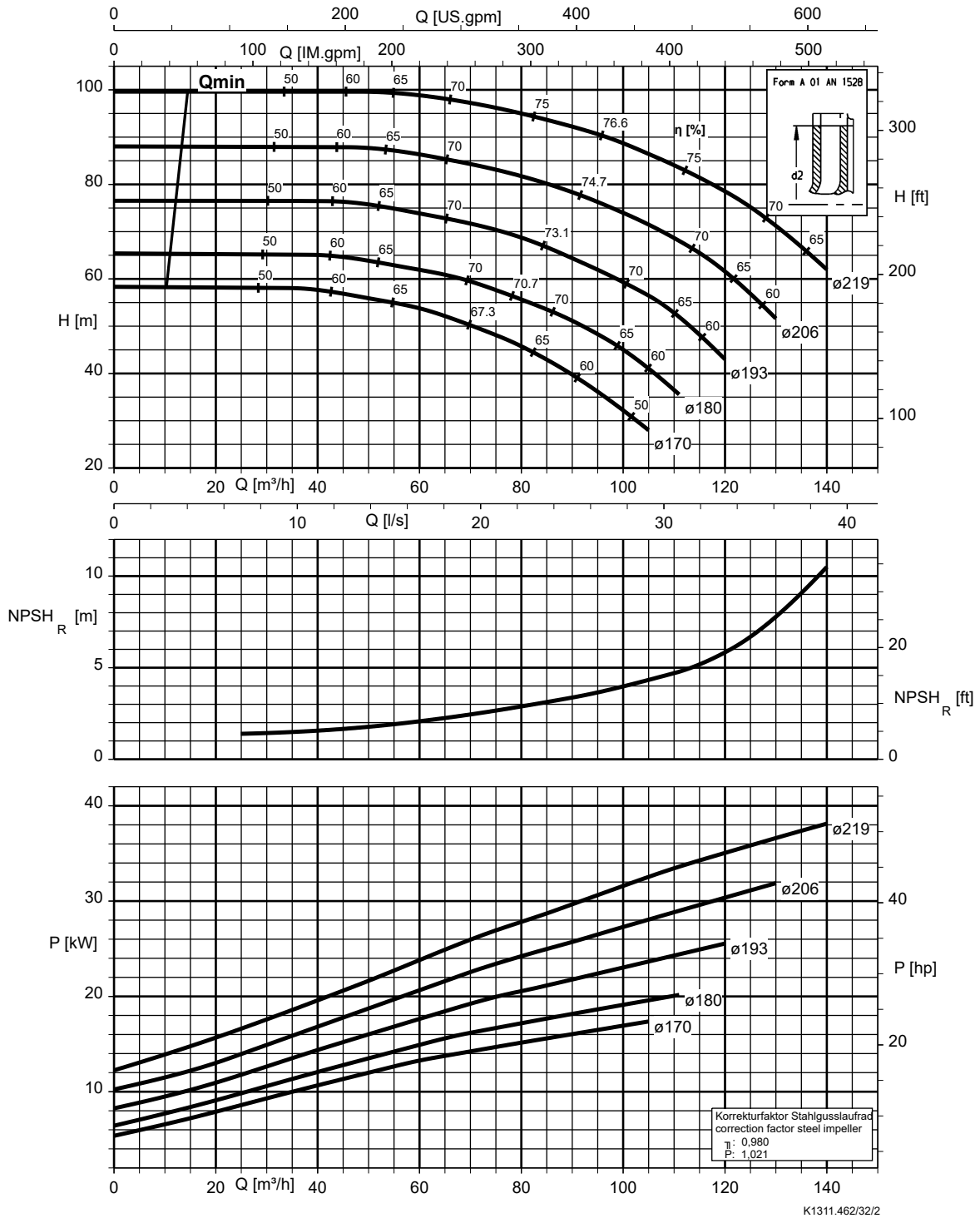
Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



K1311.462/31/1

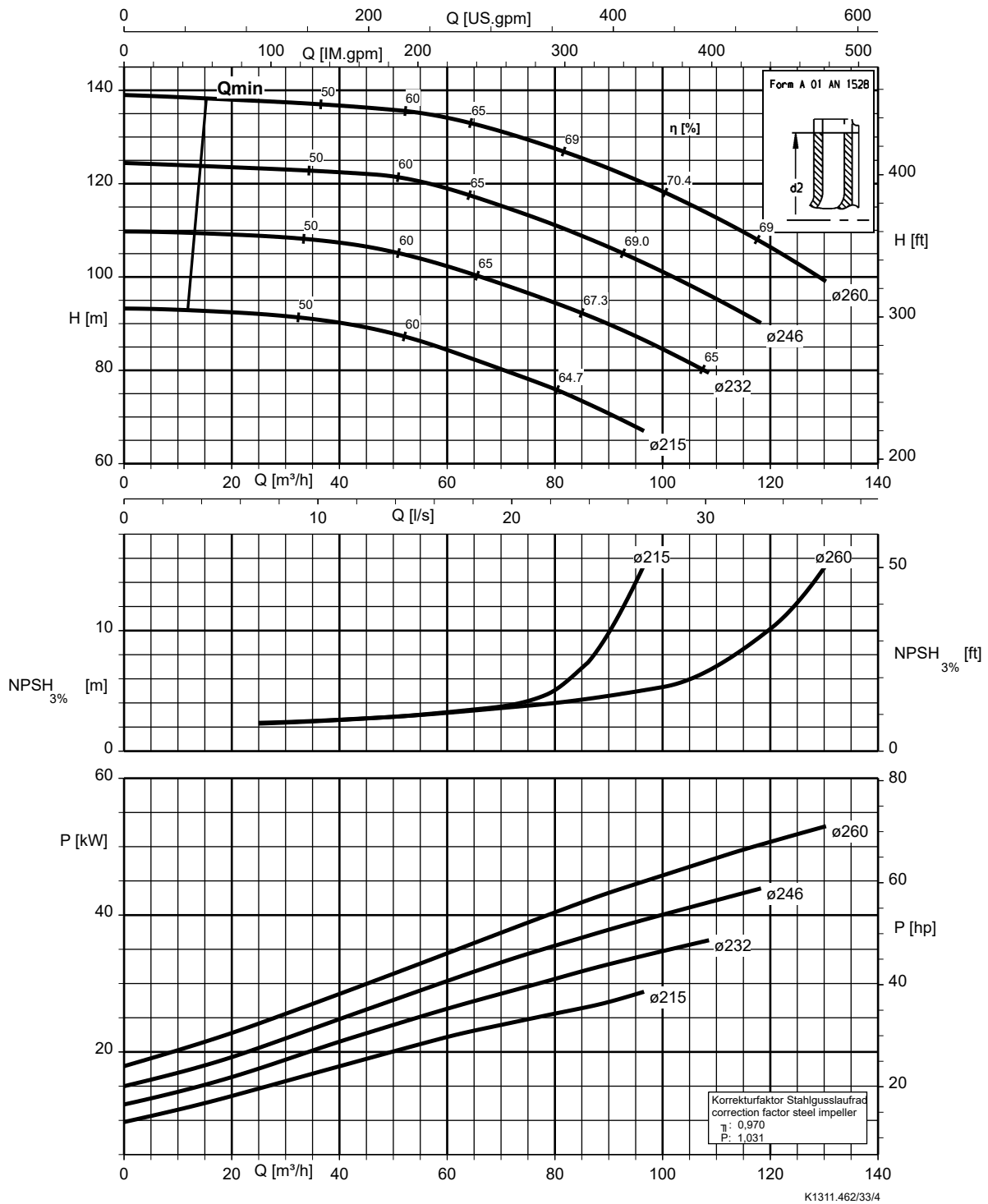
Etanorm 065-050-200, n = 3500 rpm

Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



Etanorm 065-050-250, n = 3500 rpm

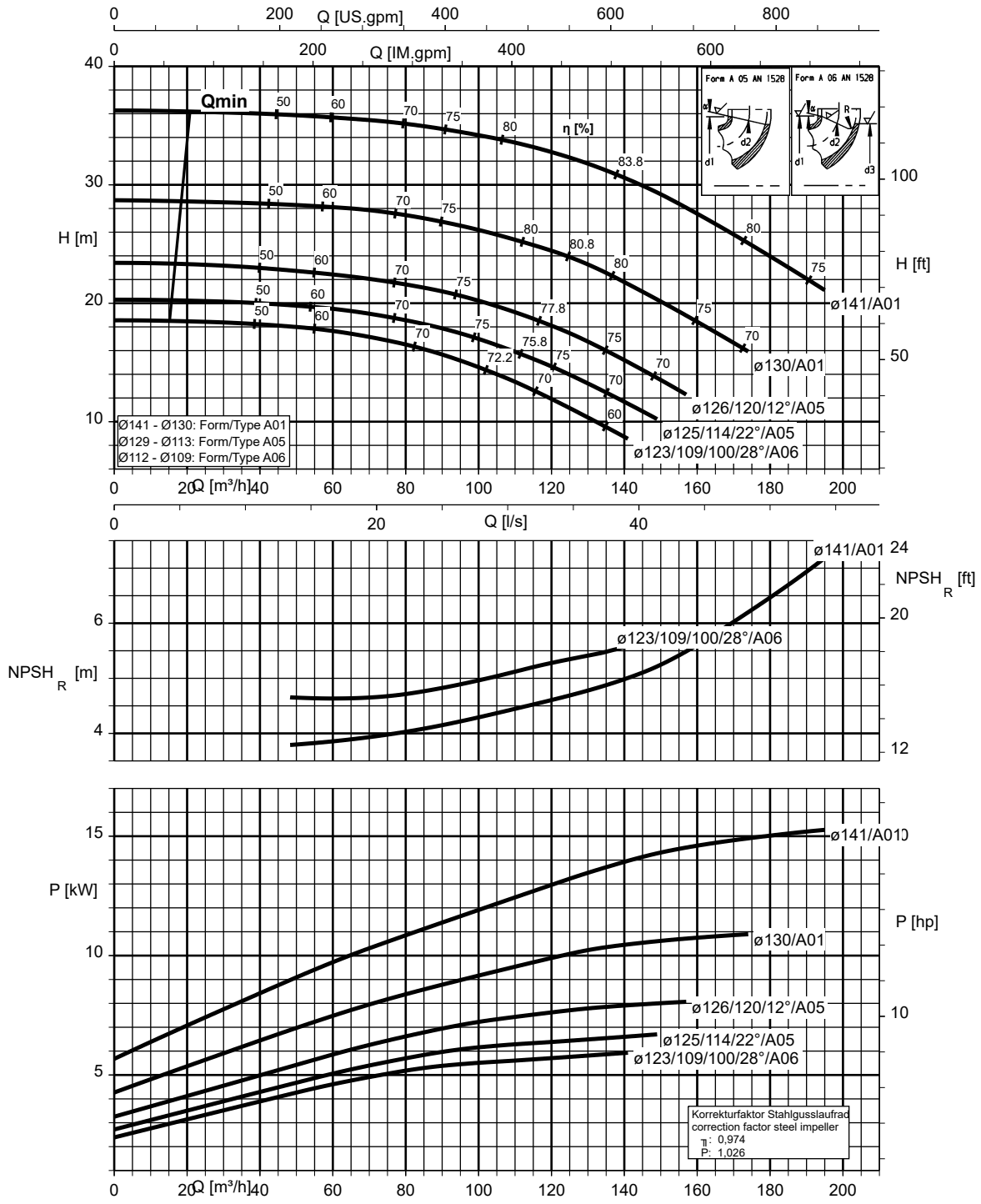
Etabloc



1311.46/11-EN-US

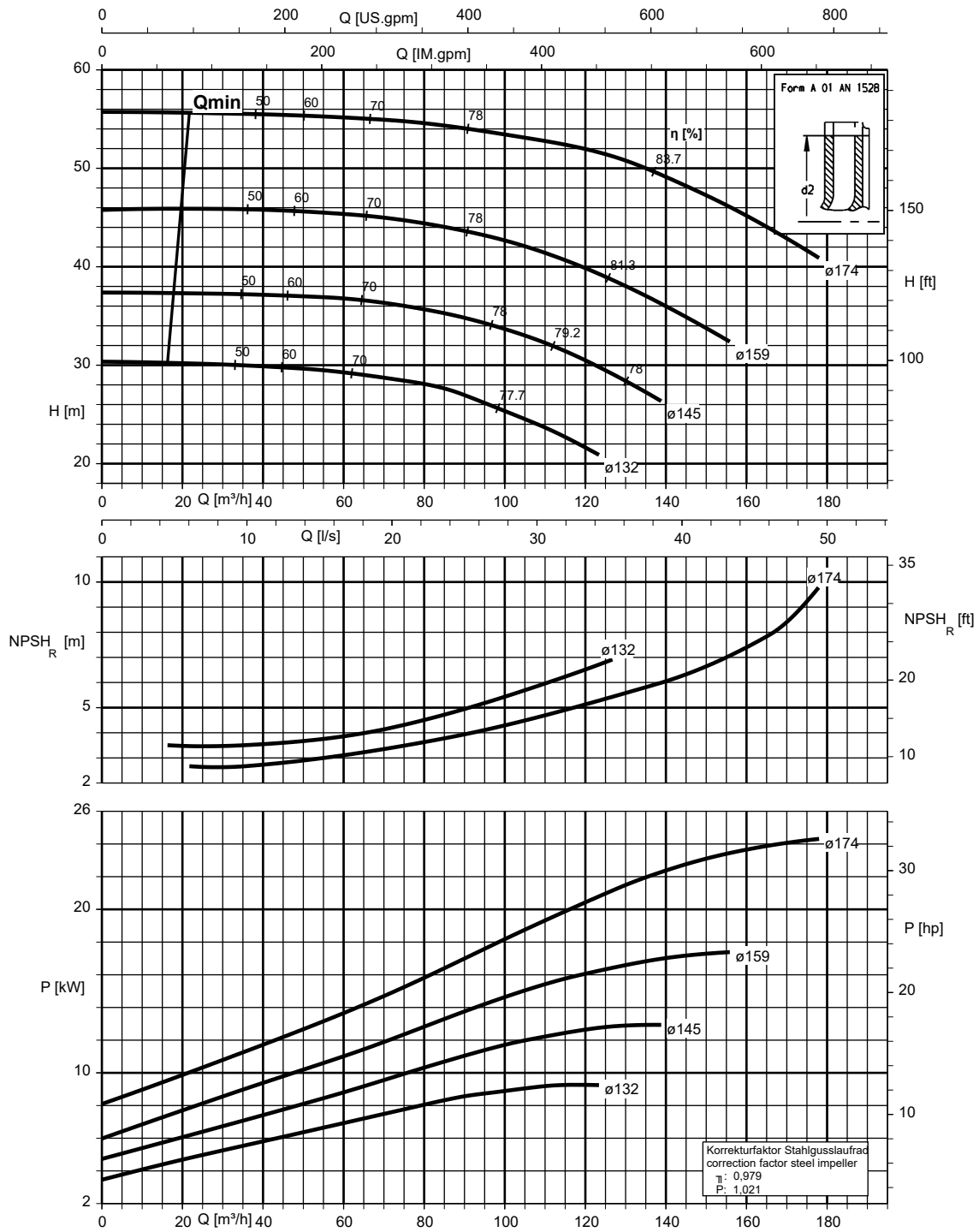
Etanorm 080-065-125, n = 3500 rpm

Etanorm V, Etabloc



Etanorm 080-065-160, n = 3500 rpm

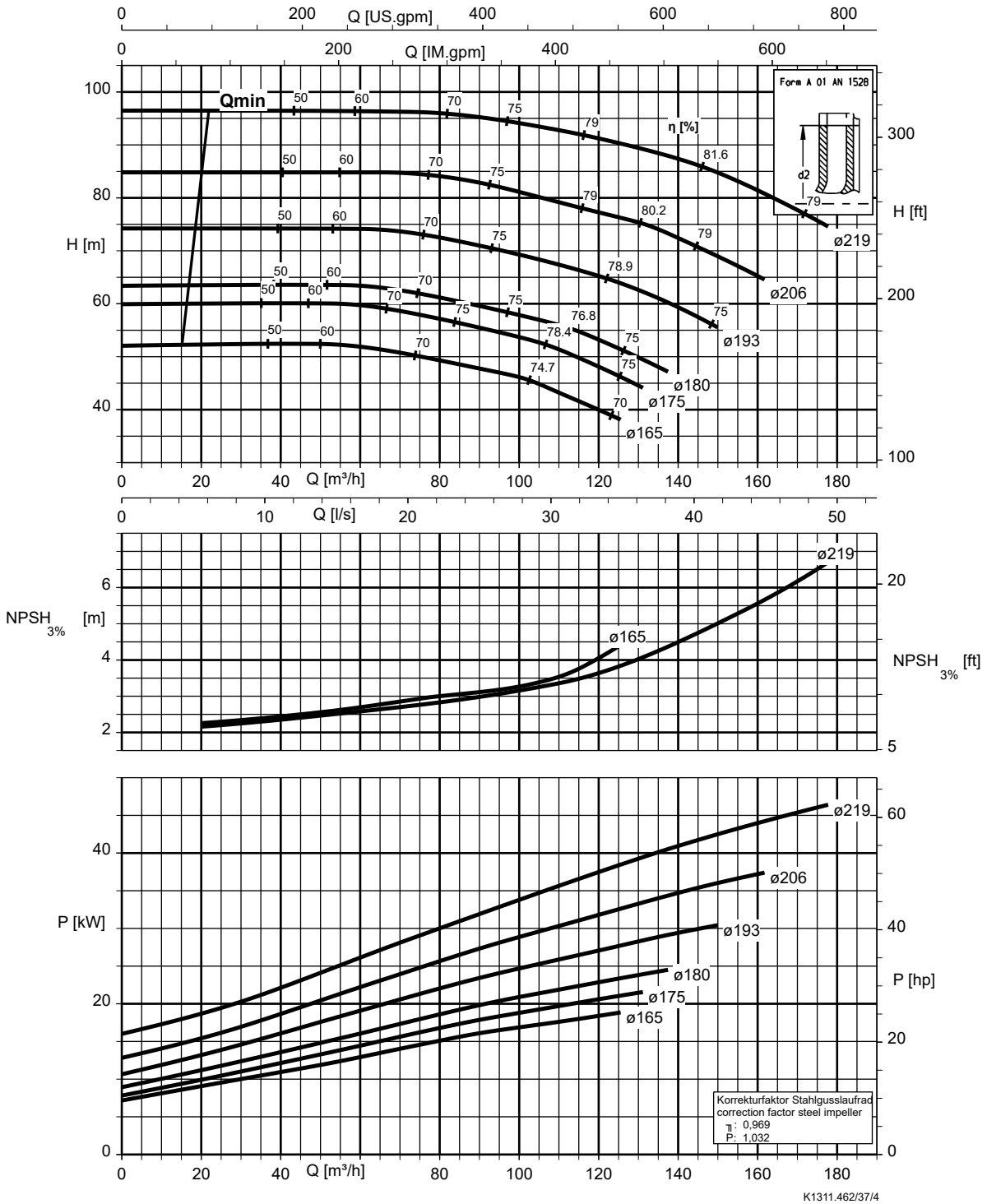
Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



K1311.462/36/2

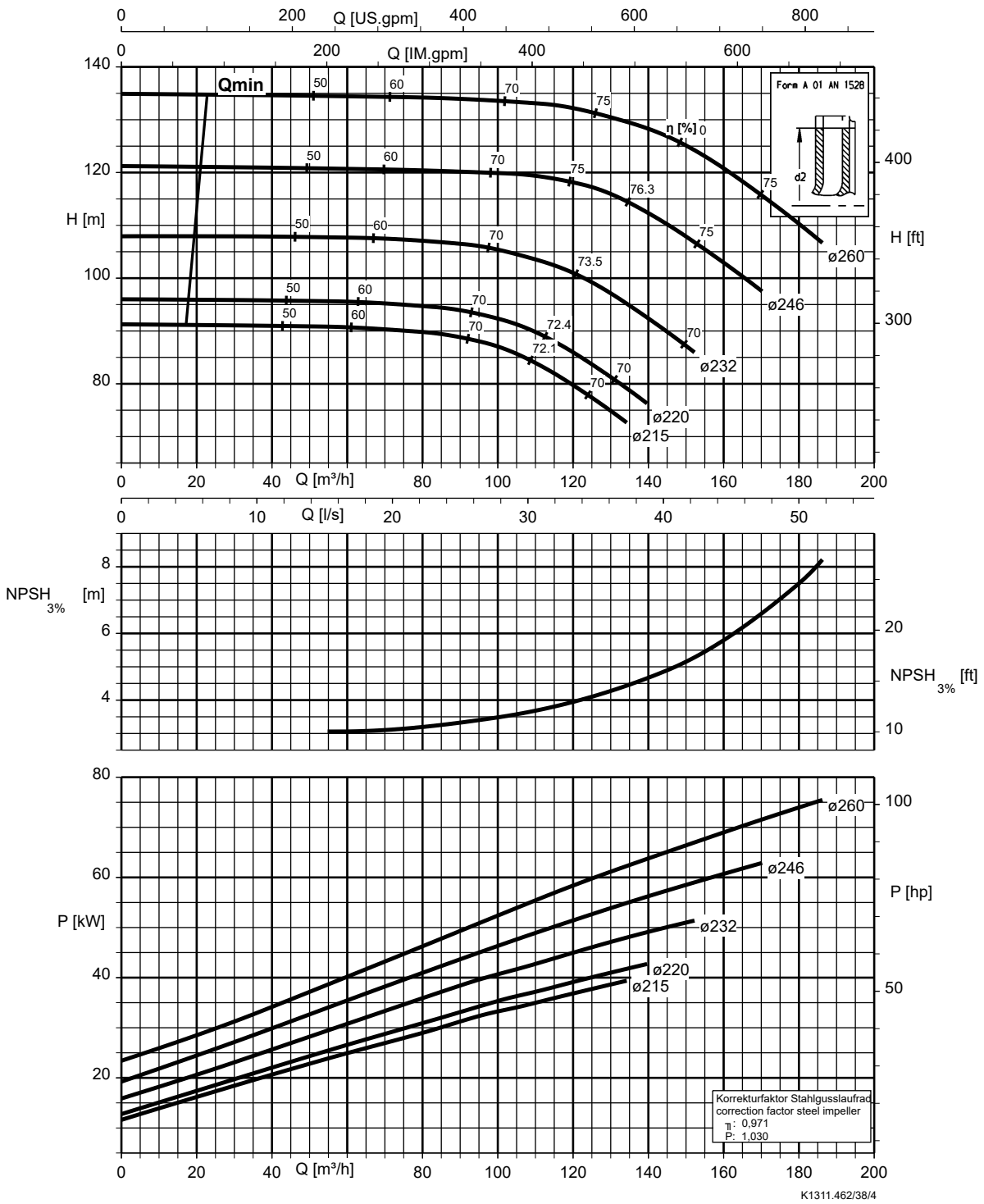
Etanorm 080-065-200, n = 3500 rpm

Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



Etanorm 080-065-250, n = 3500 rpm

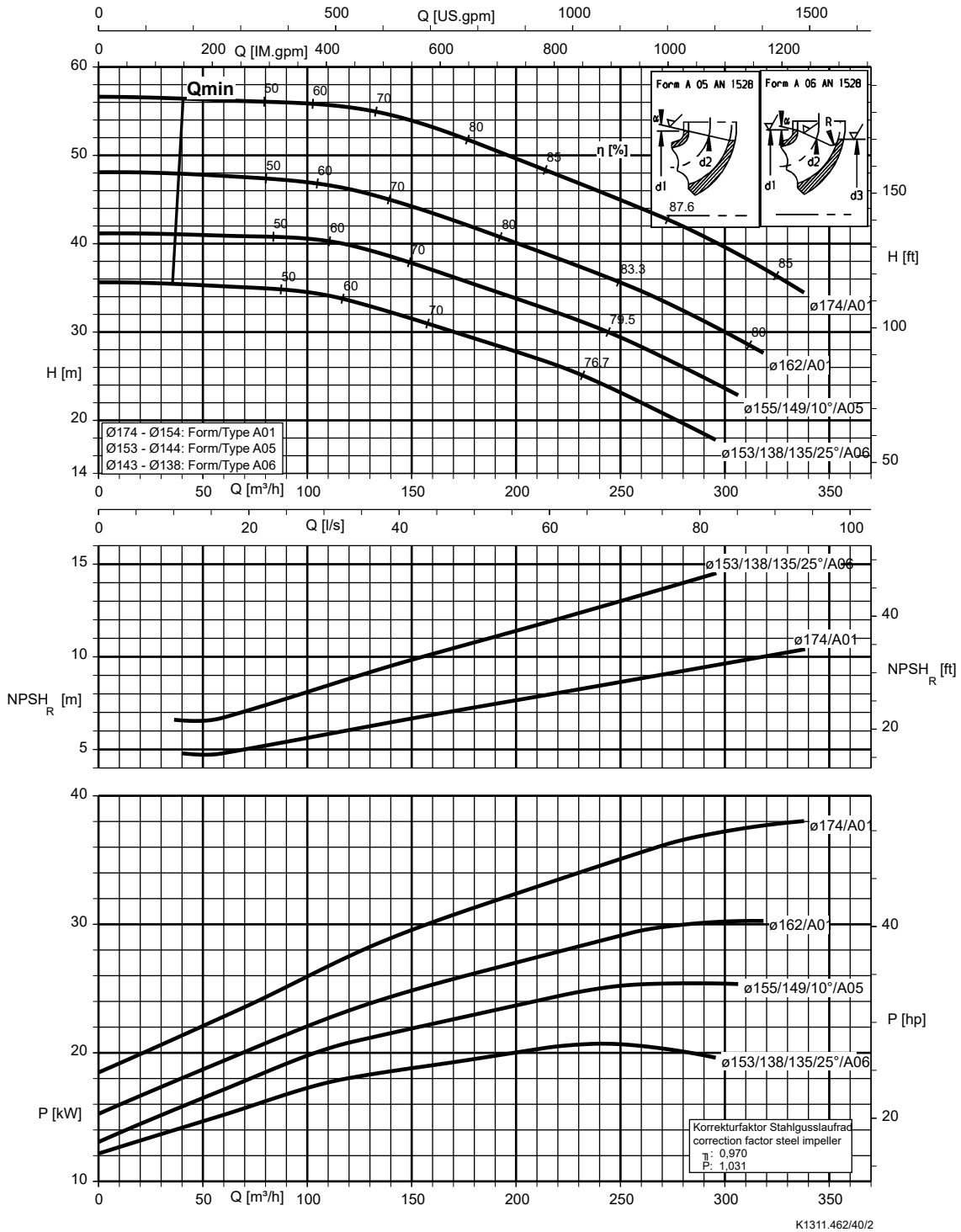
Etabloc



1311.46/11-EN-US

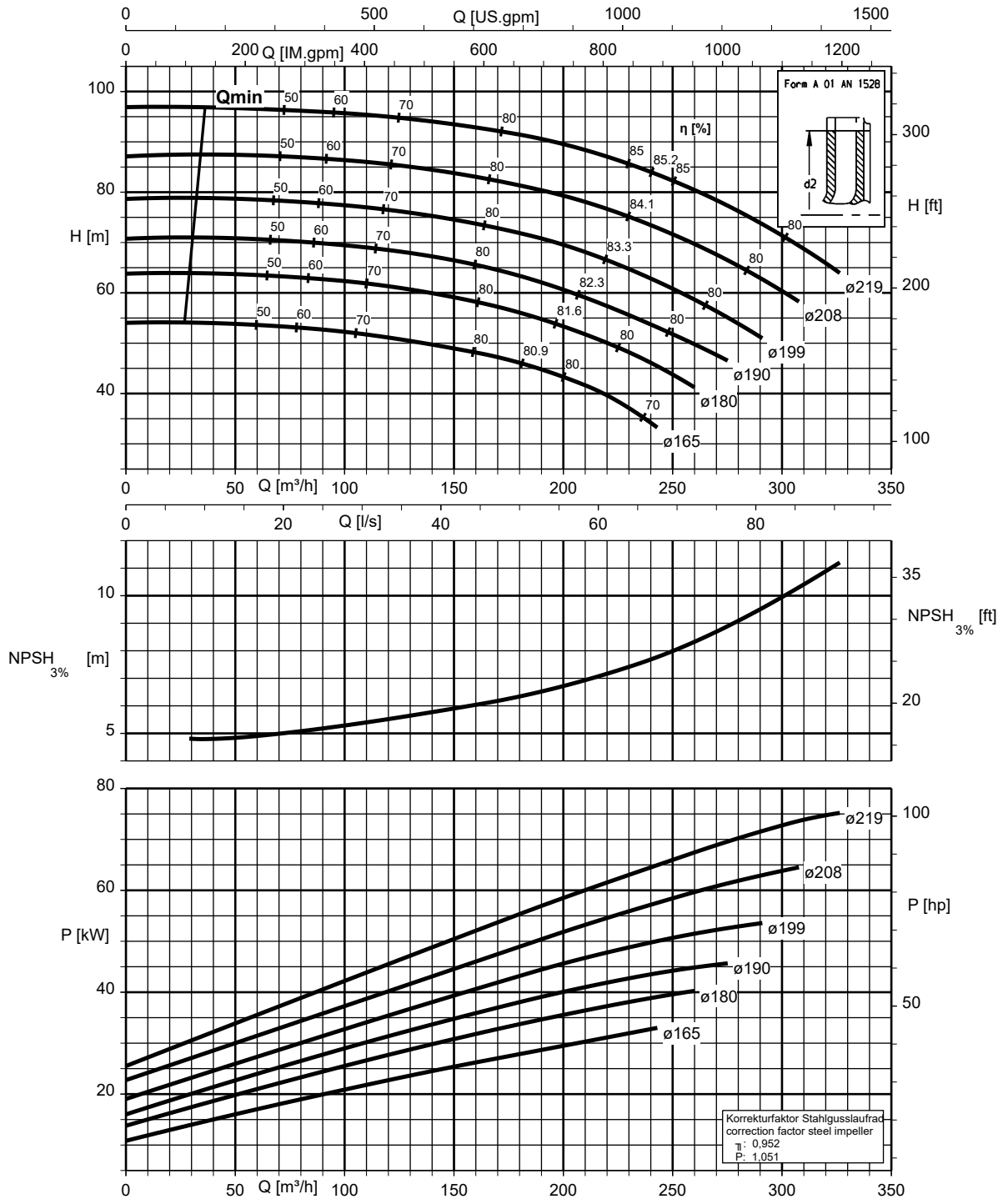
Etanorm 100-080-160, n = 3500 rpm

Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



Etanorm 100-080-200, n = 3500 rpm

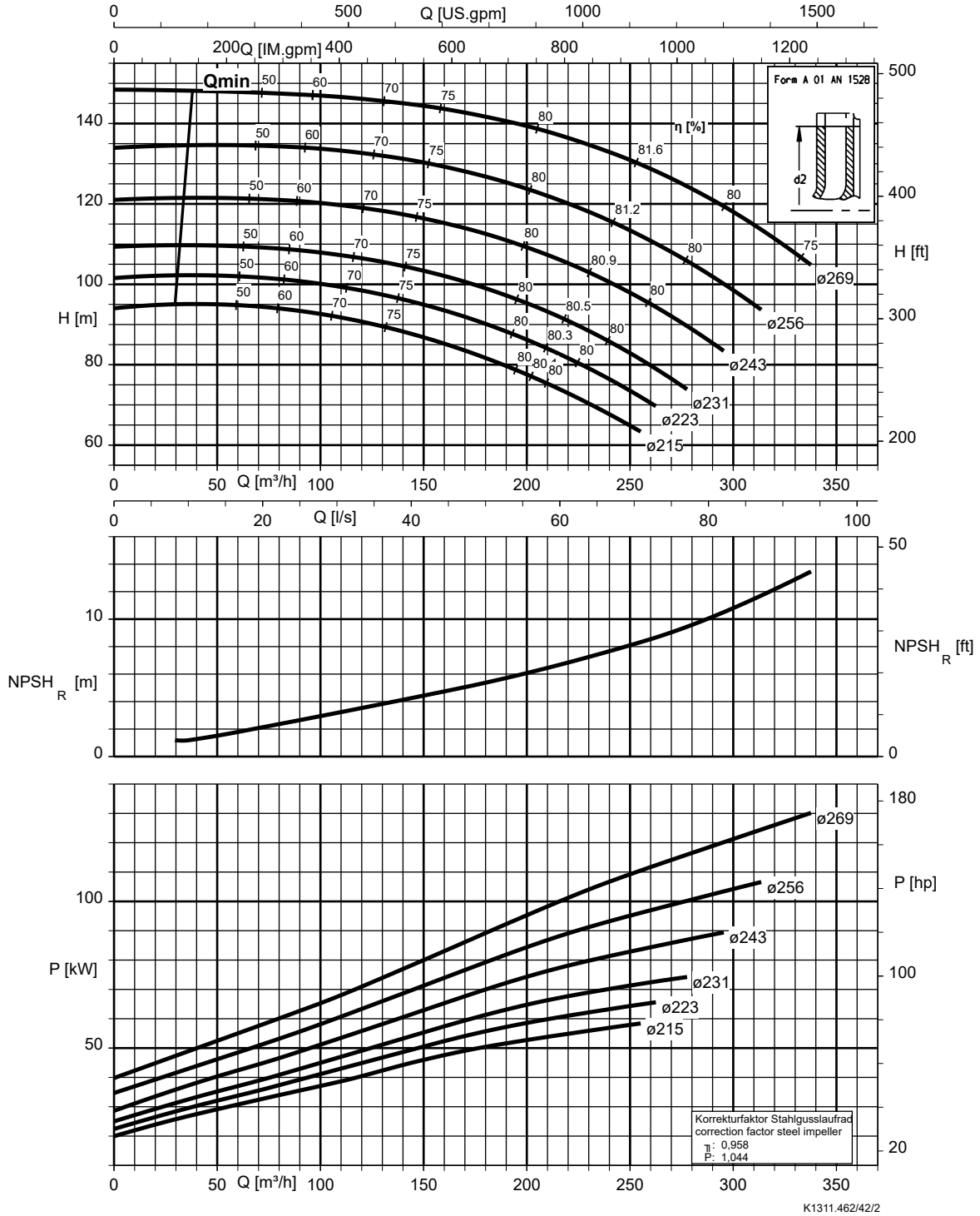
Etanorm SYT, Etanorm V, Etabloc



K1311.462/41/6

1311.46/11-EN-US

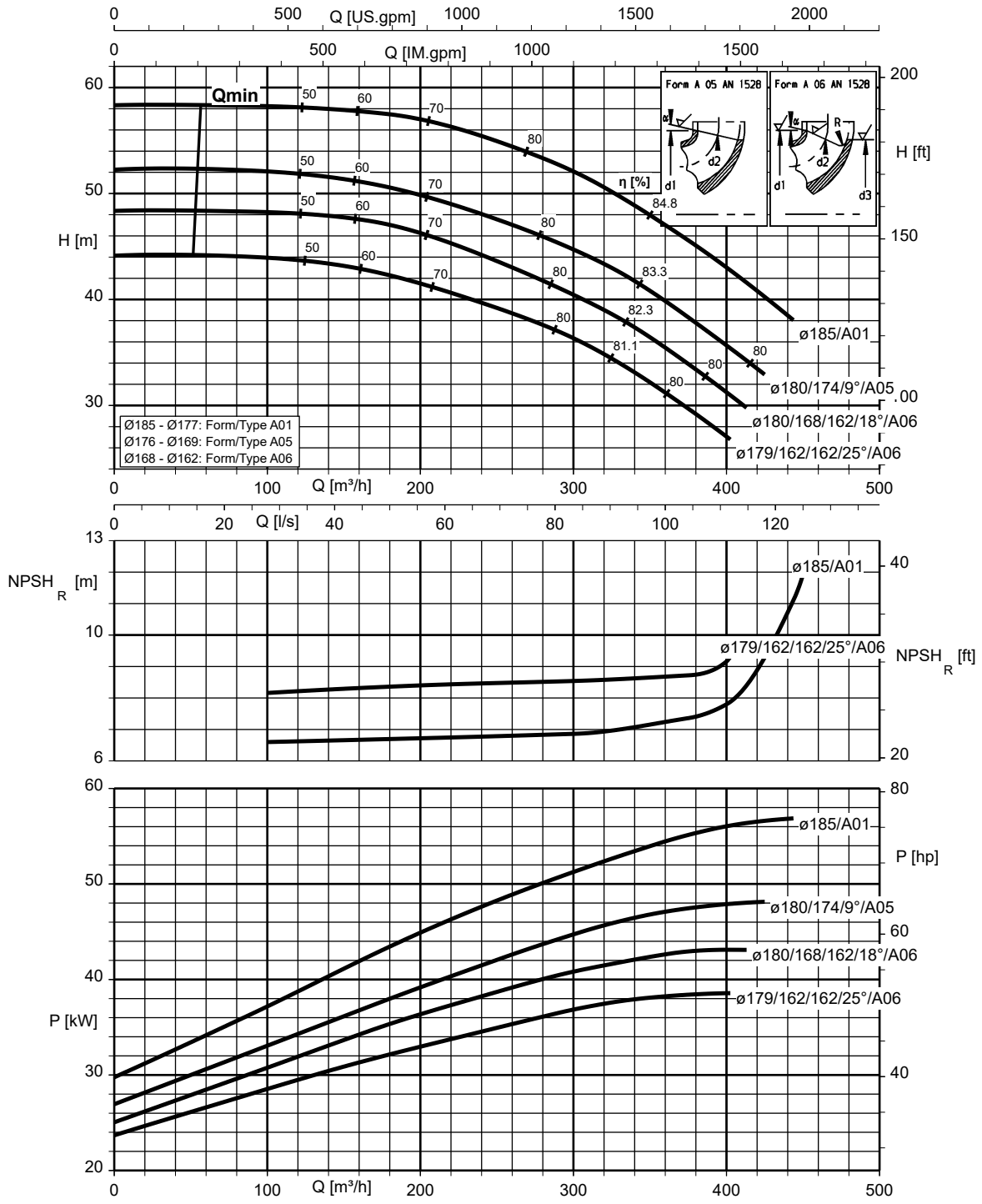
Etanorm 100-080-250, n = 3500 rpm



1311.46/11-EN-US

Etanorm 125-100-160, n = 3500 rpm

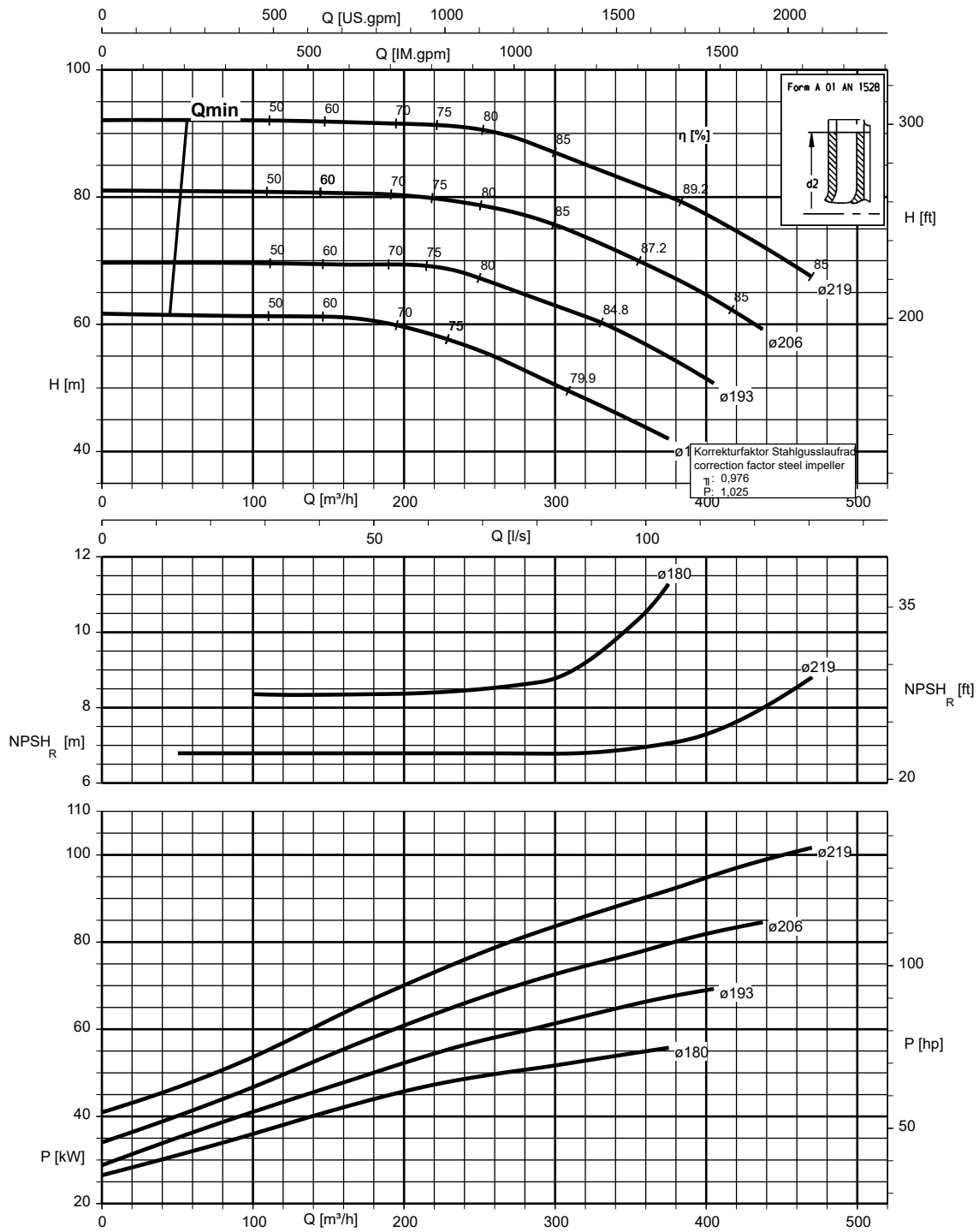
Etanorm SYT, Etanorm V, Etabloc



K1311.462/45/3

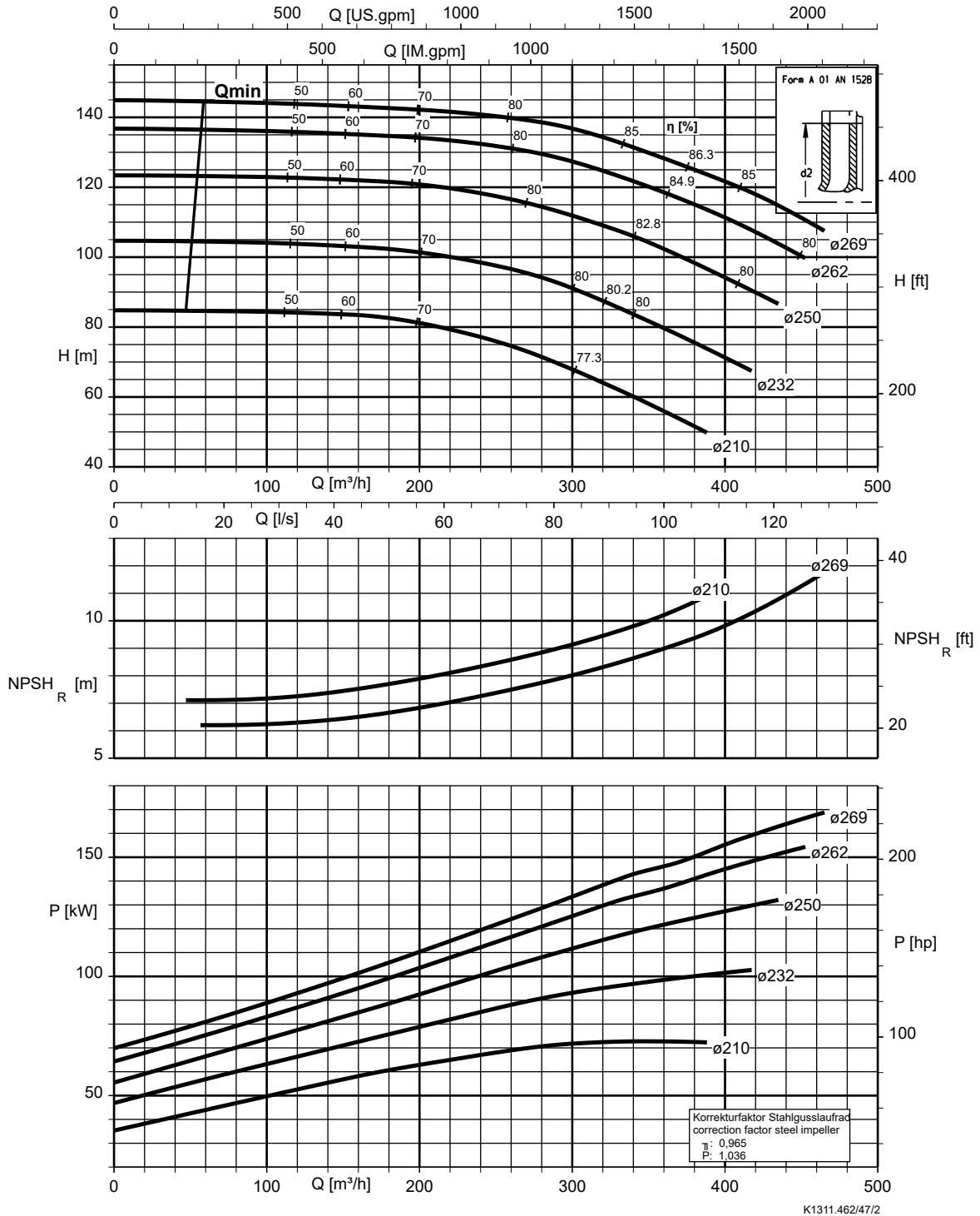
Etanorm 125-100-200, n = 3500 rpm

Etanorm SYT, Etanorm V



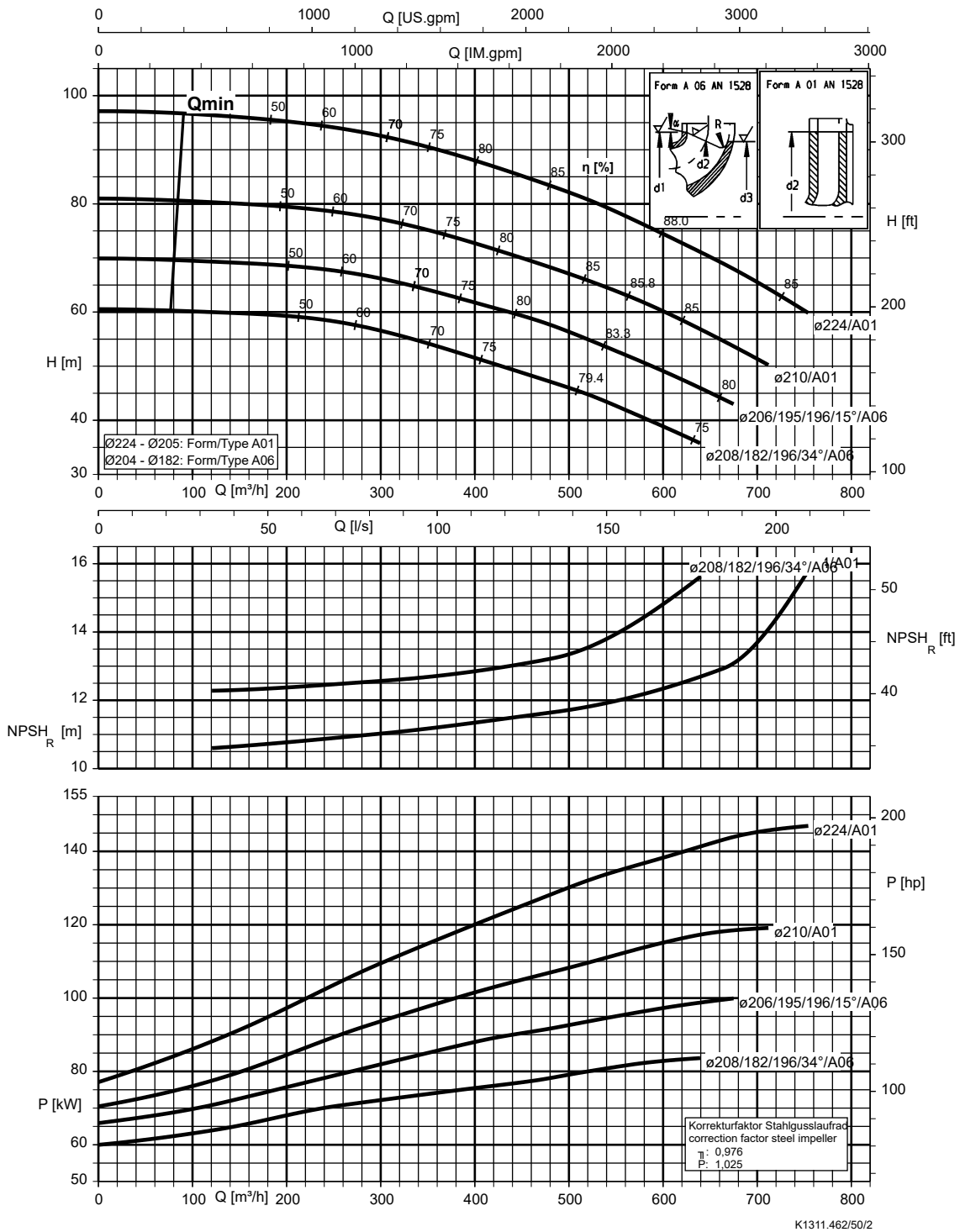
K1311.462/46/1

Etanorm 125-100-250, n = 3500 rpm



Etanorm 150-125-200, n = 3500 rpm

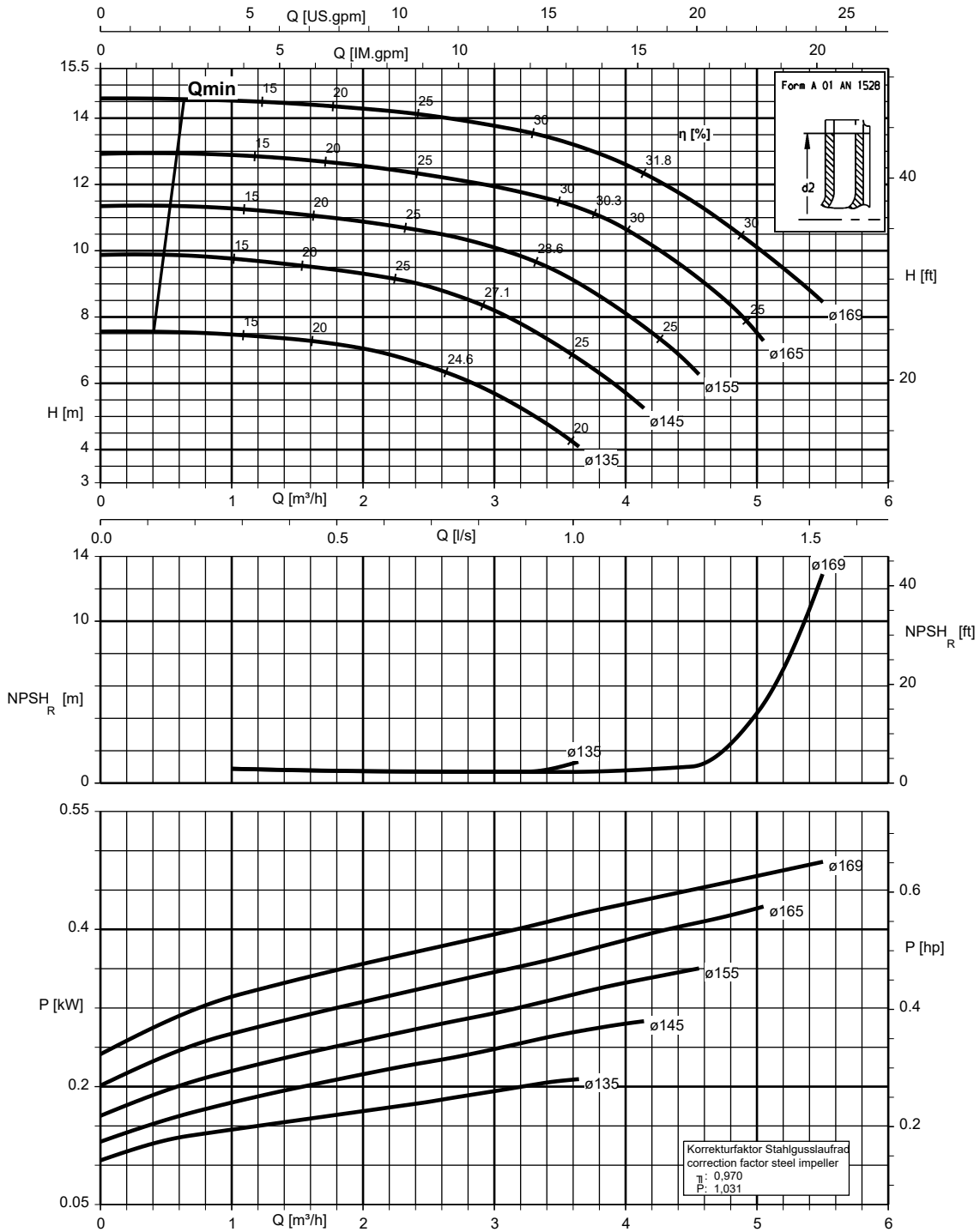
Etanorm SYT, Etanorm V



n = 1750 rpm

Etanorm 040-025-160, n = 1750 rpm

Etanorm SYT, Etabloc, Etabloc SYT

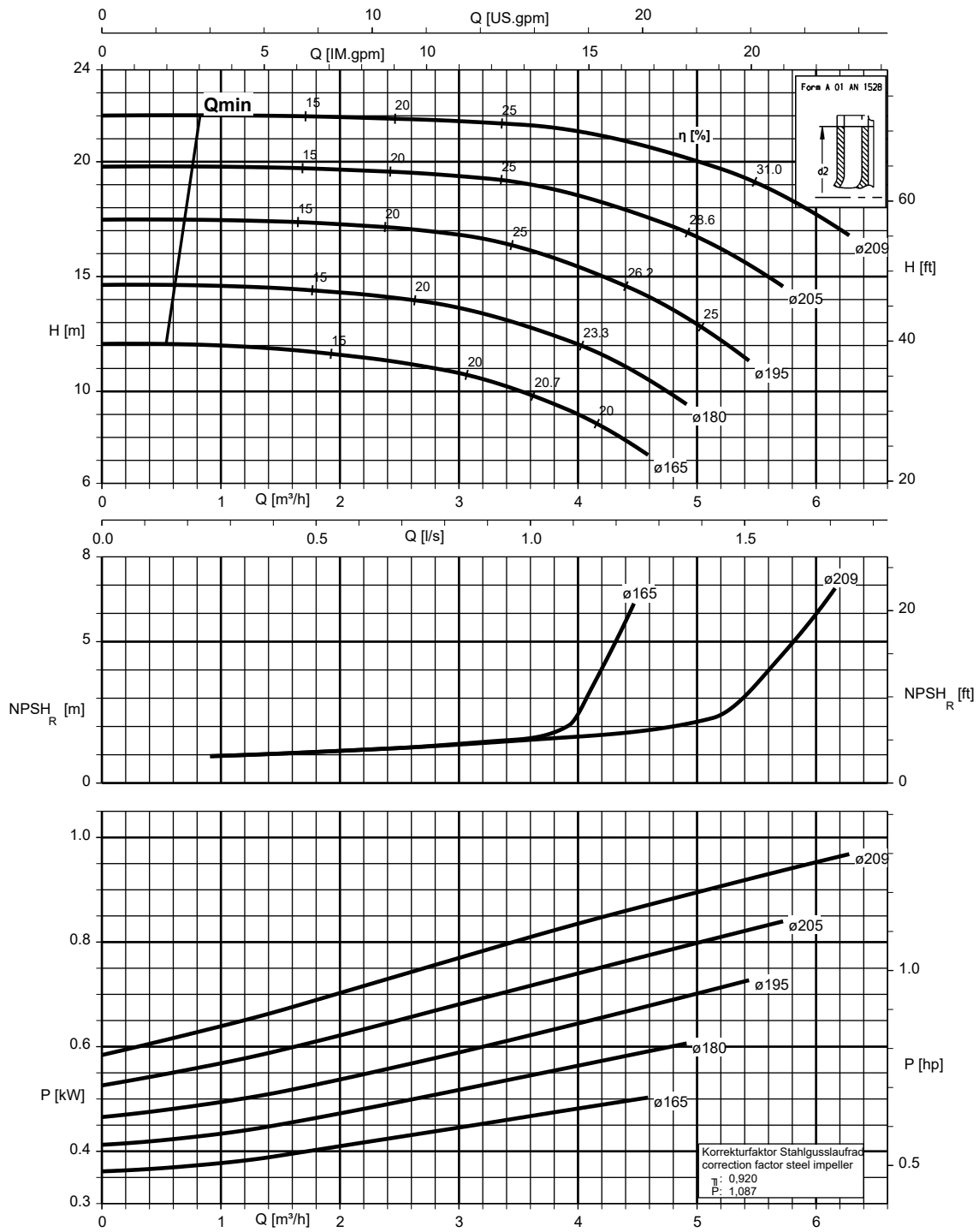


K1311.464/14/2

1311.46/11-EN-US

Etanorm 040-025-200, n = 1750 rpm

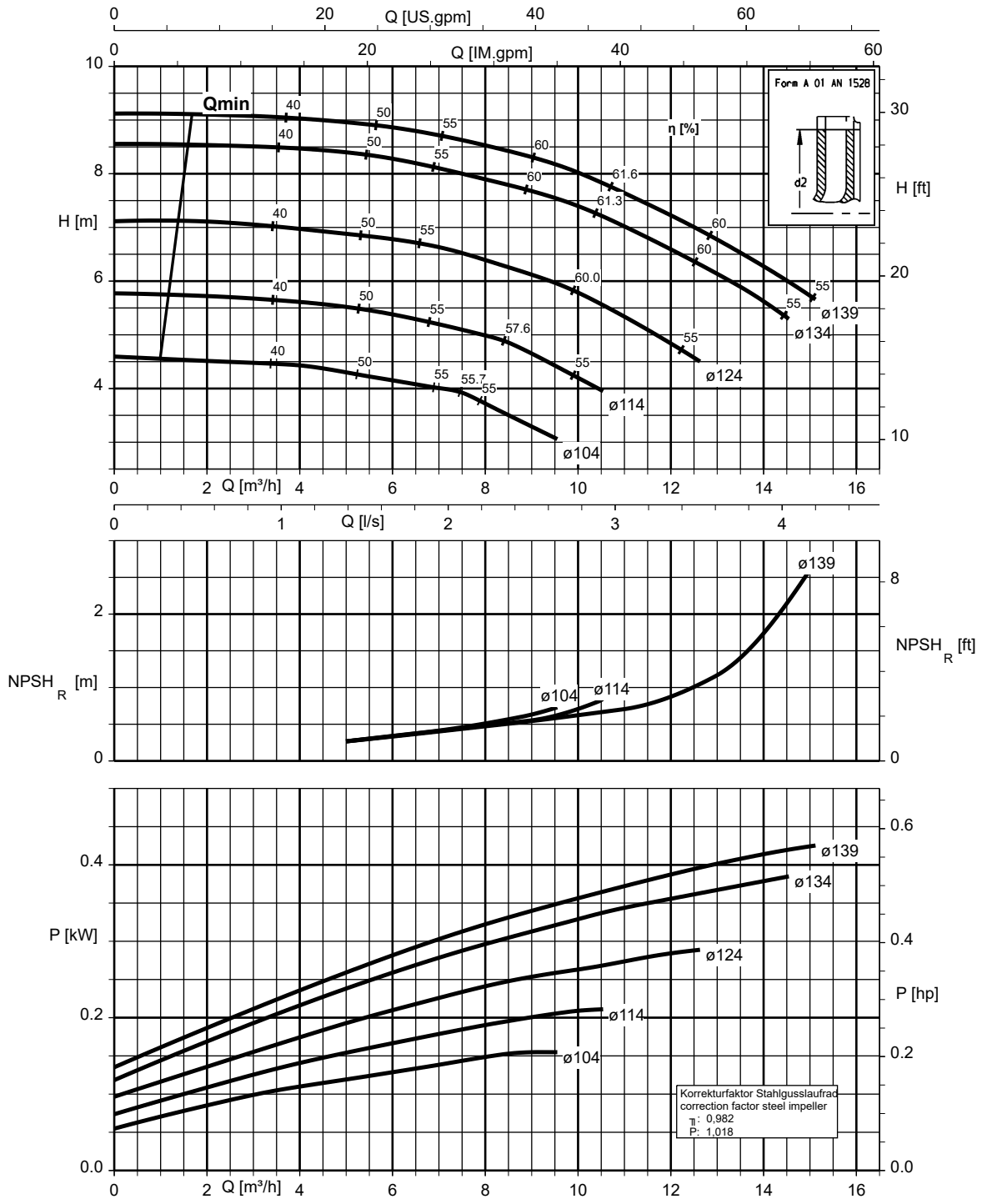
Etanorm SYT, Etabloc, Etabloc SYT



K1311.464/15/2

Etanorm 050-032-125.1, n = 1750 rpm

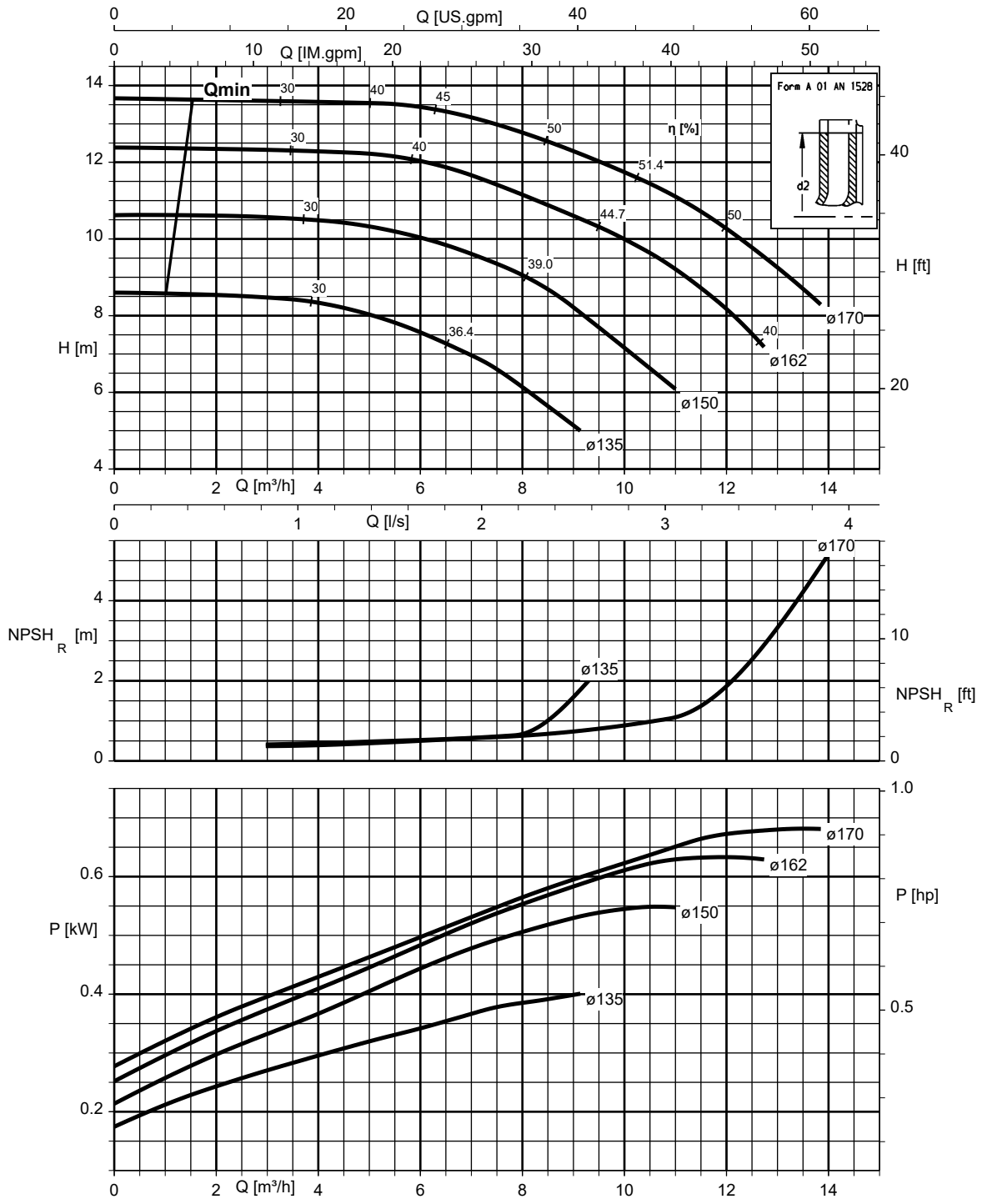
Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



1311.46/11-EN-US

Etanorm 050-032-160.1, n = 1750 rpm

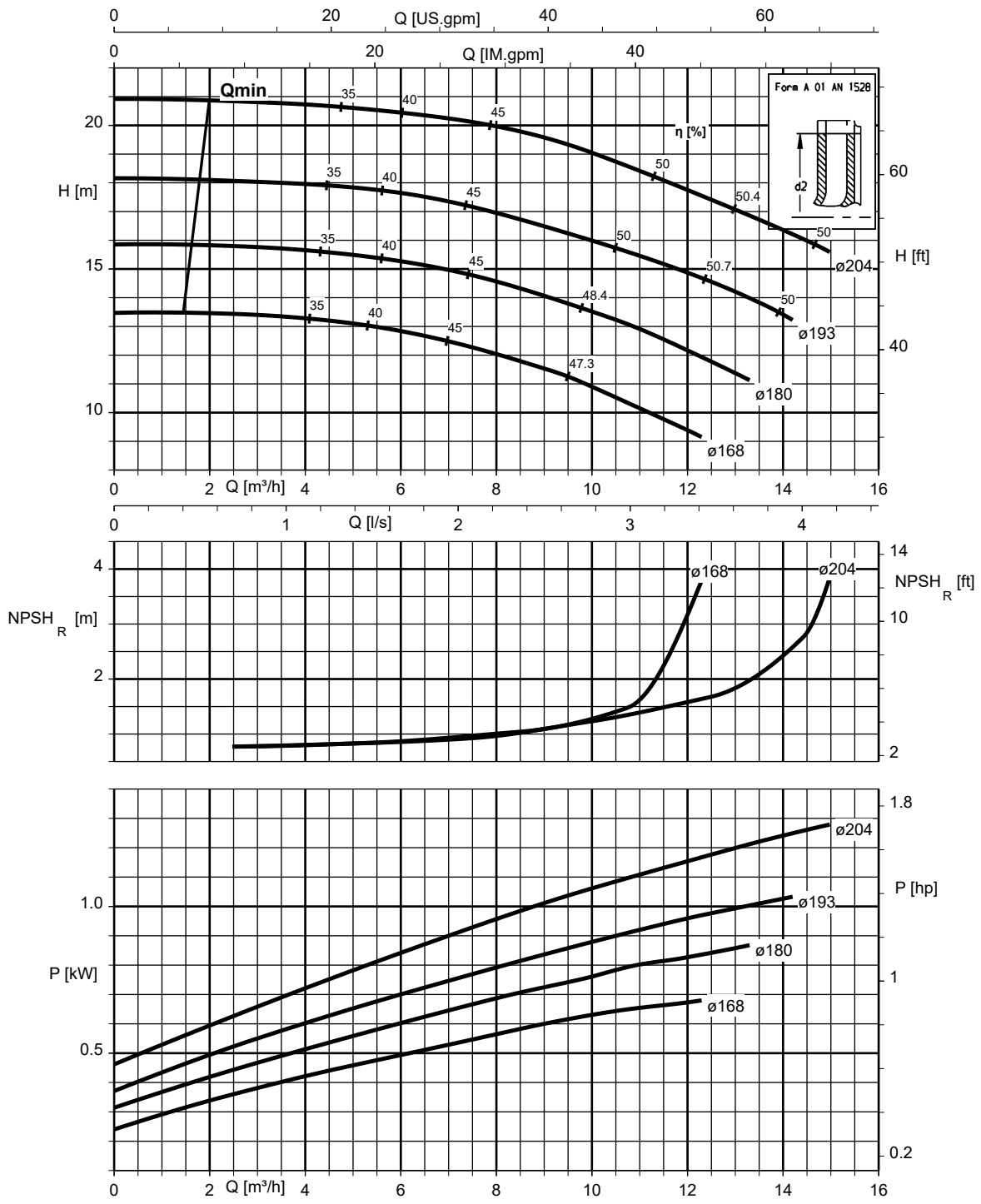
Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



K1311.464/18/2

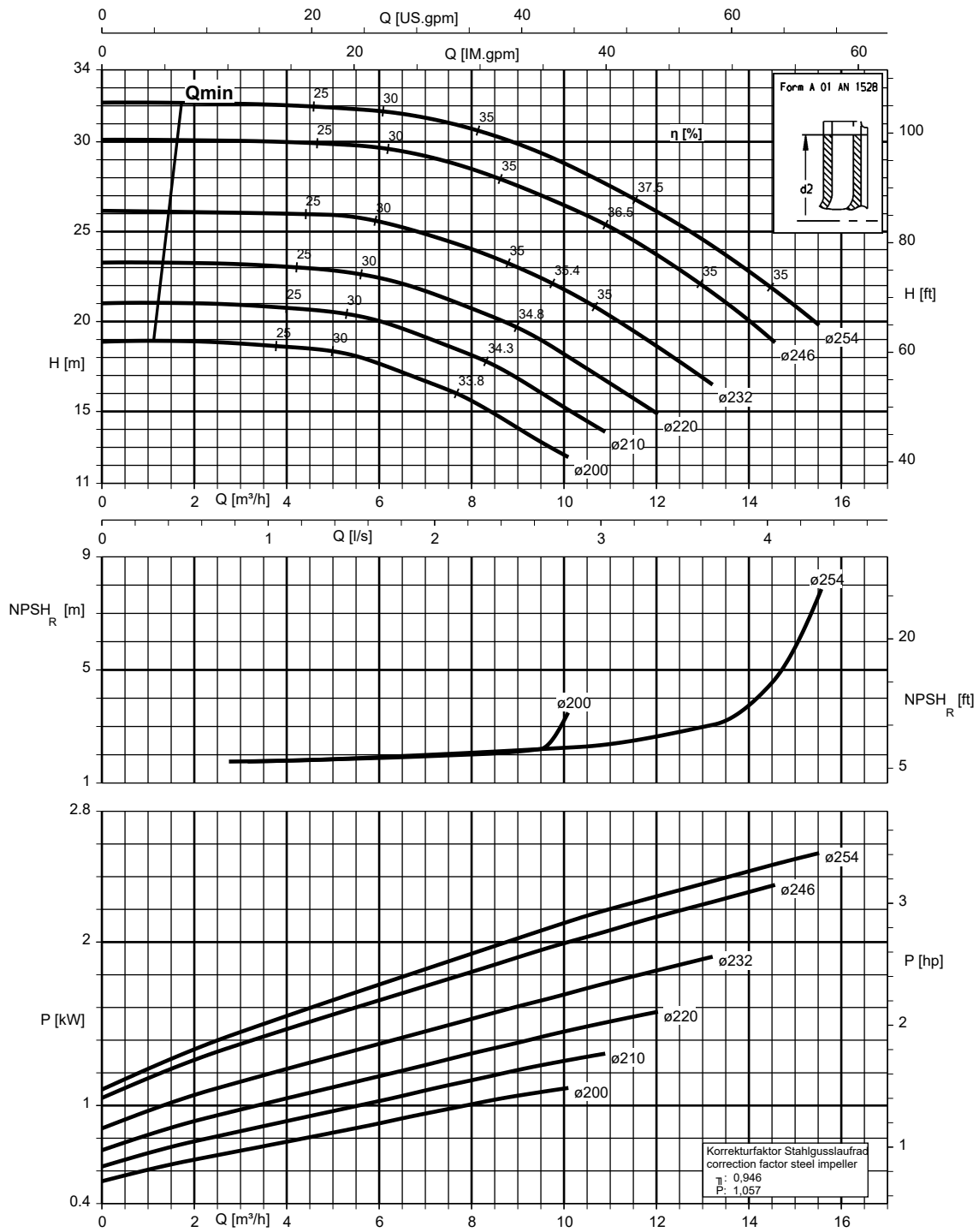
Etanorm 050-032-200.1, n = 1750 rpm

Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



Etanorm 050-032-250.1, n = 1750 rpm

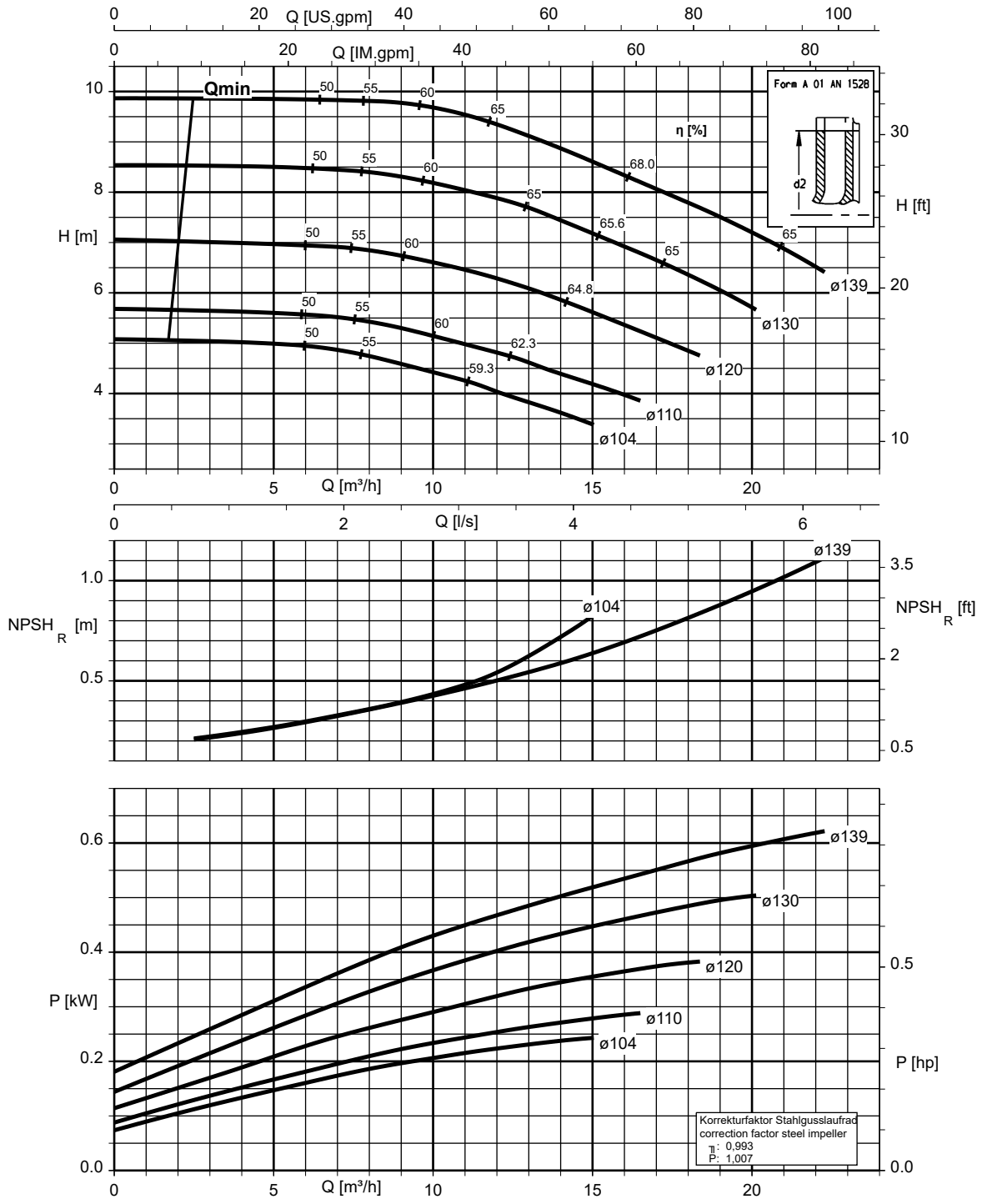
Etanorm V, Etabloc



K1311.464/20/2

Etanorm 050-032-125, n = 1750 rpm

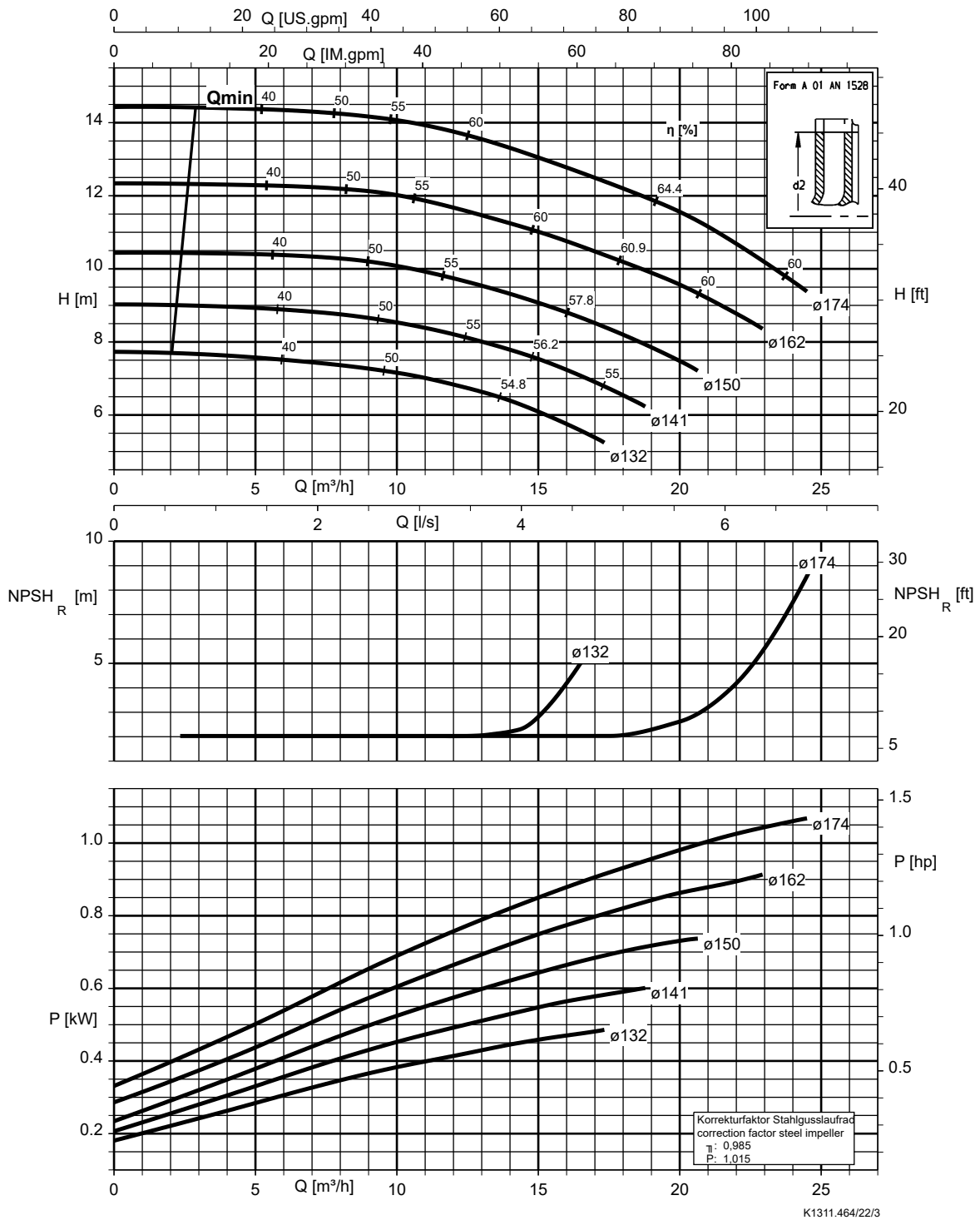
Etanorm V, Etabloc



1311.46/11-EN-US

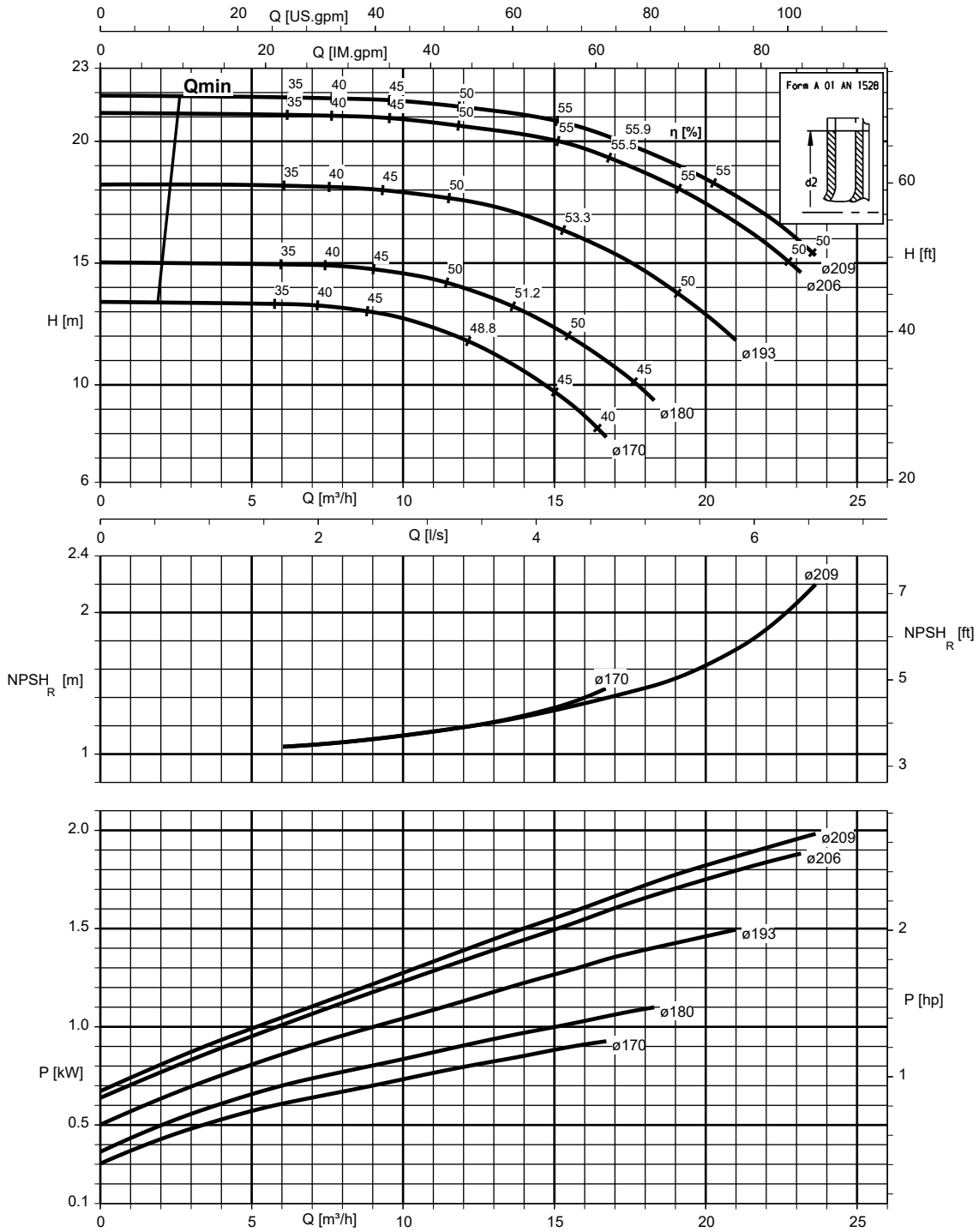
Etanorm 050-032-160, n = 1750 rpm

Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



Etanorm 050-032-200, n = 1750 rpm

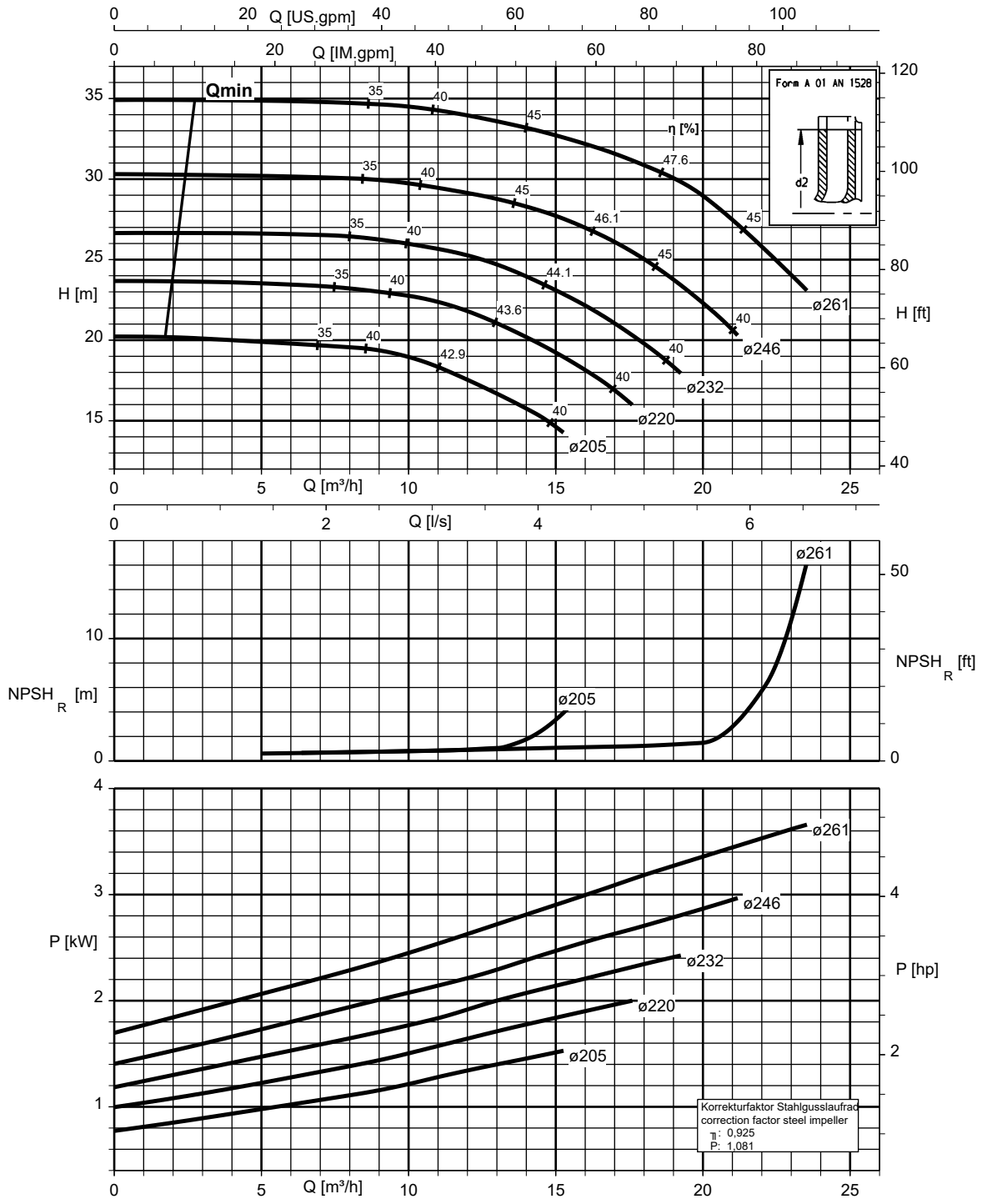
Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



K1311.464/23/1

Etanorm 050-032-250, n = 1750 rpm

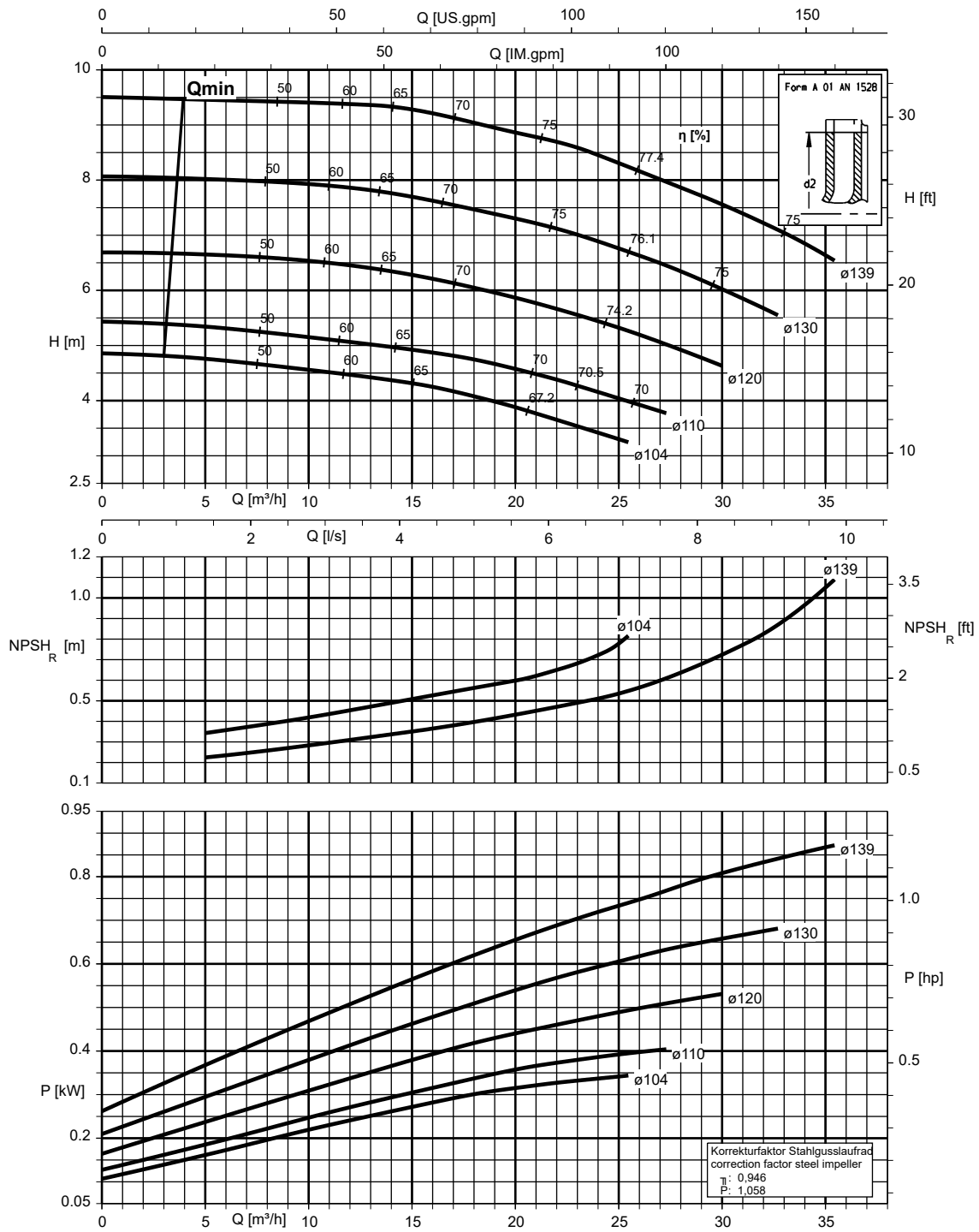
Etanorm SYT, Etanorm V, Etabloc



K1311.464/24/2

Etanorm 065-040-125, n = 1750 rpm

Etanorm V, Etabloc

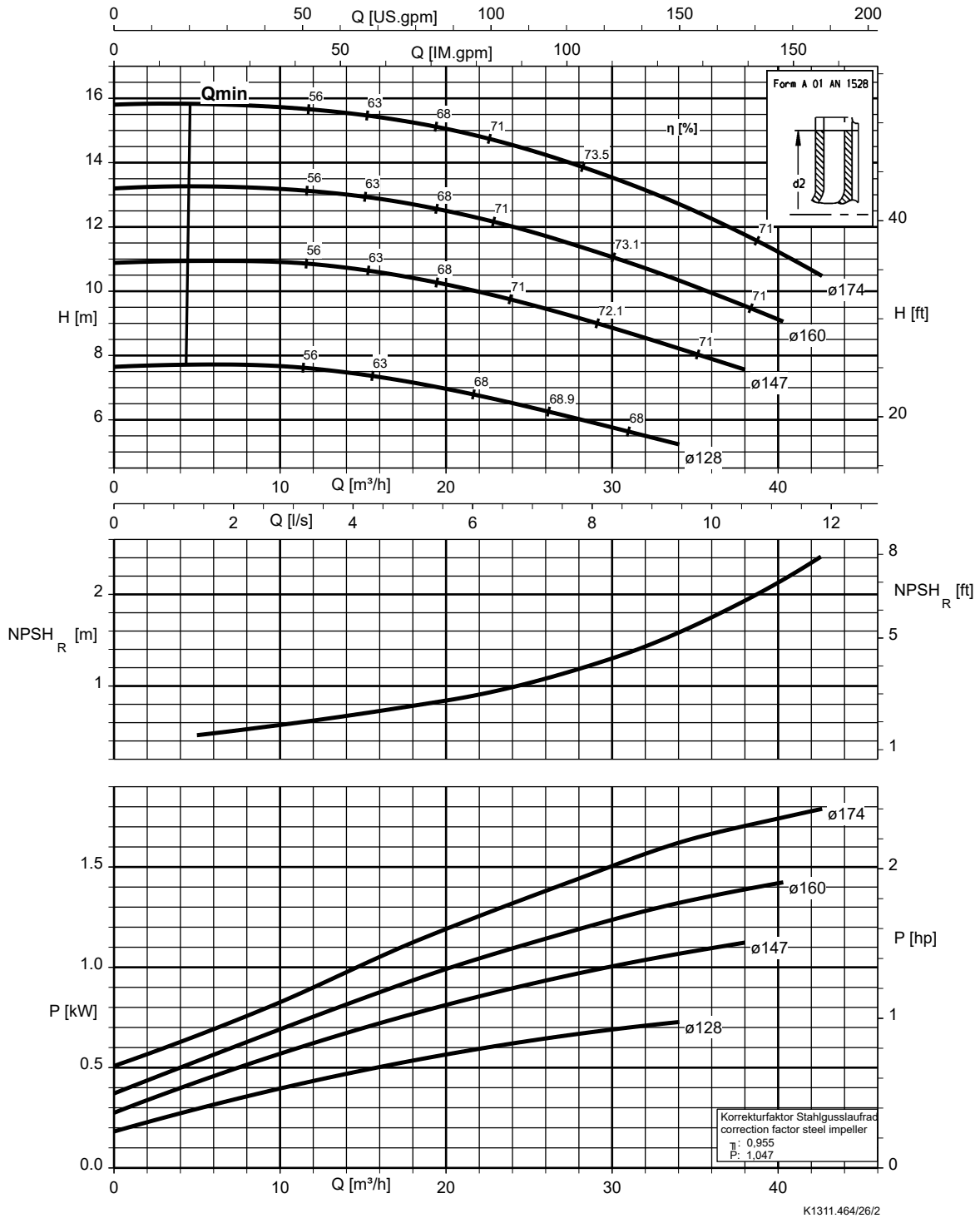


K1311.464/25/1

1311.46/11-EN-US

Etanorm 065-040-160, n = 1750 rpm

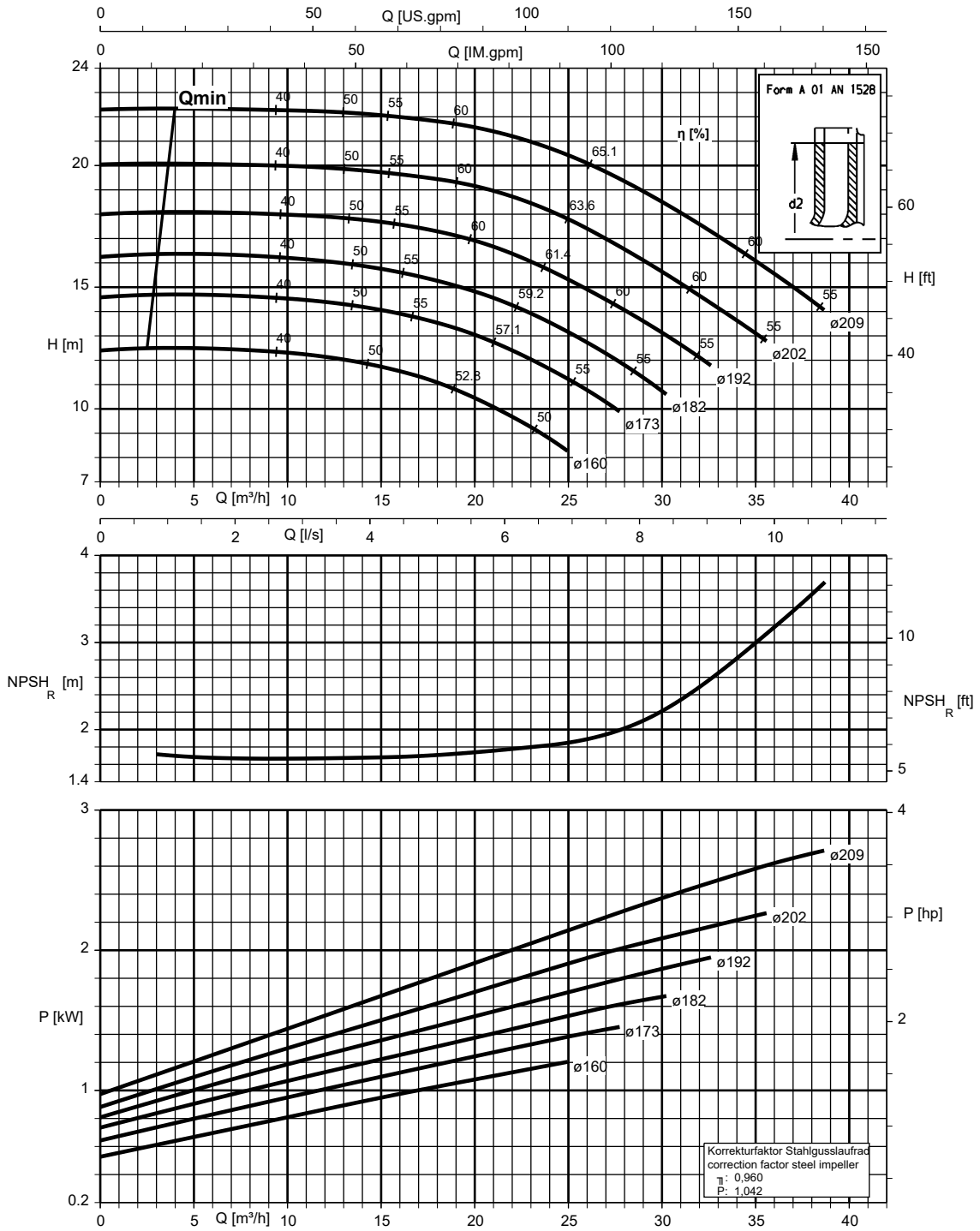
Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



K1311.464/26/2

Etanorm 065-040-200, n = 1750 rpm

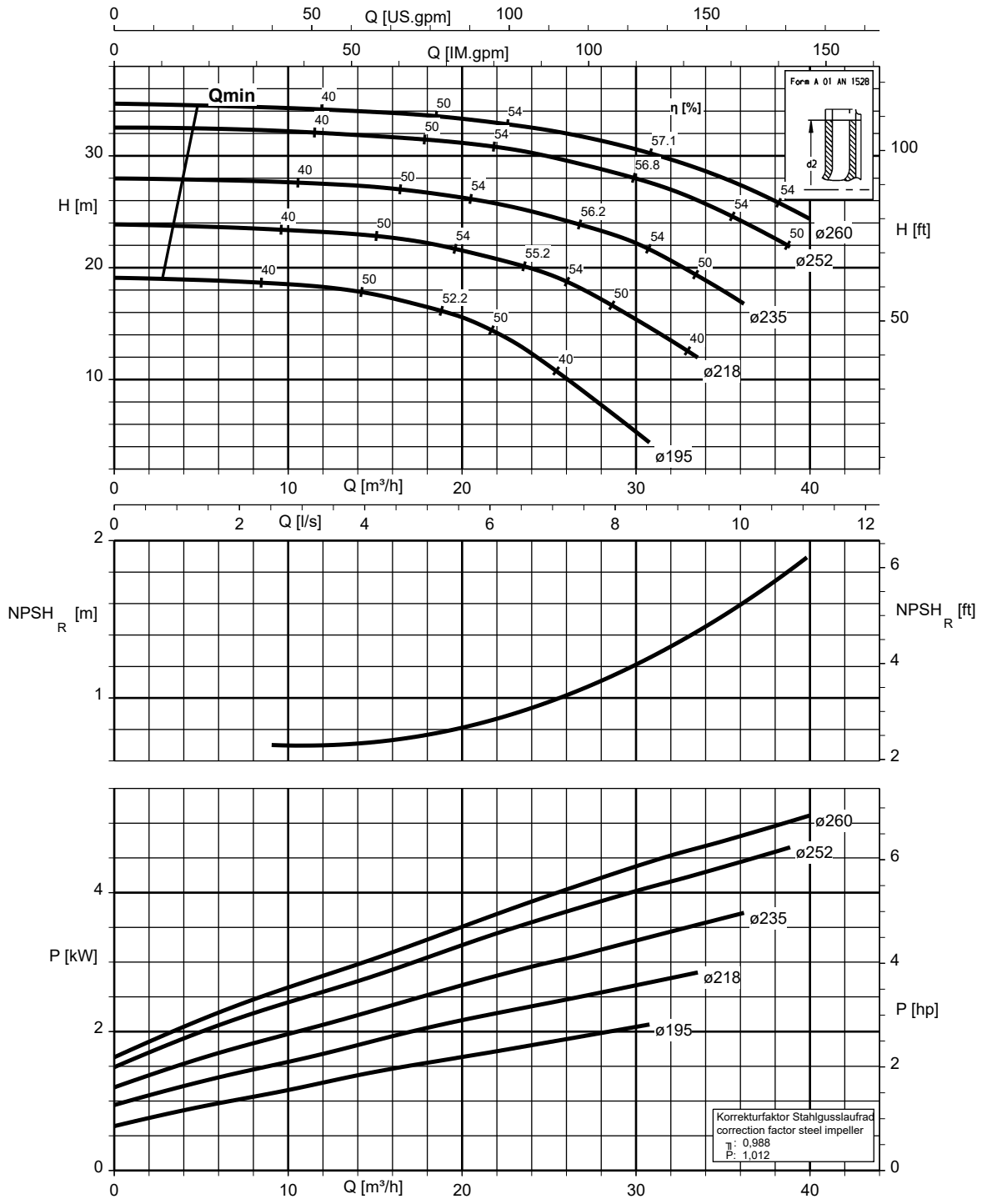
Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



K1311.464/27/1

Etanorm 065-040-250, n = 1750 rpm

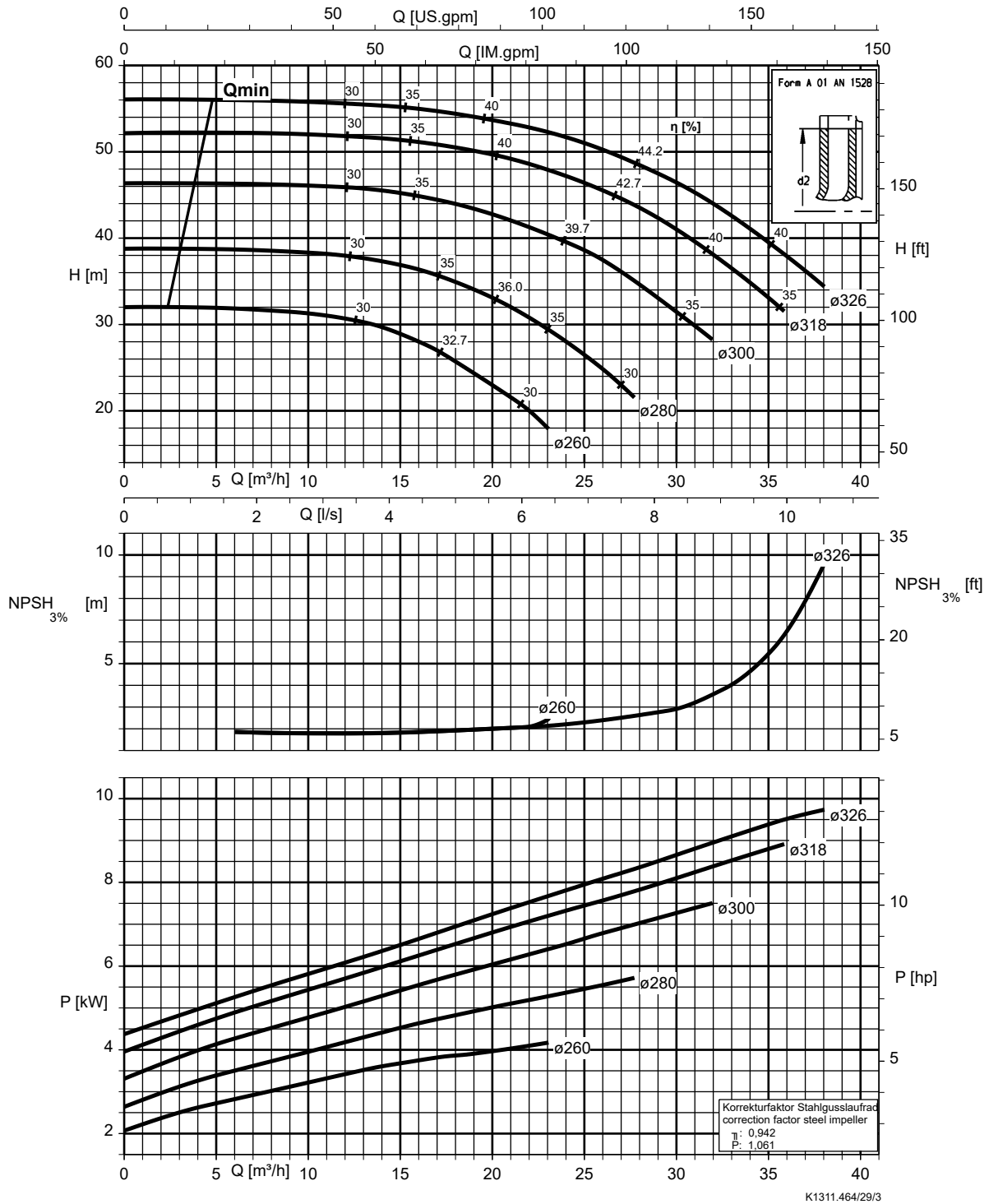
Etanorm SYT, Etanorm V, Etabloc



K1311.464/28/2

Etanorm 065-040-315, n = 1750 rpm

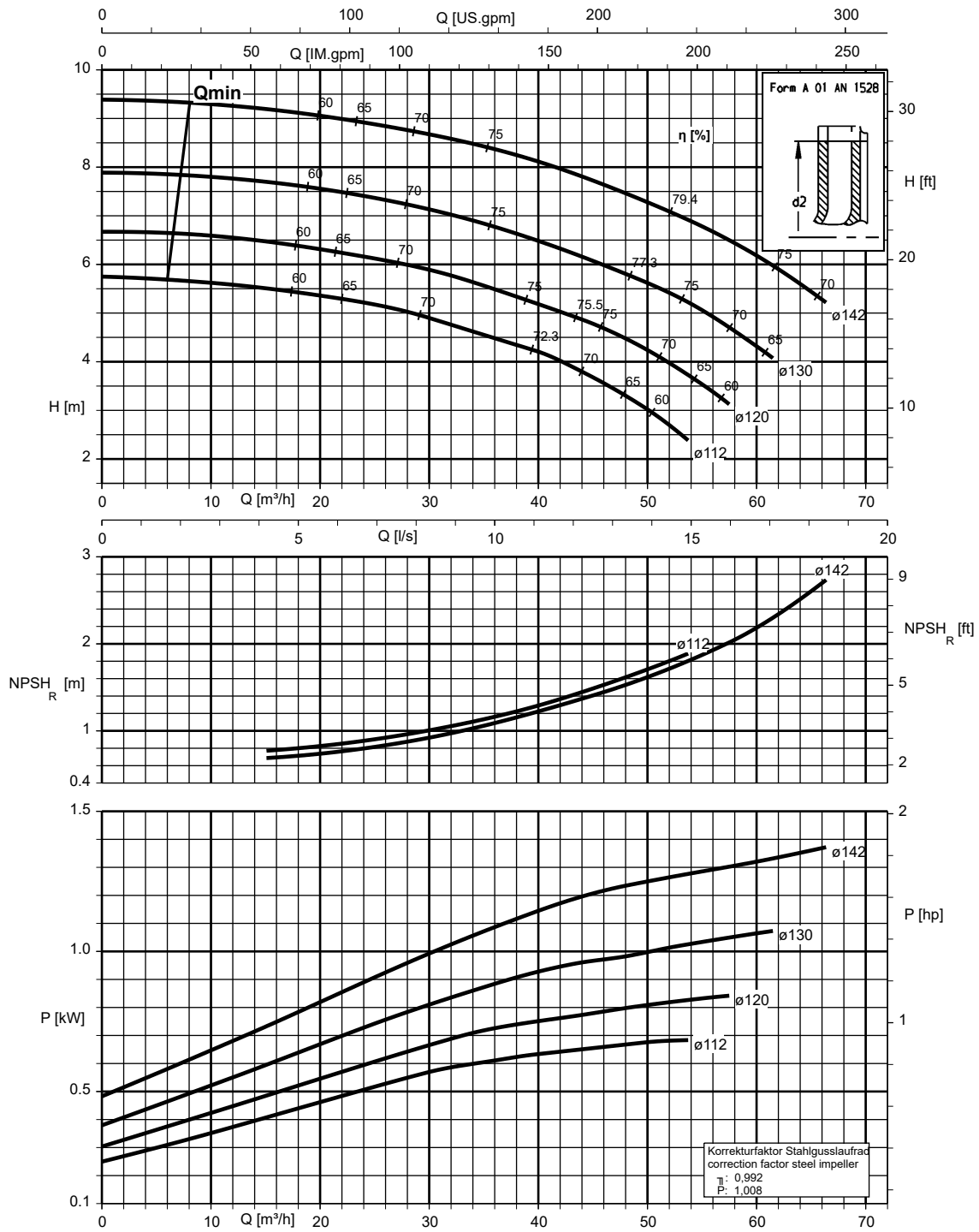
Etanorm SYT, Etanorm V, Etabloc



1311.46/11-EN-US

Etanorm 065-050-125, n = 1750 rpm

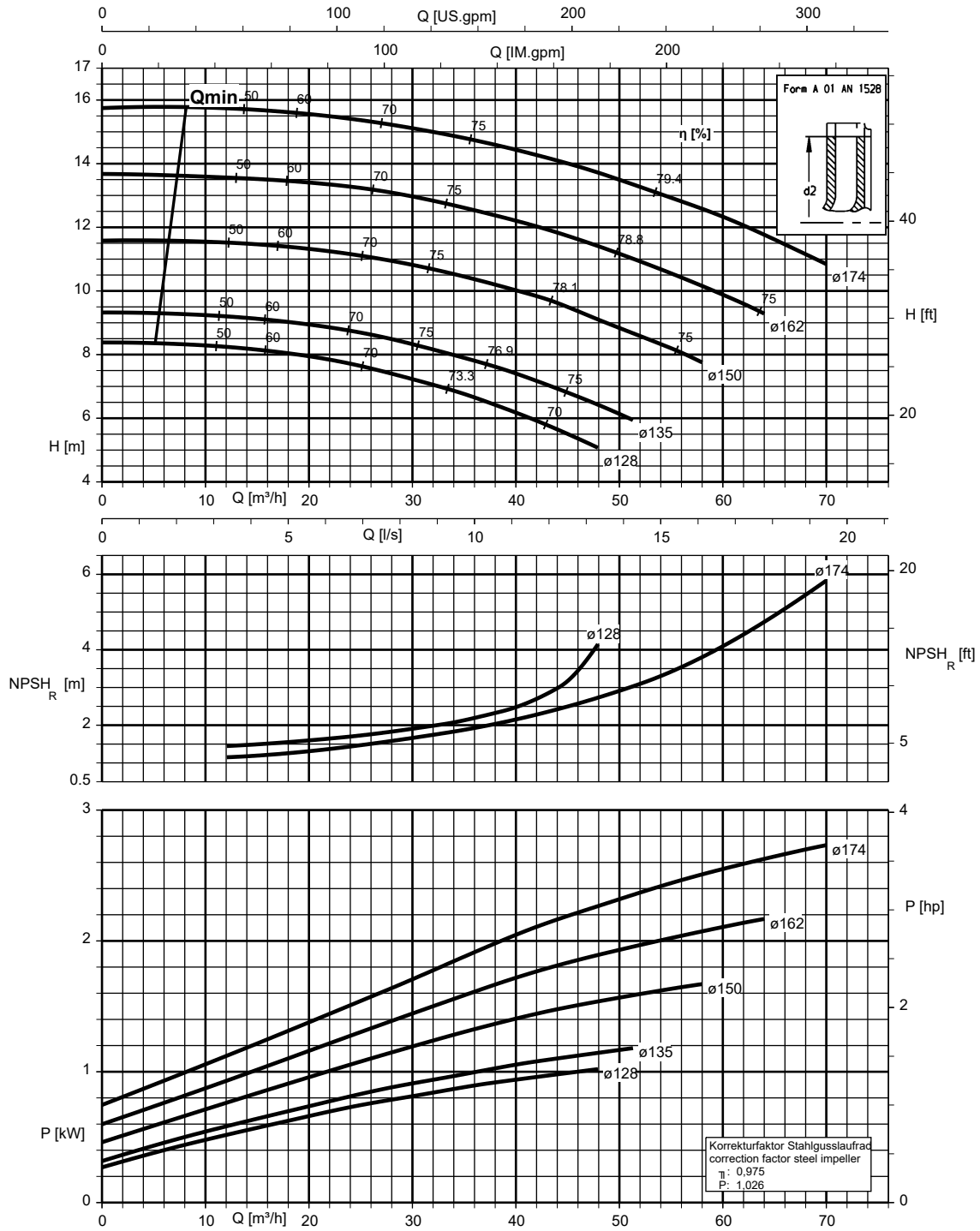
Etanorm V, Etabloc



K1311.464/30/1

Etanorm 065-050-160, n = 1750 rpm

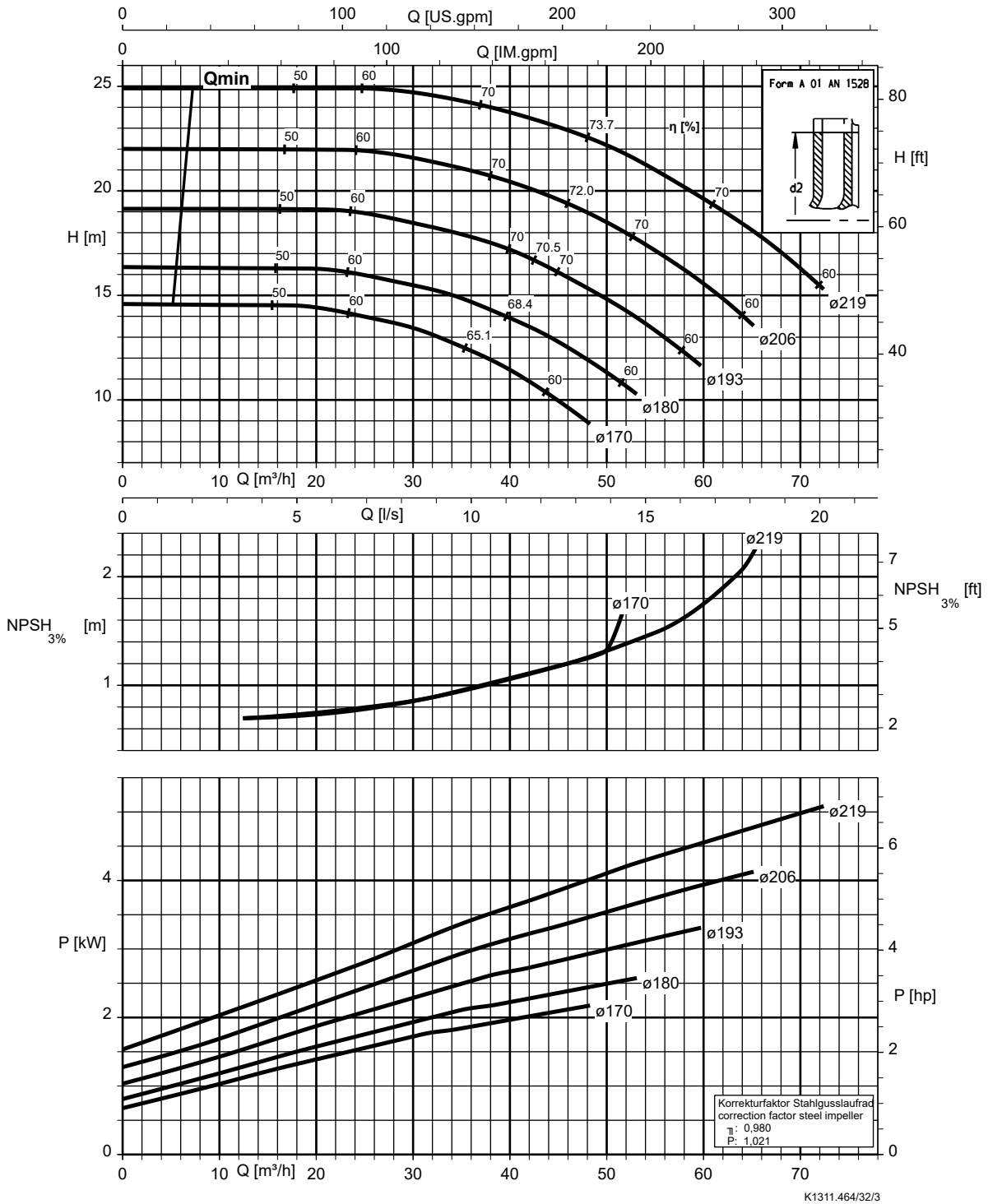
Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



K1311.464/31/1

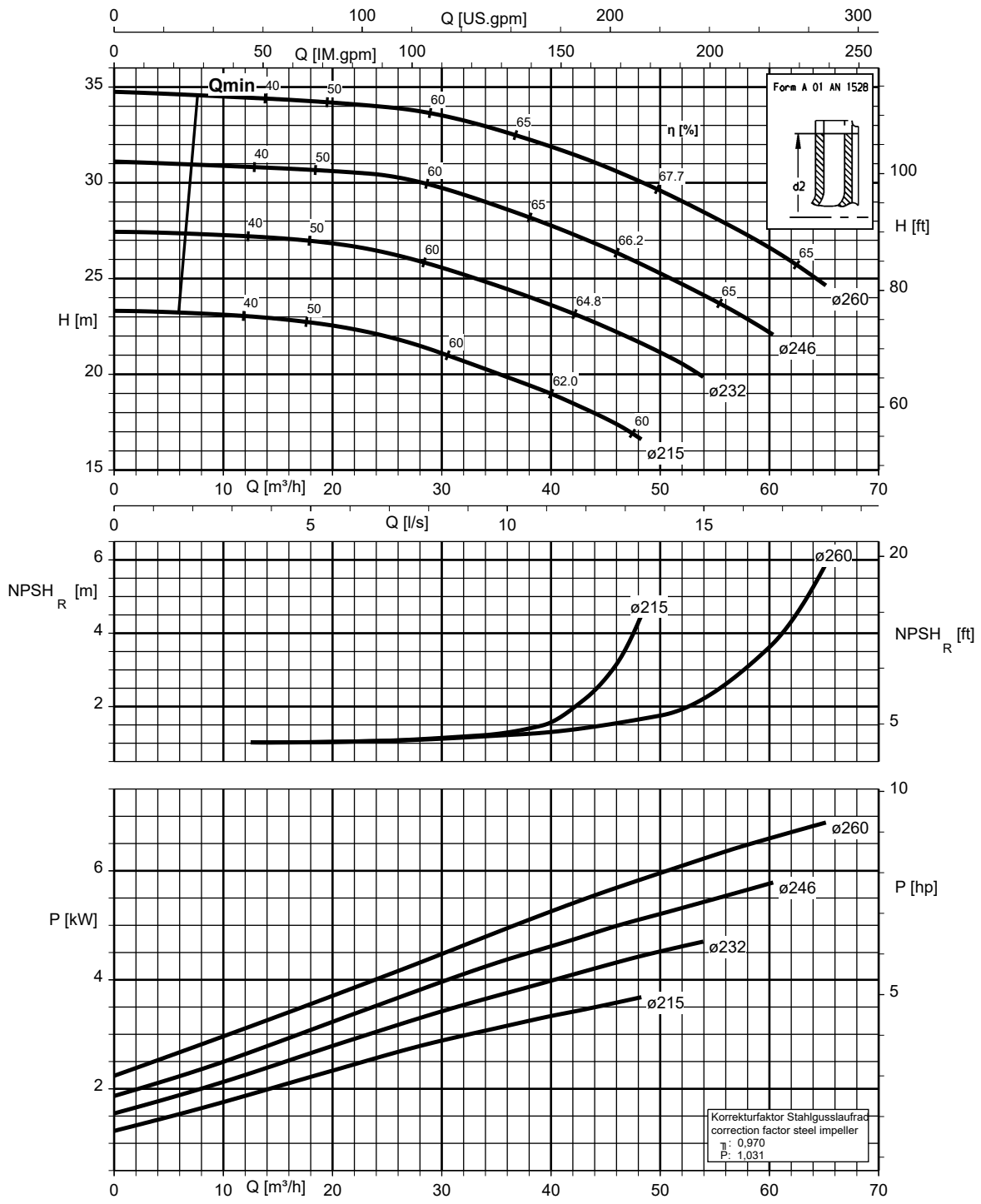
Etanorm 065-050-200, n = 1750 rpm

Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



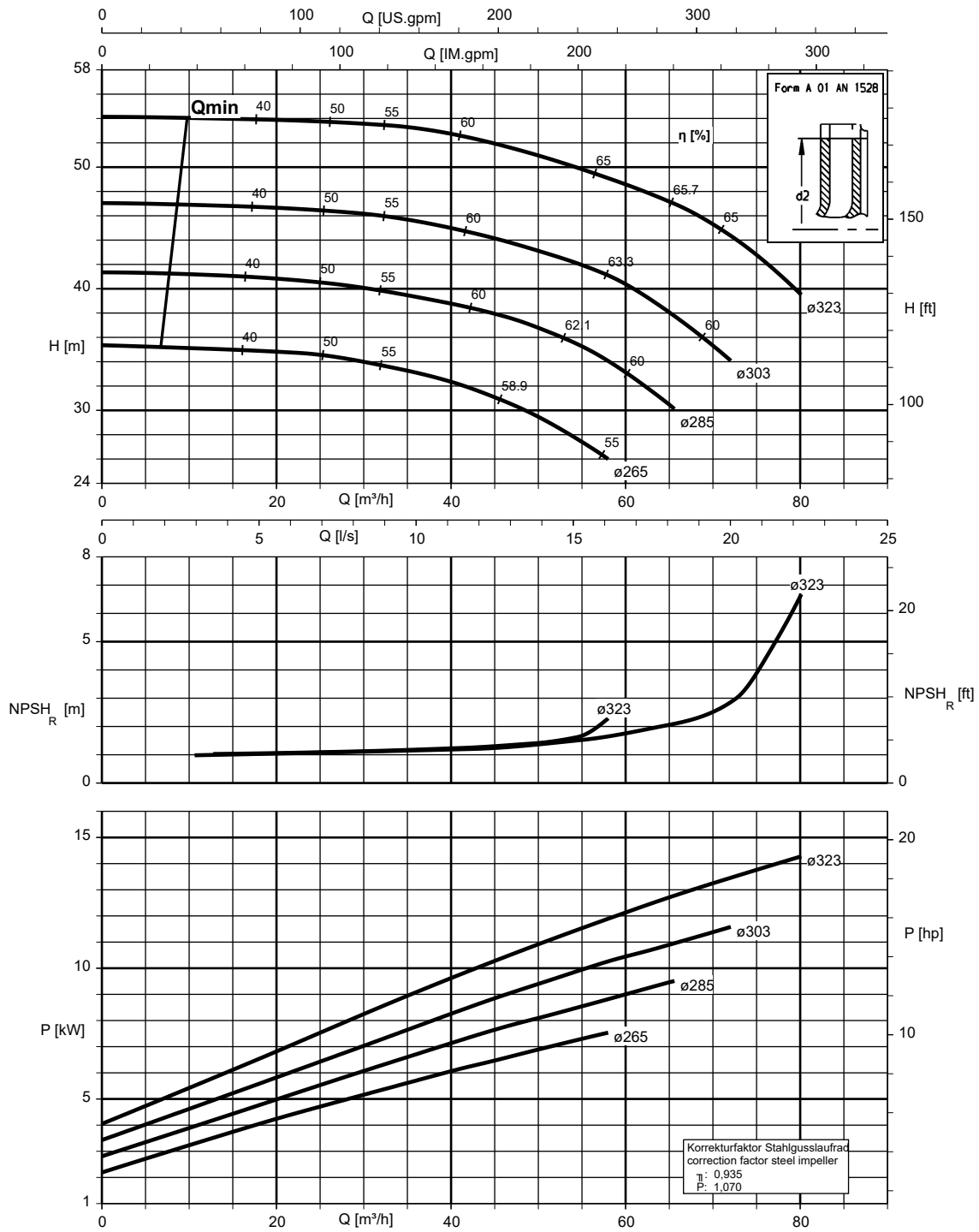
Etanorm 065-050-250, n = 1750 rpm

Etanorm SYT, Etanorm V, Etabloc



Etanorm 065-050-315, n = 1750 rpm

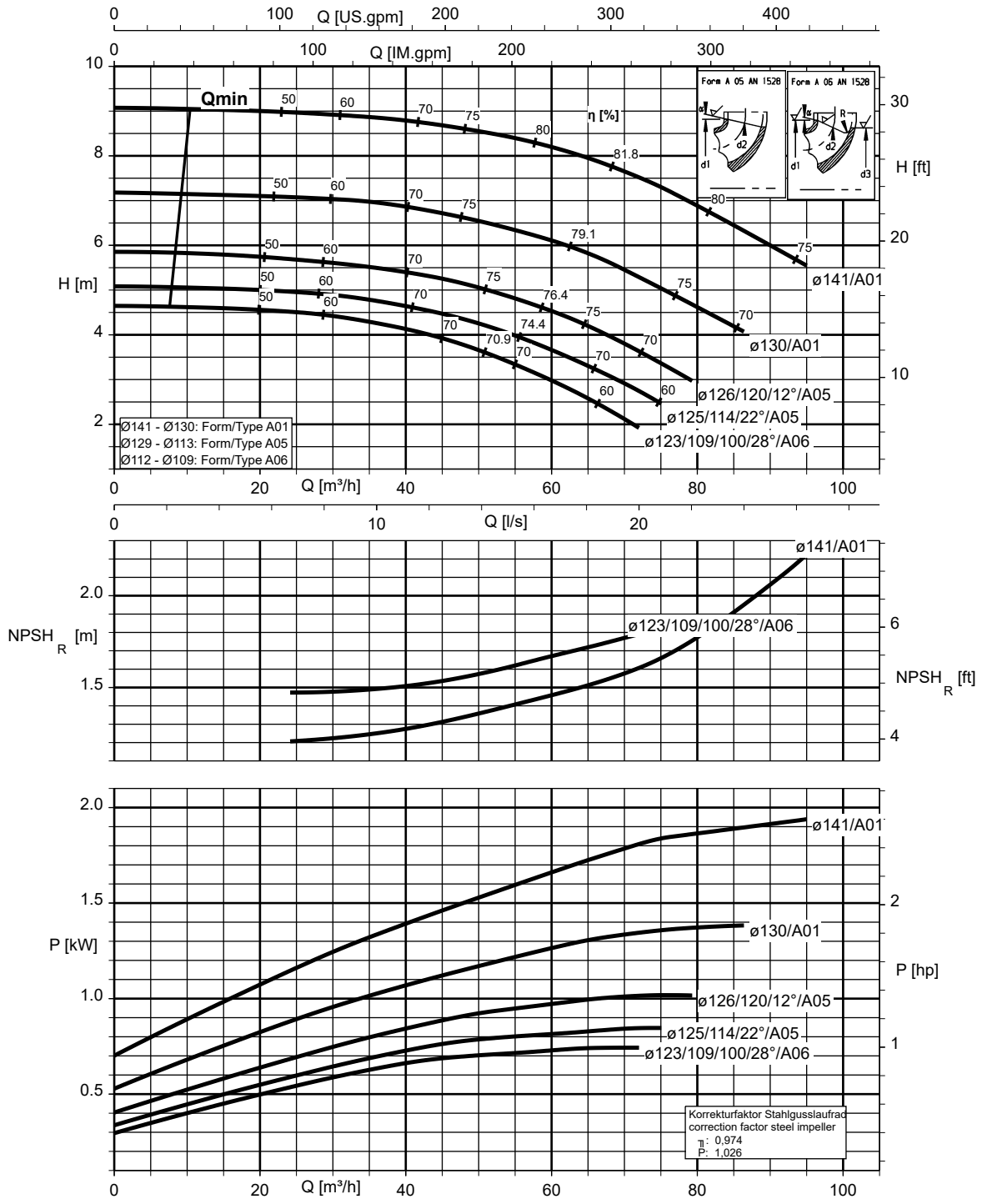
Etanorm SYT, Etanorm V, Etabloc



K1311.464/34/2

Etanorm 080-065-125, n = 1750 rpm

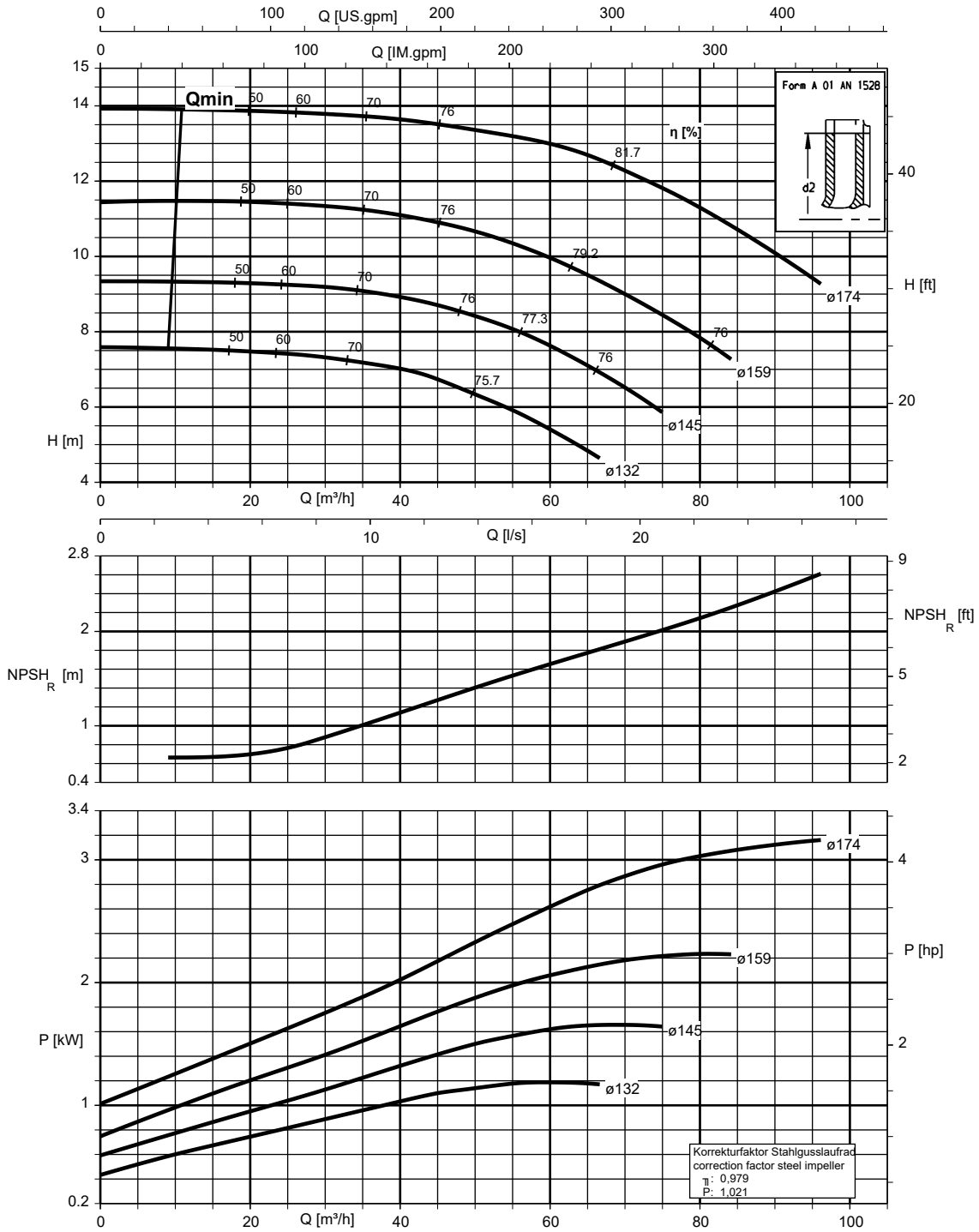
Etanorm V, Etabloc



K1311.464/35/3

Etanorm 080-065-160, n = 1750 rpm

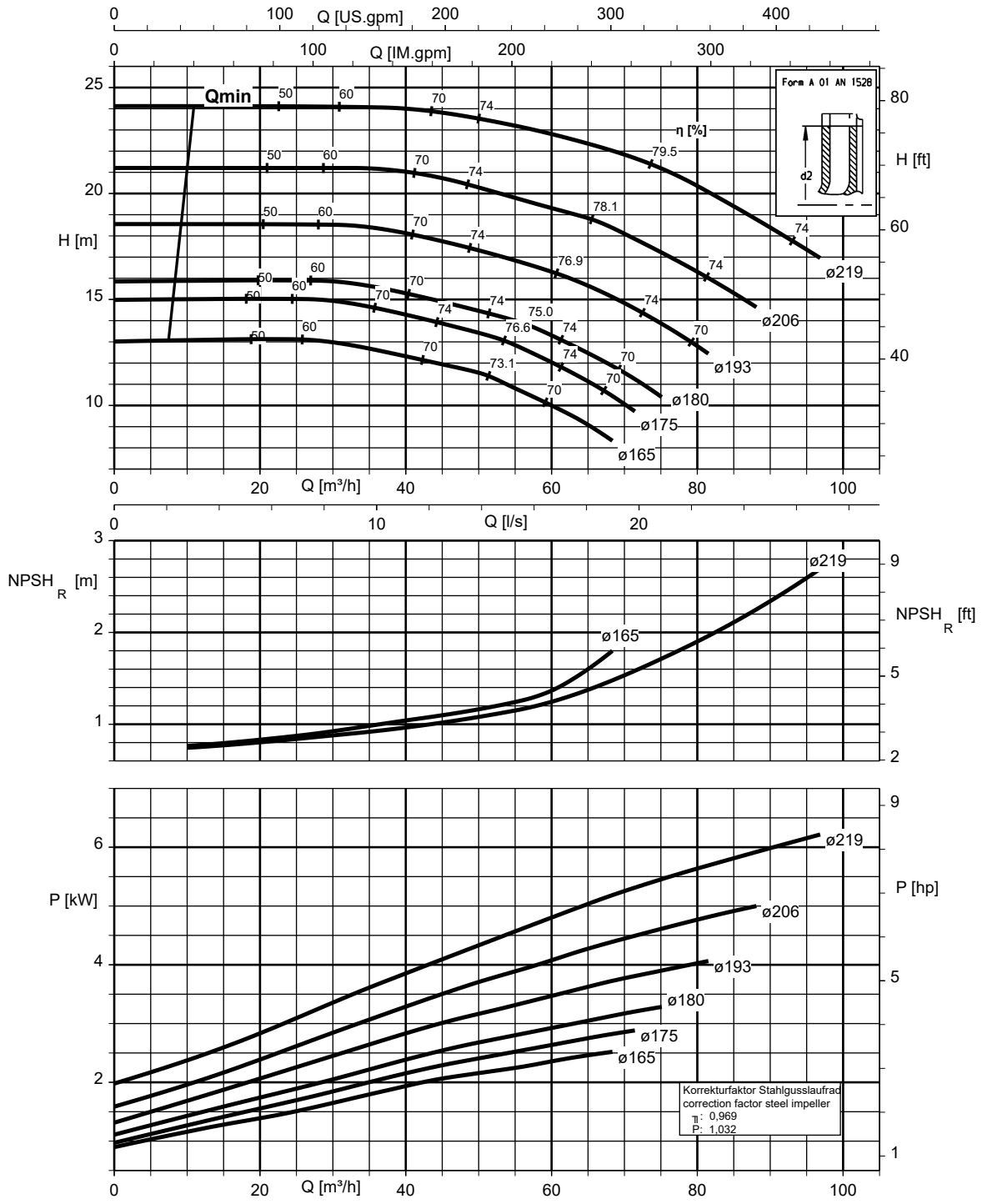
Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



K1311.464/36/2

Etanorm 080-065-200, n = 1750 rpm

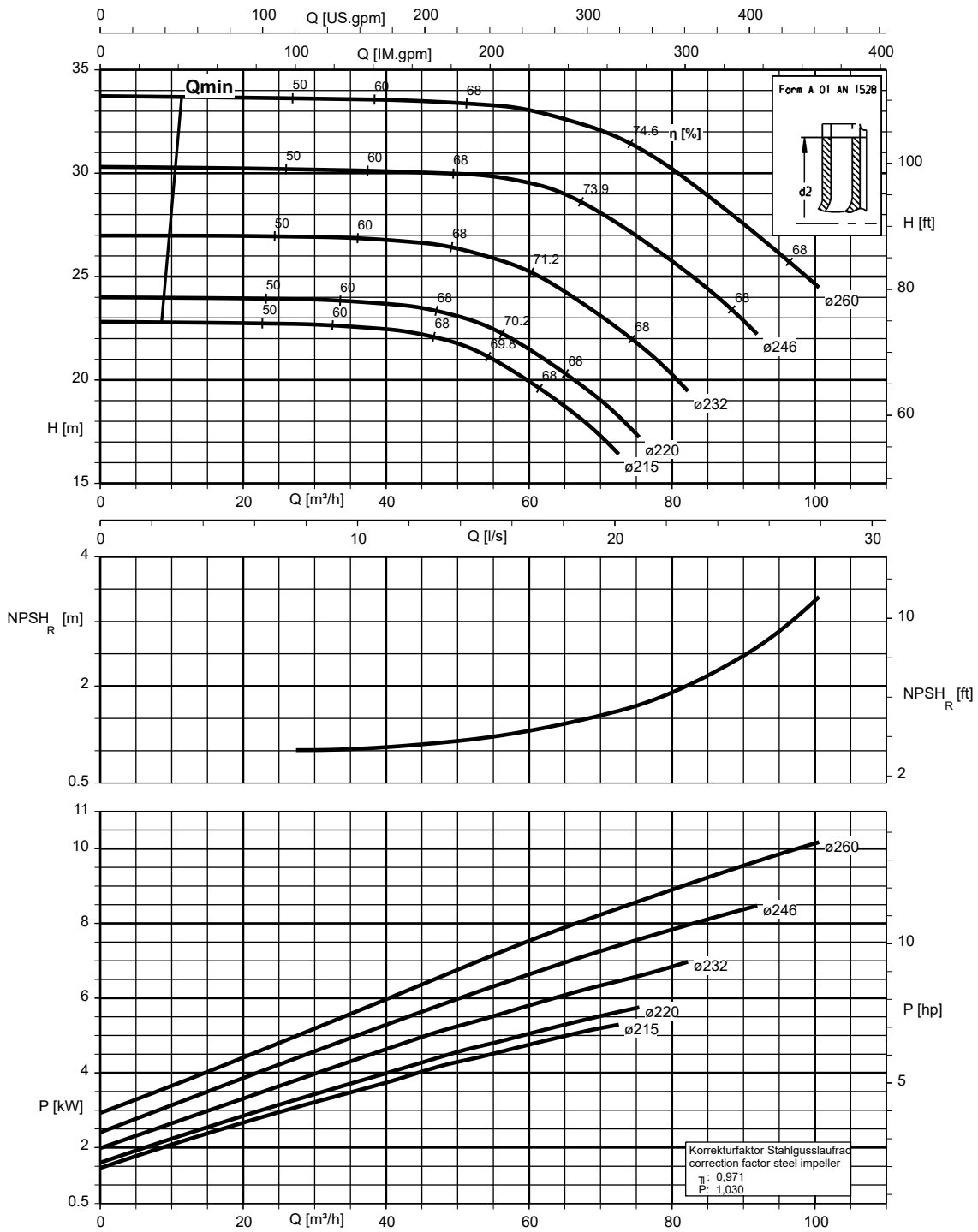
Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



K1311.464/37/2

Etanorm 080-065-250, n = 1750 rpm

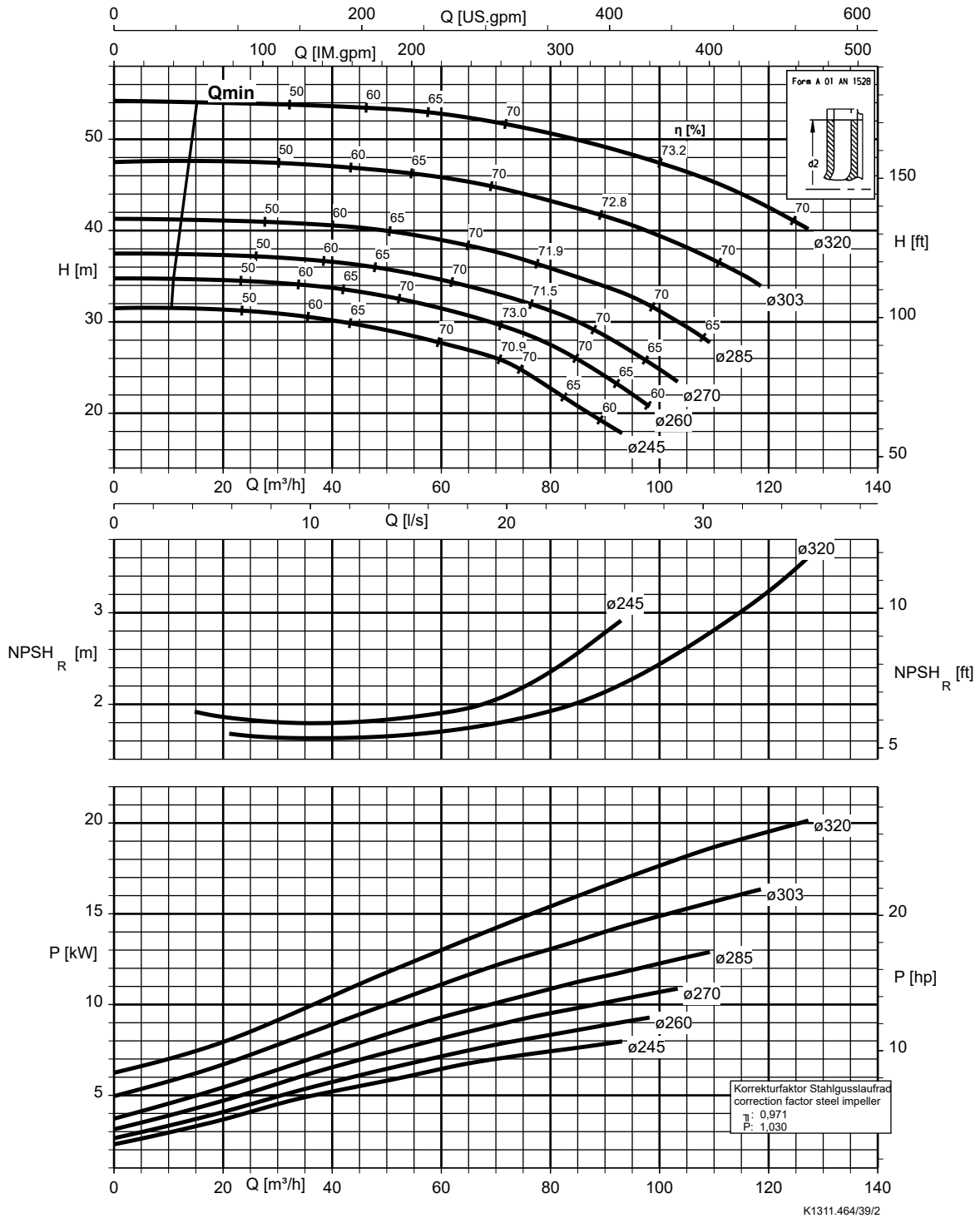
Etanorm SYT, Etanorm V, Etabloc



K1311.464/38/2

Etanorm 080-065-315, n = 1750 rpm

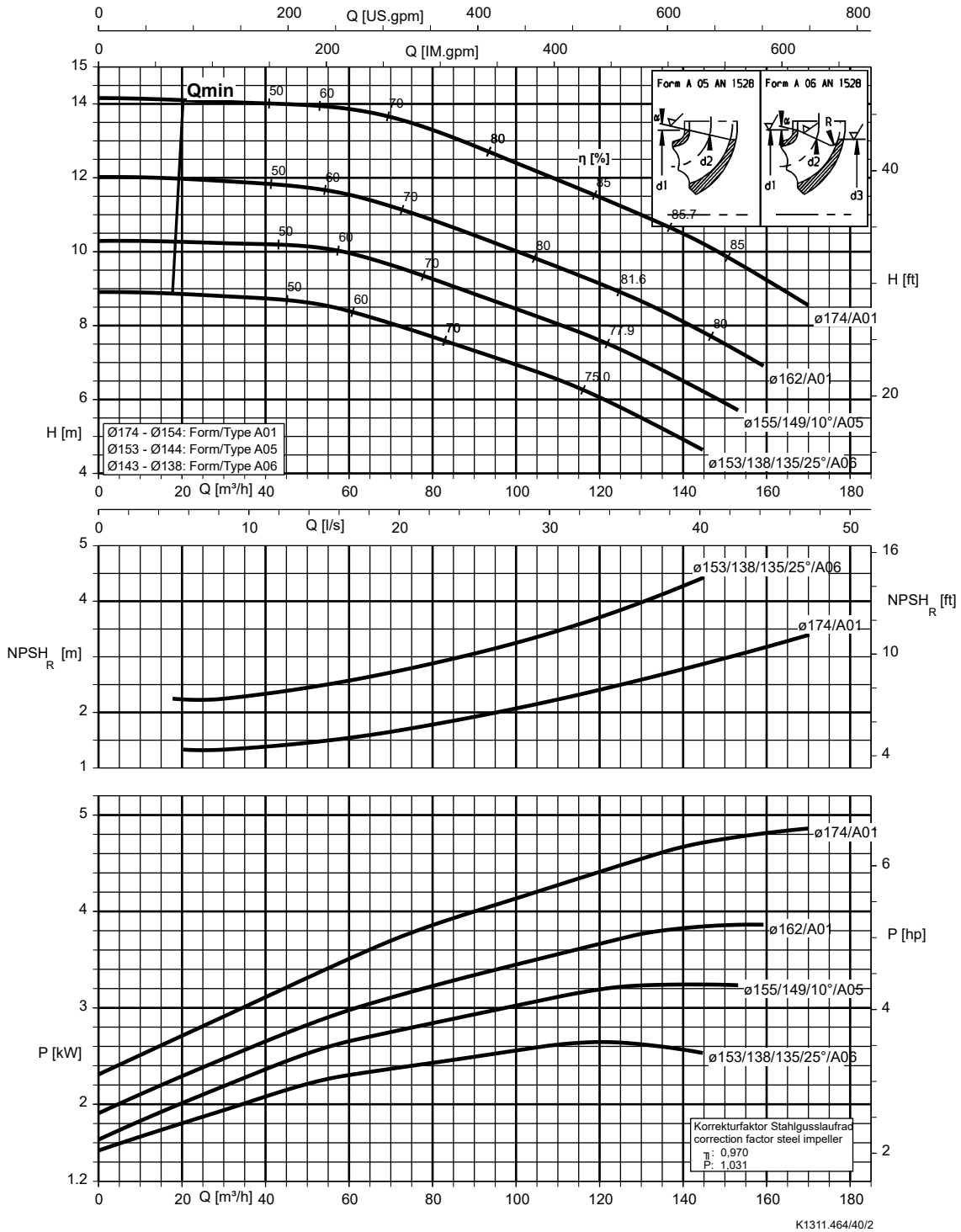
Etanorm SYT, Etanorm V, Etabloc



1311.46/11-EN-US

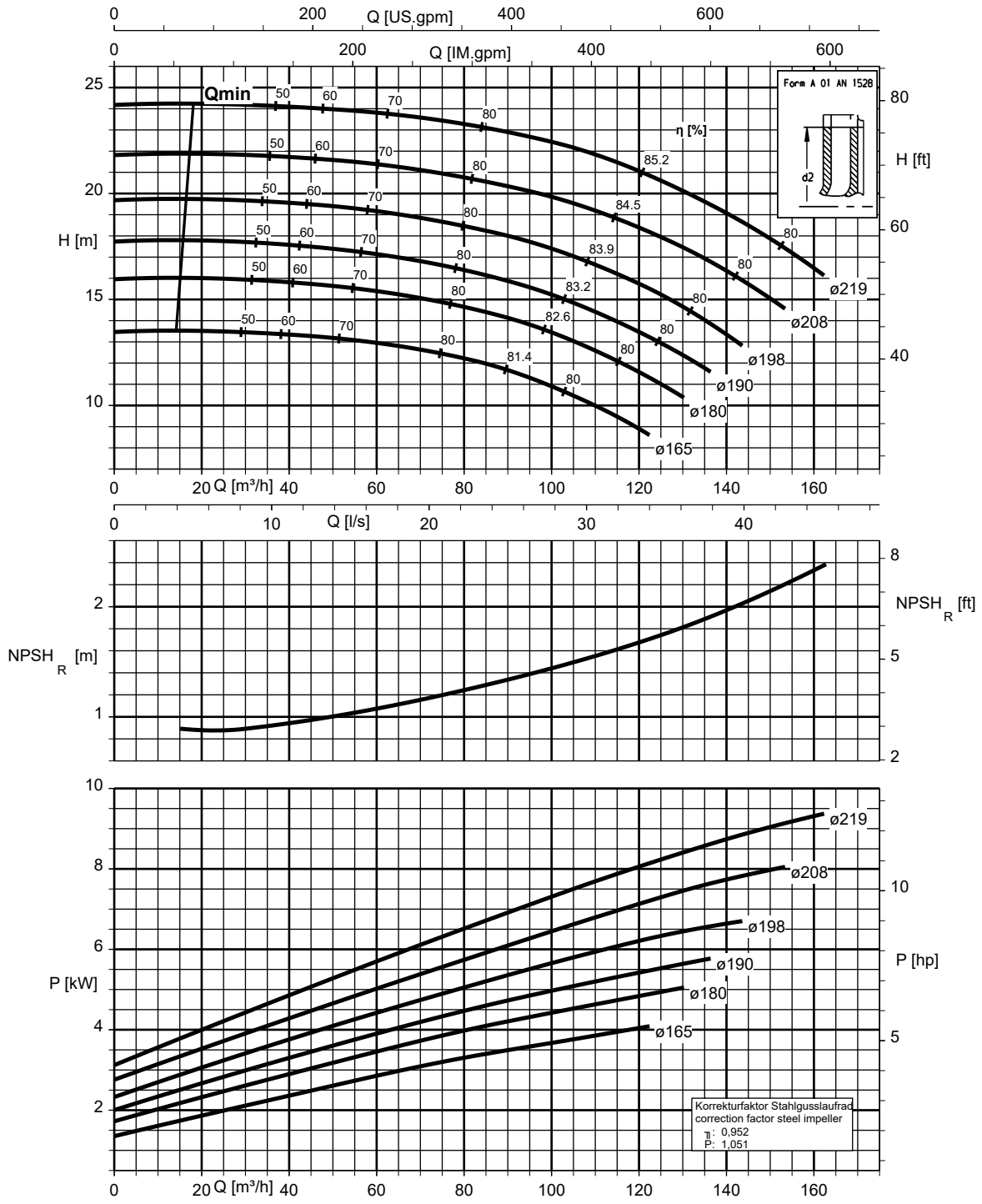
Etanorm 100-080-160, n = 1750 rpm

Etanorm SYT, Etanorm V, Etabloc, Etabloc SYT



Etanorm 100-080-200, n = 1750 rpm

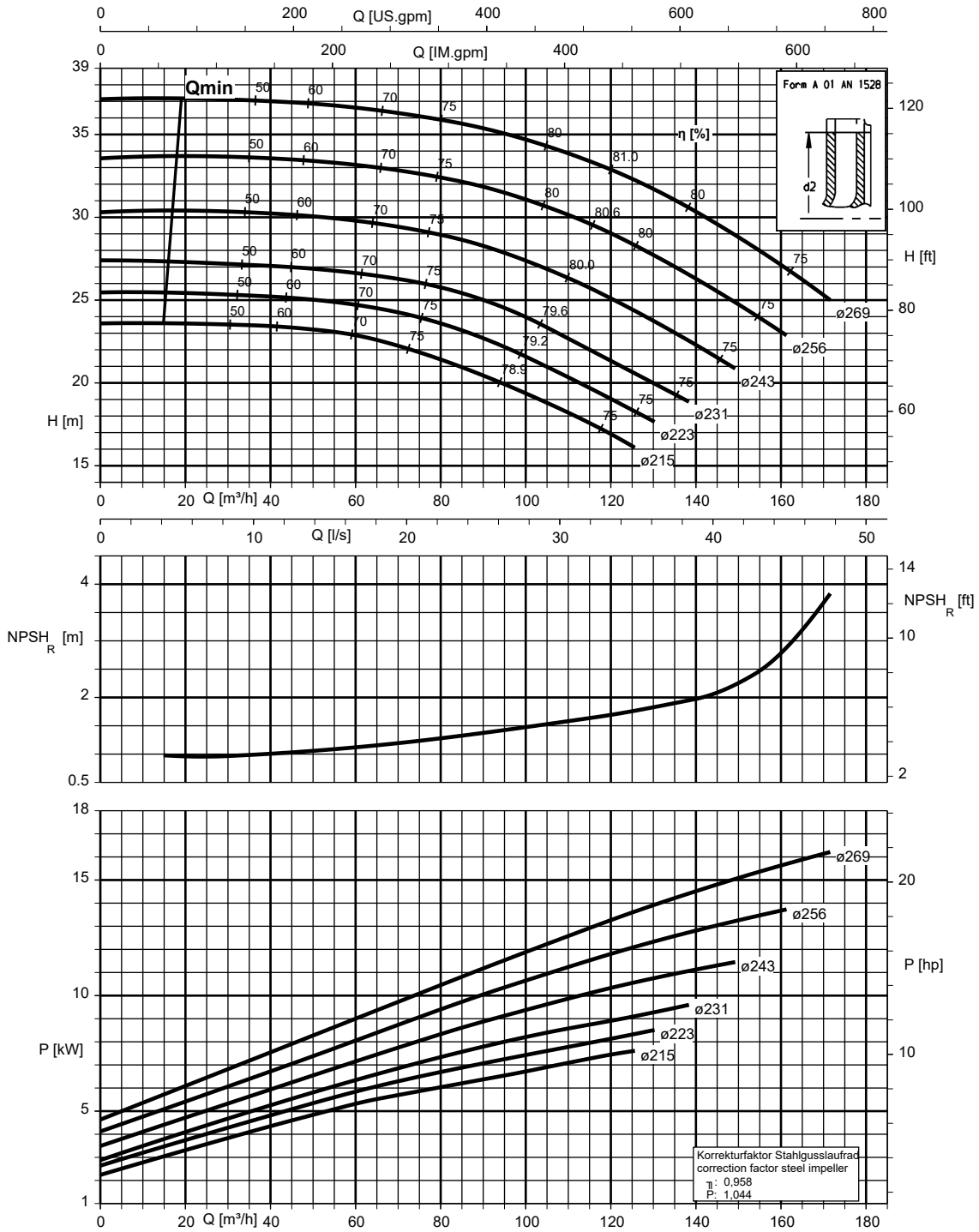
Etanorm SYT, Etanorm V, Etabloc



1311.46/11-EN-US

Etanorm 100-080-250, n = 1750 rpm

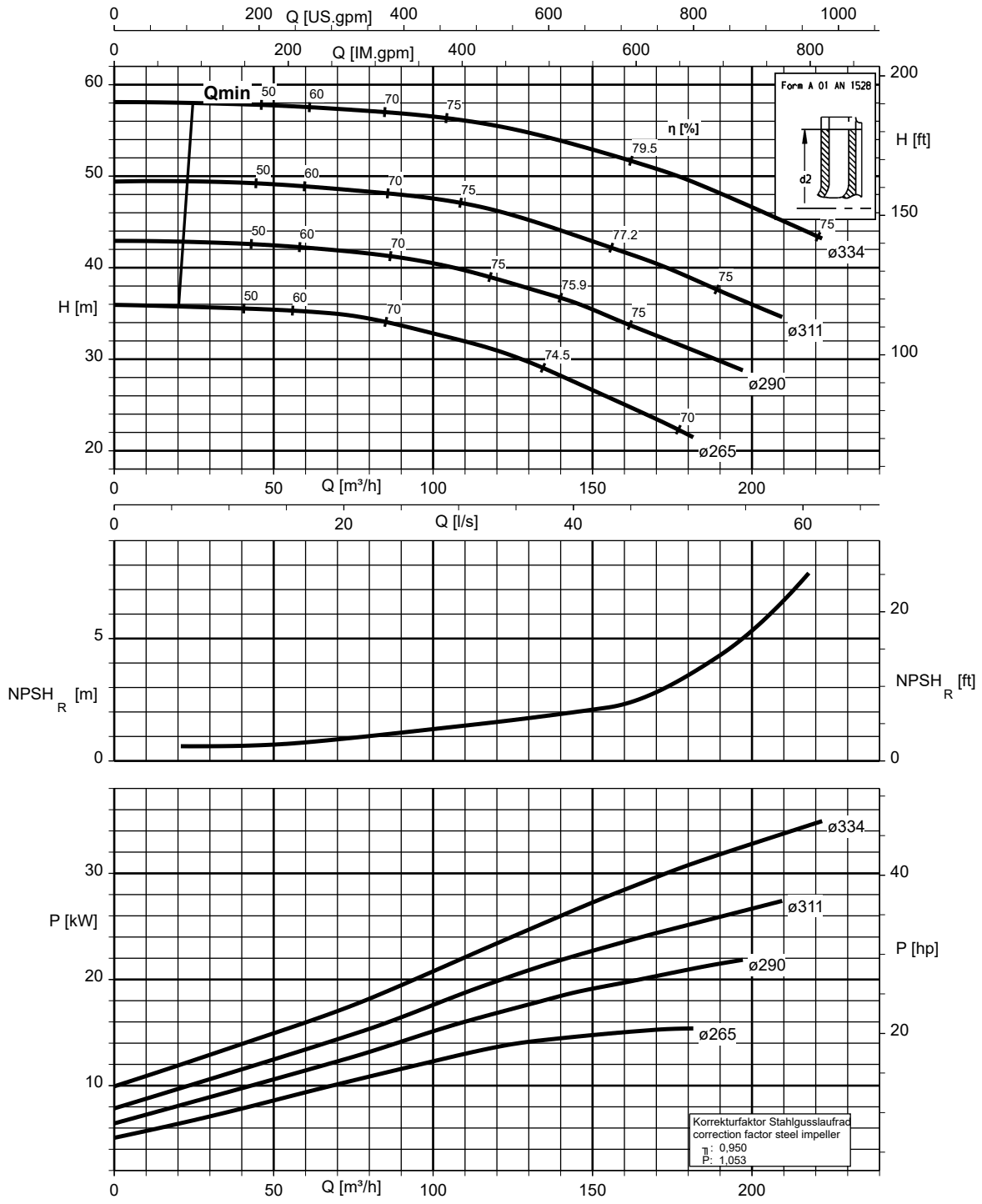
Etanorm SYT, Etanorm V, Etabloc



K1311.464/42/2

Etanorm 100-080-315, n = 1750 rpm

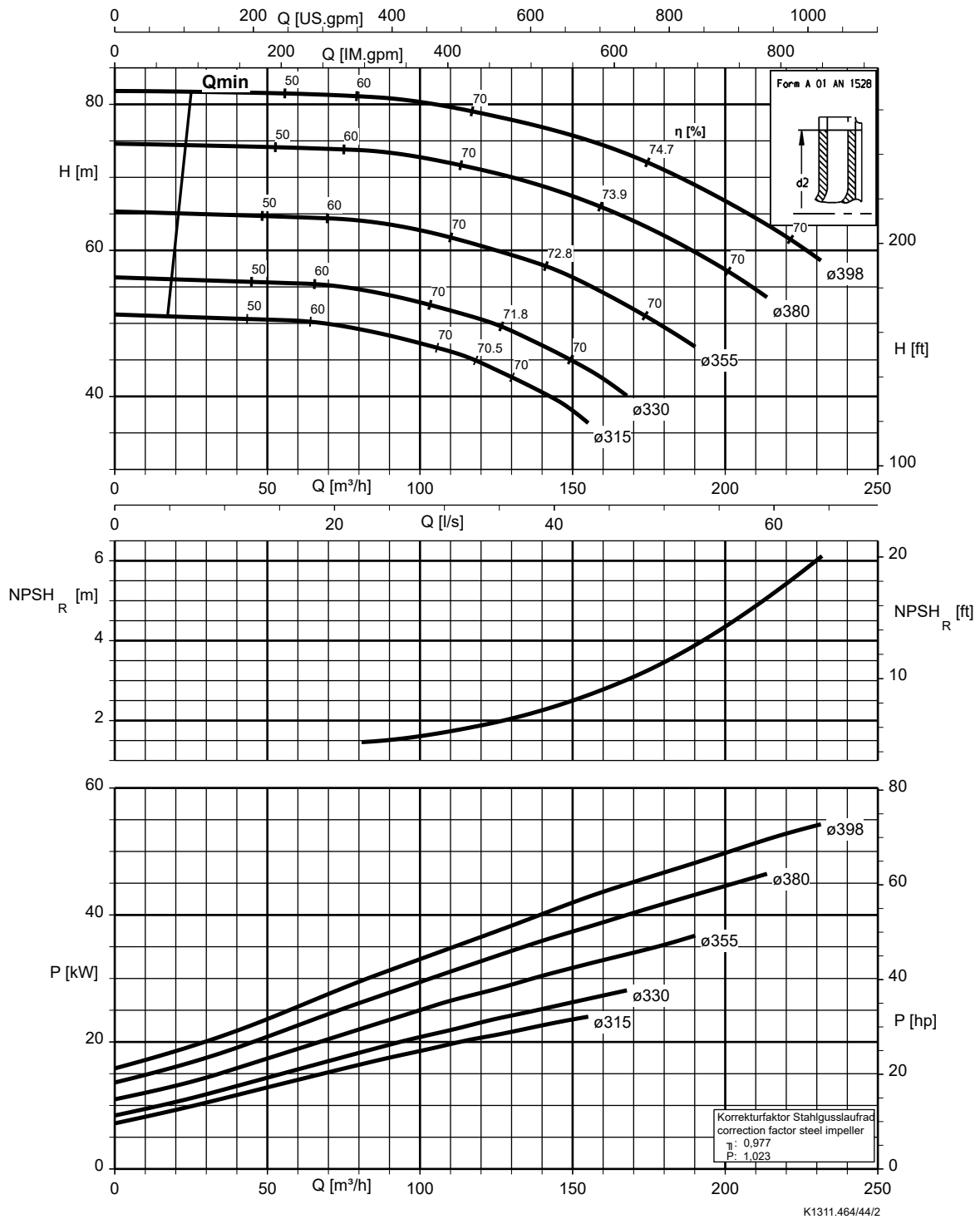
Etanorm SYT, Etanorm V, Etabloc



K1311.464/43/3

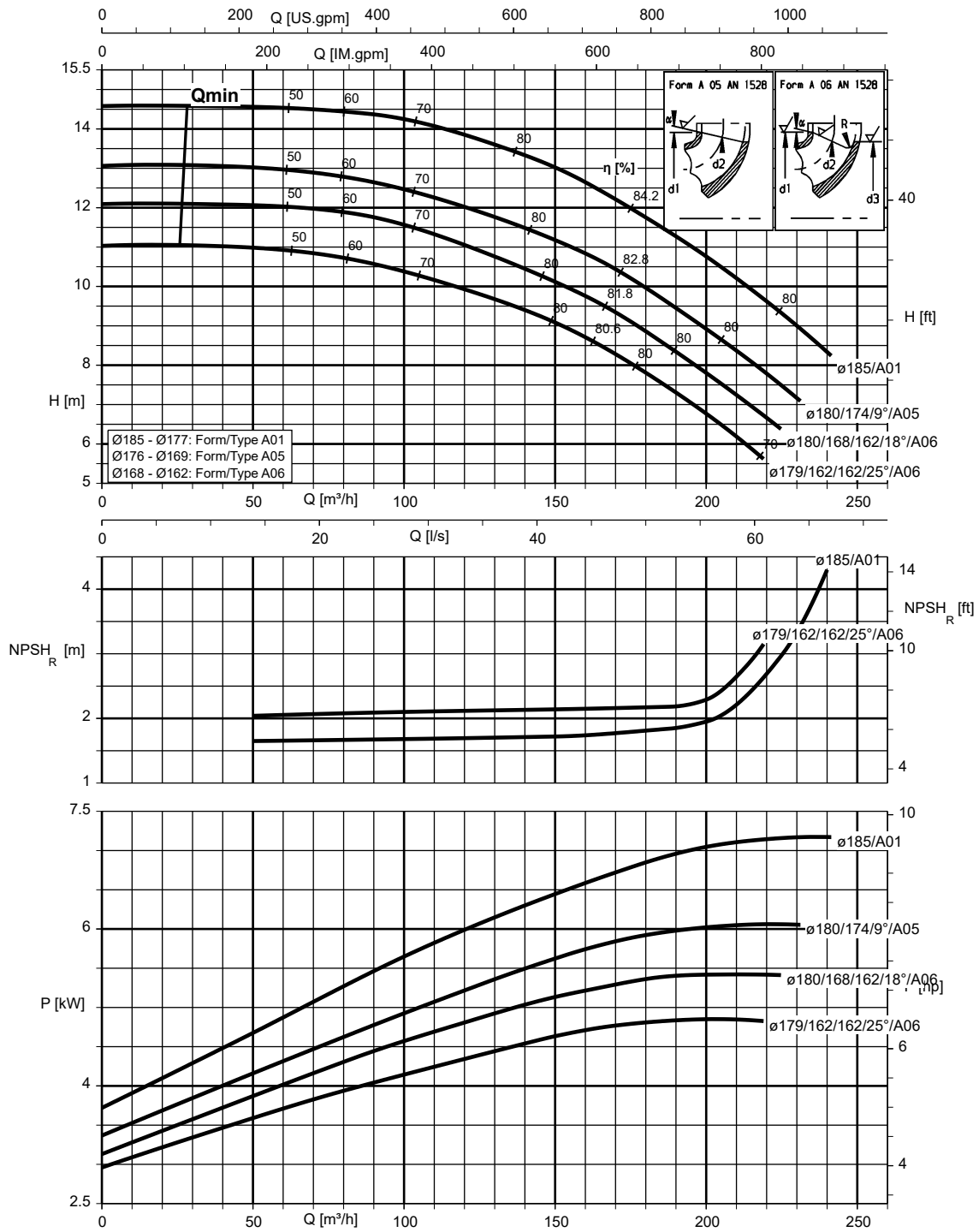
Etanorm 100-080-400, n = 1750 rpm

Etanorm V, Etabloc



Etanorm 125-100-160, n = 1750 rpm

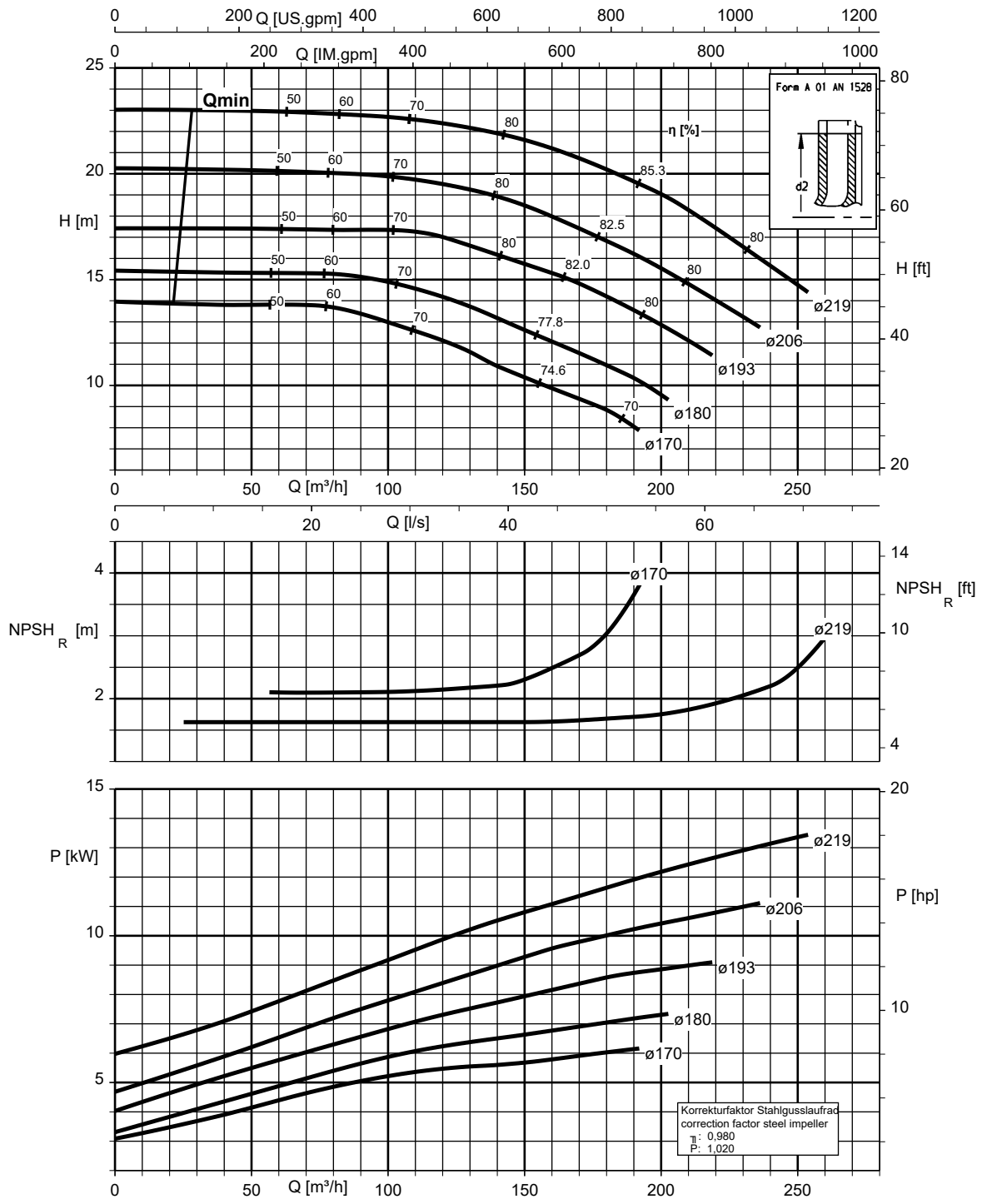
Etanorm SYT, Etanorm V, Etabloc



K1311.464/45/2

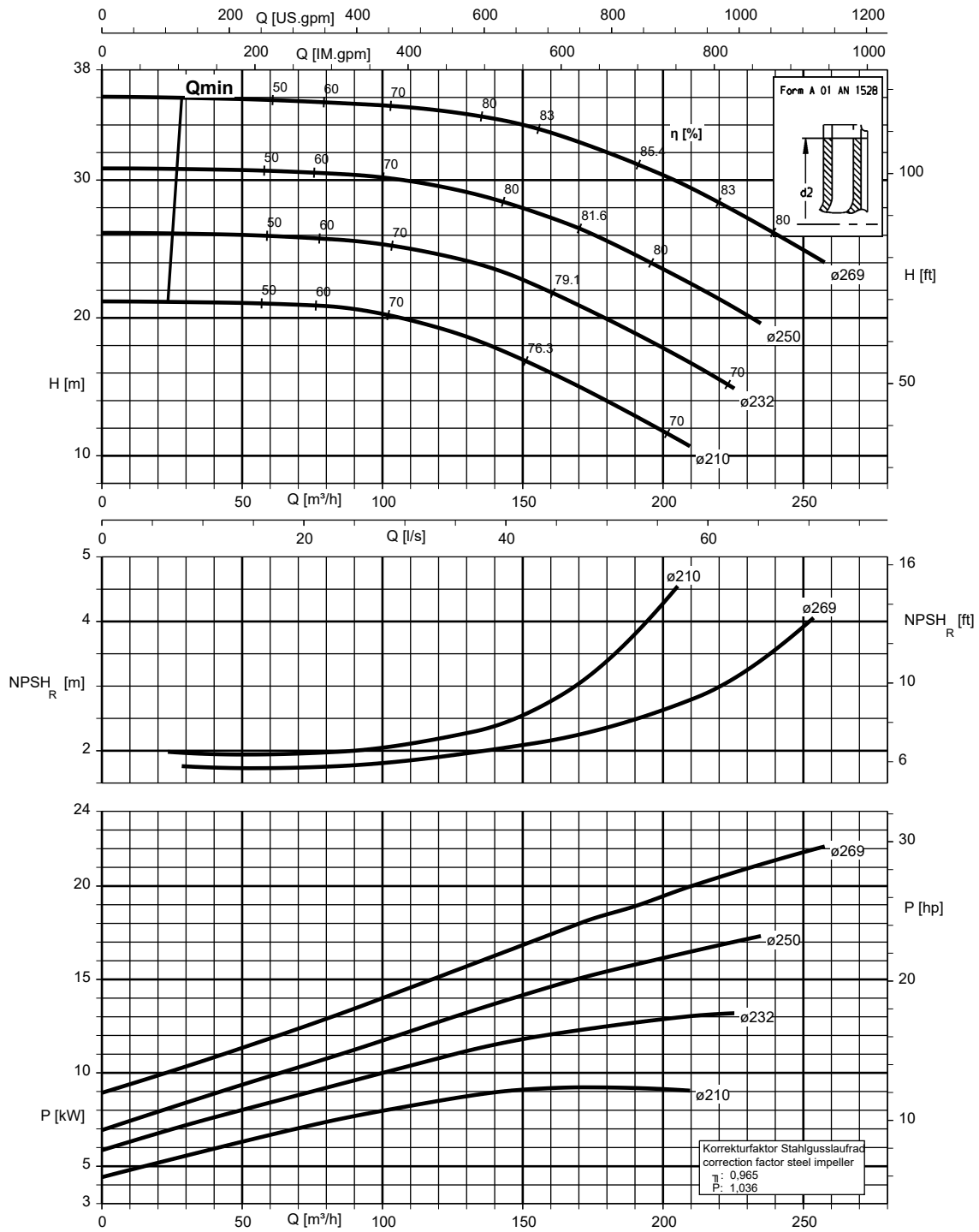
Etanorm 125-100-200, n = 1750 rpm

Etanorm SYT, Etanorm V, Etabloc



Etanorm 125-100-250, n = 1750 rpm

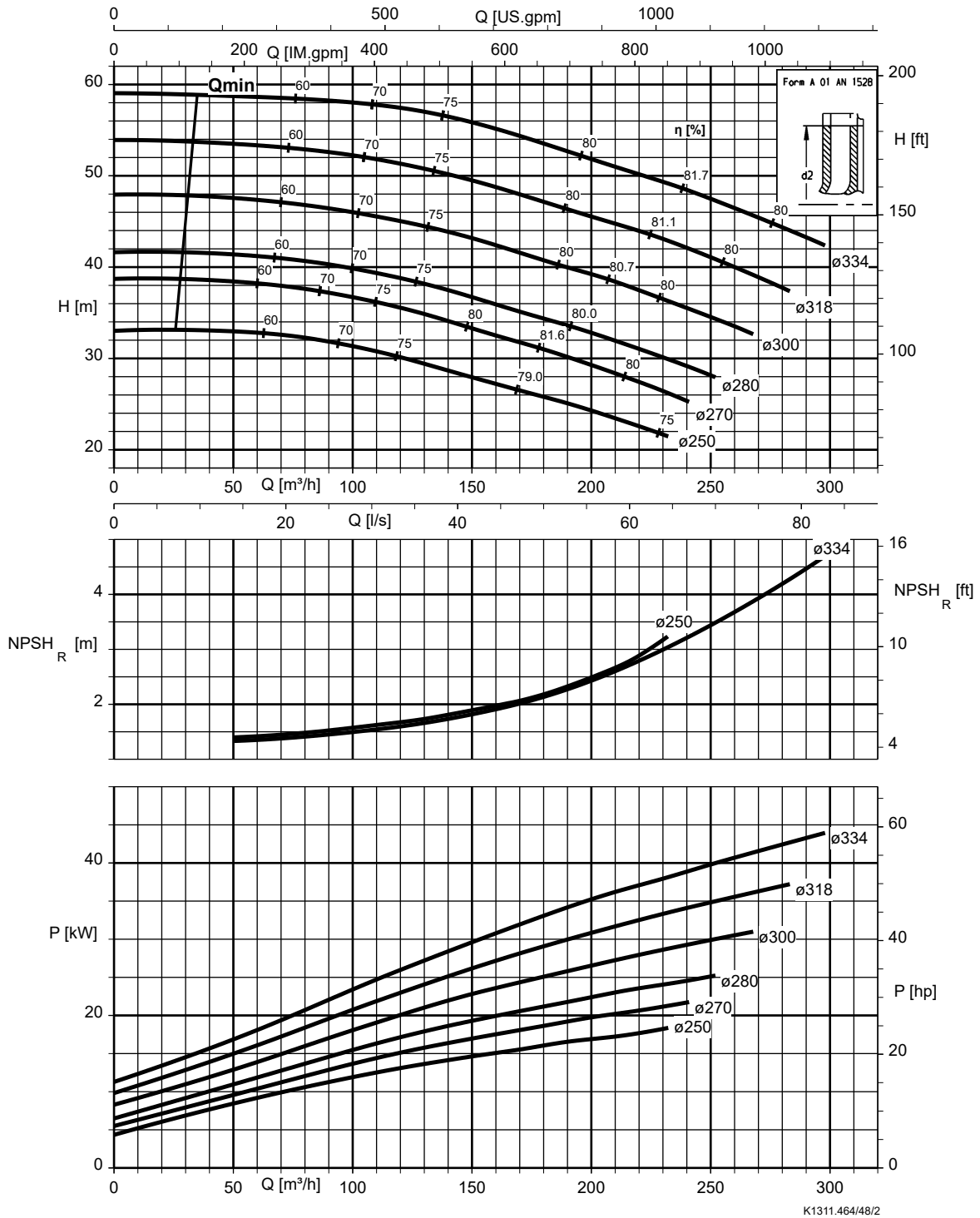
Etanorm SYT, Etanorm V, Etabloc



K1311.464/47/2

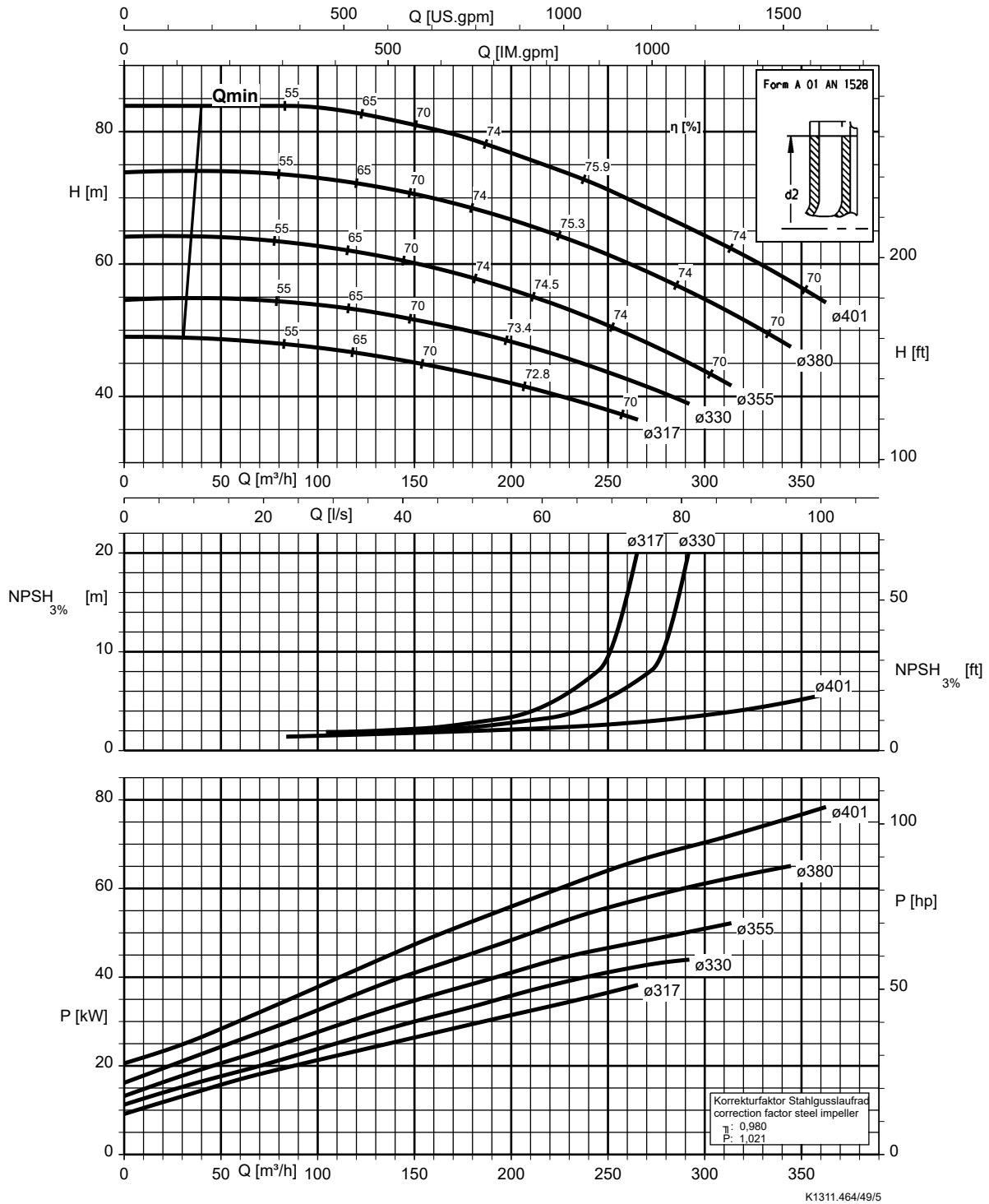
Etanorm 125-100-315, n = 1750 rpm

Etanorm SYT, Etanorm V, Etabloc



Etanorm 125-100-400, n = 1750 rpm

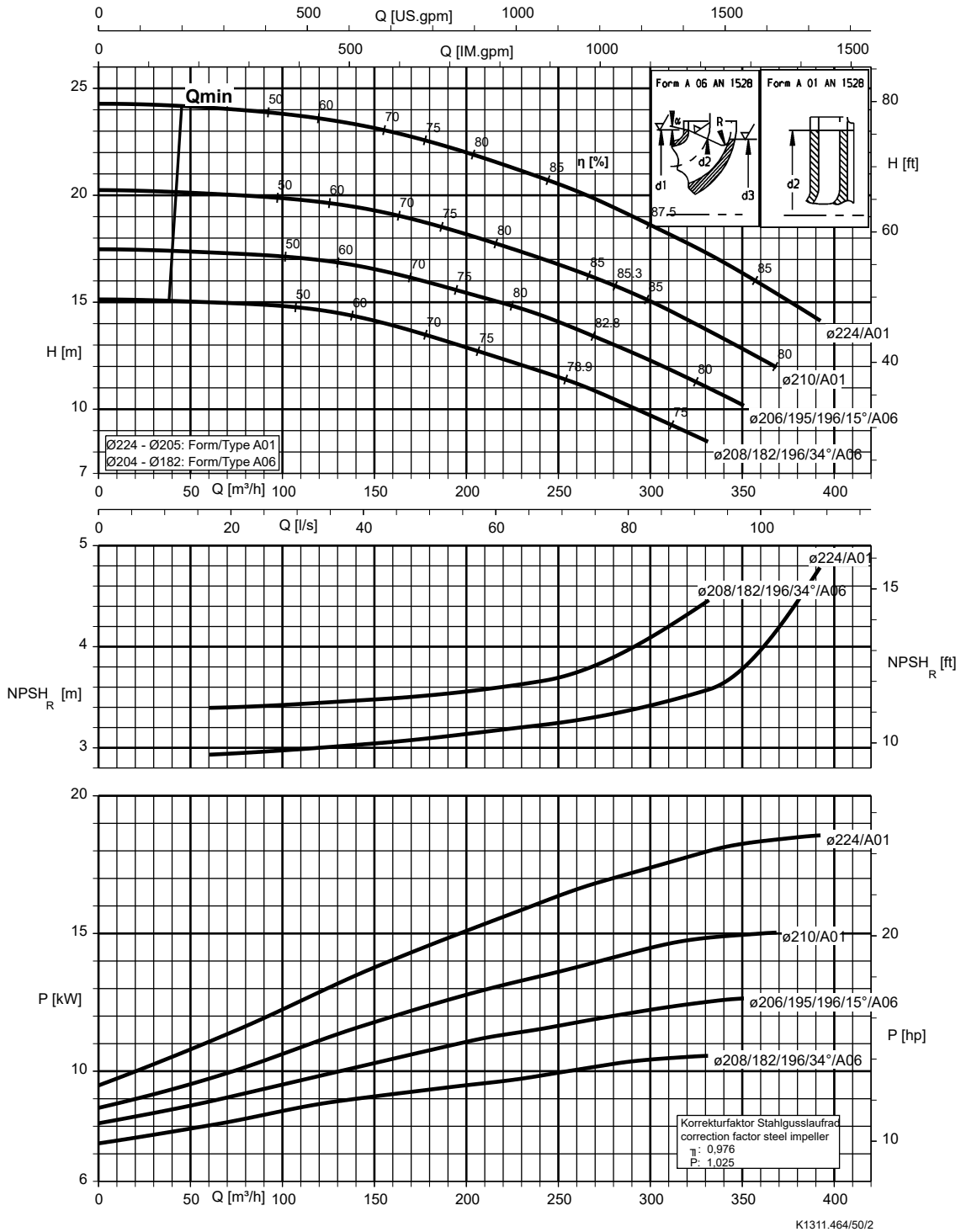
Etanorm V, Etabloc



1311.46/11-EN-US

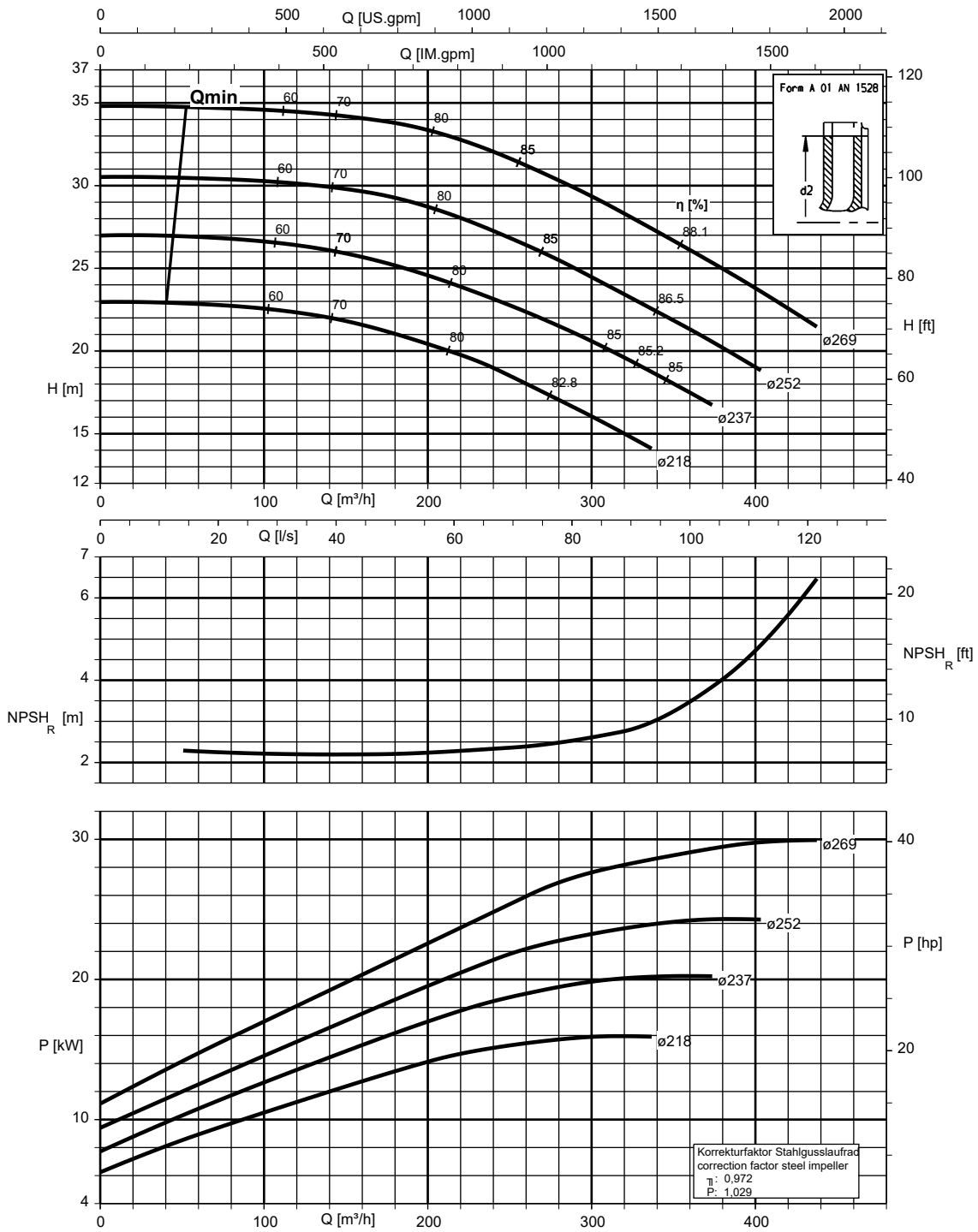
Etanorm 150-125-200, n = 1750 rpm

Etanorm SYT, Etanorm V, Etabloc



Etanorm 150-125-250, n = 1750 rpm

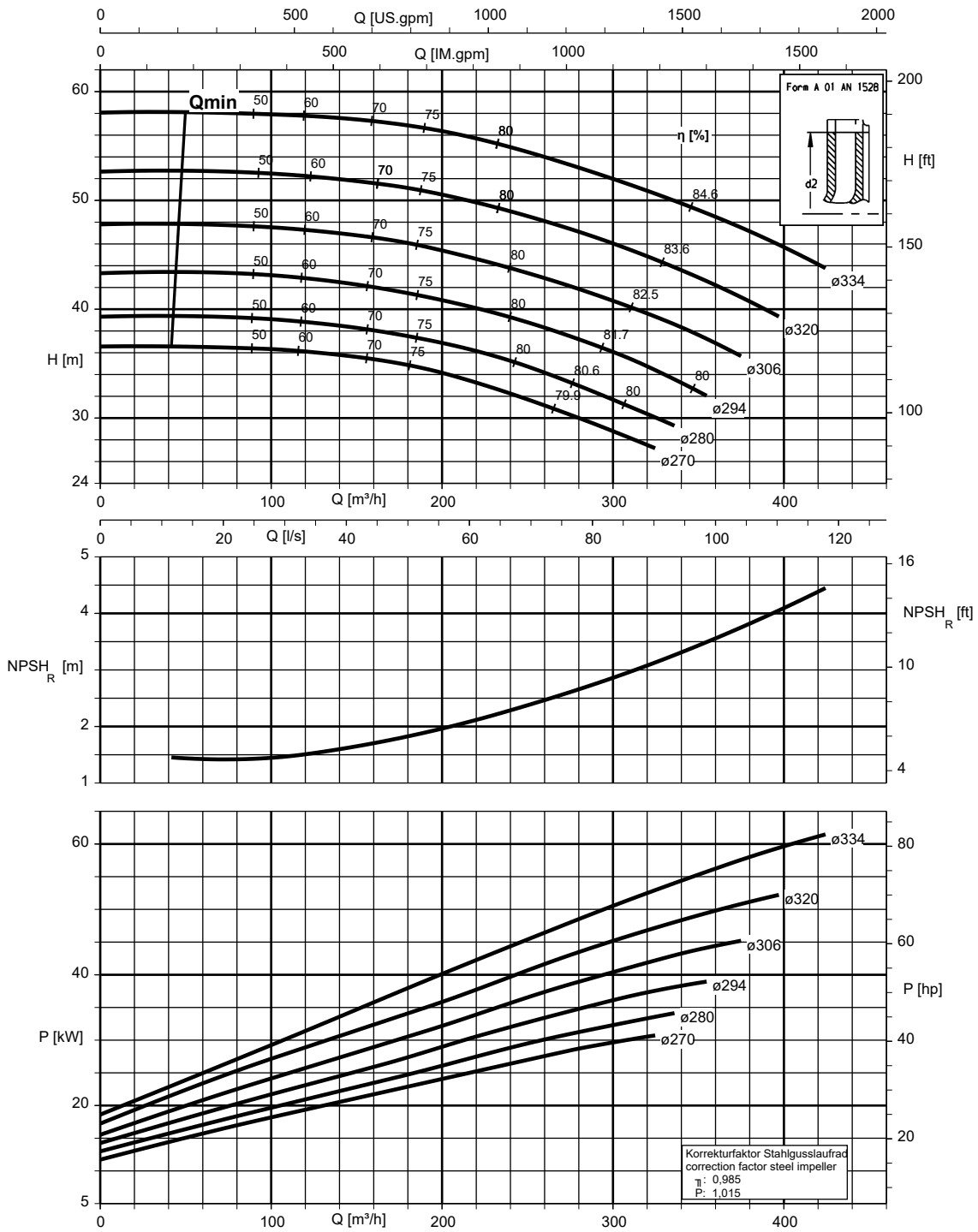
Etanorm SYT, Etanorm V, Etabloc



K1311.464/51/2

Etanorm 150-125-315, n = 1750 rpm

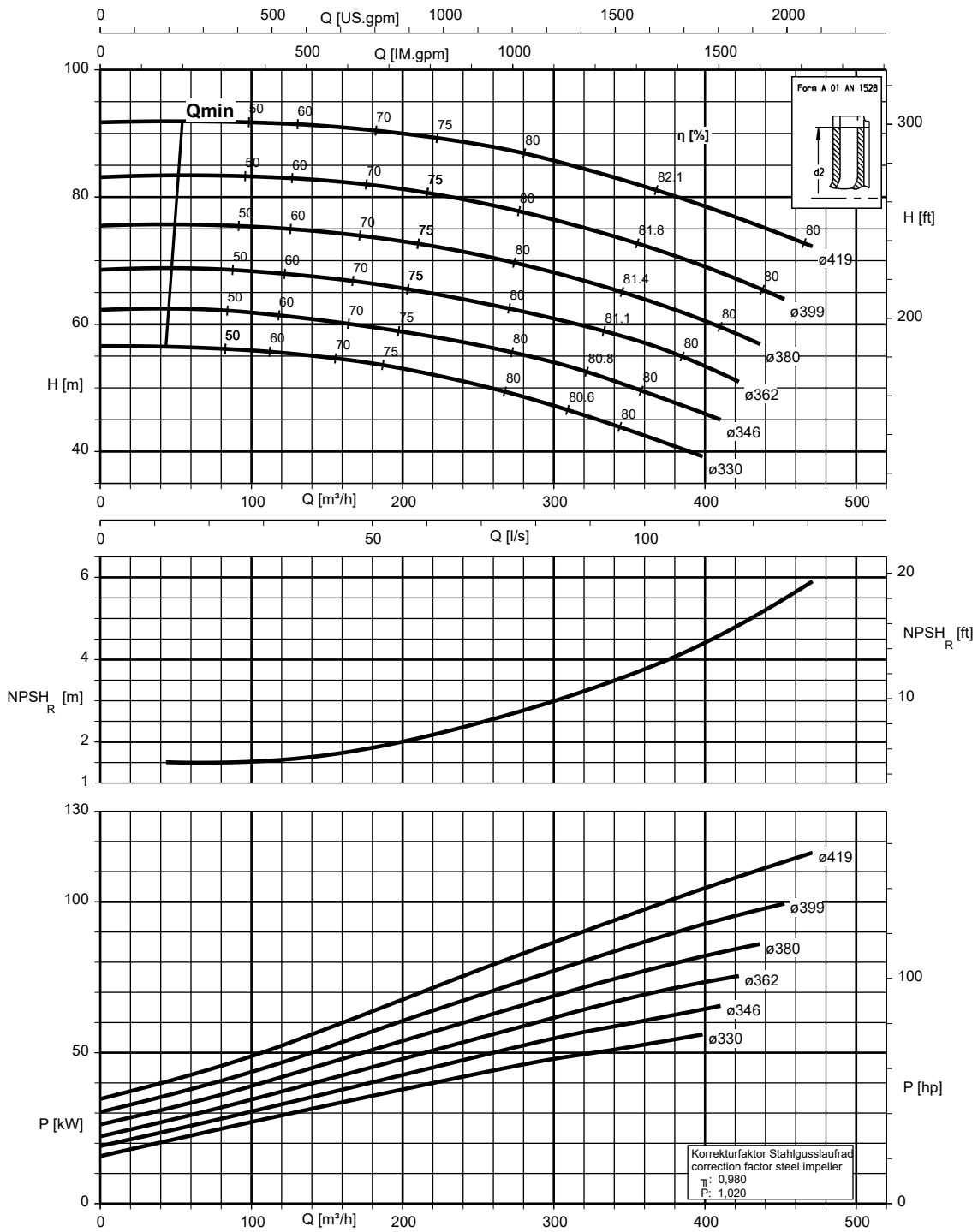
Etanorm SYT, Etanorm V, Etabloc



K1311.464/52/2

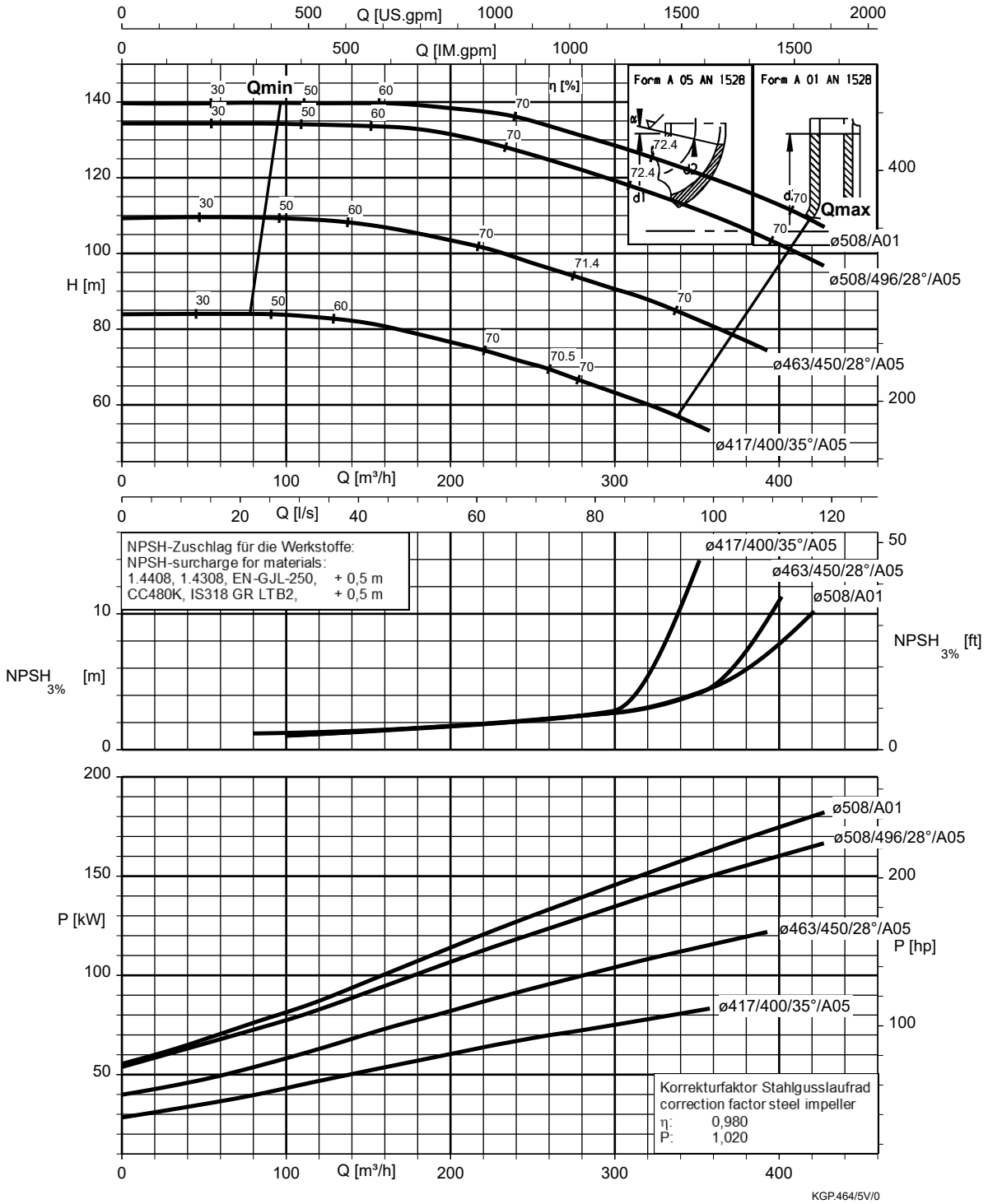
Etanorm 150-125-400, n = 1750 rpm

Etanorm SYT, Etanorm V



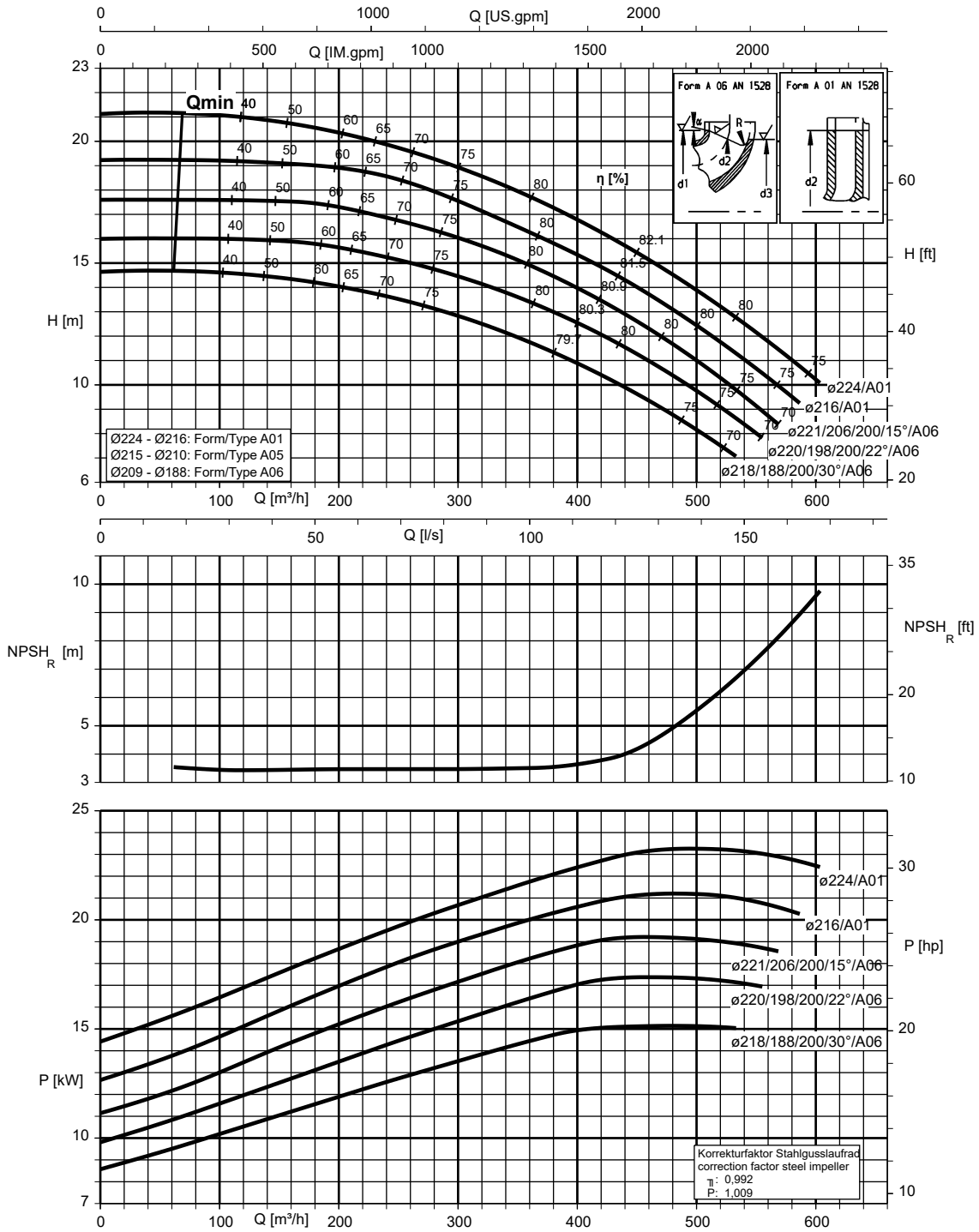
K1311.464/53/2

Etanorm 150-125-510, n = 1750 min⁻¹



Etanorm 200-150-200, n = 1750 rpm

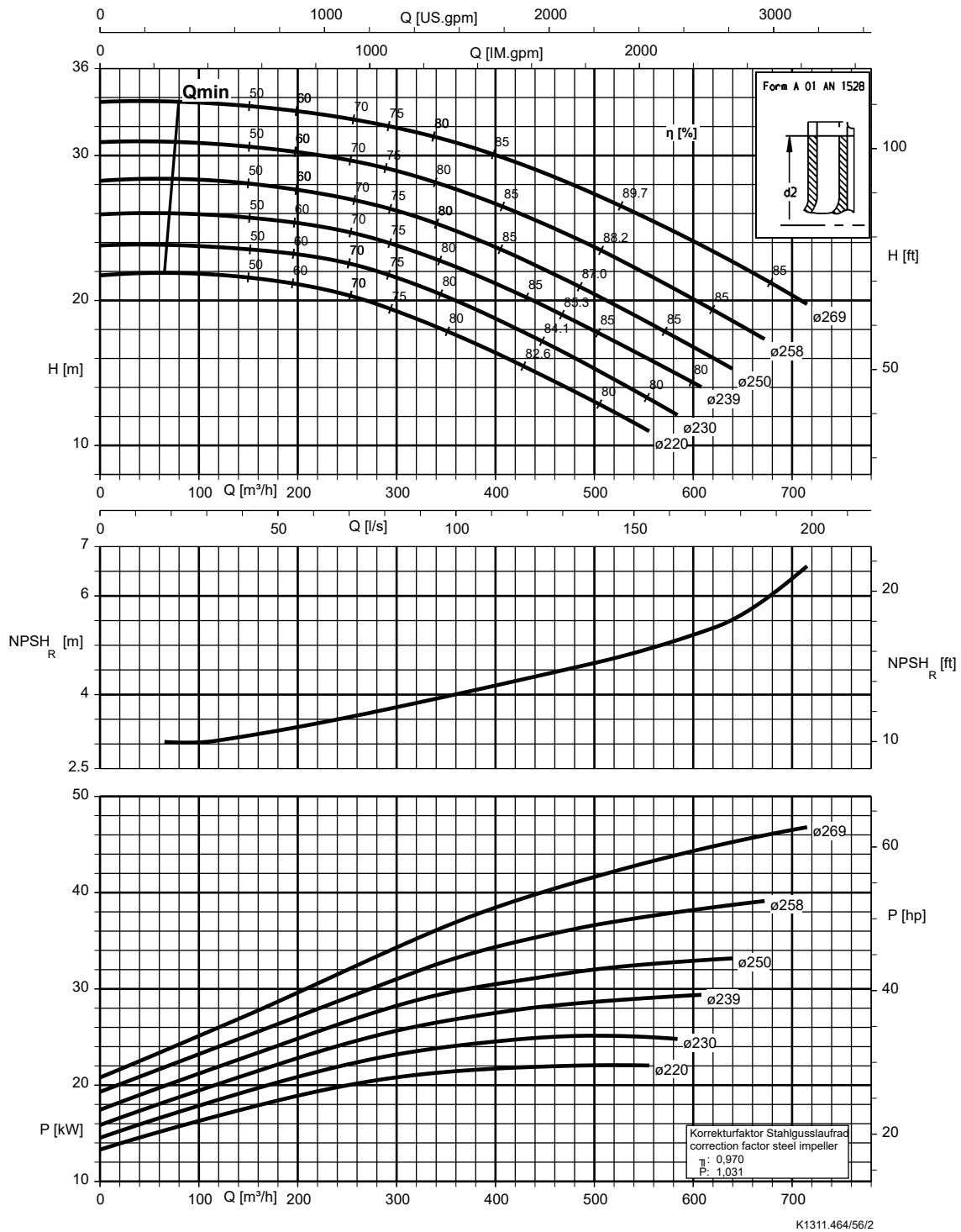
Etanorm V, Etabloc



K1311.464/55/2

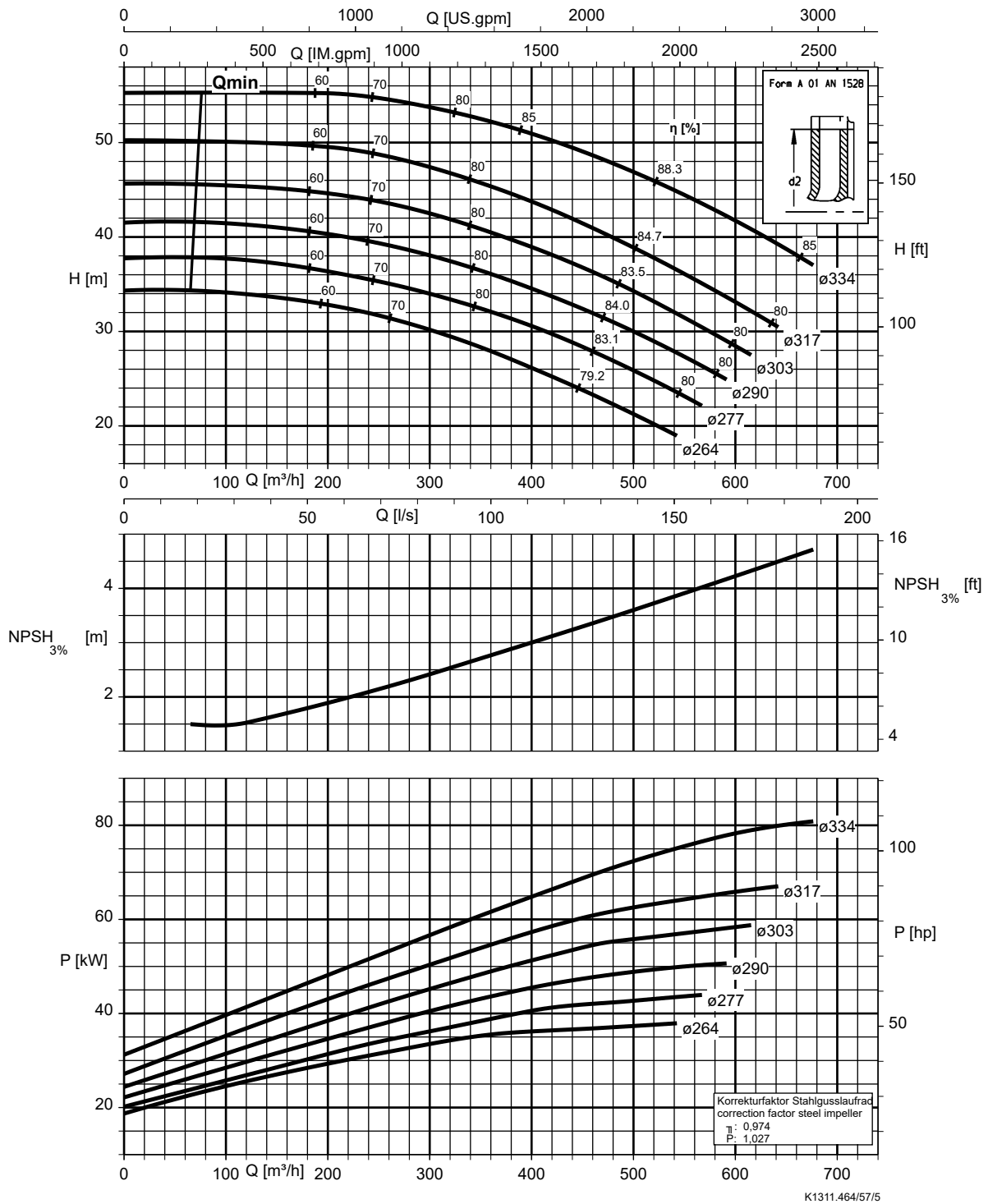
Etanorm 200-150-250, n = 1750 rpm

Etanorm V, Etabloc



Etanorm 200-150-315, n = 1750 rpm

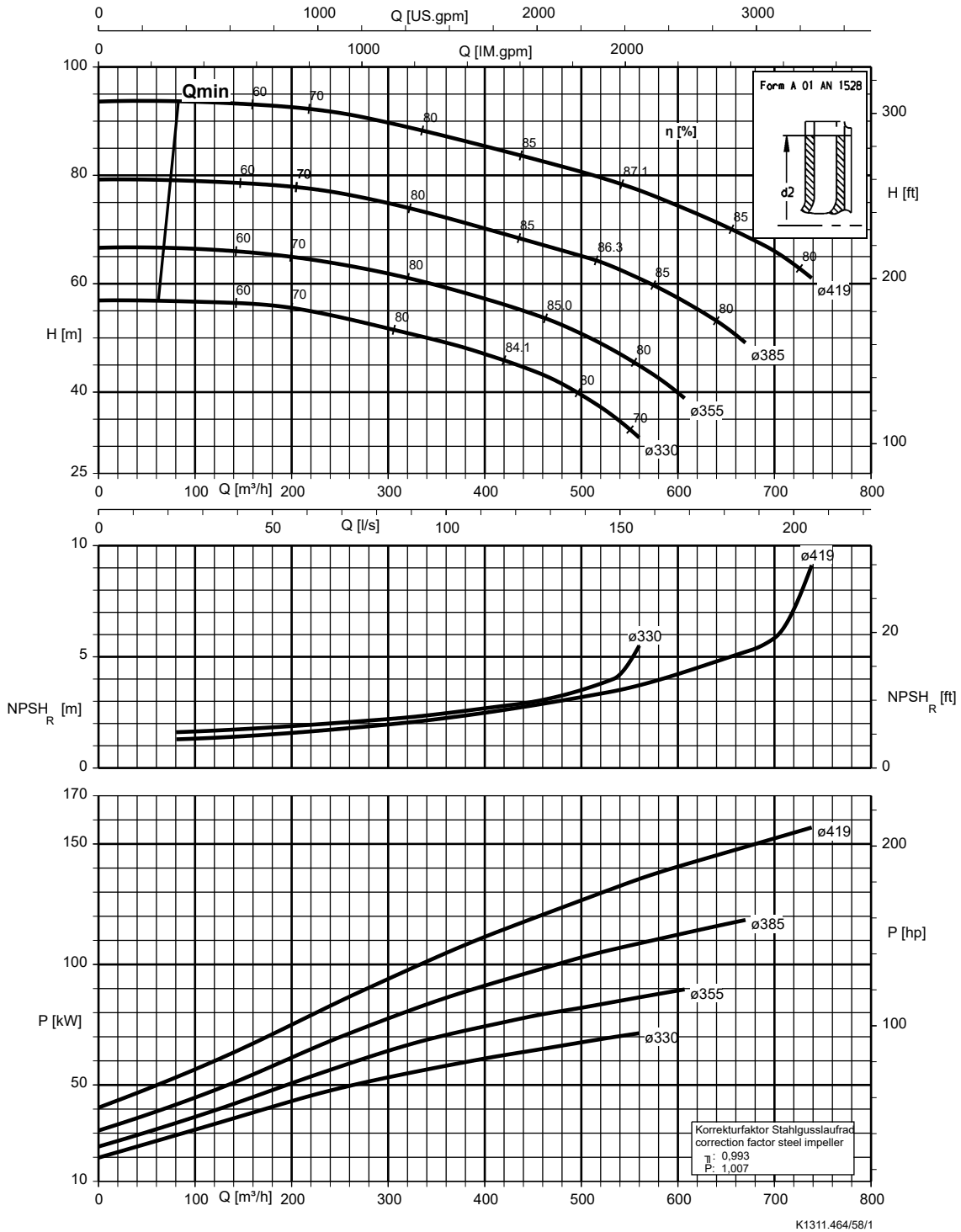
Etanorm SYT, Etanorm V, Etabloc



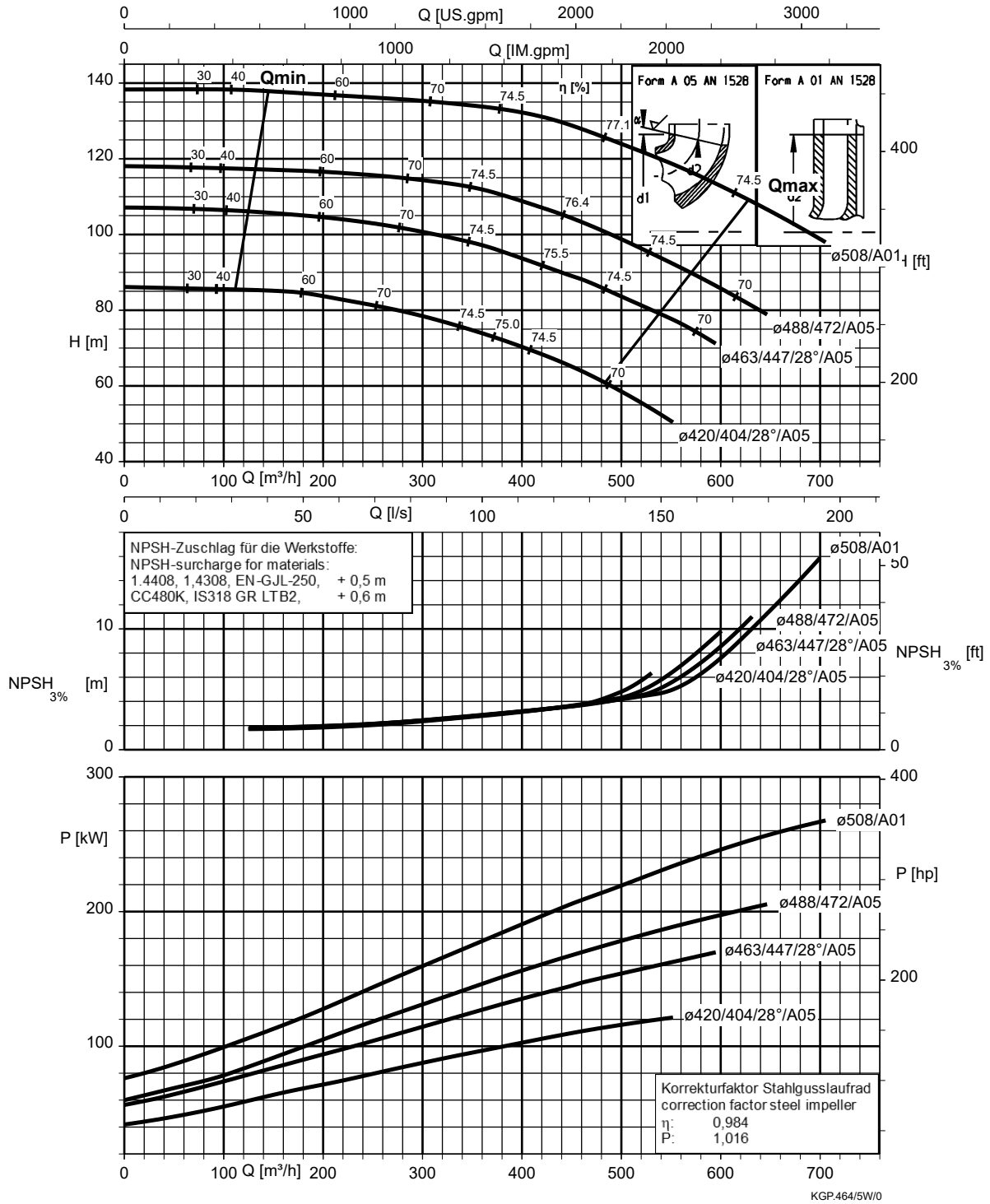
1311.46/11-EN-US

Etanorm 200-150-400, n = 1750 rpm

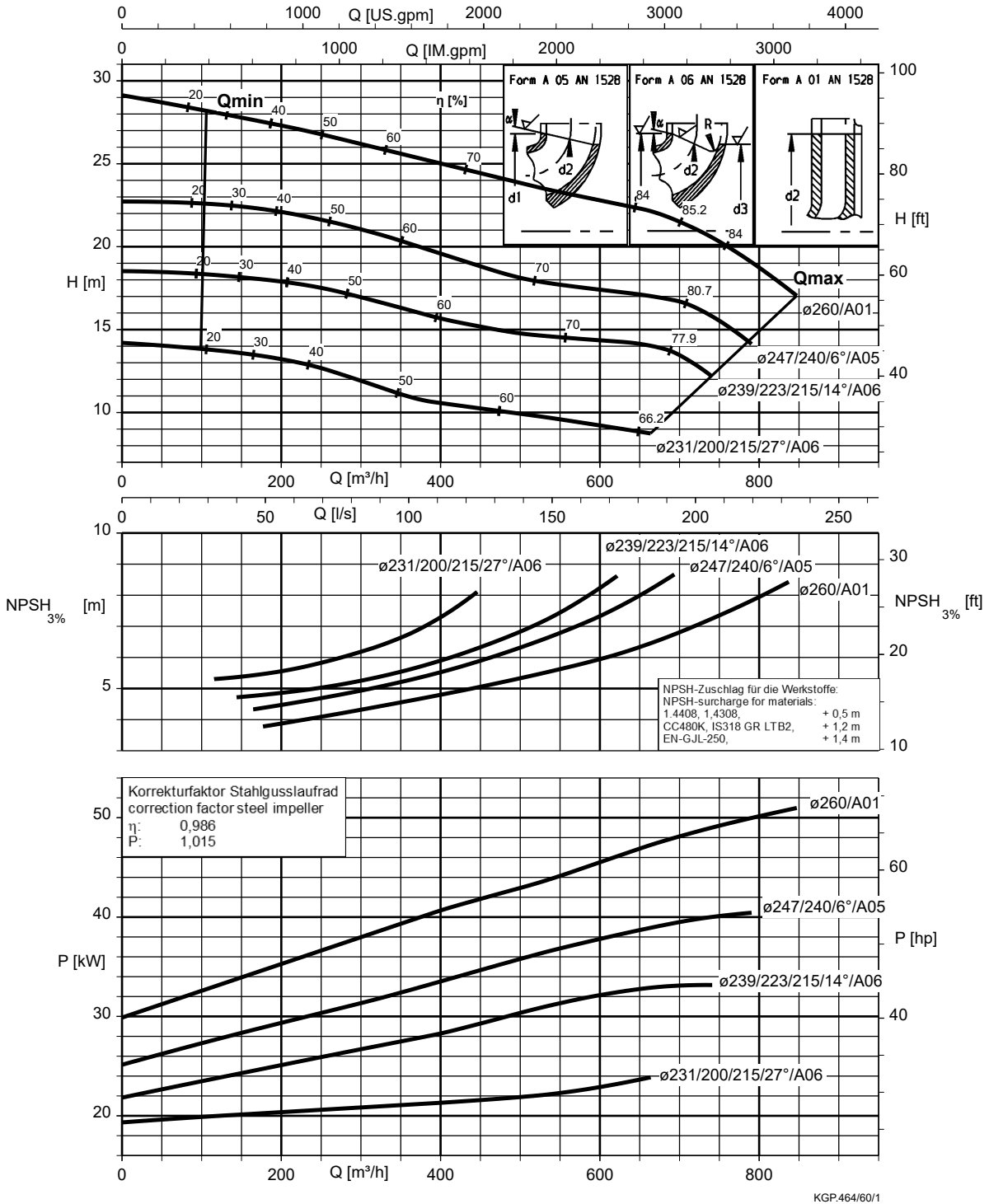
Etanorm SYT, Etanorm V



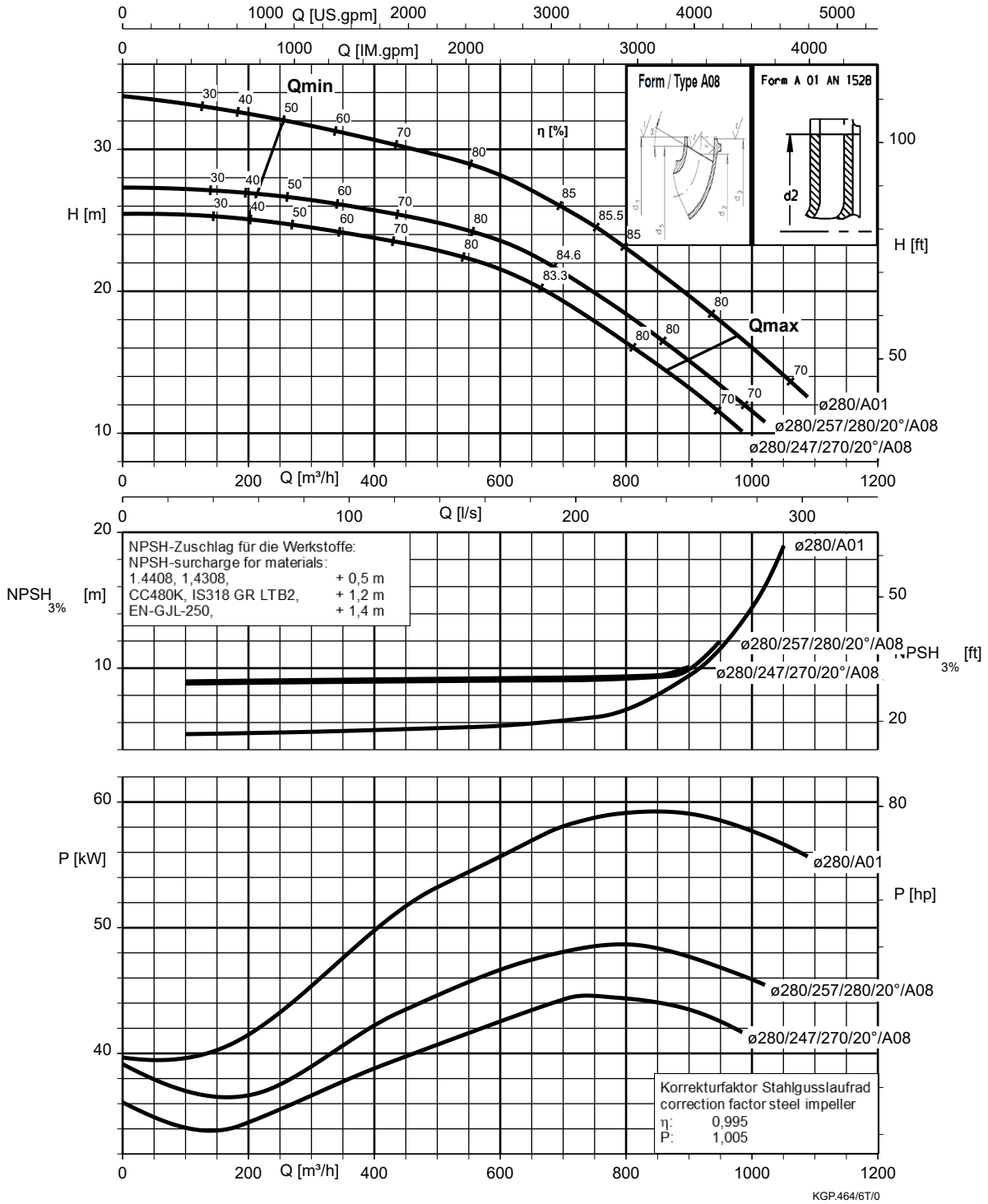
Etanorm 200-150-510, $n = 1750 \text{ min}^{-1}$



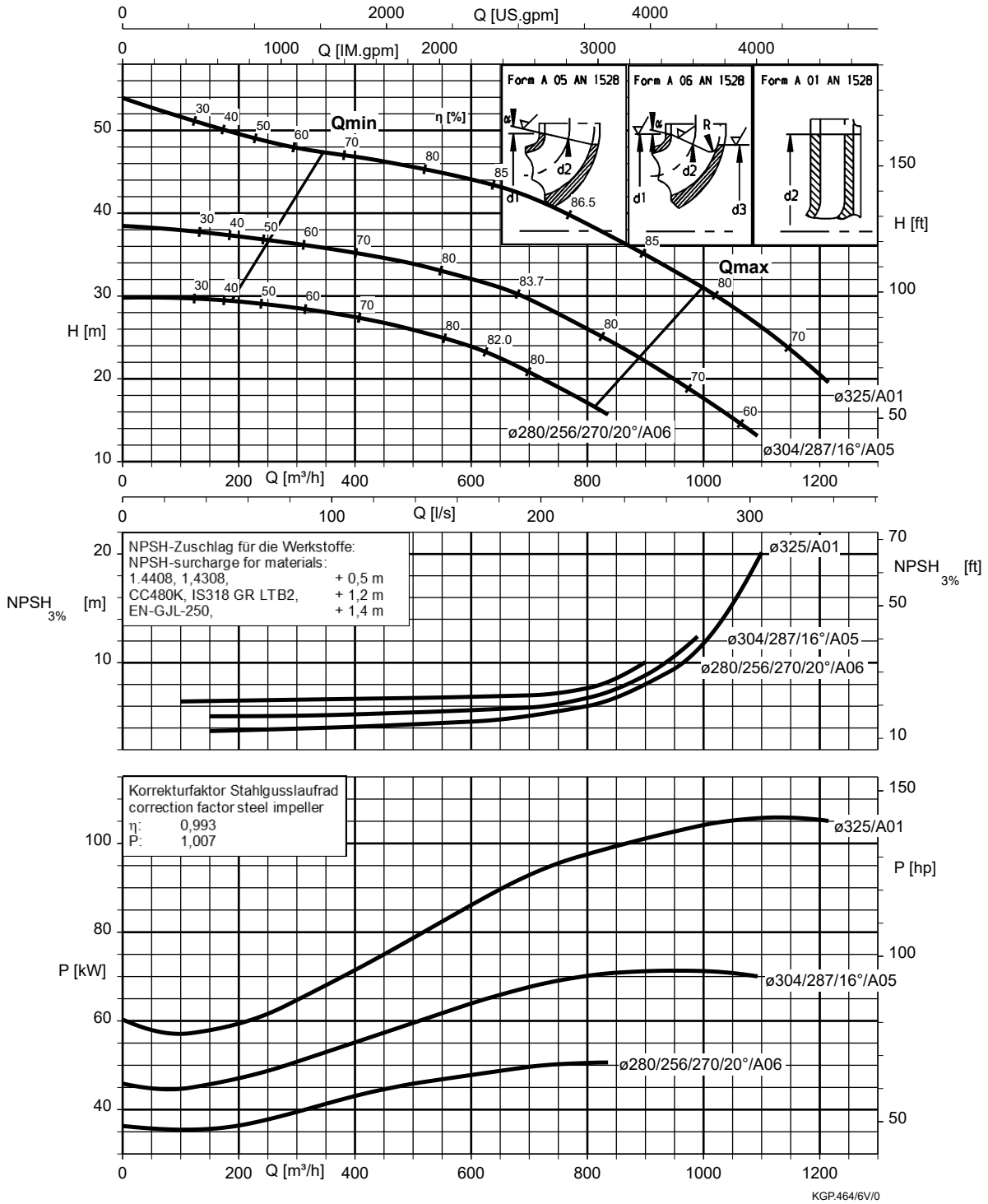
Etanorm 200-200-250, $n = 1750 \text{ min}^{-1}$



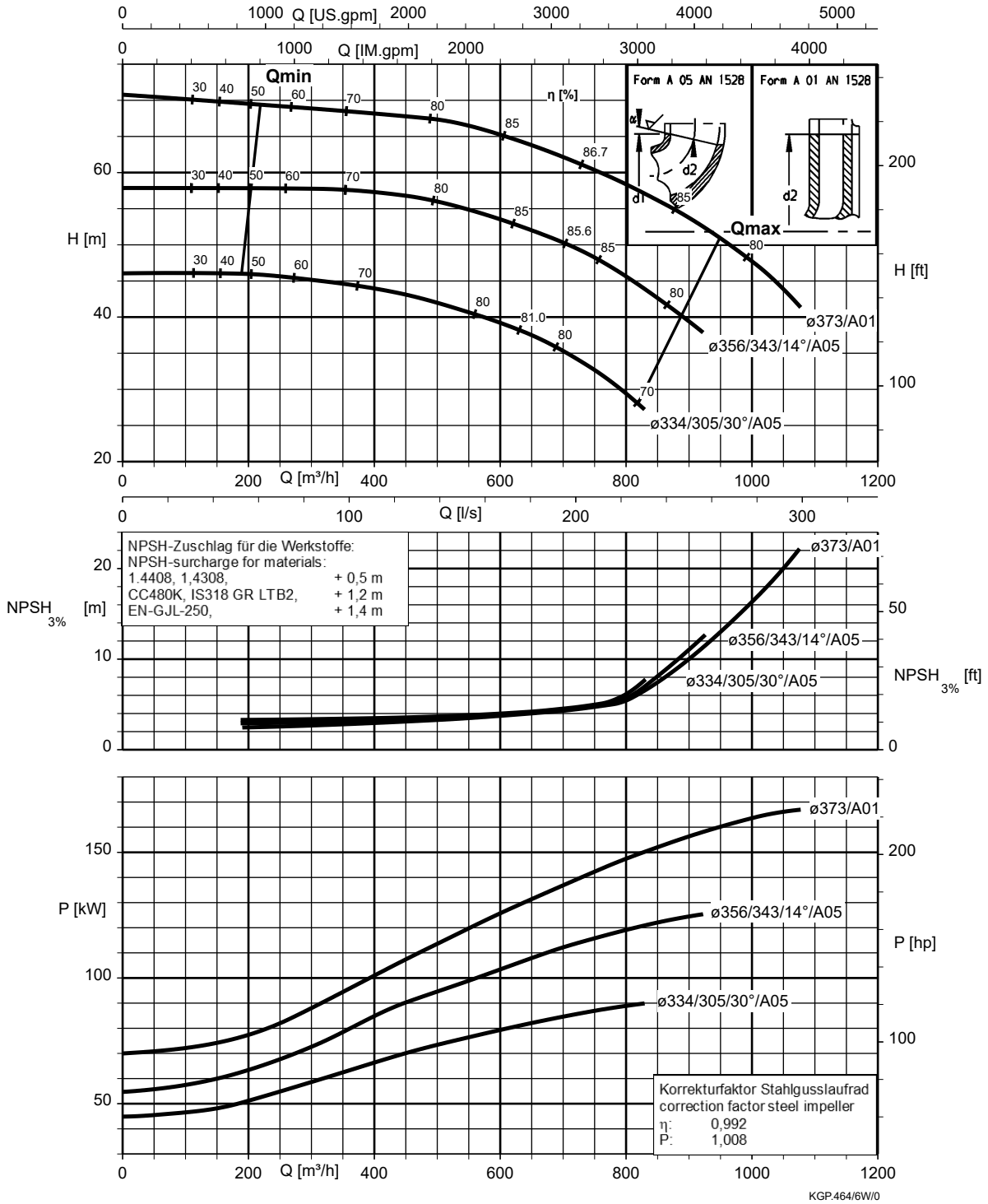
Etanorm 250-200-275, n = 1750 min⁻¹



Etanorm 250-200-320, n = 1750 min⁻¹

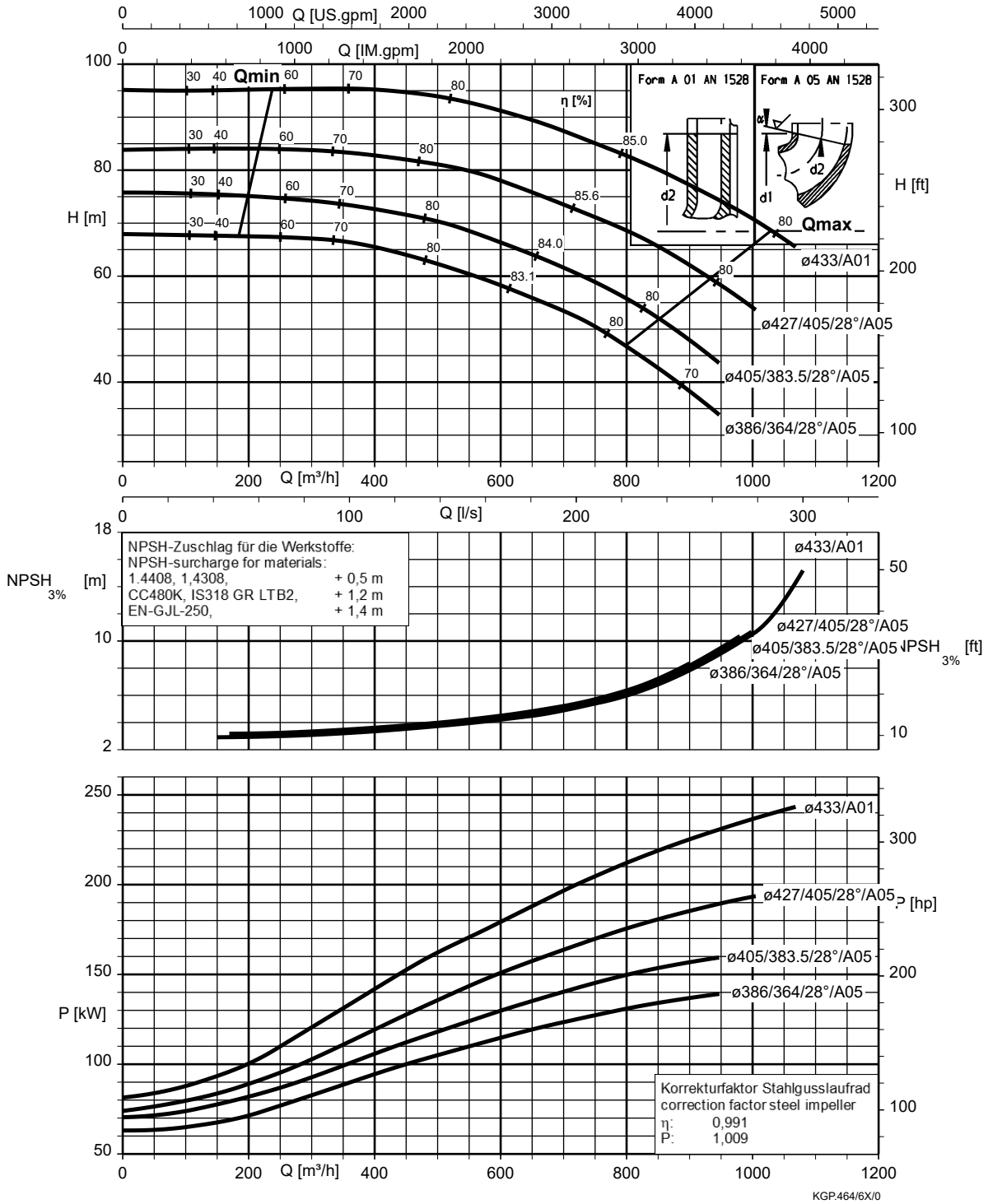


Etanorm 250-200-375, n = 1750 min⁻¹

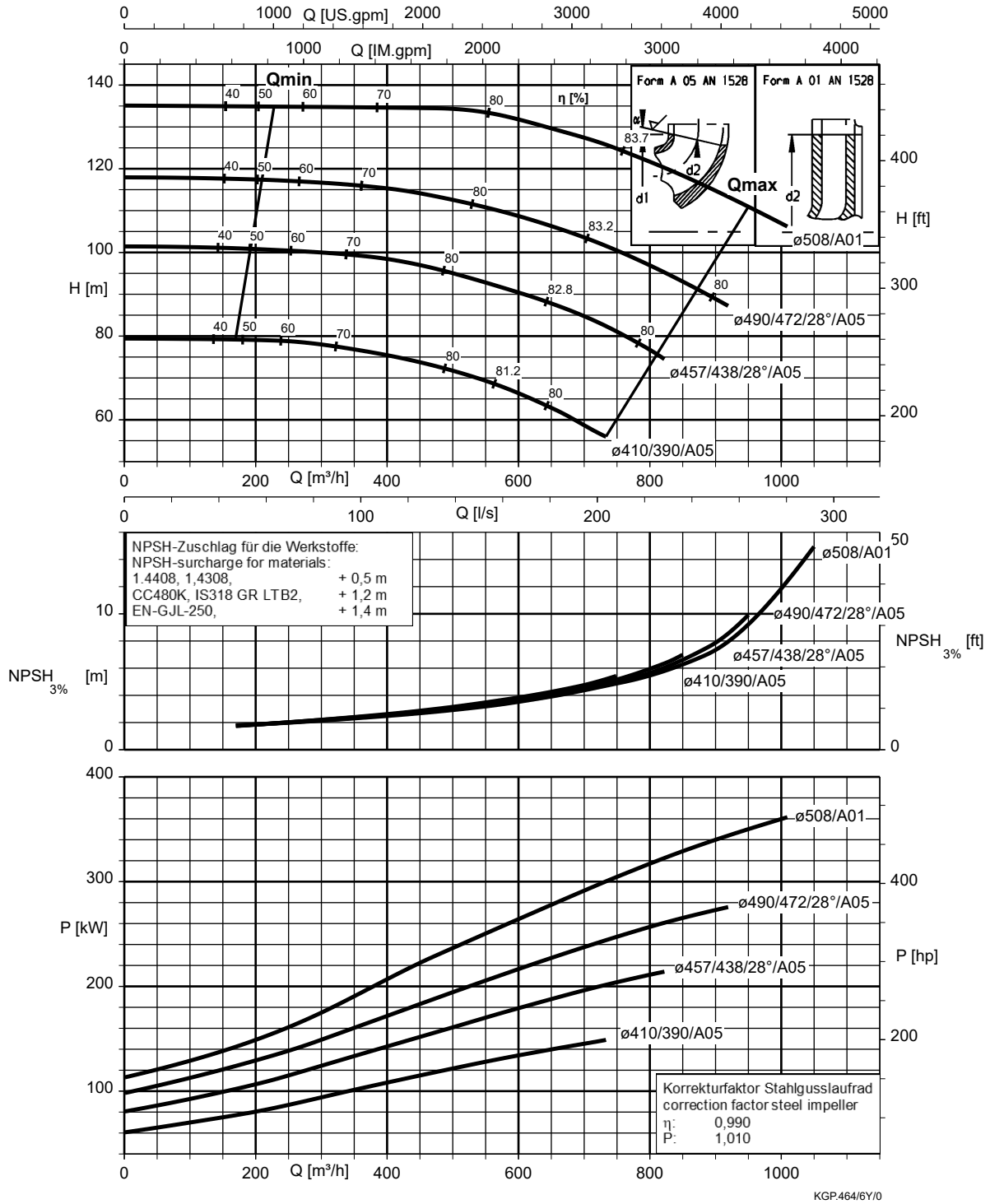


1311.46/11-EN-US

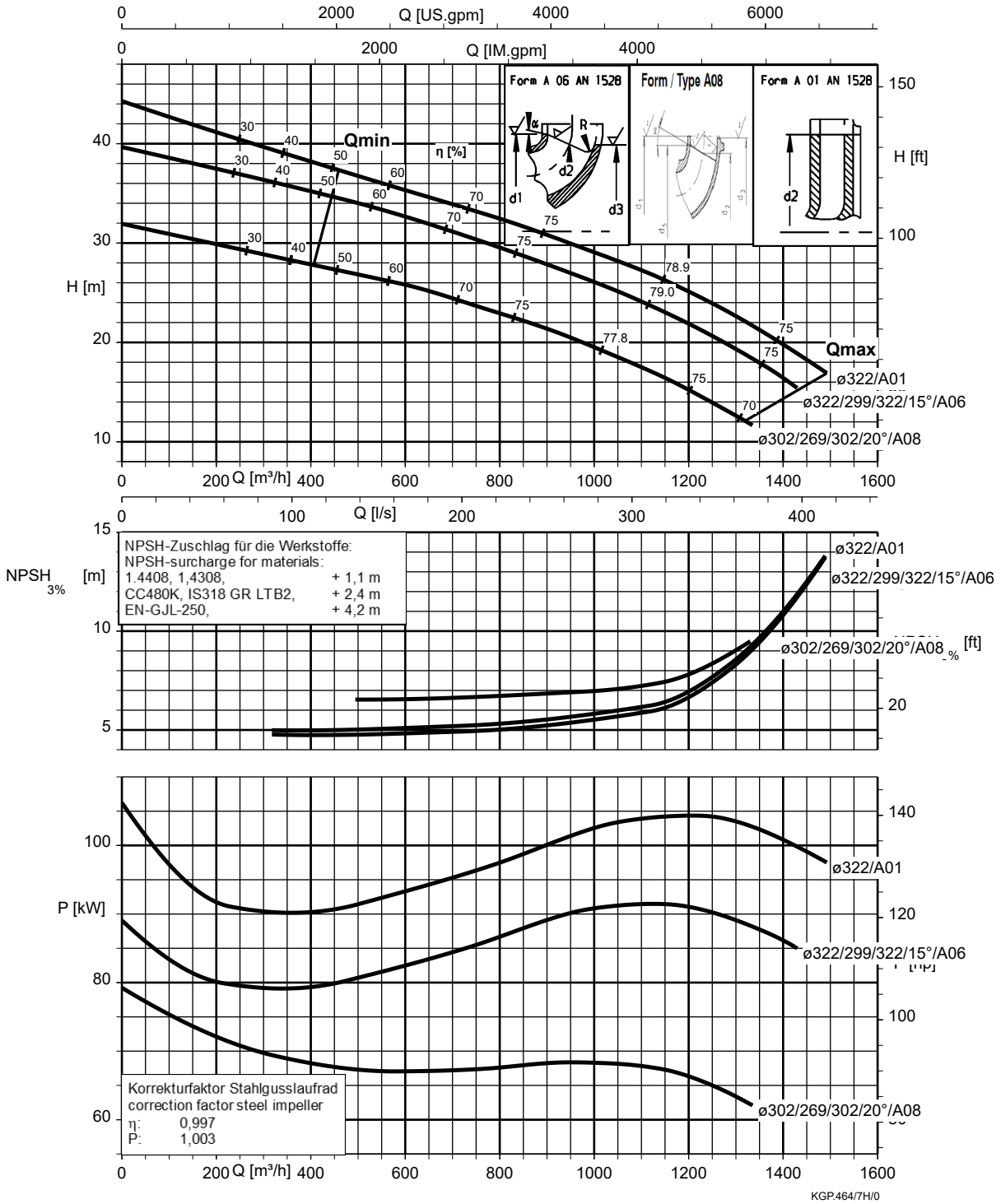
Etanorm 250-200-435 , n = 1750 min⁻¹



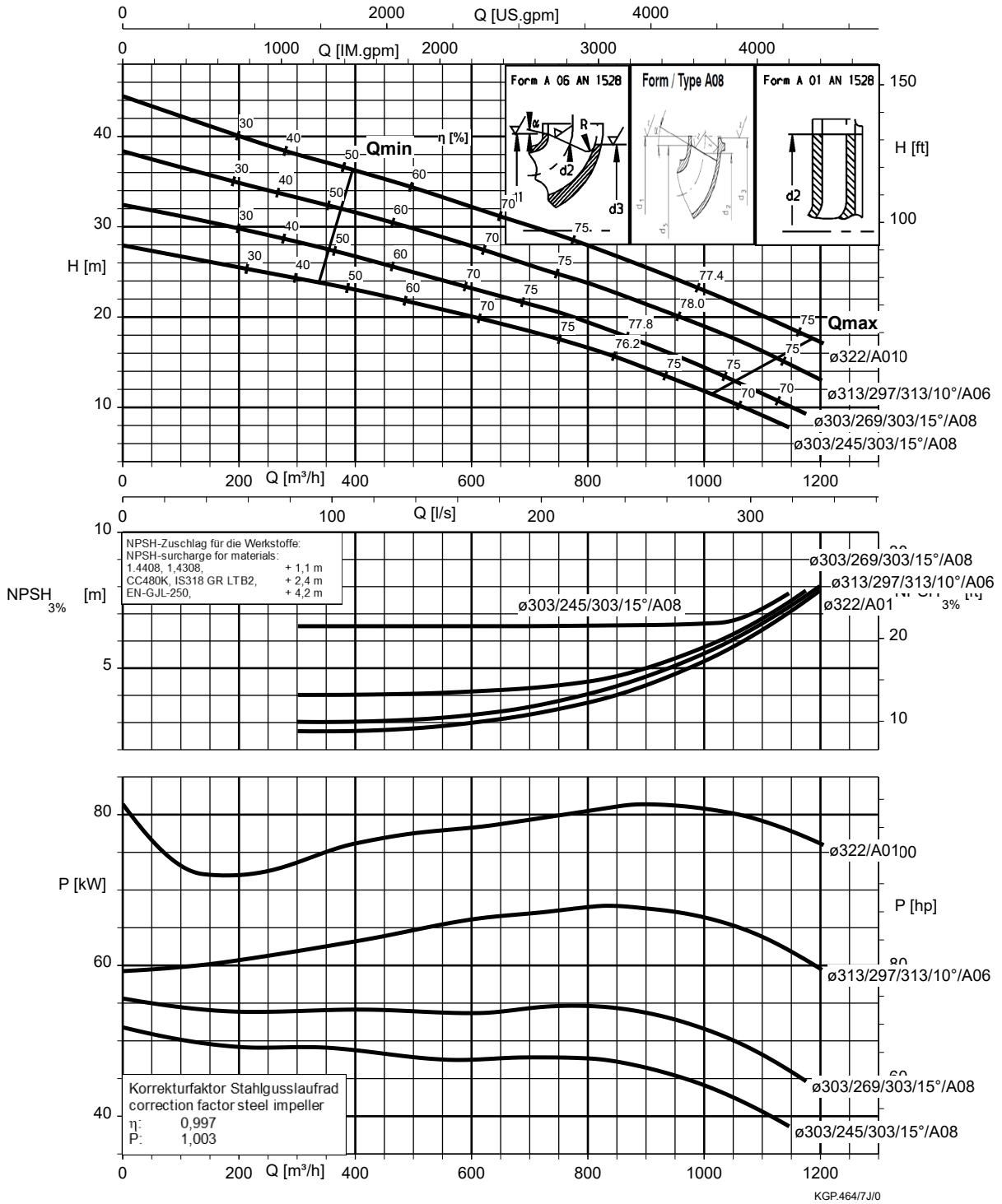
Etanorm 250-200-510 , n = 1750 min⁻¹



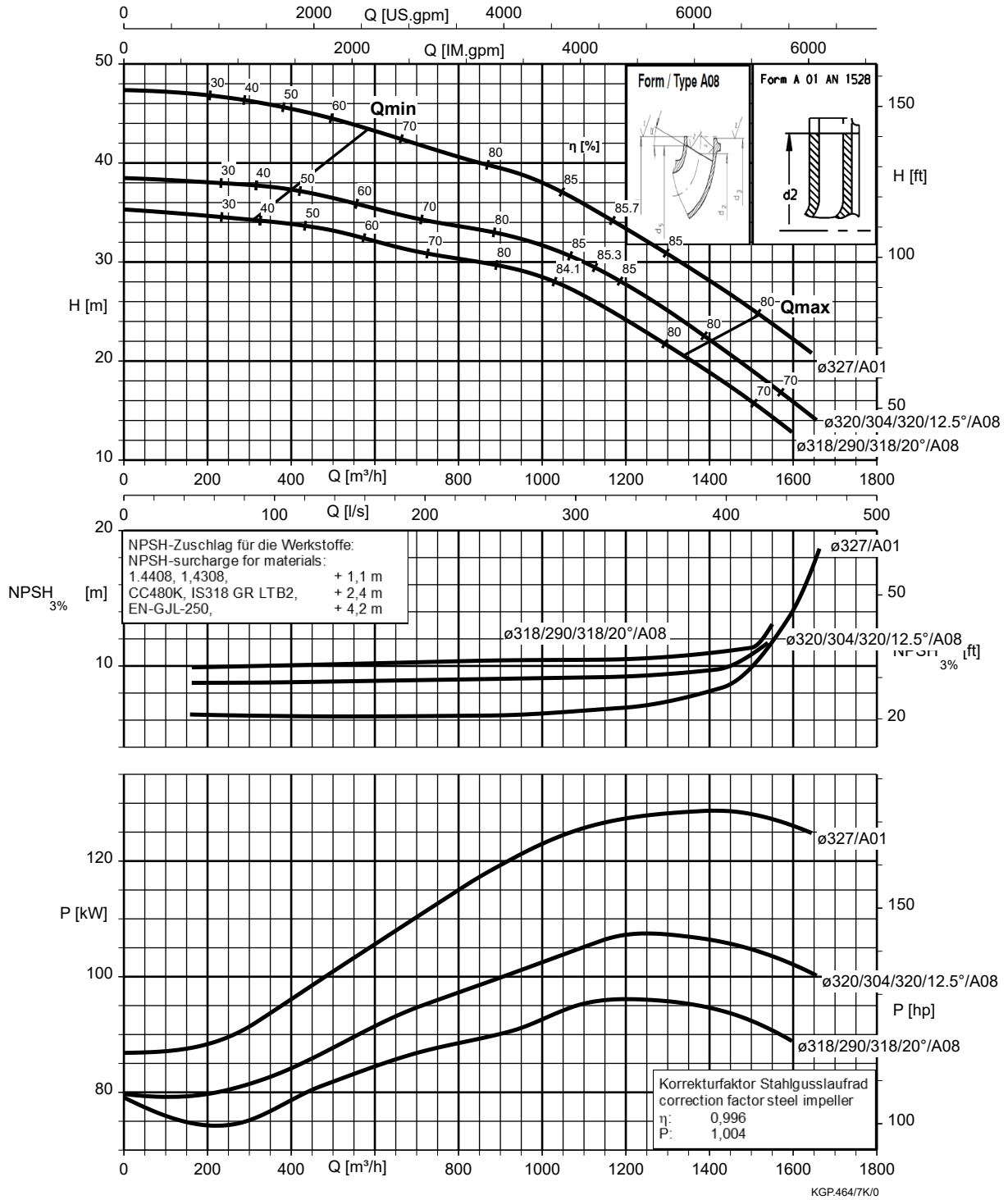
Etanorm 300-250-295, n = 1750 min⁻¹



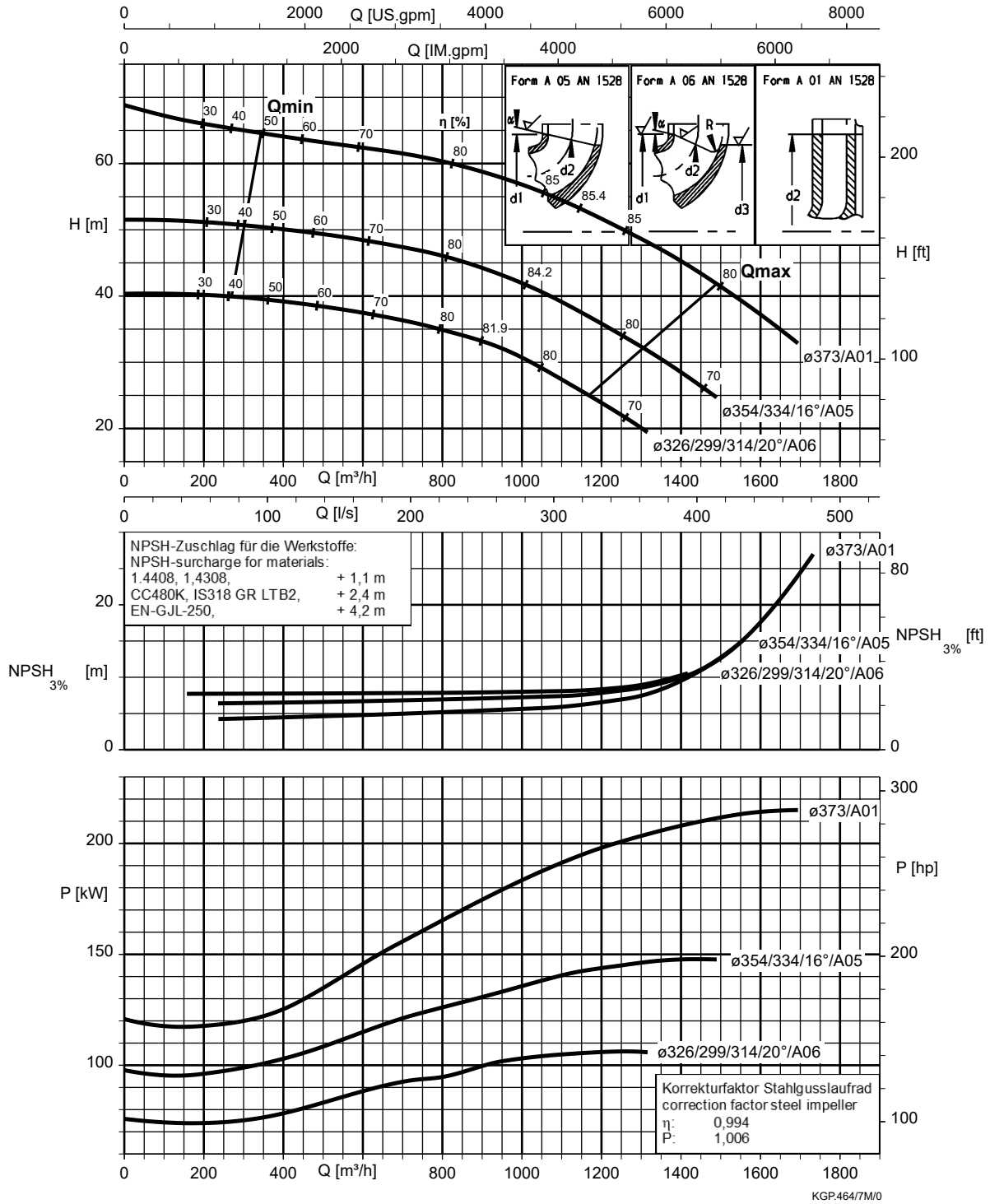
Etanorm 300-250-295.1 , n = 1750 min⁻¹



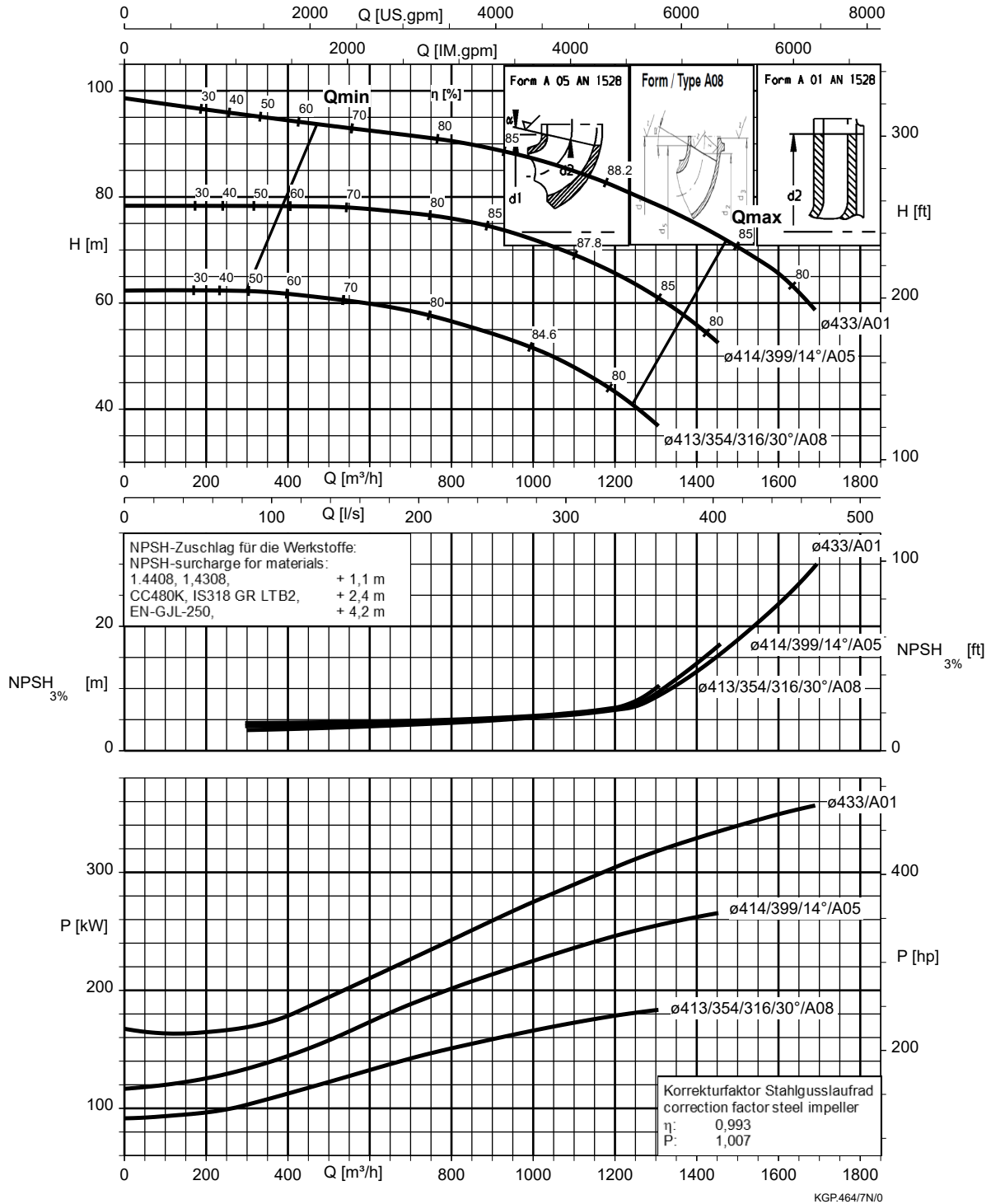
Etanorm 300-250-320, n = 1750 min⁻¹



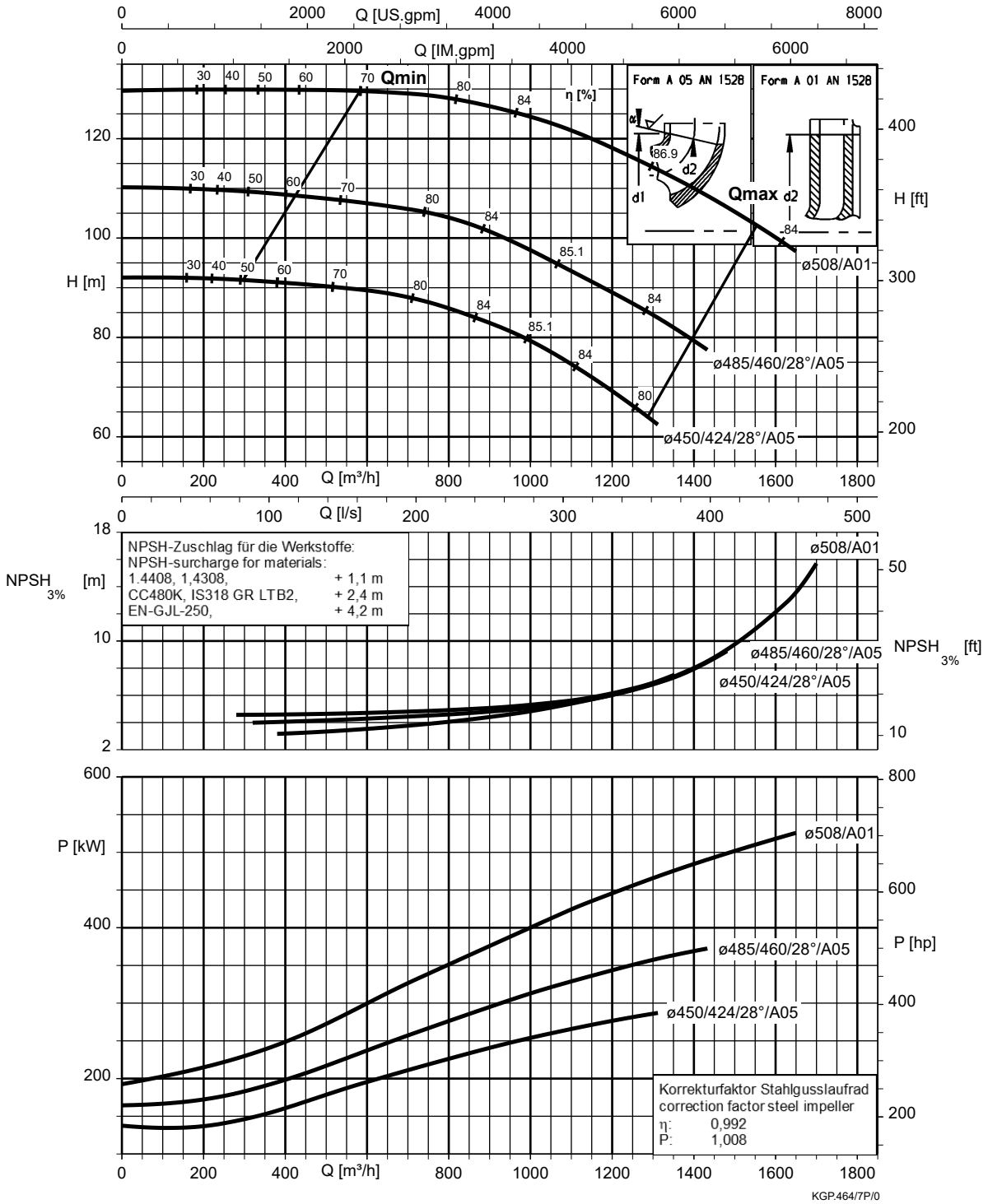
Etanorm 300-250-375, $n = 1750 \text{ min}^{-1}$



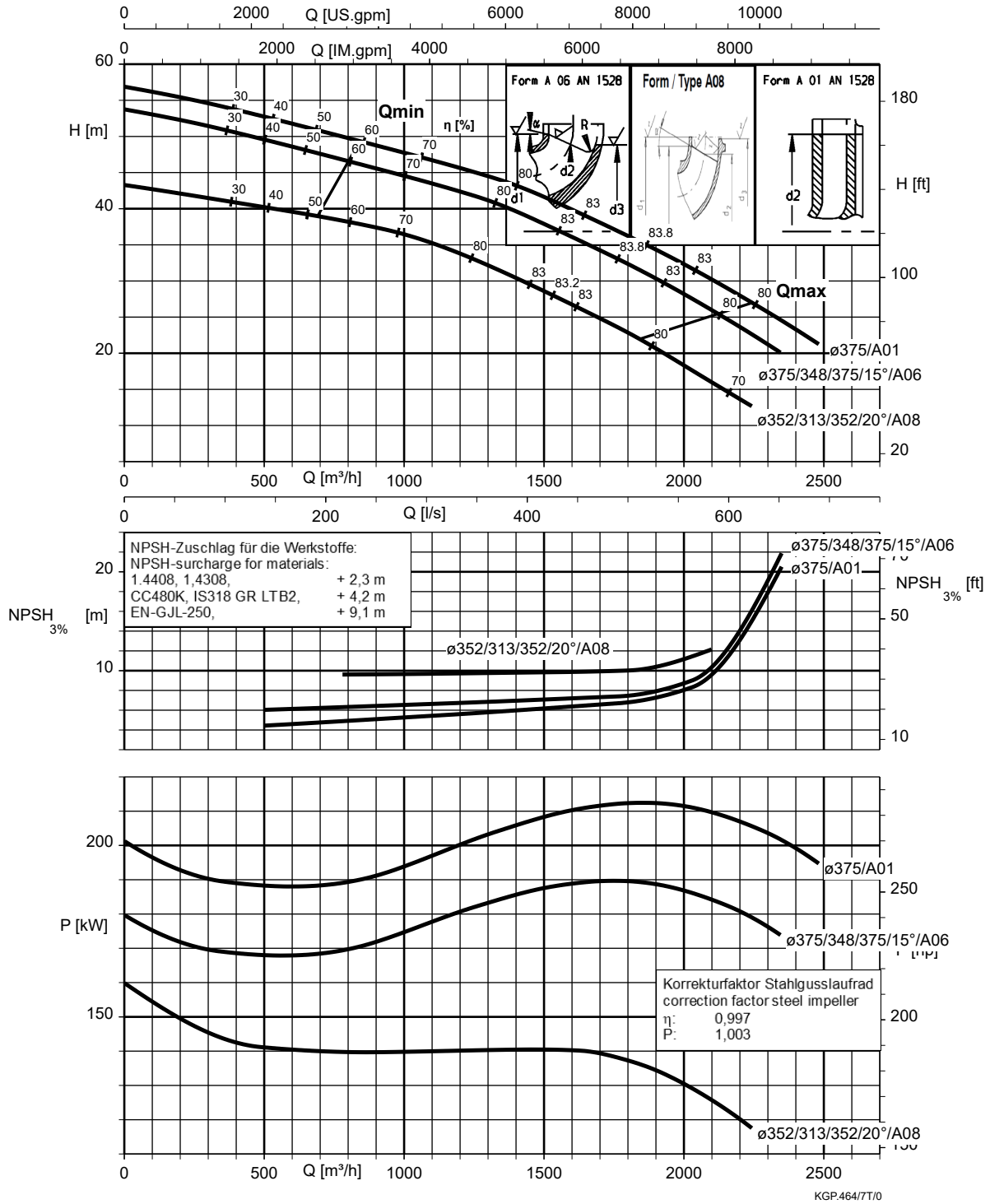
Etanorm 300-250-435, $n = 1750 \text{ min}^{-1}$



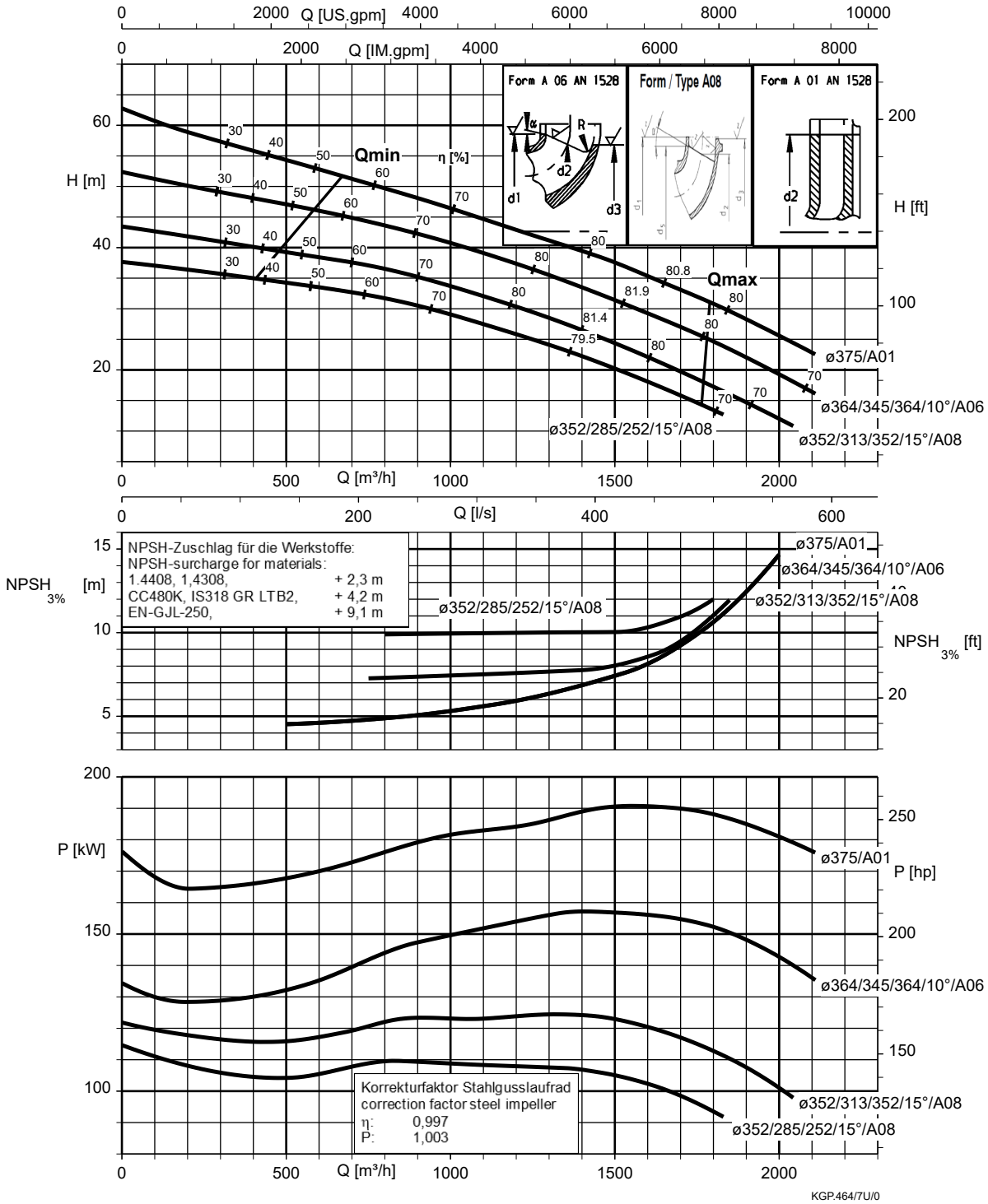
Etanorm 300-250-510, $n = 1750 \text{ min}^{-1}$



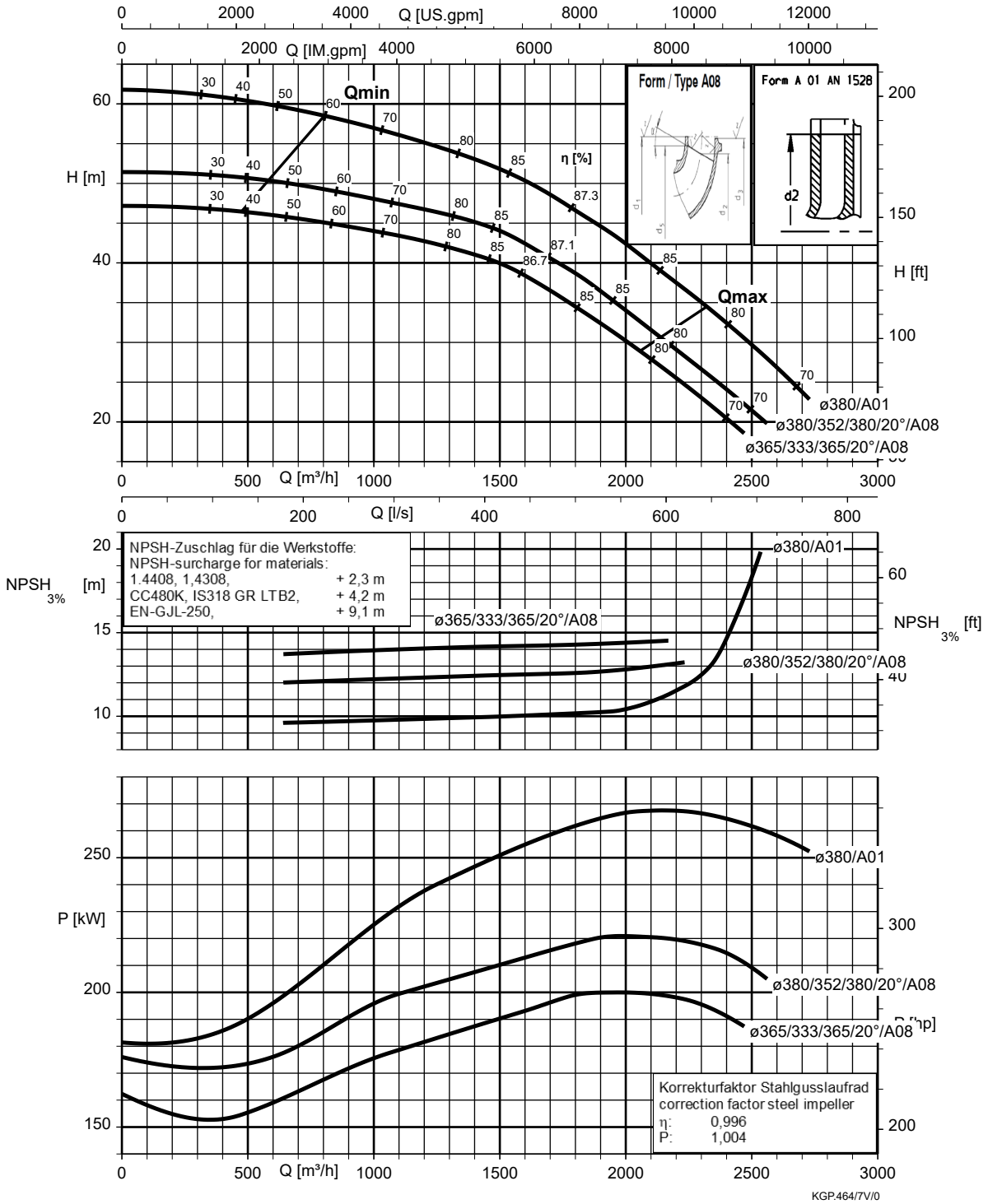
Etanorm 350-300-350, $n = 1750 \text{ min}^{-1}$



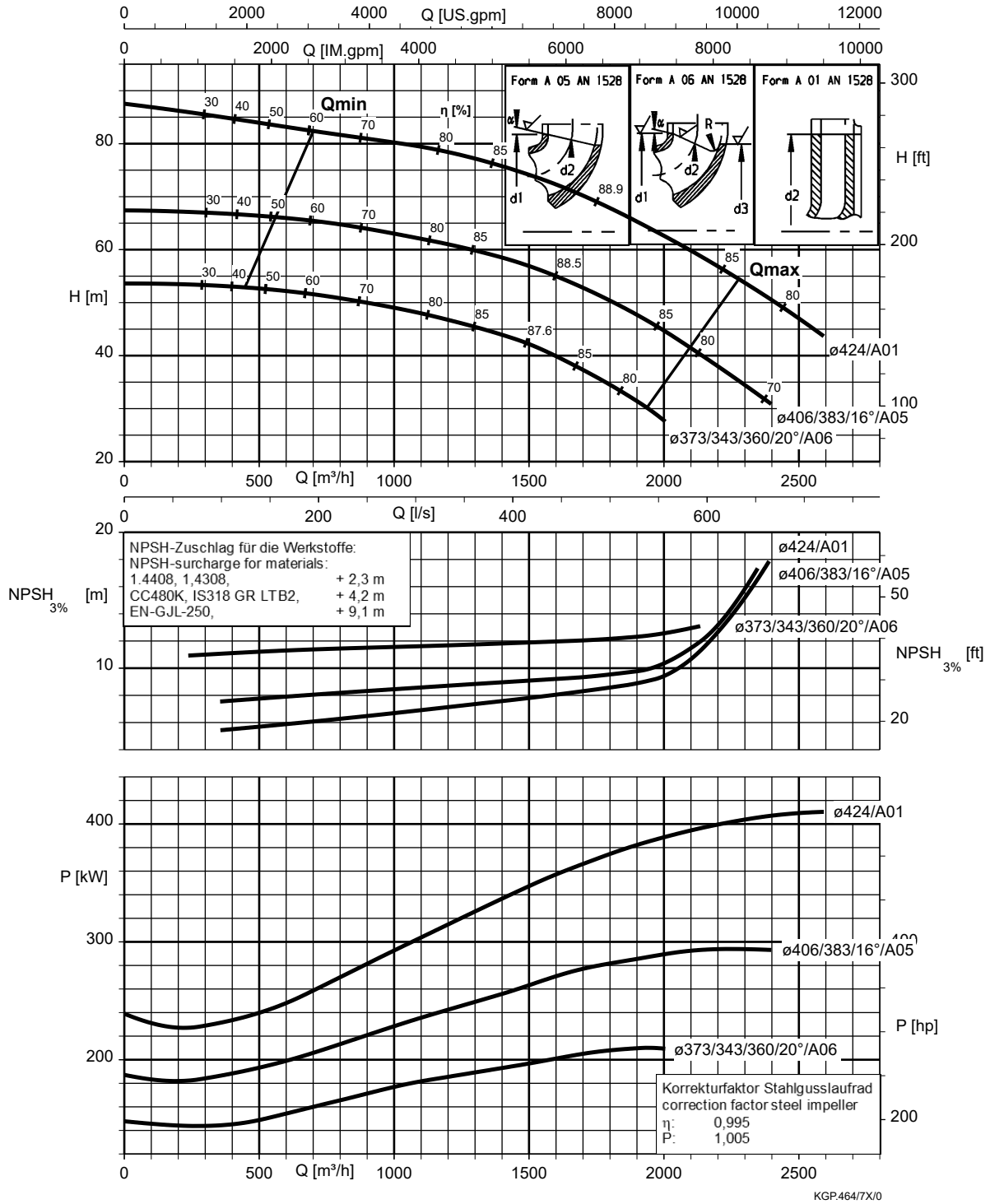
Etanorm 350-300-350.1 , n = 1750 min⁻¹



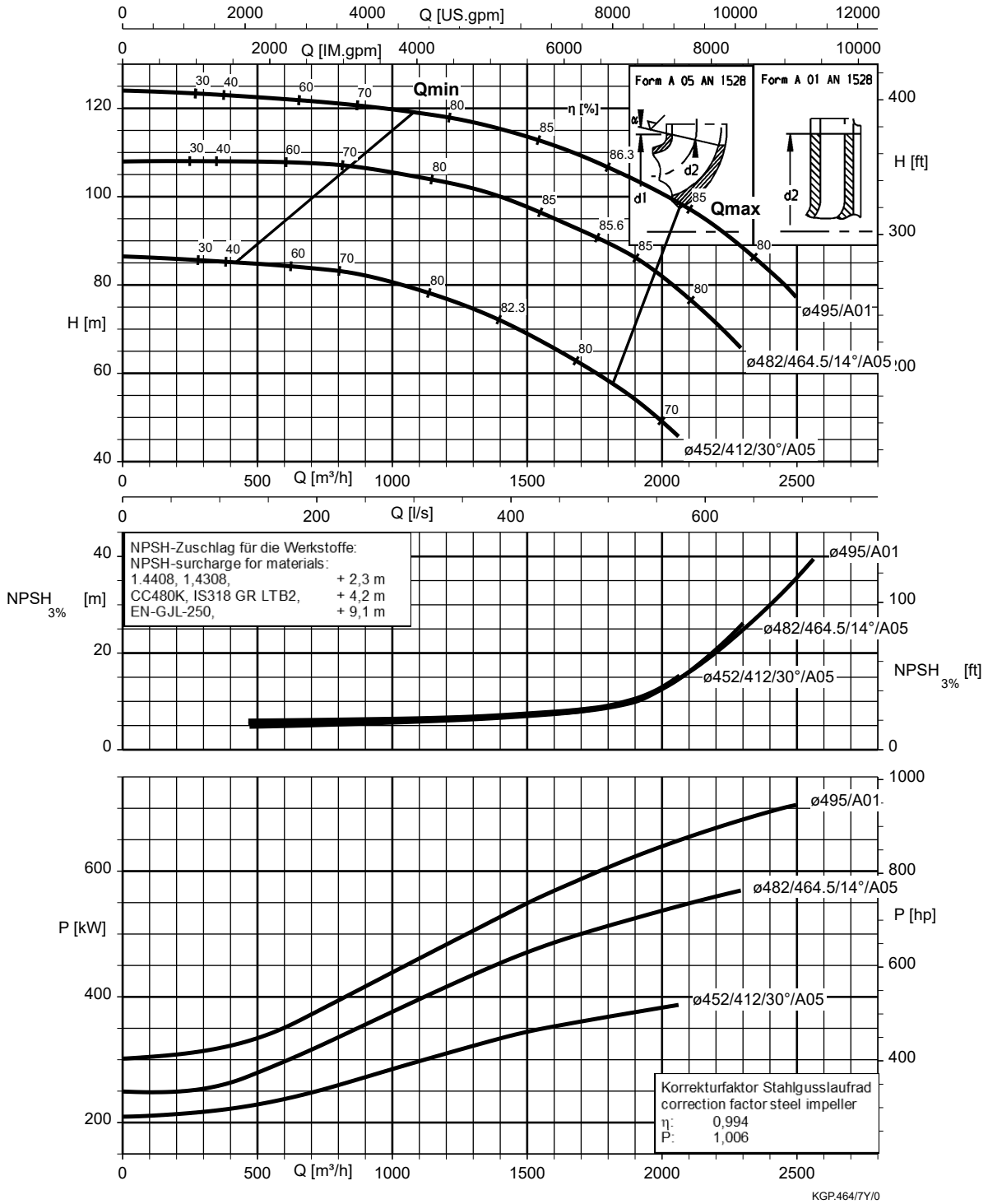
Etanorm 350-300-375, n = 1750 min⁻¹



Etanorm 350-300-435 , n = 1750 min⁻¹



Etanorm 350-300-510 , n = 1750 min⁻¹



Etanorm-R 200-250, n = 1750 rpm

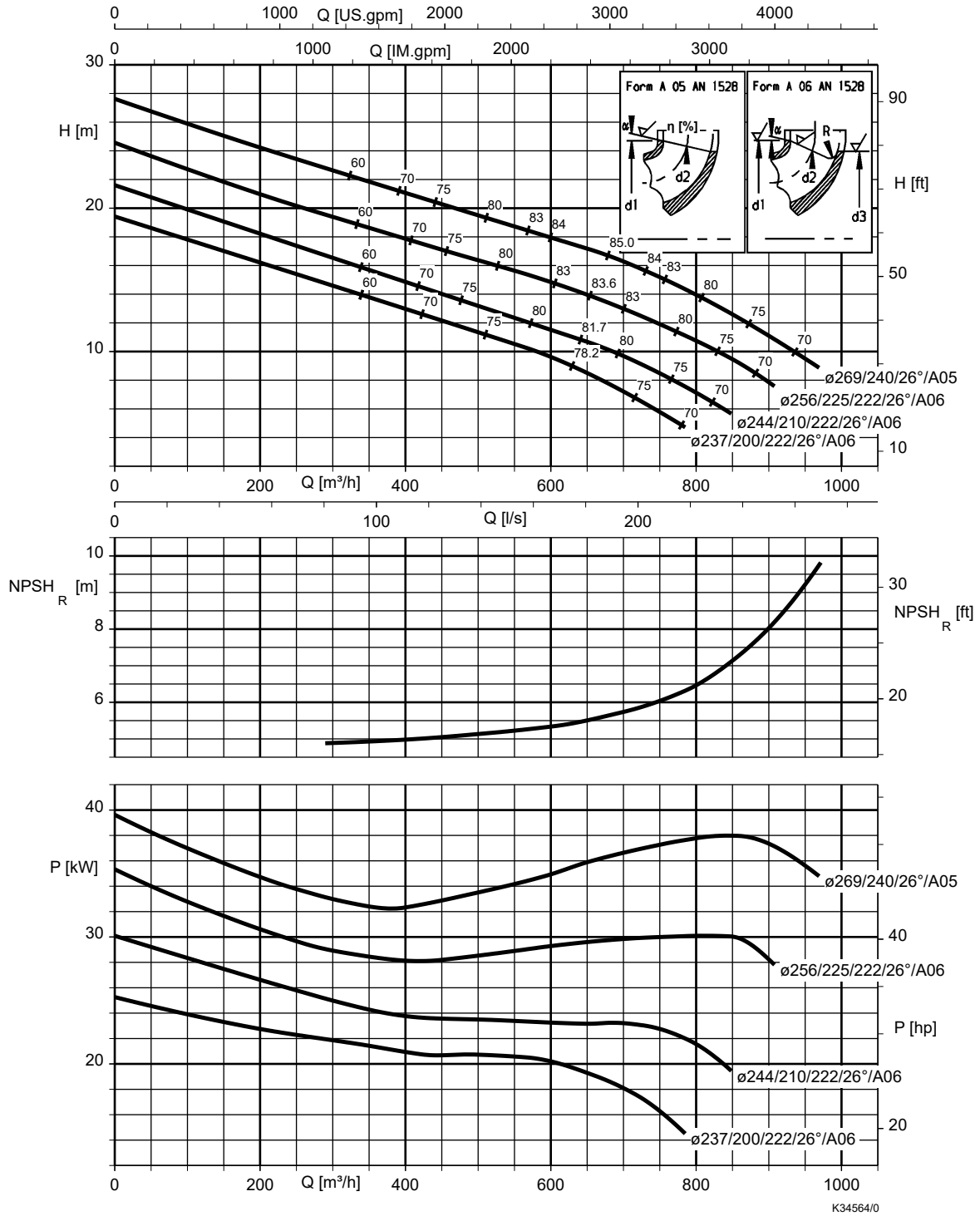


Table 3: Correction values

Impeller material	Correction value S [m]	Calculation
EN-GJL-250	4,0	$NPSH_{System} \geq NPSH + \text{correction value } S$
CC480K-GS	2,2	
1.4408	0,5	

1311.46/11-EN-US

Etanorm-R 200-260, n = 1750 rpm

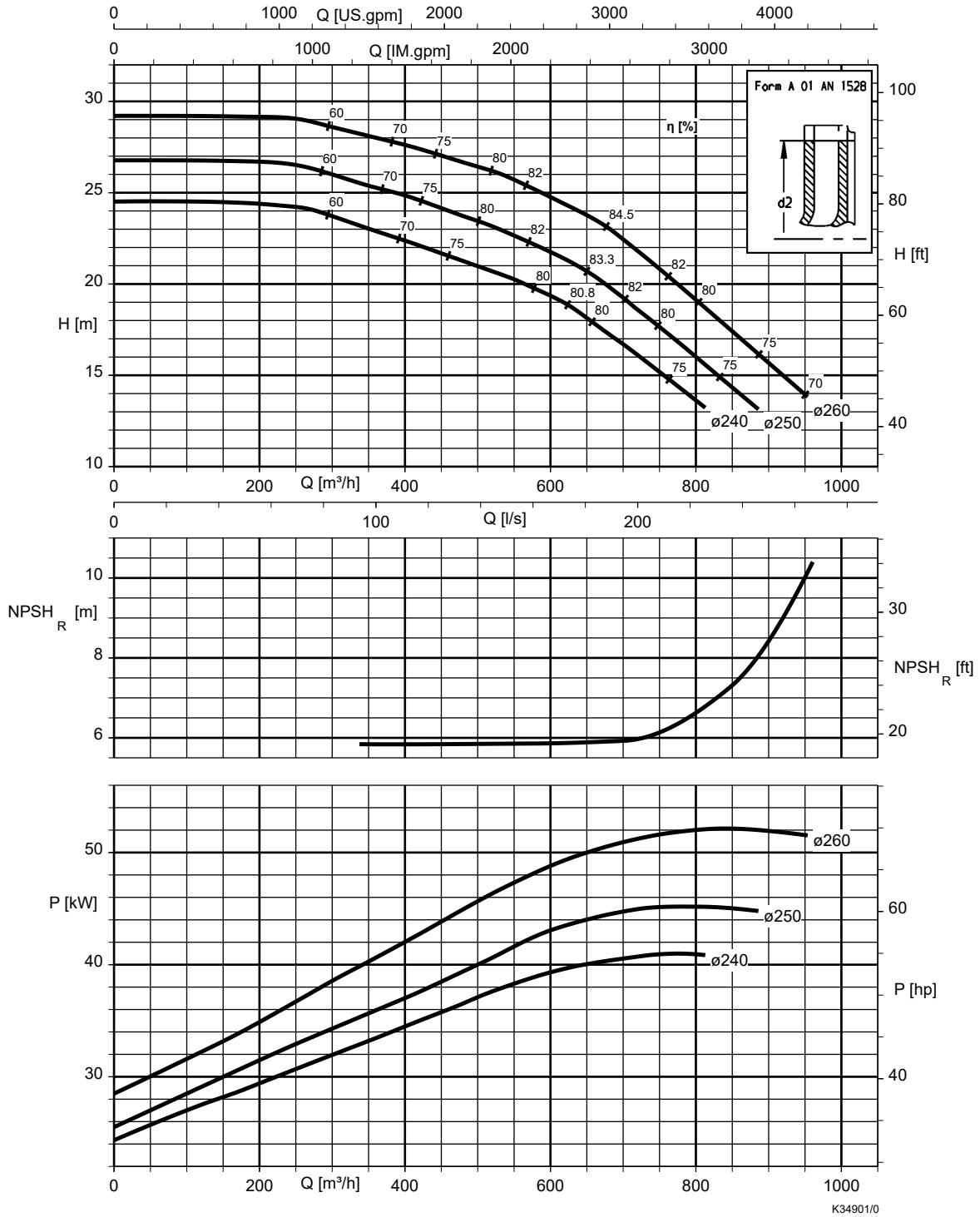


Table 4: Correction values

Impeller material	Correction value S [m]	Calculation
EN-GJL-250	0,5	$NPSH_{System} \geq NPSH + \text{correction value S}$
CC480K-GS	0,5	
1.4408	0,5	

Etanorm-R 200-330, n = 1750 rpm

Etanorm-RSY

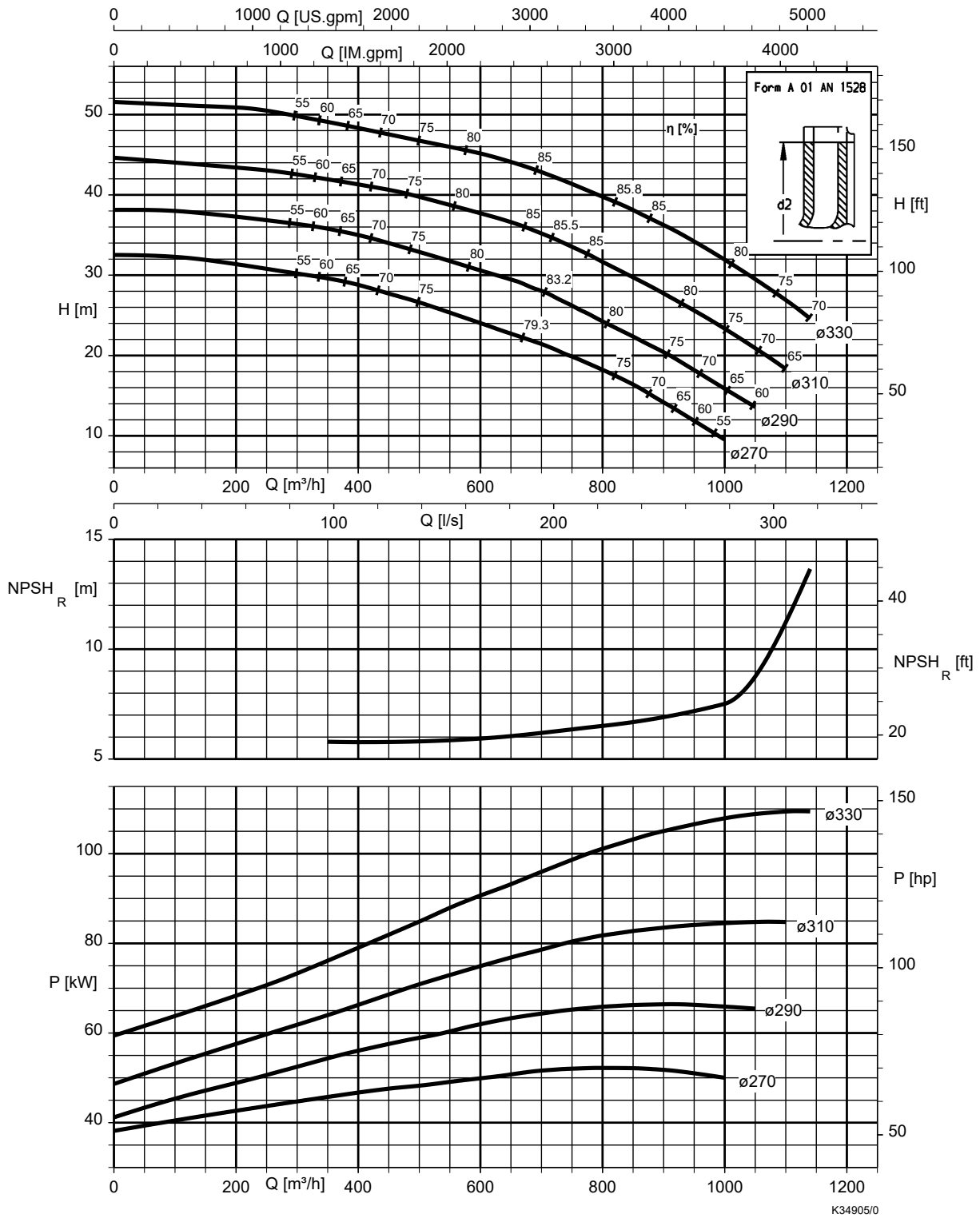


Table 5: Correction values

Impeller material	Correction value S [m]	Calculation
EN-GJL-250	0,5	$NPSH_{System} \geq NPSH + \text{correction value } S$
CC480K-GS	0,5	
1.4408	0,5	

Etanorm-R 200-400, n = 1750 rpm

Etanorm-RSY

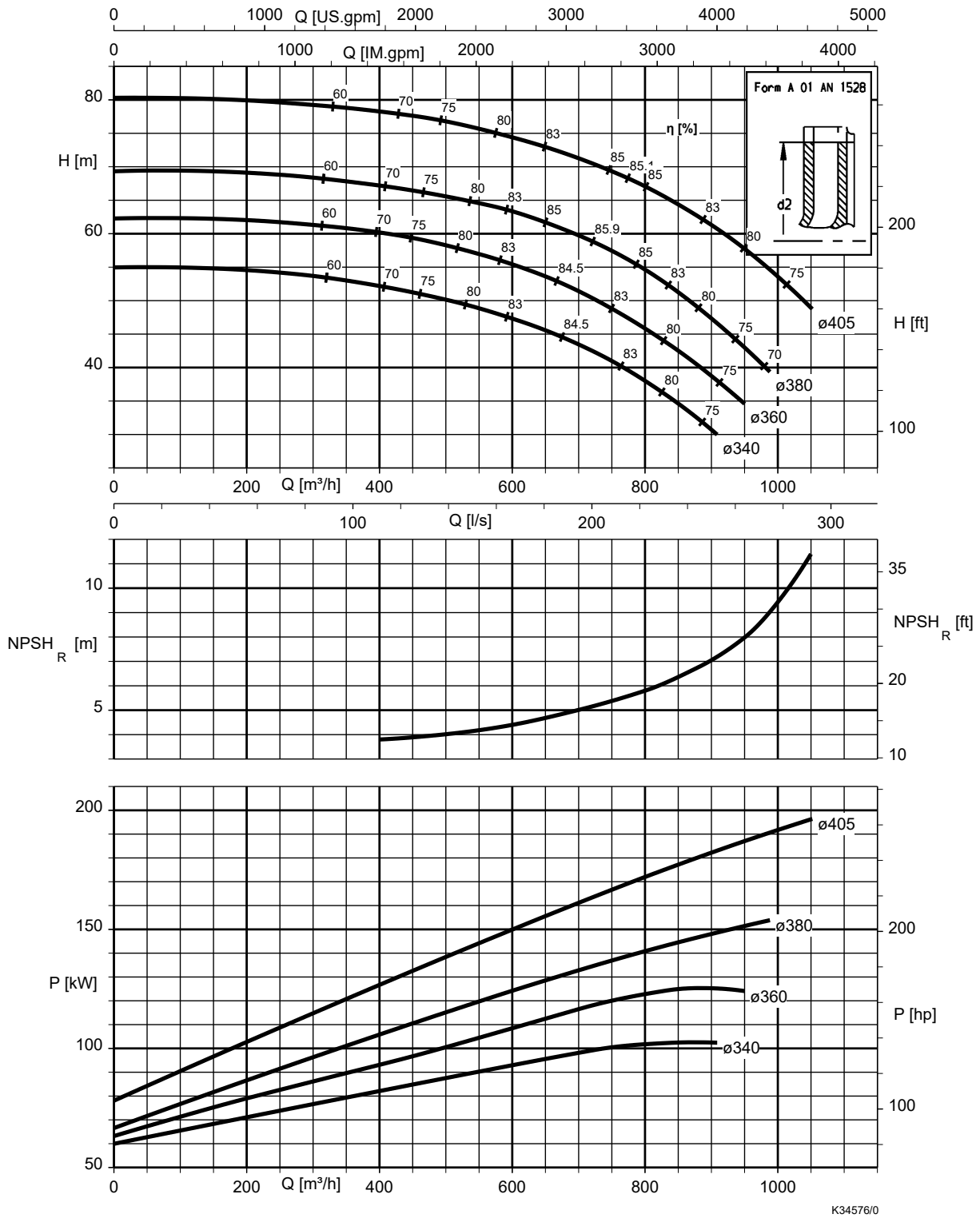


Table 6: Correction values

Impeller material	Correction value S [m]	Calculation
EN-GJL-250	3,0	$NPSH_{System} \geq NPSH + \text{correction value } S$
CC480K-GS	1,6	
1.4408	0,5	

Etanorm-R 250-300, n = 1750 rpm

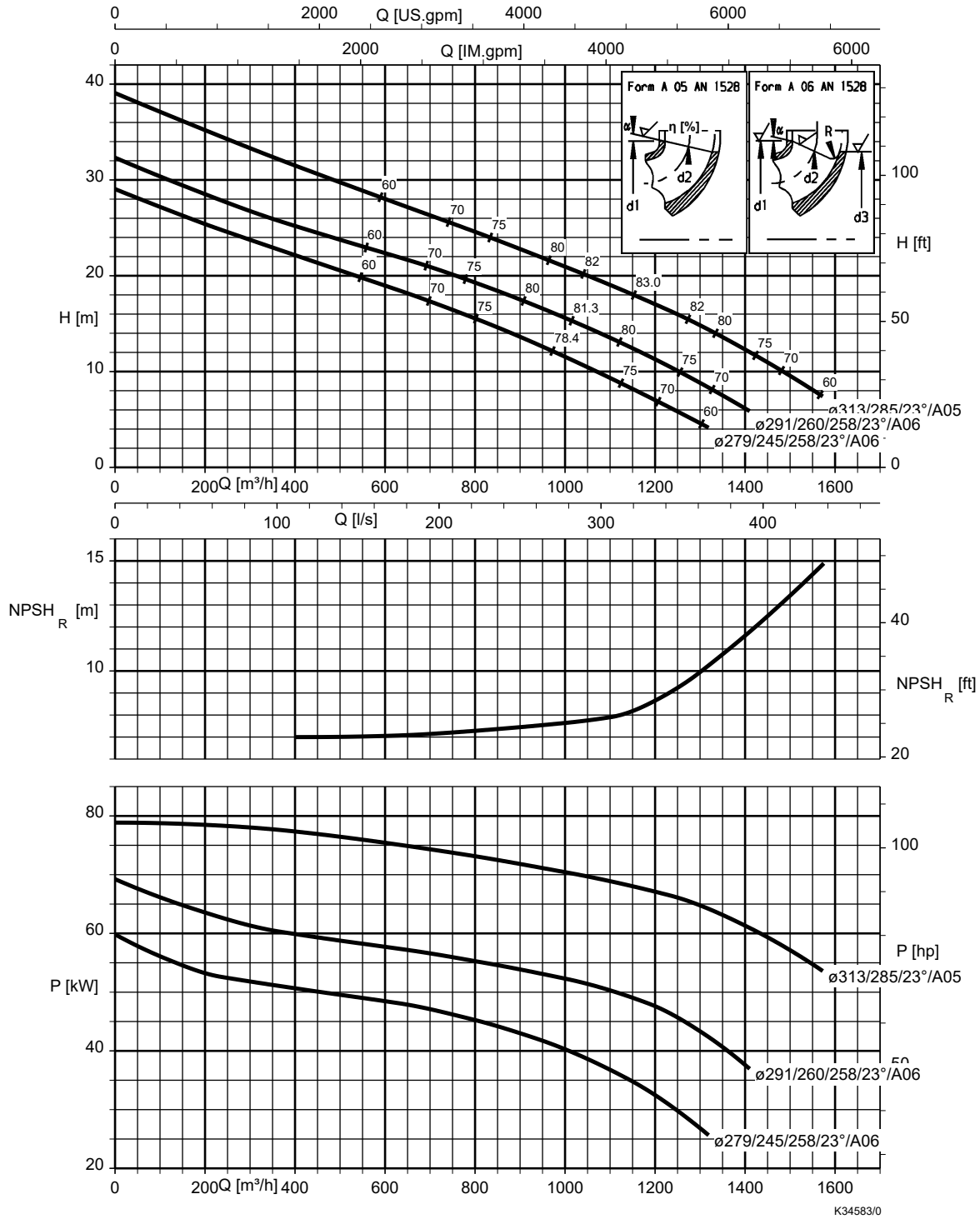


Table 7: Correction values

Impeller material	Correction value S [m]	Calculation
EN-GJL-250	2,6	$NPSH_{System} \geq NPSH + \text{correction value } S$
CC480K-GS	1,4	
1.4408	0,5	

1311.46/11-EN-US

Etanorm-R 250-330, n = 1750 rpm

Etanorm-RSY

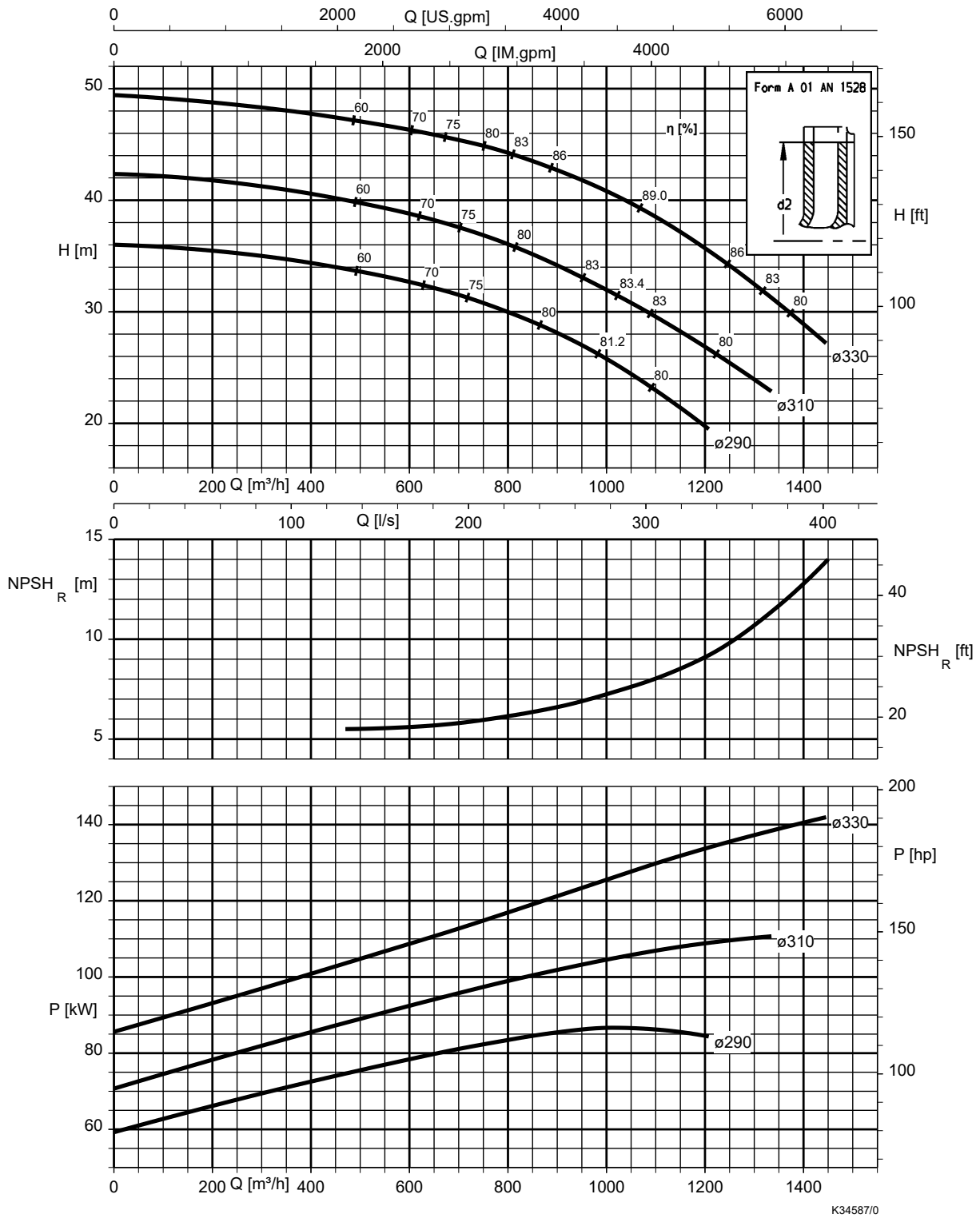


Table 8: Correction values

Impeller material	Correction value S [m]	Calculation
EN-GJL-250	3,8	$NPSH_{System} \geq NPSH + \text{correction value } S$
CC480K-GS	2,0	
1.4408	0,5	

Etanorm-R 250-400, n = 1750 rpm

Etanorm-RSY

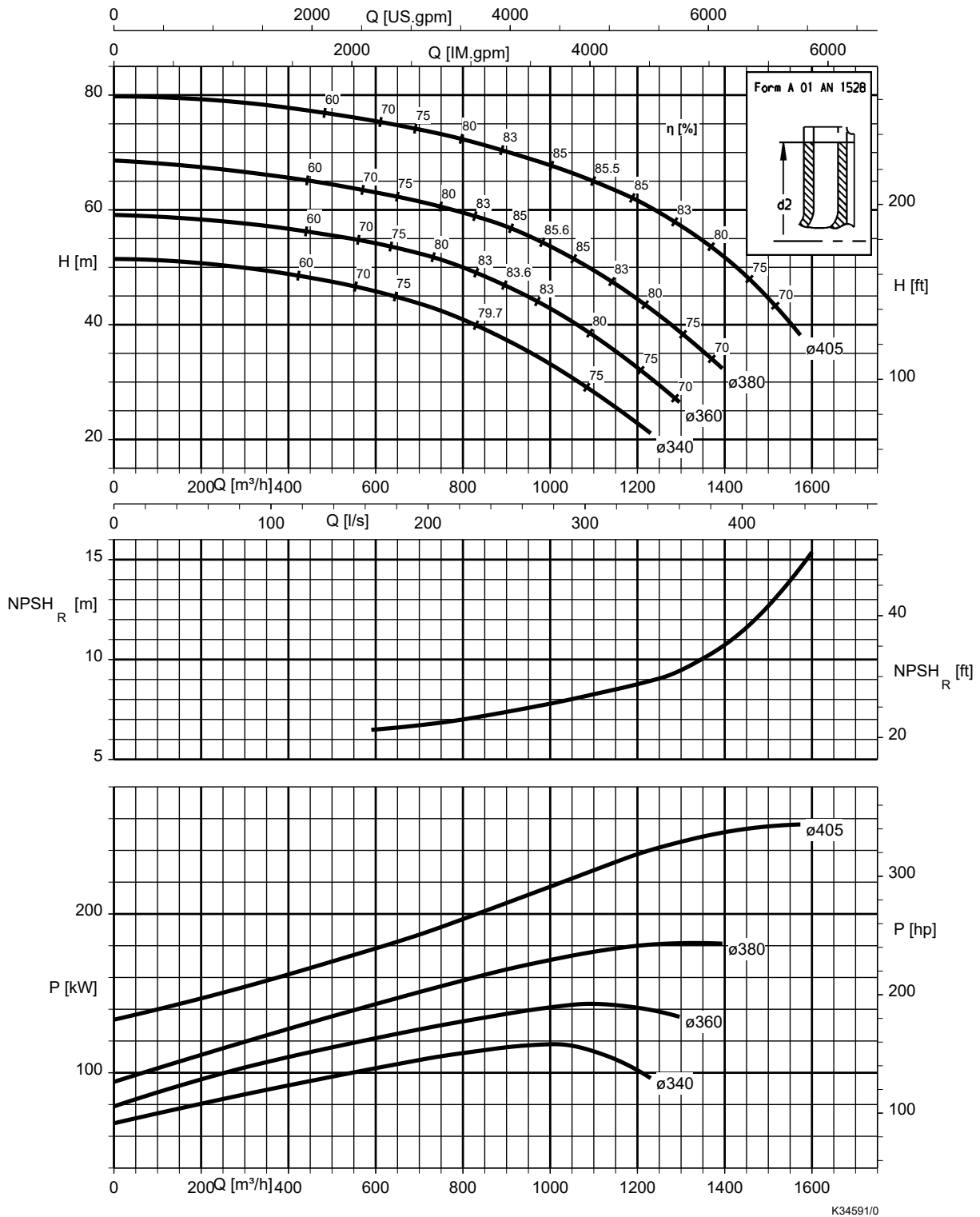


Table 9: Correction values

Impeller material	Correction value S [m]	Calculation
EN-GJL-250	5,5	$NPSH_{System} \geq NPSH + \text{correction value } S$
CC480K-GS	3,6	
1.4408	0,5	

Etanorm-R 300-340, n = 1750 rpm

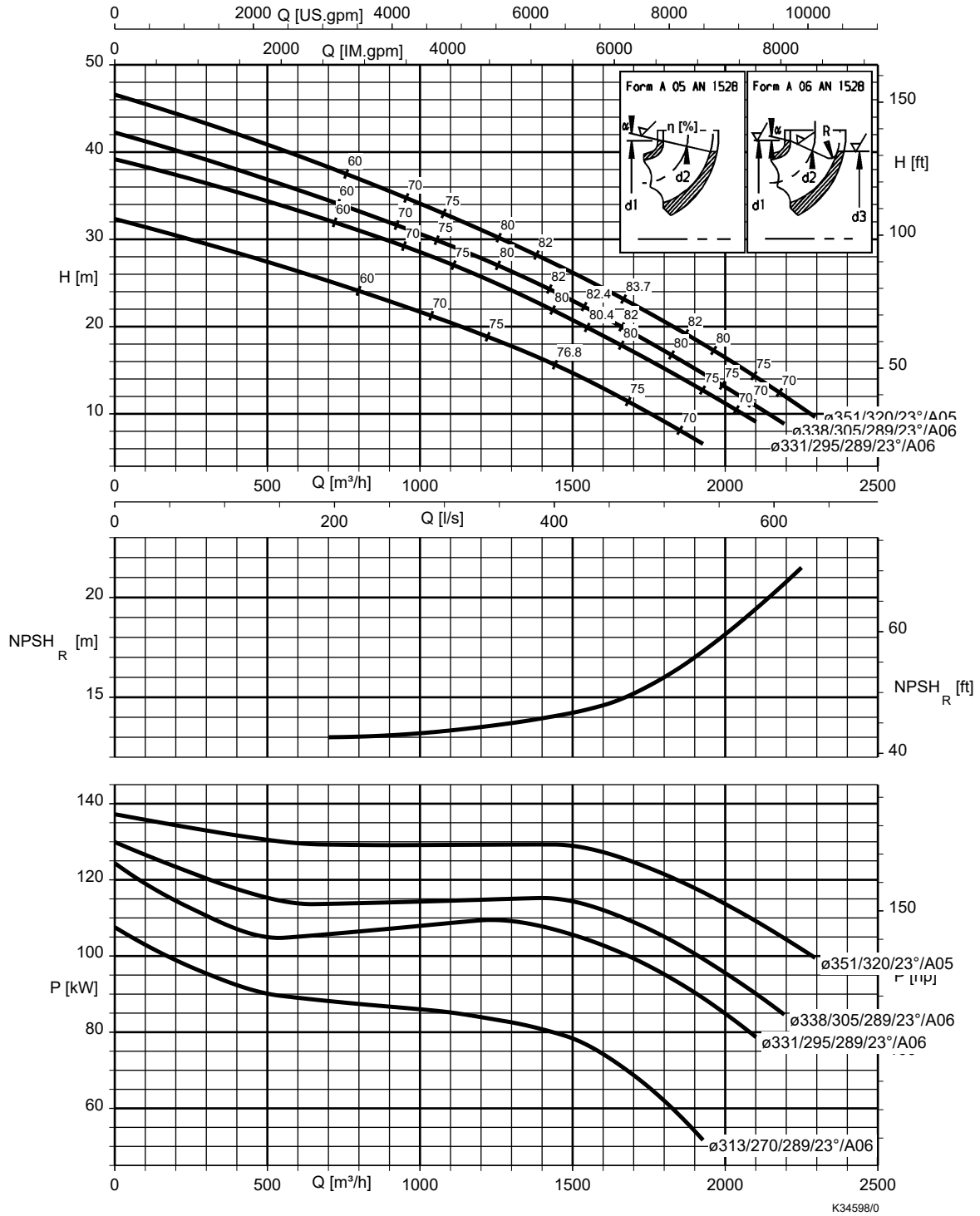
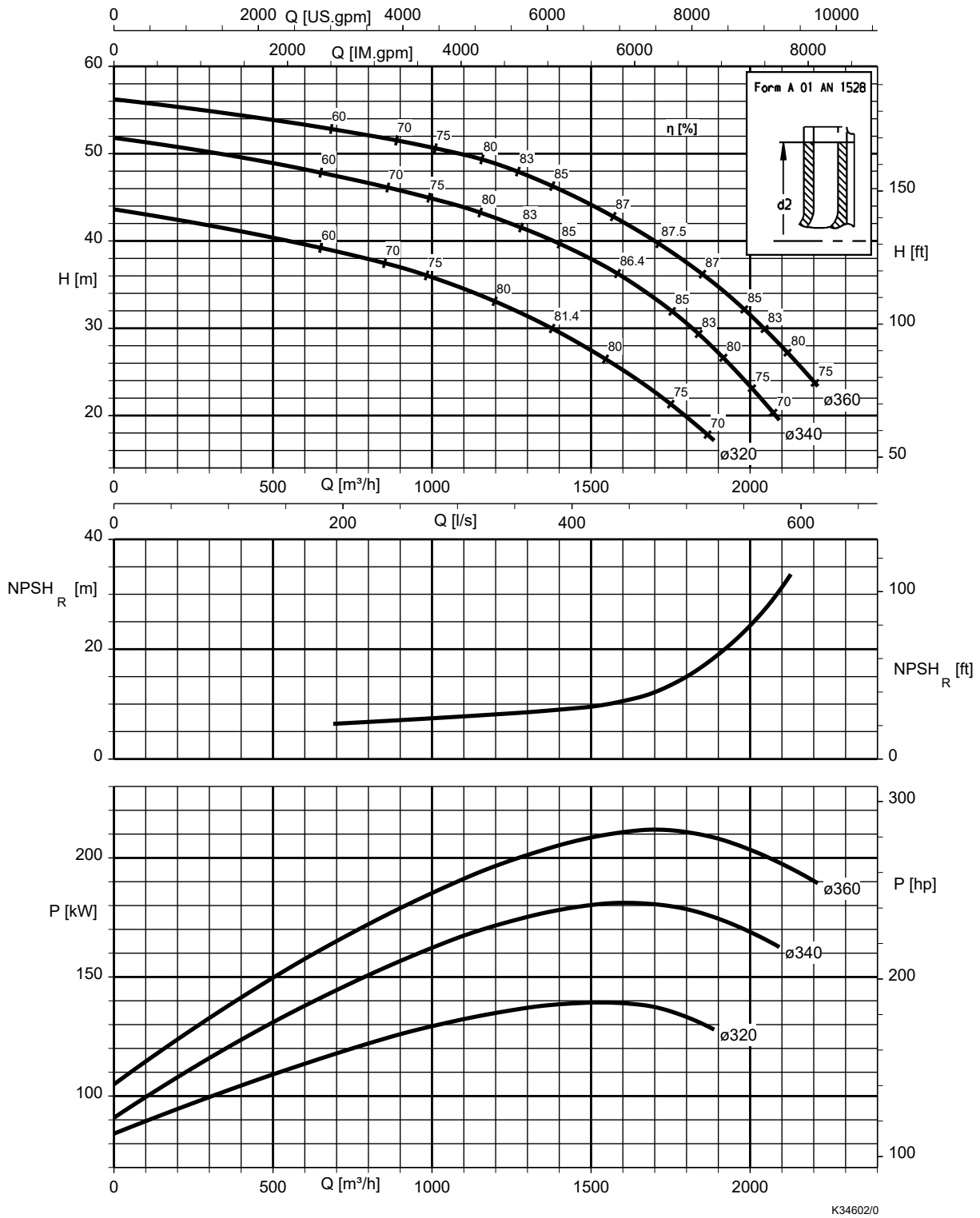


Table 10: Correction values

Impeller material	Correction value S [m]	Calculation
EN-GJL-250	3,8	$NPSH_{System} \geq NPSH + \text{correction value S}$
CC480K-GS	2,1	
1.4408	0,5	

Etanorm-R 300-360, n = 1750 rpm

Etanorm-RSY



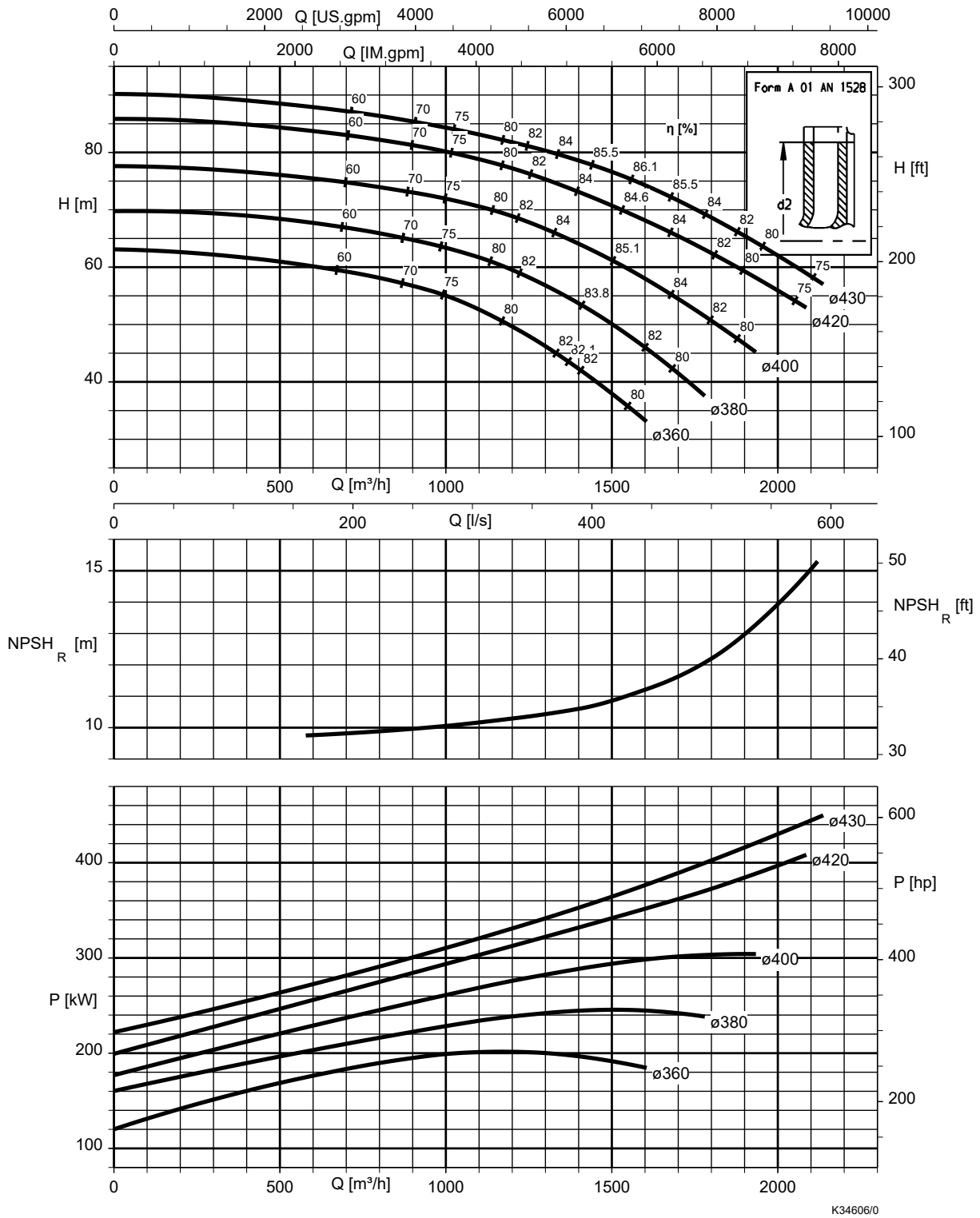
K34602/0

Table 11: Correction values

Impeller material	Correction value S [m]	Calculation
EN-GJL-250	2,5	$NPSH_{System} \geq NPSH + \text{correction value } S$
CC480K-GS	1,3	
1.4408	0,5	

Etanorm-R 300-400, n = 1750 rpm

Etanorm-RSY



K34606/0

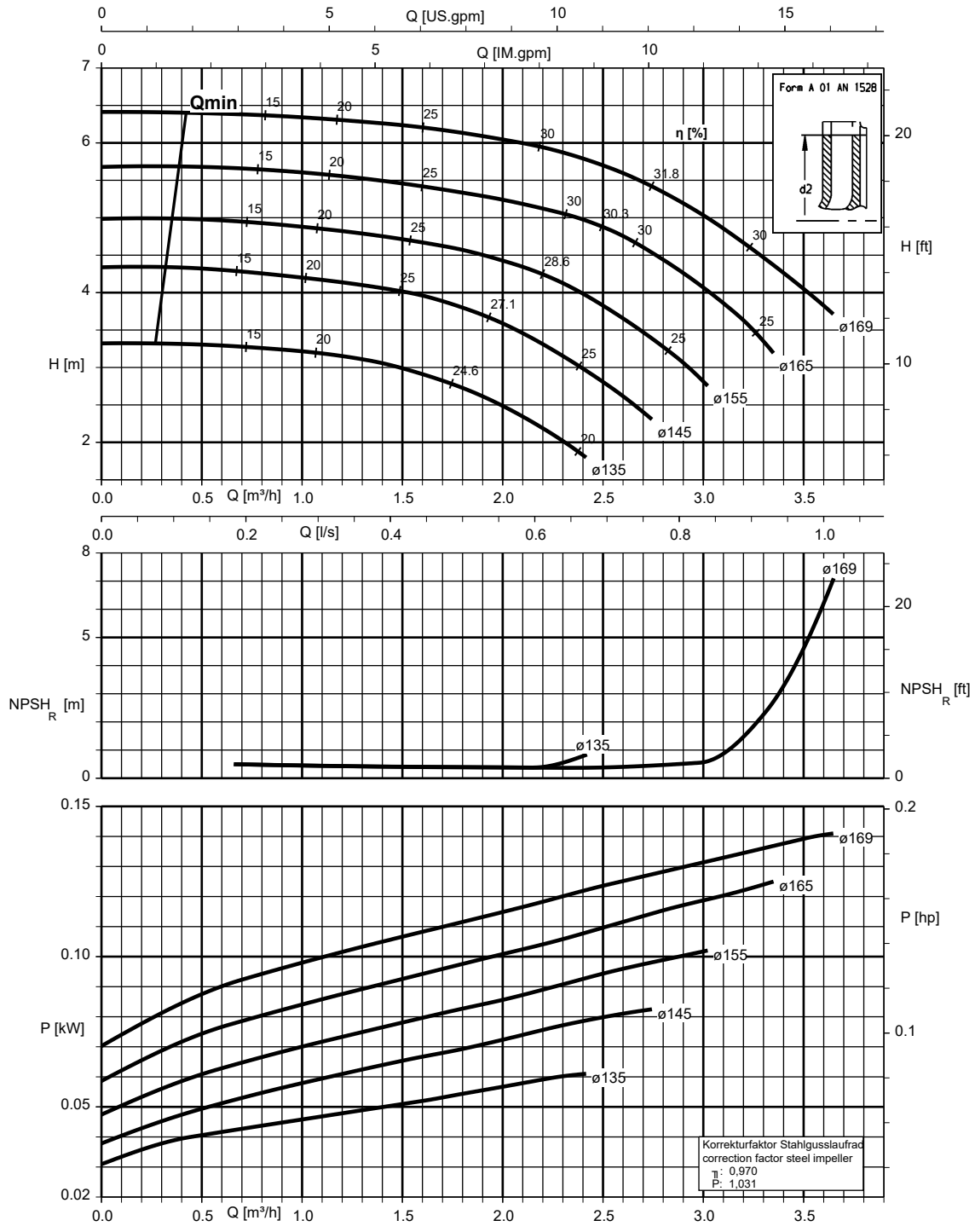
Table 12: Correction values

Impeller material	Correction value S [m]	Calculation
EN-GJL-250	4,7	$NPSH_{System} \geq NPSH + \text{correction value } S$
CC480K-GS	2,8	
1.4408	0,5	

n = 1160 rpm

Etanorm 040-025-160, n = 1160 rpm

Etanorm SYT, Etabloc

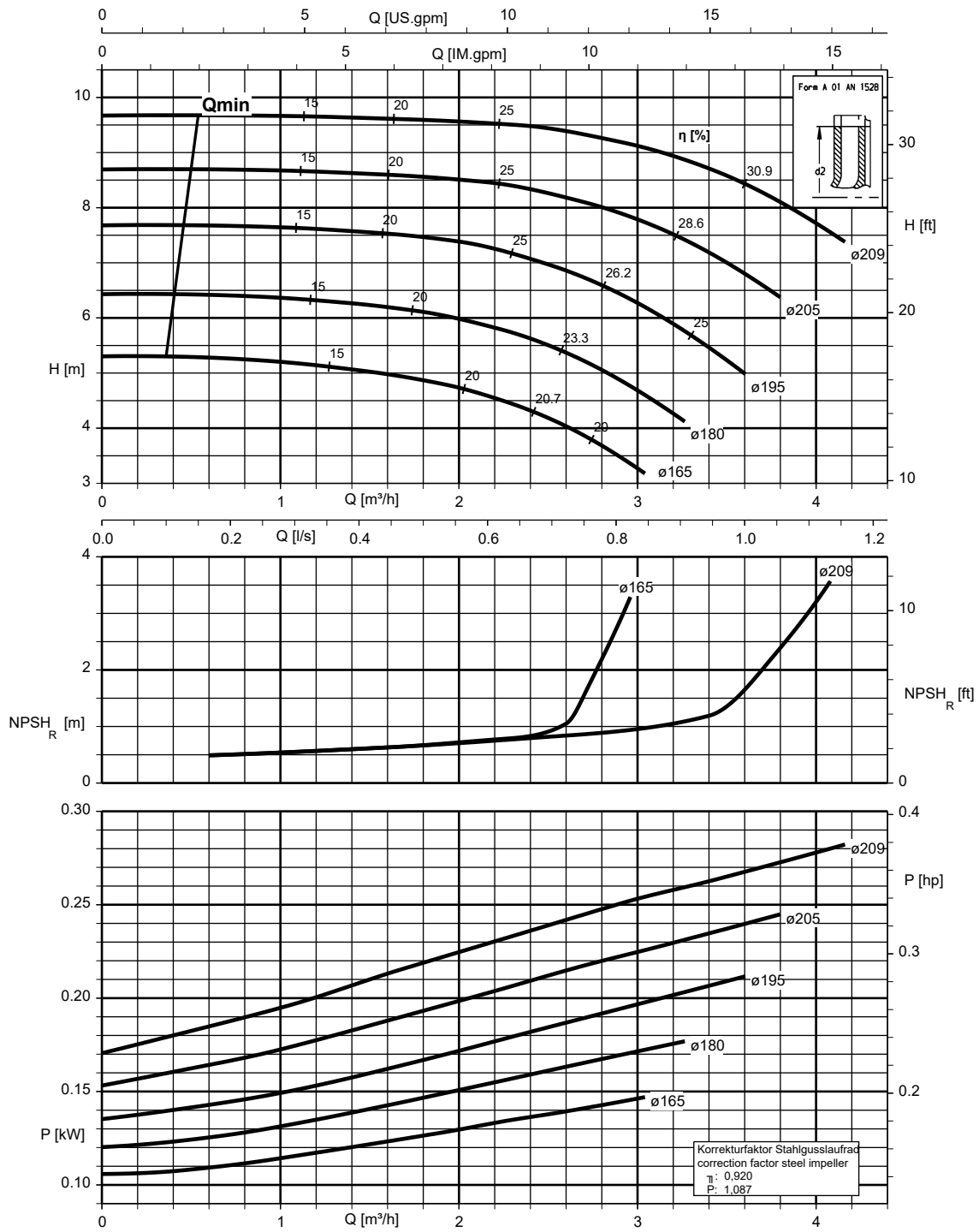


K1311.466/14/2

1311.46/11-EN-US

Etanorm 040-025-200, n = 1160 rpm

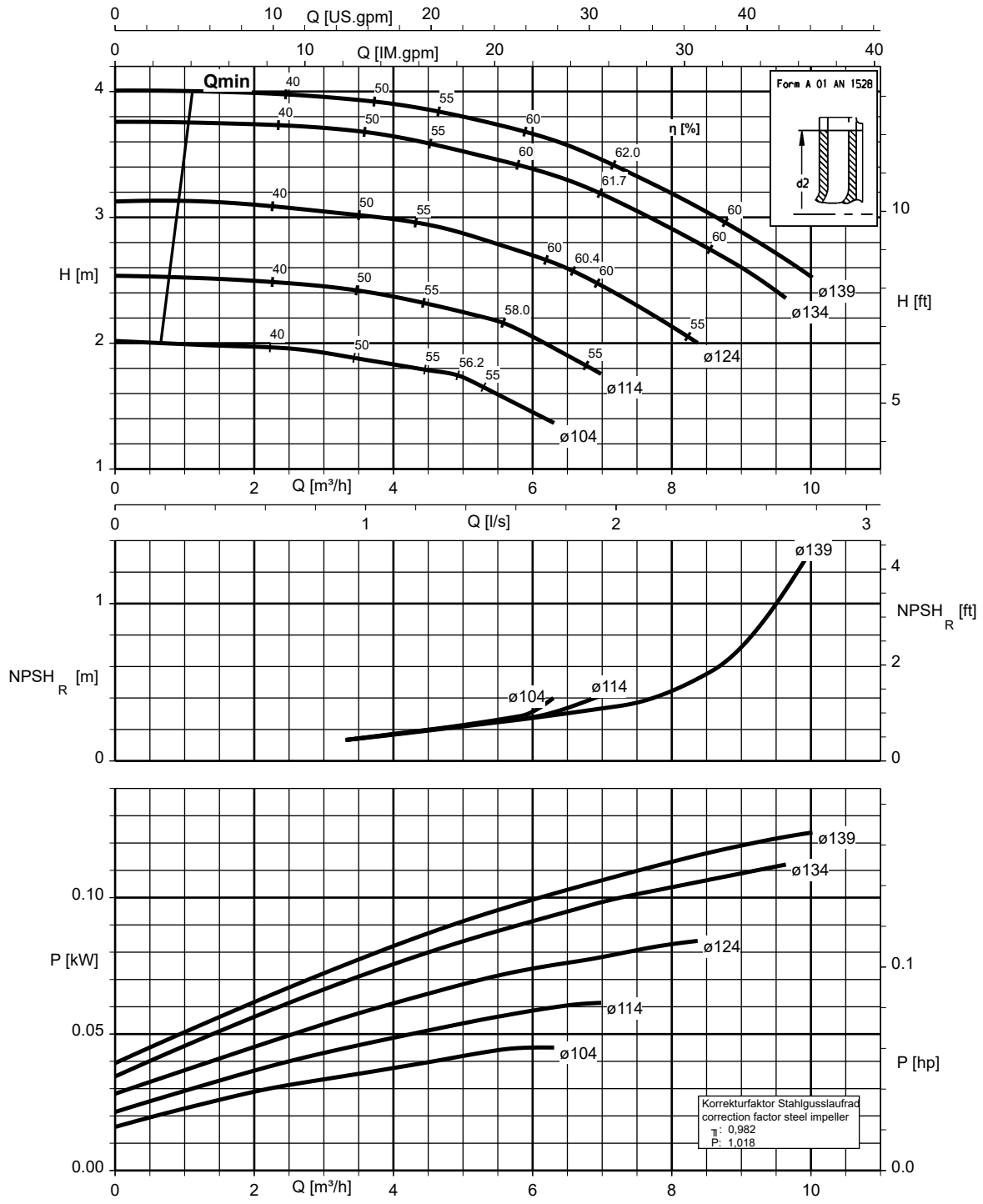
Etanorm SYT, Etabloc



K1311.466/15/2

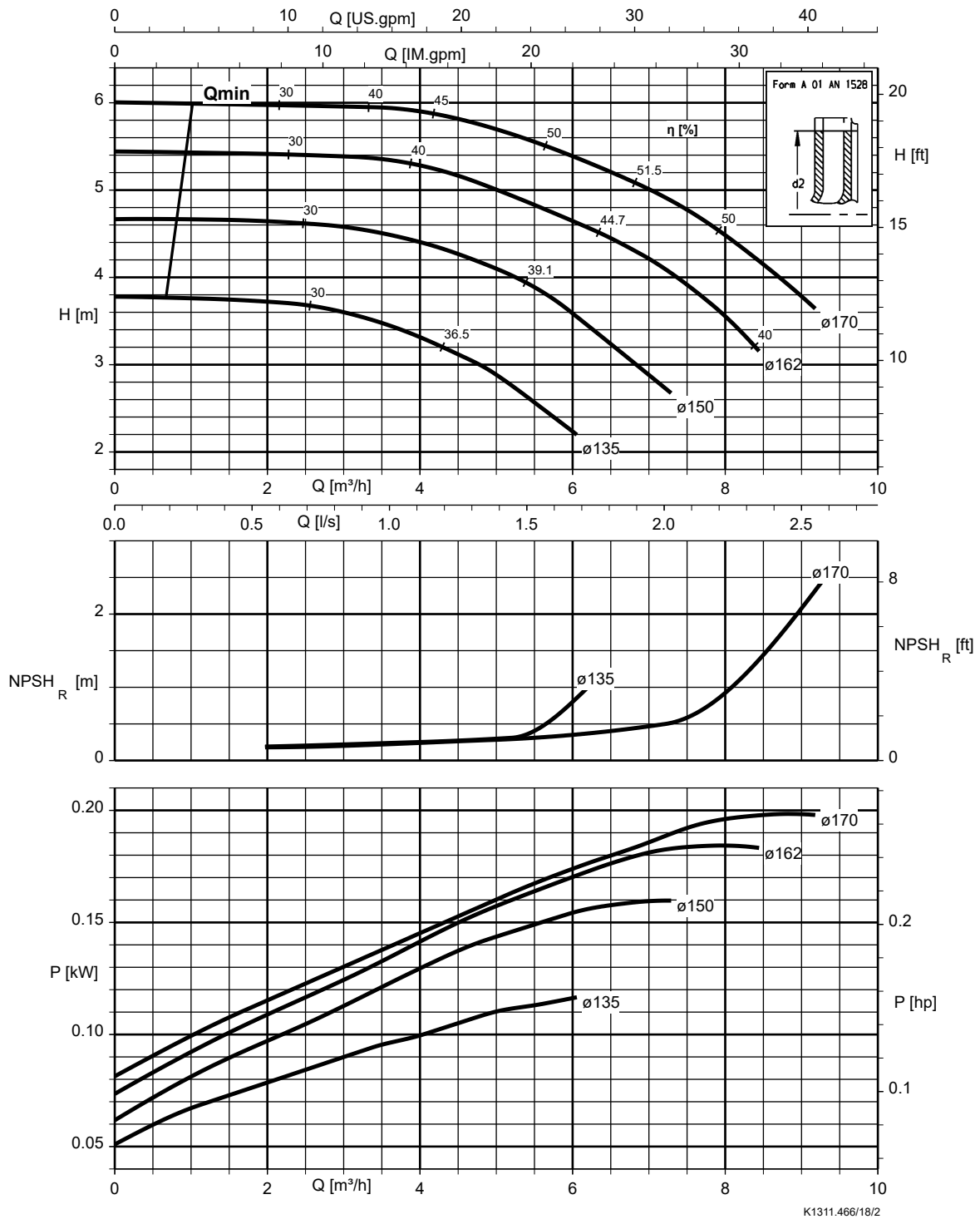
Etanorm 050-032-125.1, n = 1160 rpm

Etanorm SYT, Etabloc



Etanorm 050-032-160.1, n = 1160 rpm

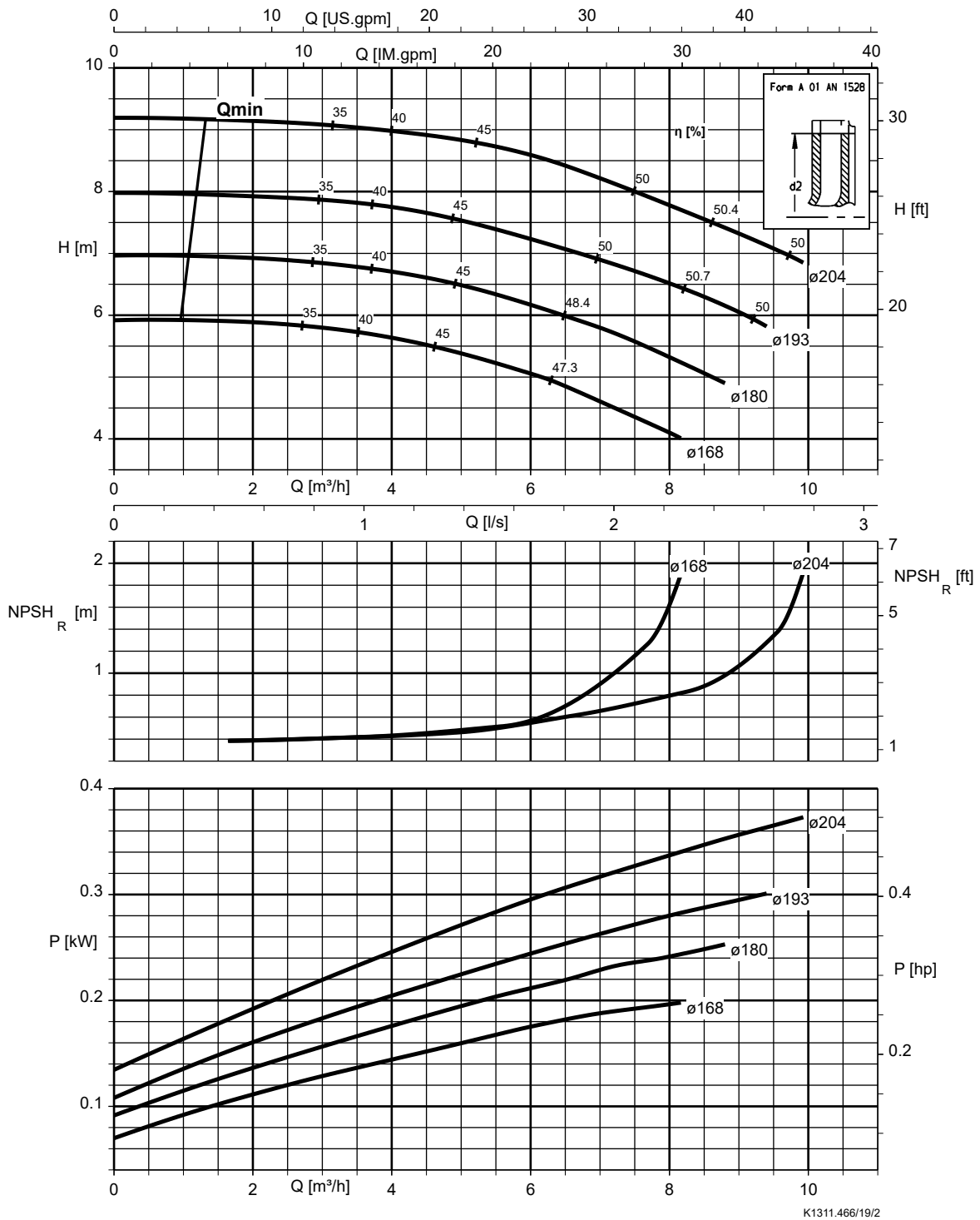
Etanorm SYT, Etabloc



K1311.466/18/2

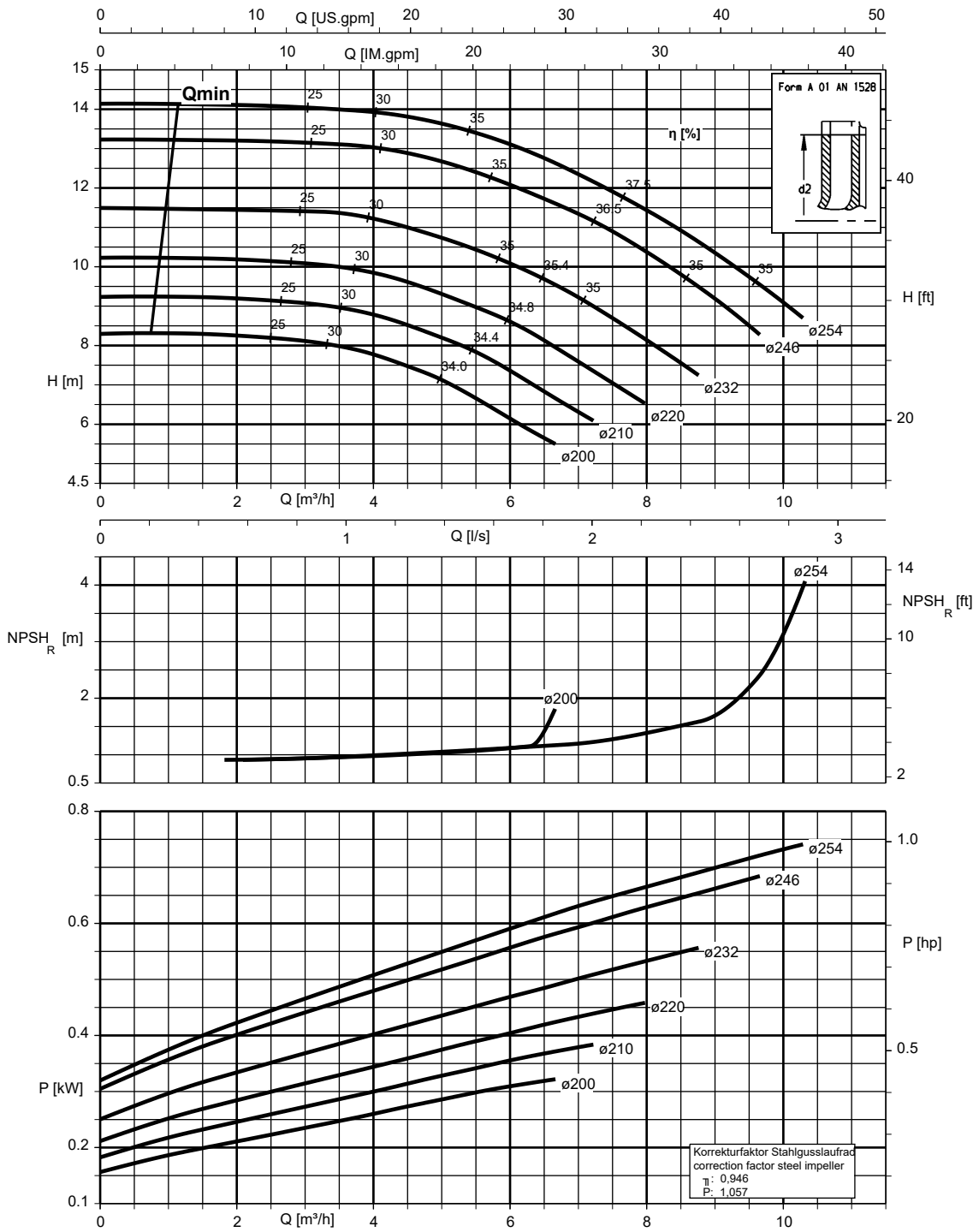
Etanorm 050-032-200.1, n = 1160 rpm

Etanorm SYT, Etabloc



Etanorm 050-032-250.1, n = 1160 rpm

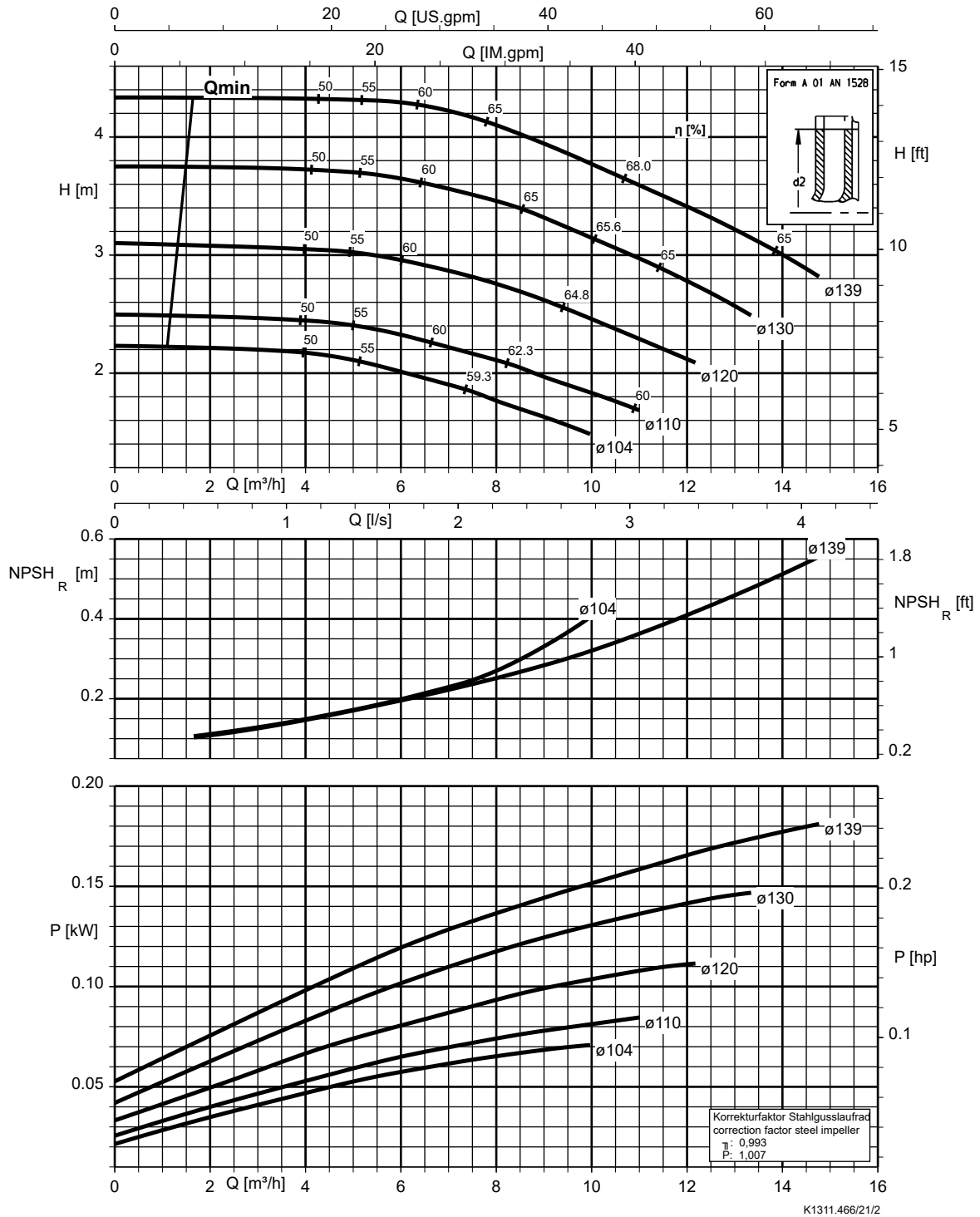
Etabloc



K1311.466/20/2

Etanorm 050-032-125, n = 1160 rpm

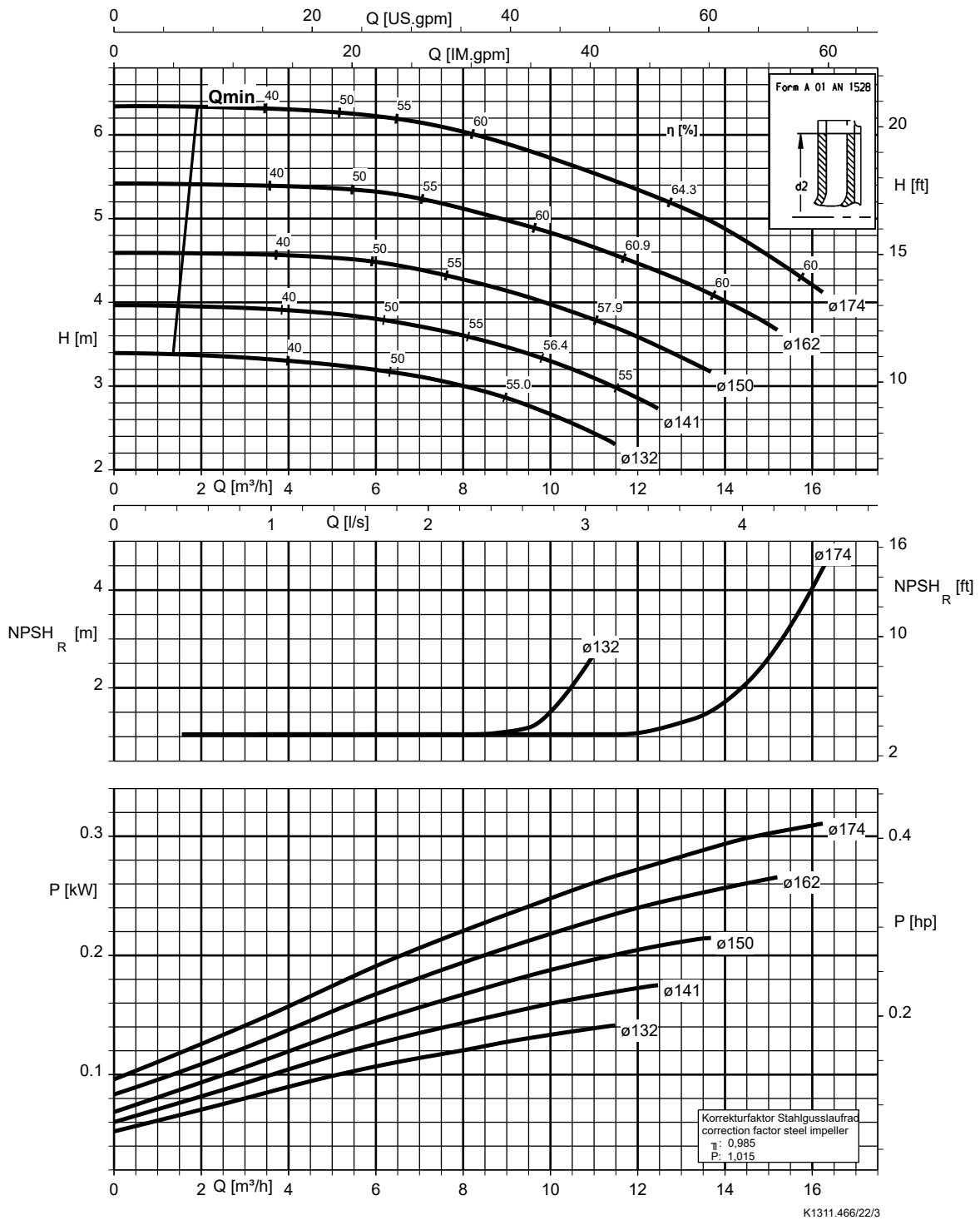
Etabloc



1311.46/11-EN-US

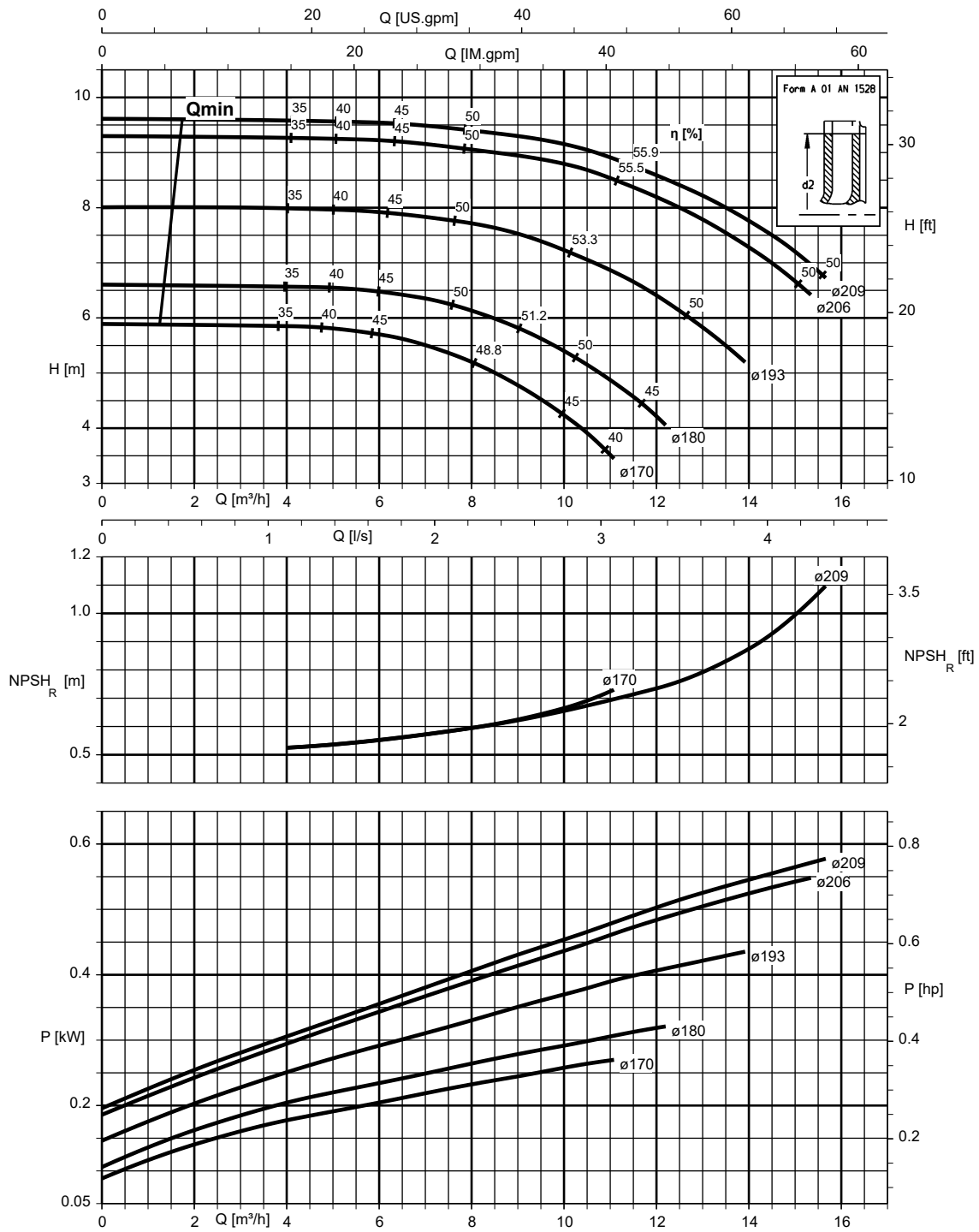
Etanorm 050-032-160, n = 1160 rpm

Etanorm SYT, Etabloc



Etanorm 050-032-200, n = 1160 rpm

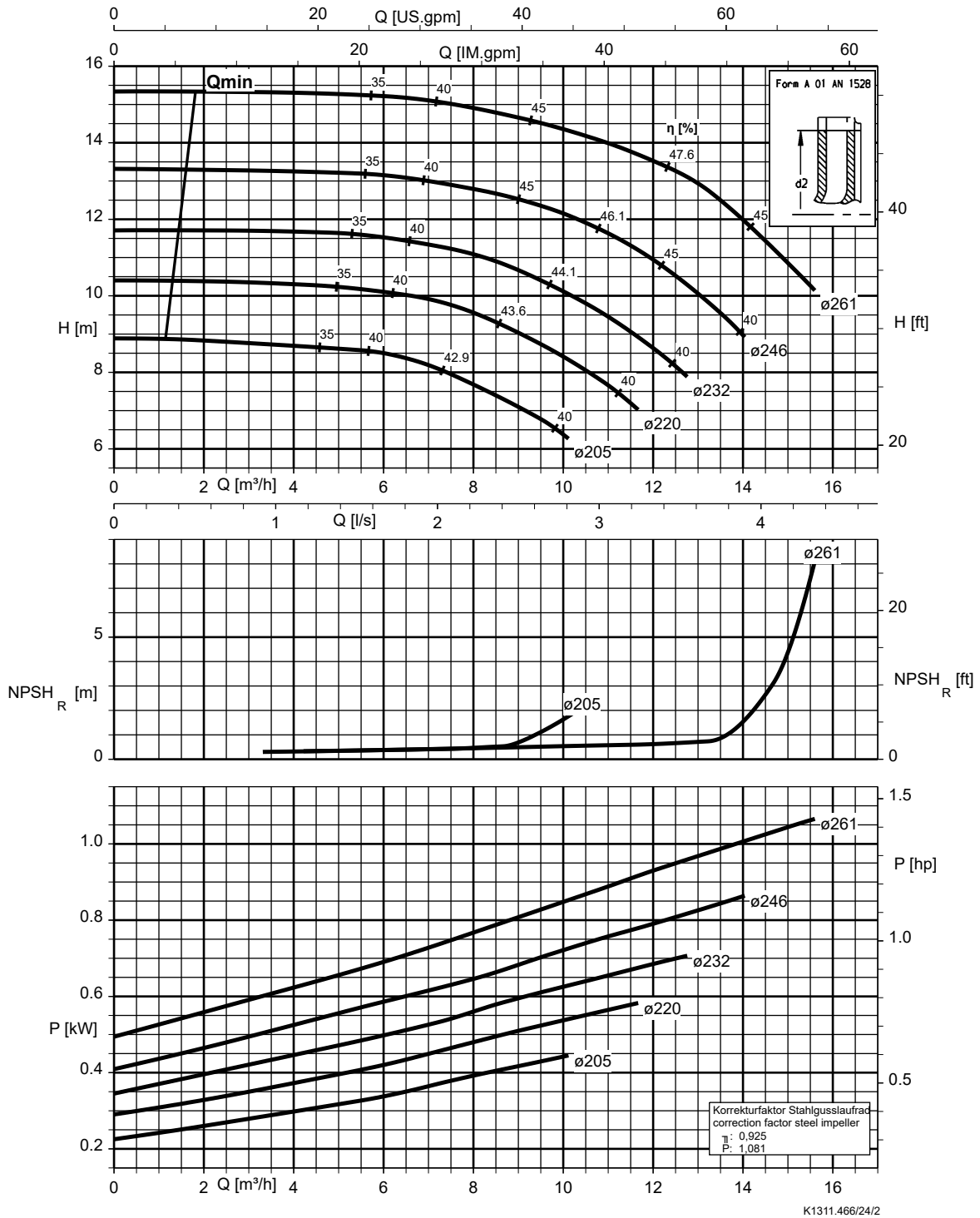
Etanorm SYT, Etabloc



K1311.466/23/1

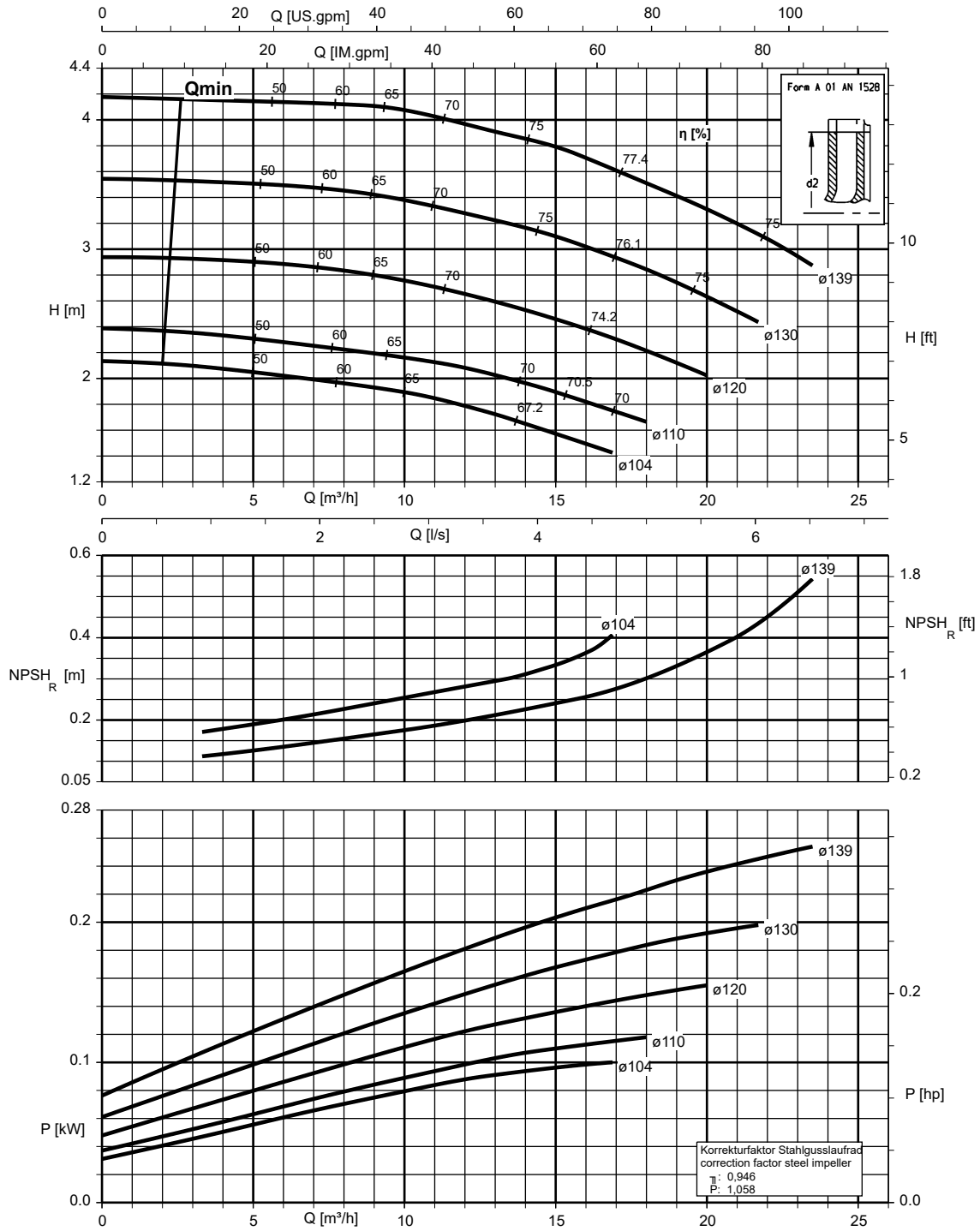
Etanorm 050-032-250, n = 1160 rpm

Etanorm SYT, Etabloc



Etanorm 065-040-125, n = 1160 rpm

Etabloc

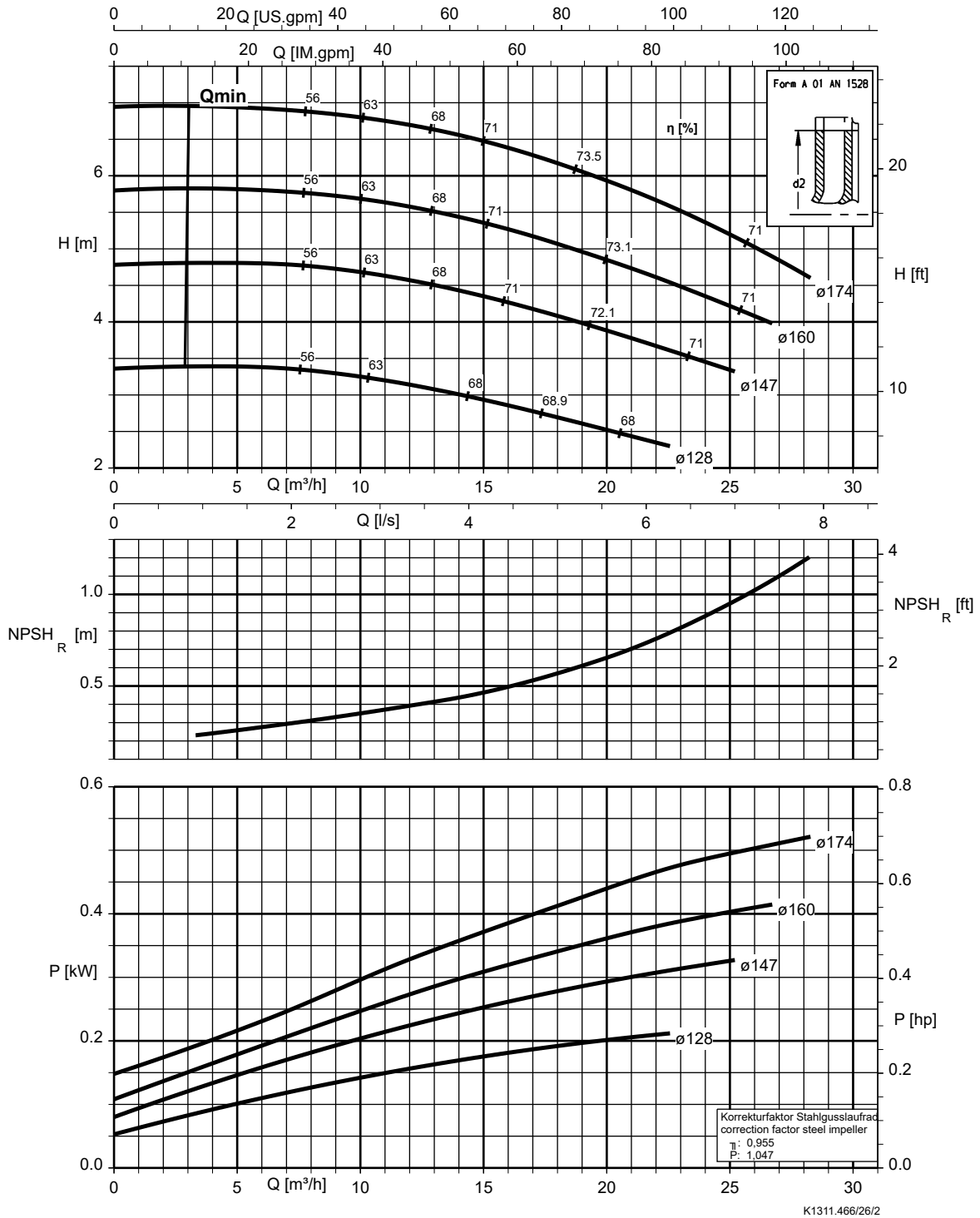


K1311.466/25/1

1311.46/11-EN-US

Etanorm 065-040-160, n = 1160 rpm

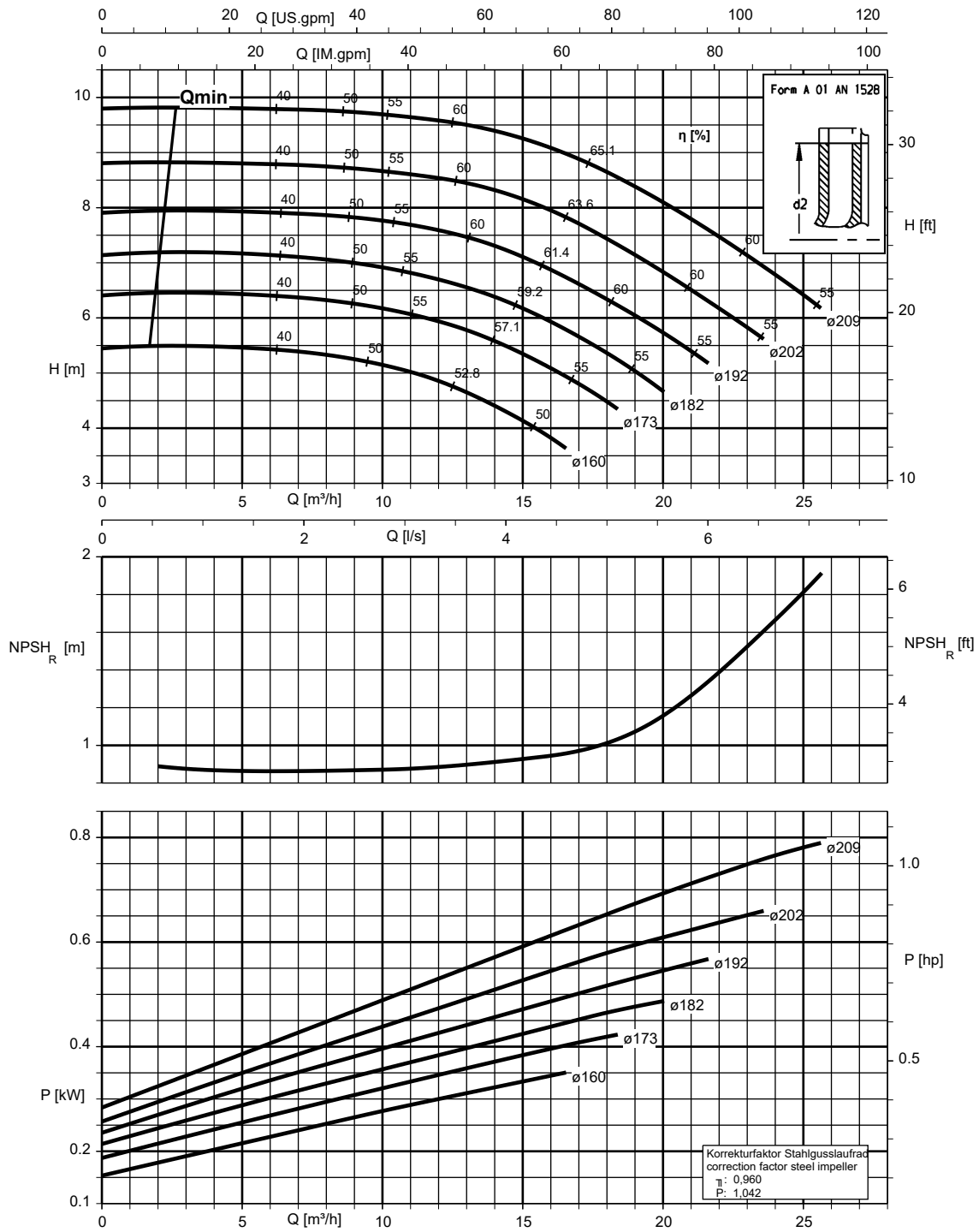
Etanorm SYT, Etabloc



K1311.466/26/2

Etanorm 065-040-200, n = 1160 rpm

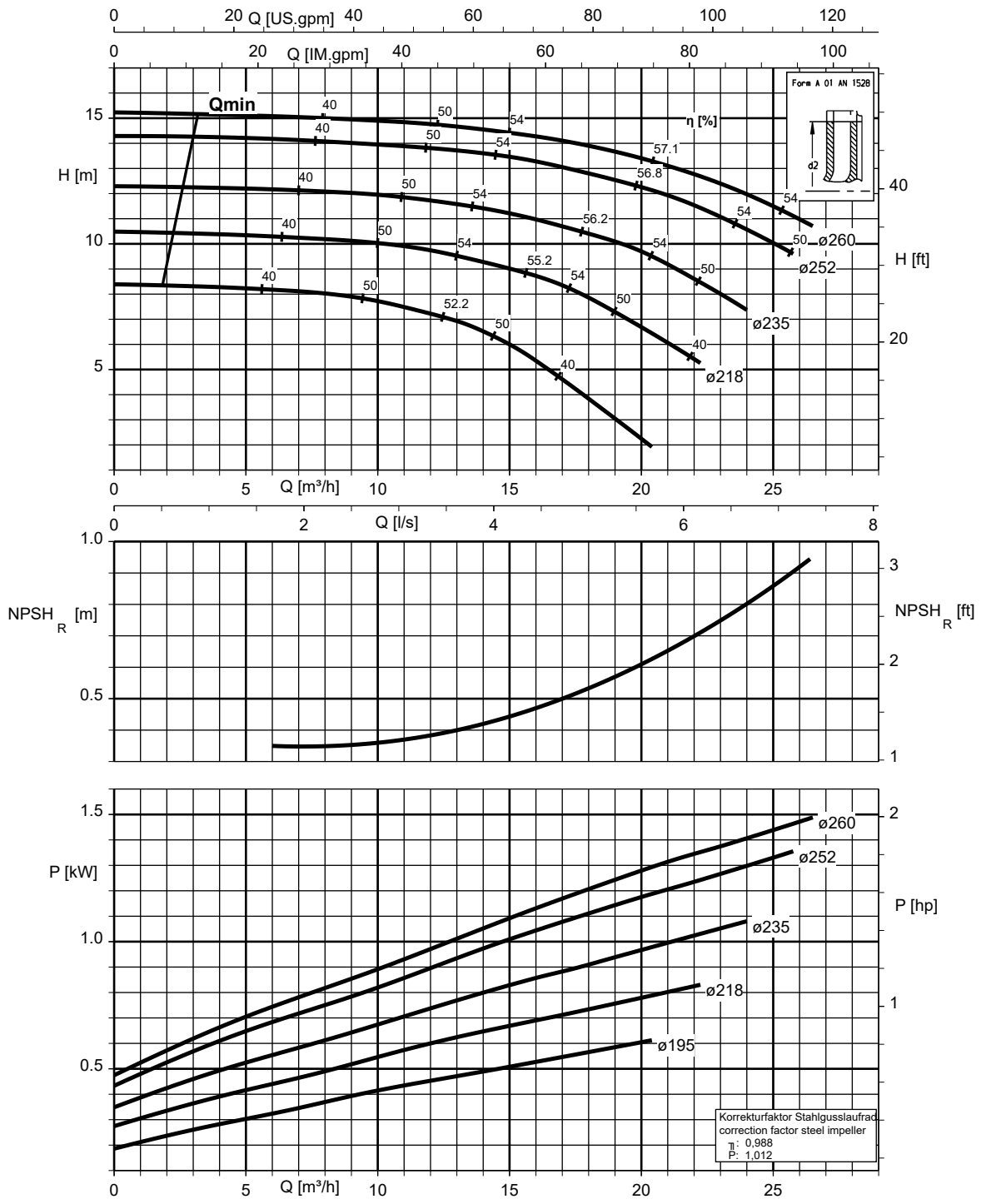
Etanorm SYT, Etabloc



K1311.466/27/1

Etanorm 065-040-250, n = 1160 rpm

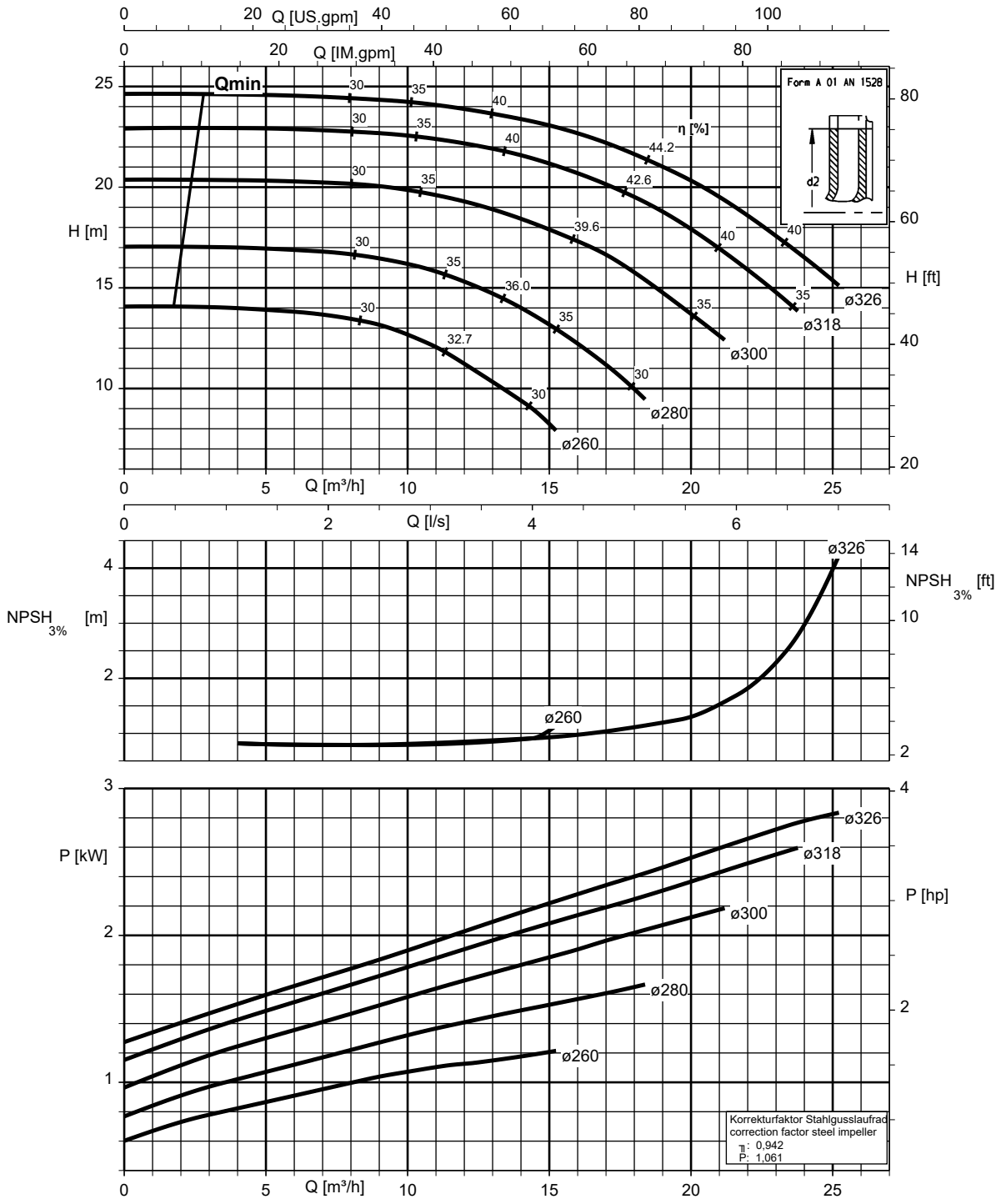
Etanorm SYT, Etabloc



K1311.466/28/2

Etanorm 065-040-315, n = 1160 rpm

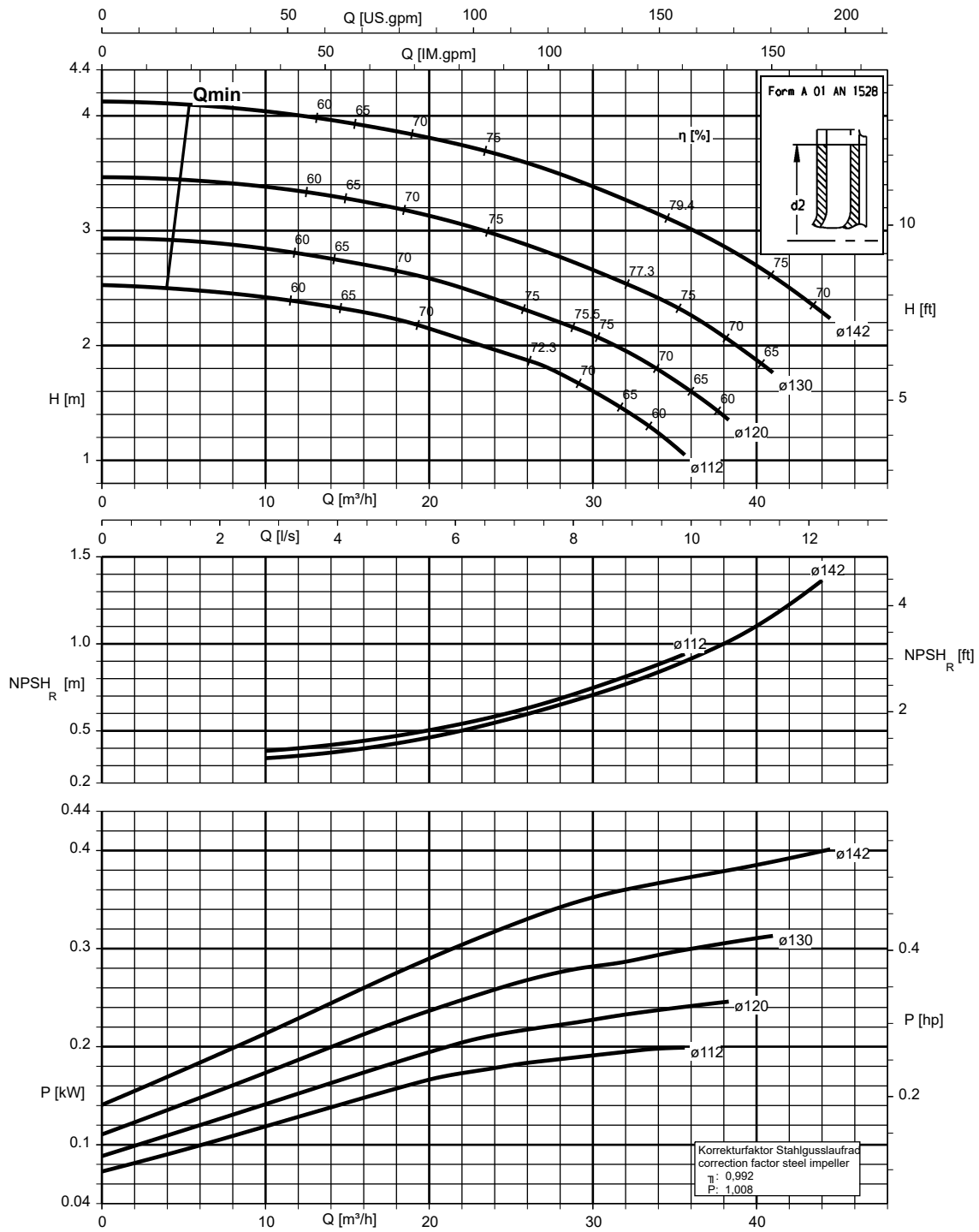
Etanorm SYT, Etabloc



K1311.466/29/3

Etanorm 065-050-125, n = 1160 rpm

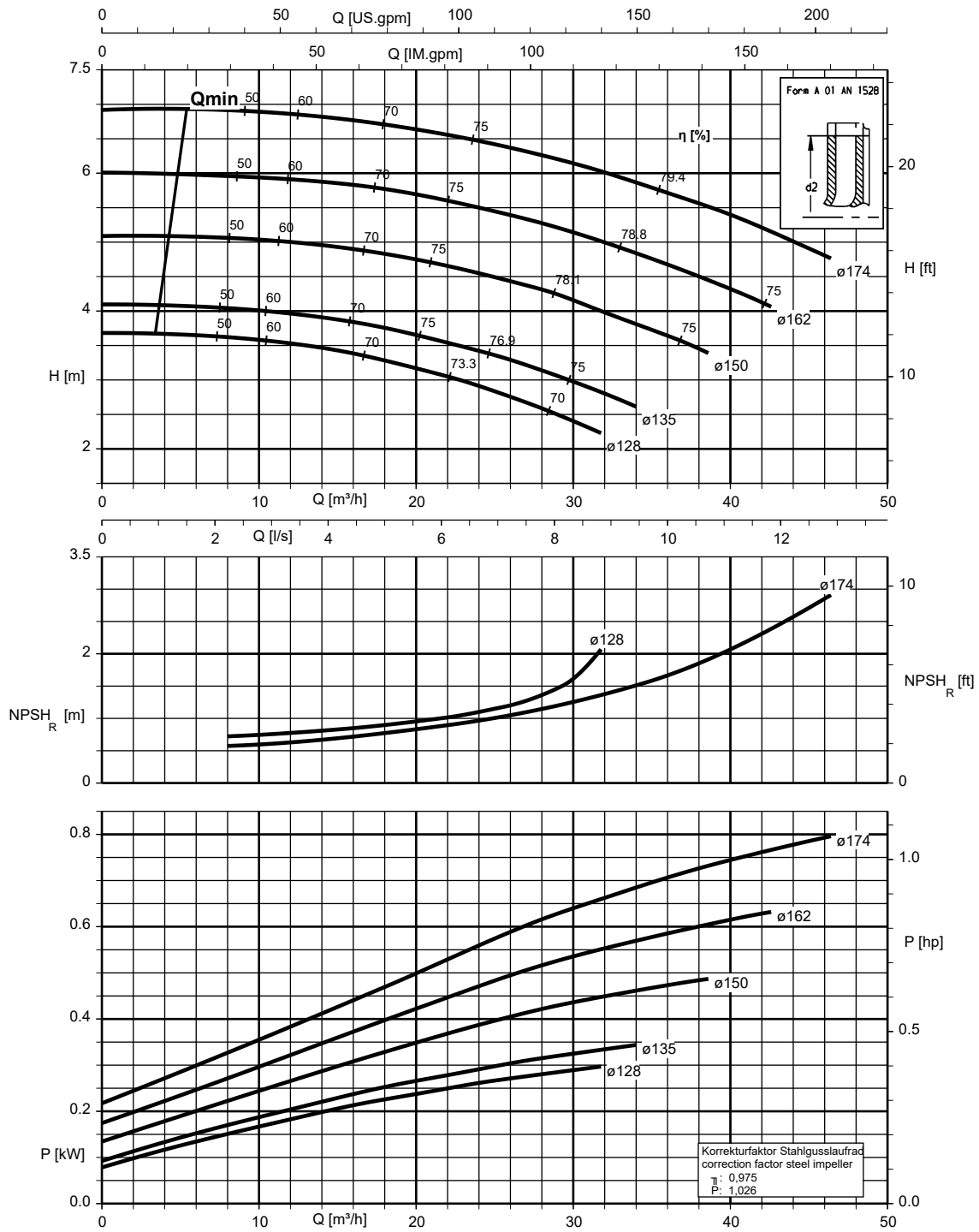
Etabloc



K1311.466/30/1

Etanorm 065-050-160, n = 1160 rpm

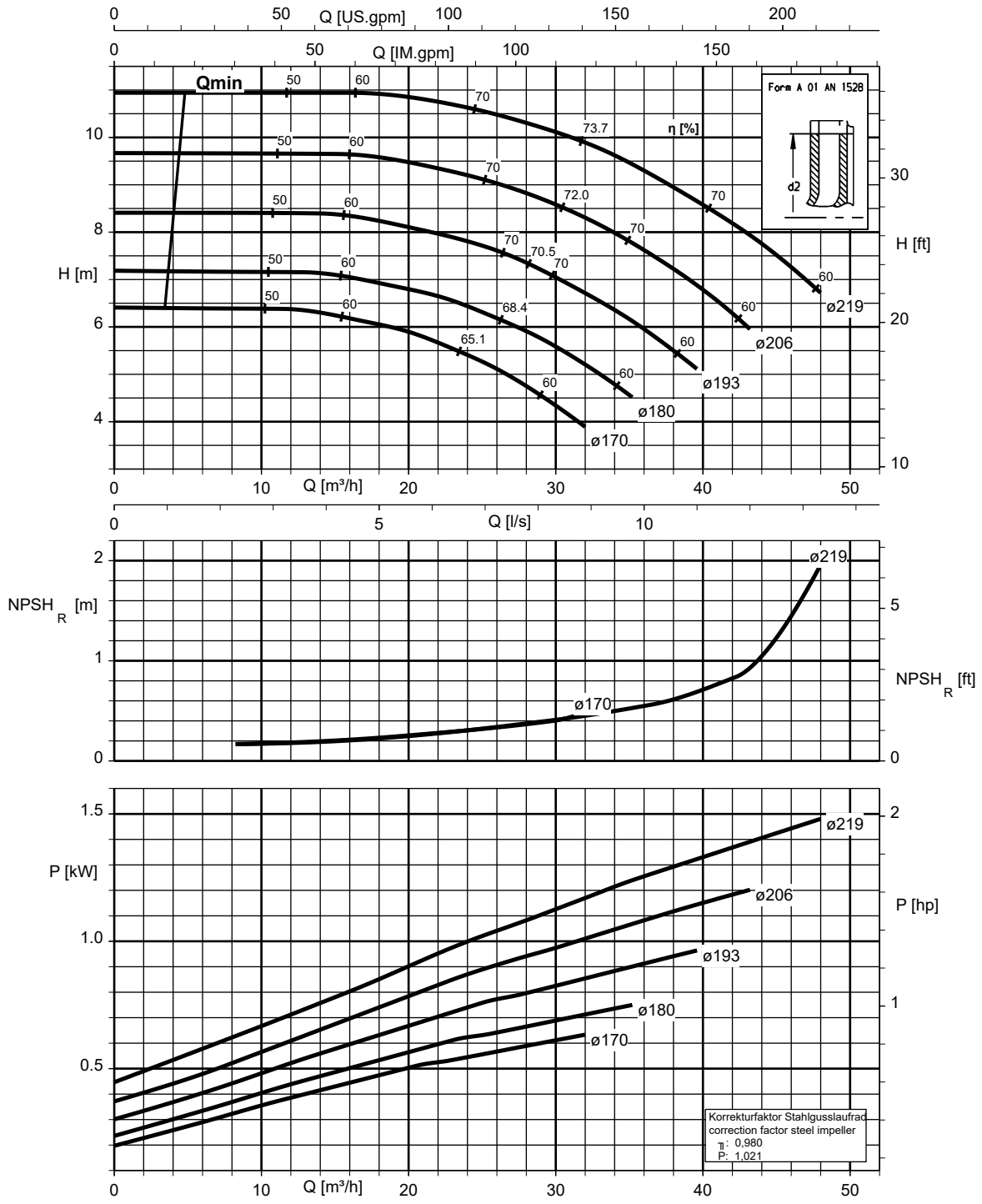
Etanorm SYT, Etabloc



K1311.466/31/1

Etanorm 065-050-200, n = 1160 rpm

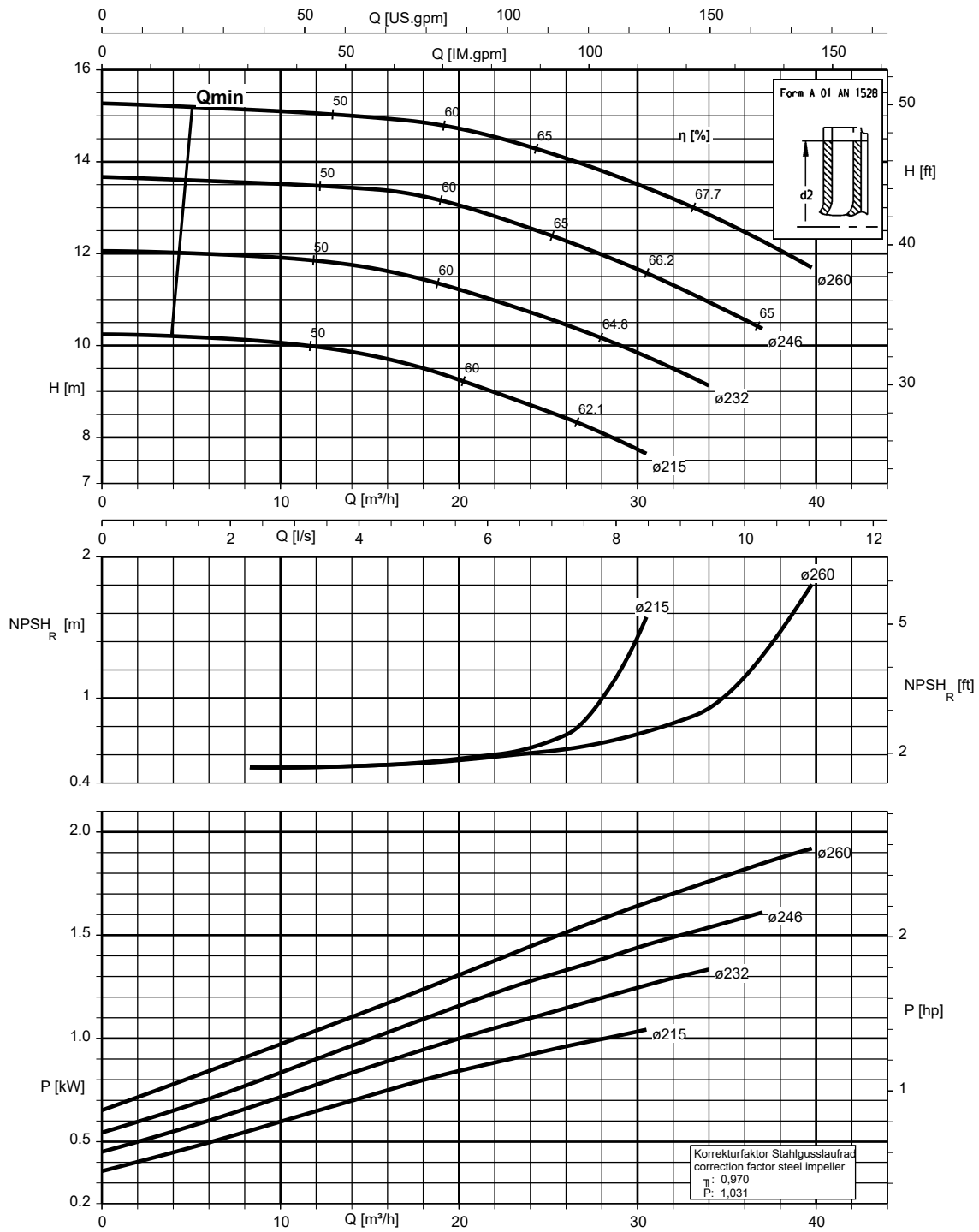
Etanorm SYT, Etabloc



K1311.466/32/2

Etanorm 065-050-250, n = 1160 rpm

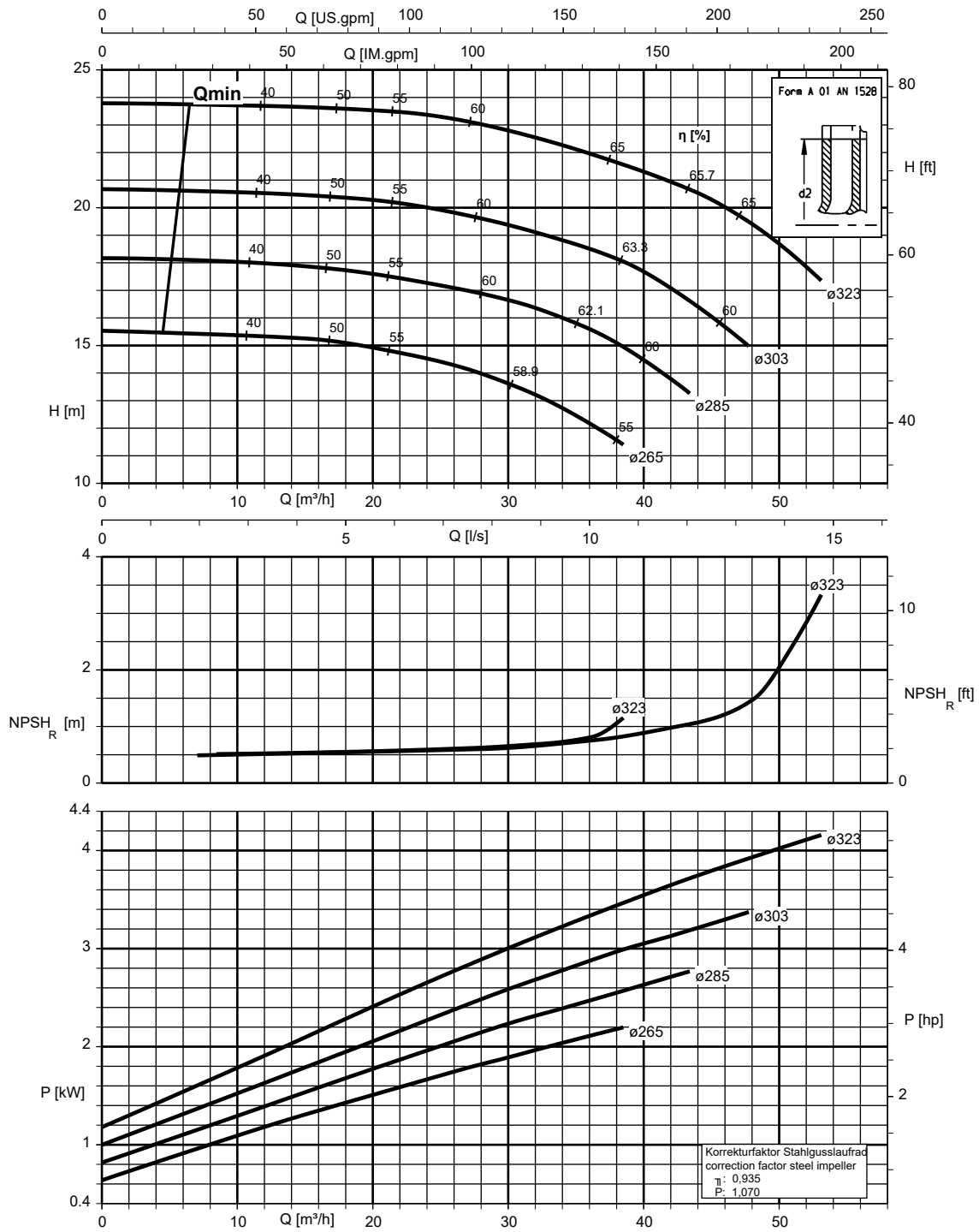
Etanorm SYT, Etabloc



K1311.466/33/1

Etanorm 065-050-315, n = 1160 rpm

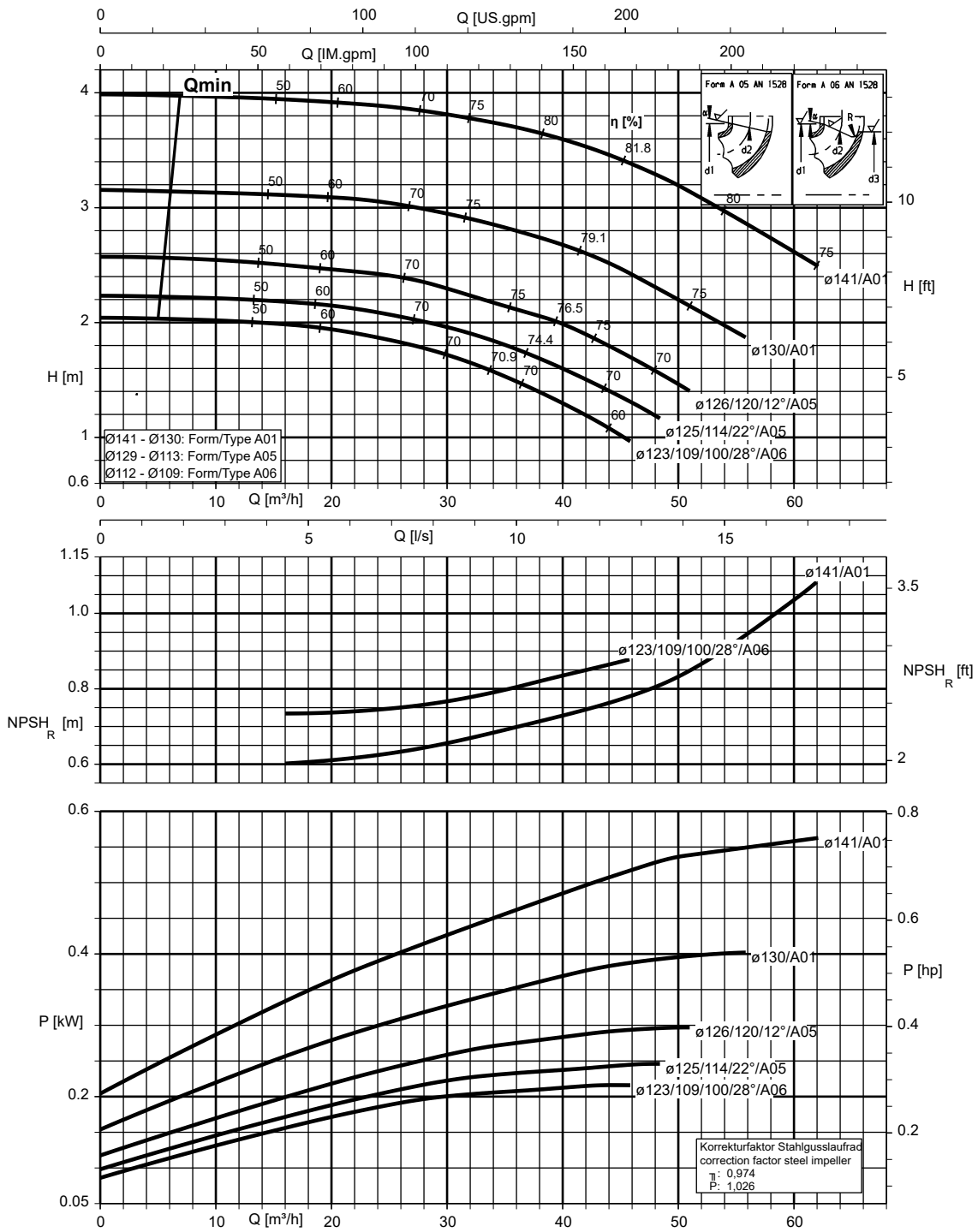
Etanorm SYT, Etabloc



K1311.466/34/2

Etanorm 080-065-125, n = 1160 rpm

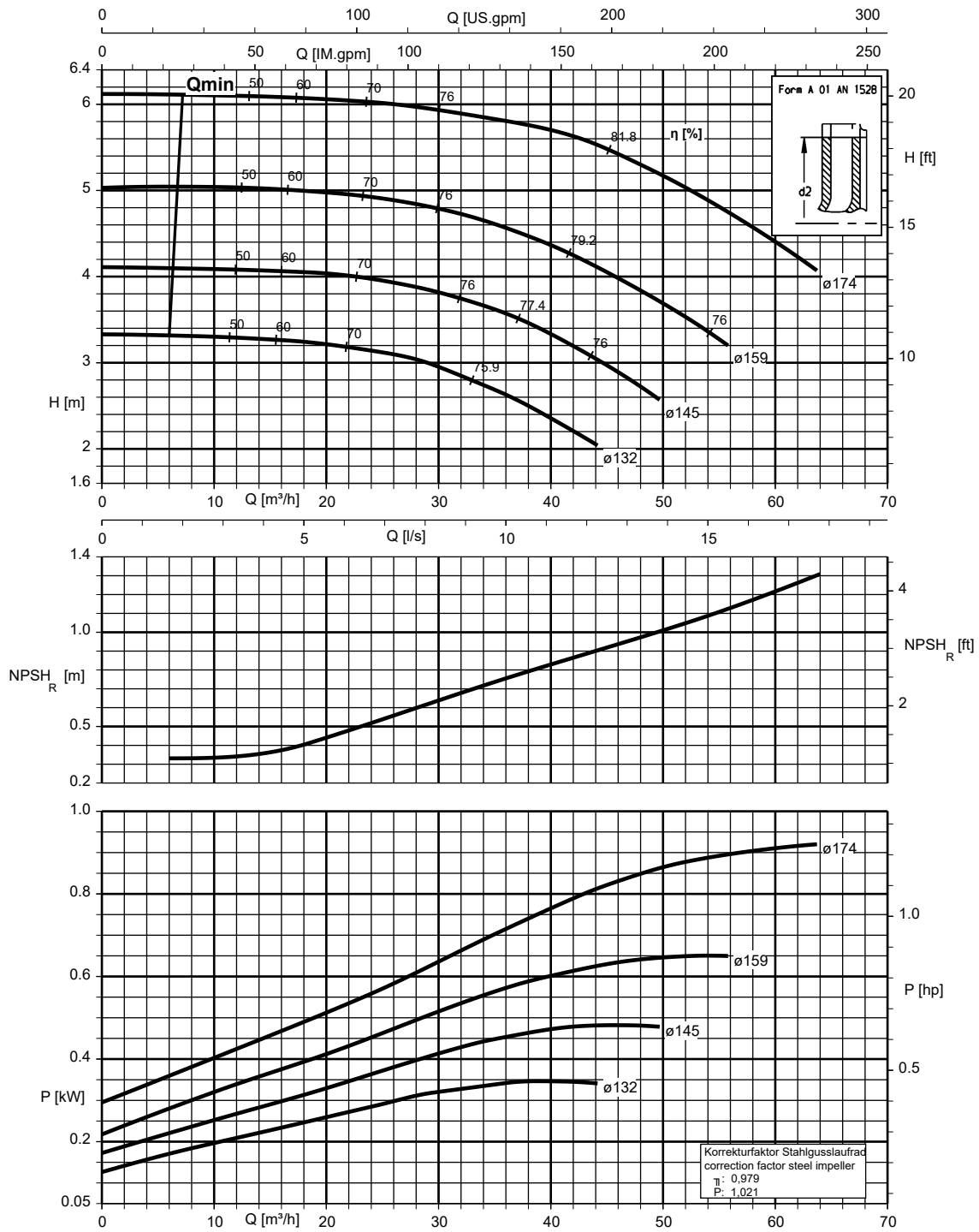
Etabloc



K1311.466/35/2

Etanorm 080-065-160, n = 1160 rpm

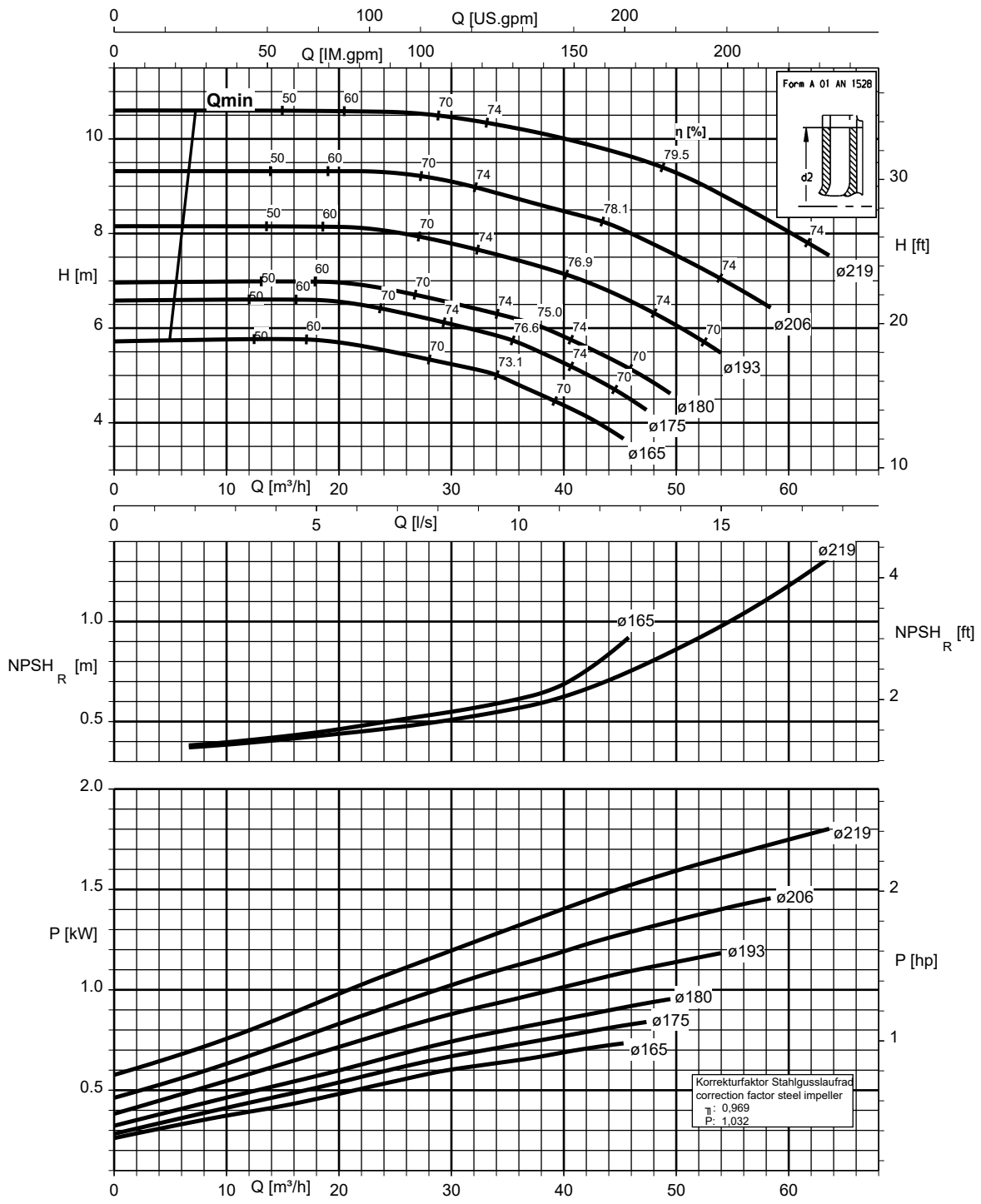
Etanorm SYT, Etabloc



K1311.466/36/2

Etanorm 080-065-200, n = 1160 rpm

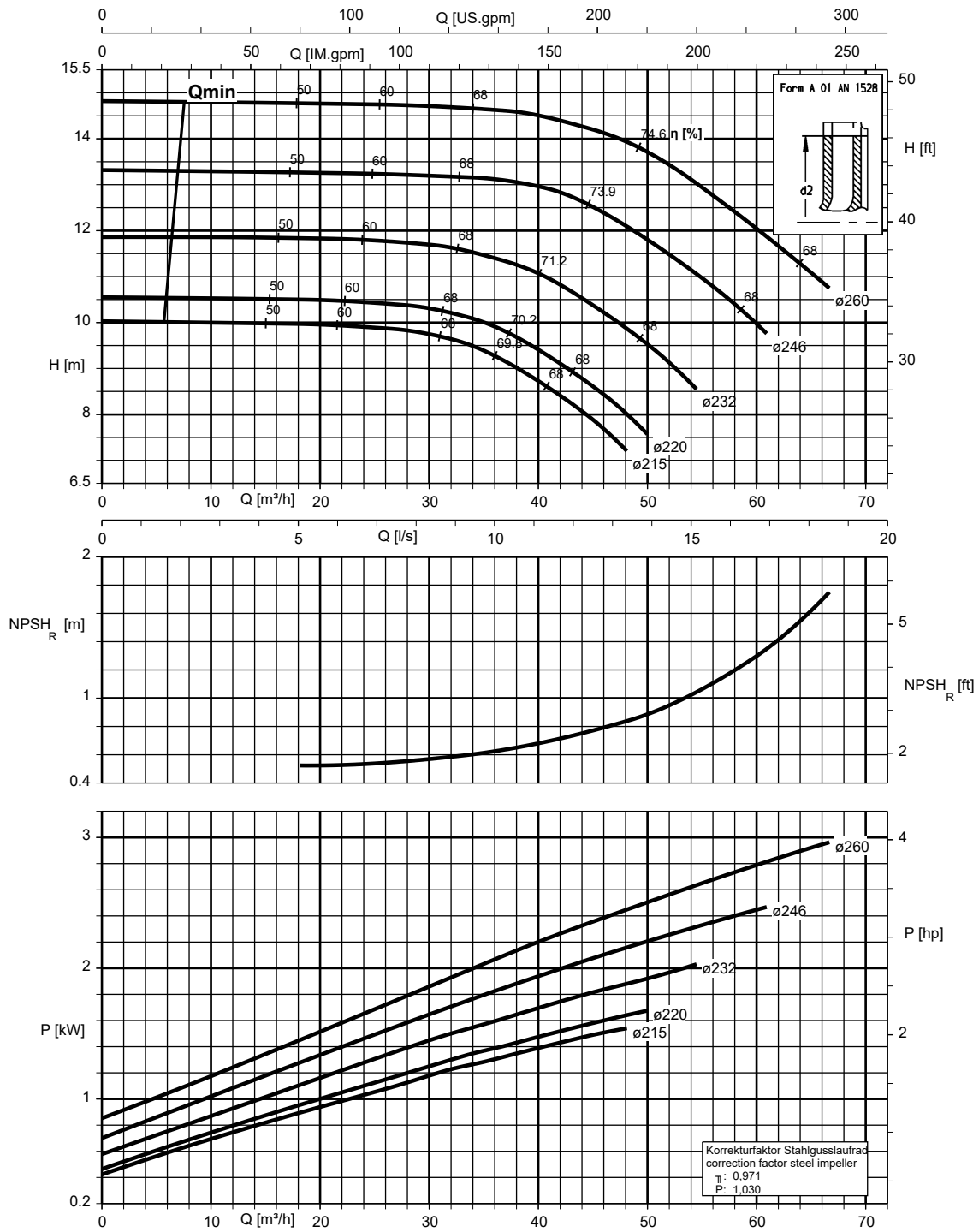
Etanorm SYT, Etabloc



K1311.466/37/2

Etanorm 080-065-250, n = 1160 rpm

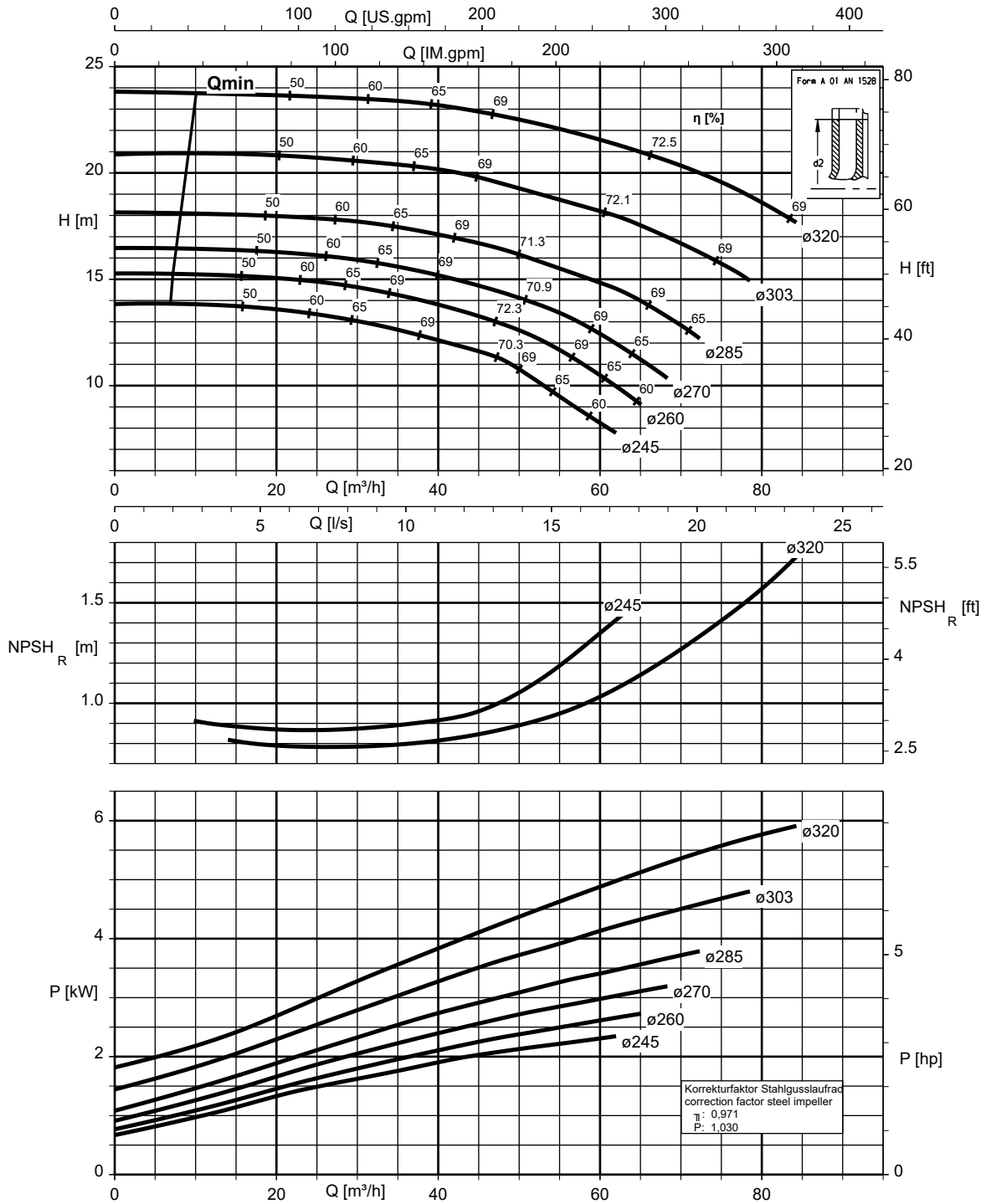
Etanorm SYT, Etabloc



K1311.466/38/2

Etanorm 080-065-315, n = 1160 rpm

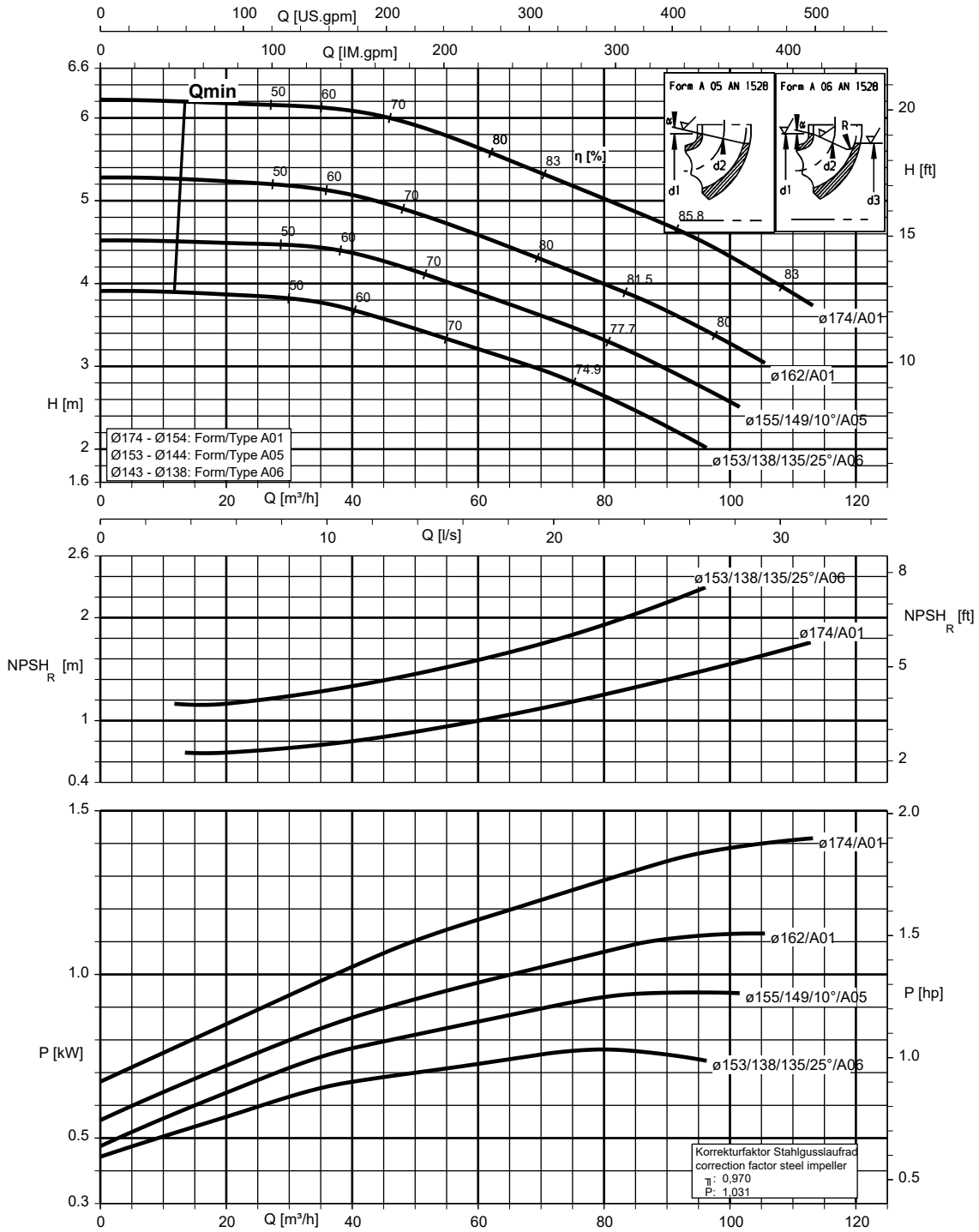
Etanorm SYT, Etabloc



K1311.466/39/2

Etanorm 100-080-160, n = 1160 rpm

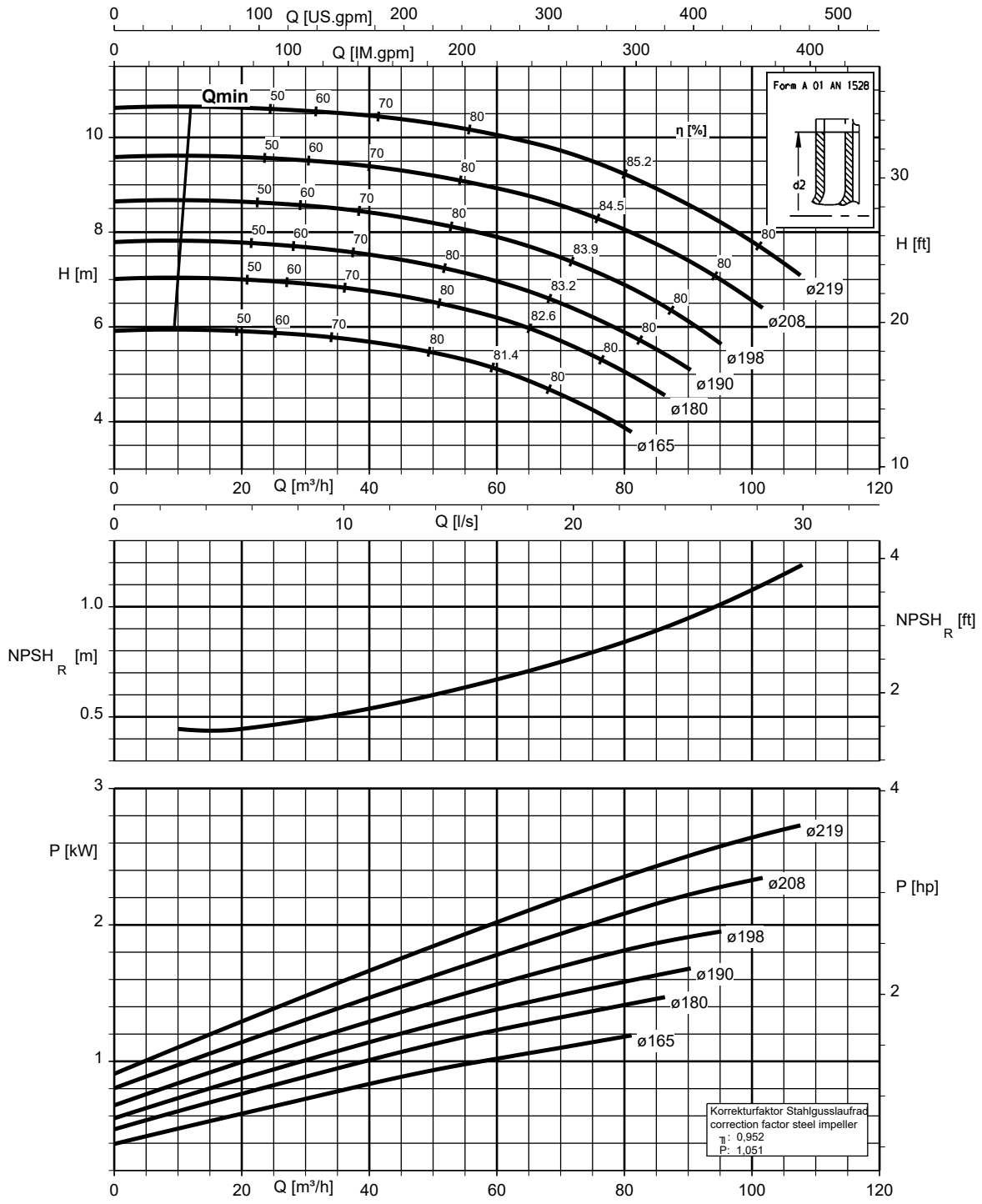
Etanorm SYT, Etabloc



K1311.466/40/2

Etanorm 100-080-200, n = 1160 rpm

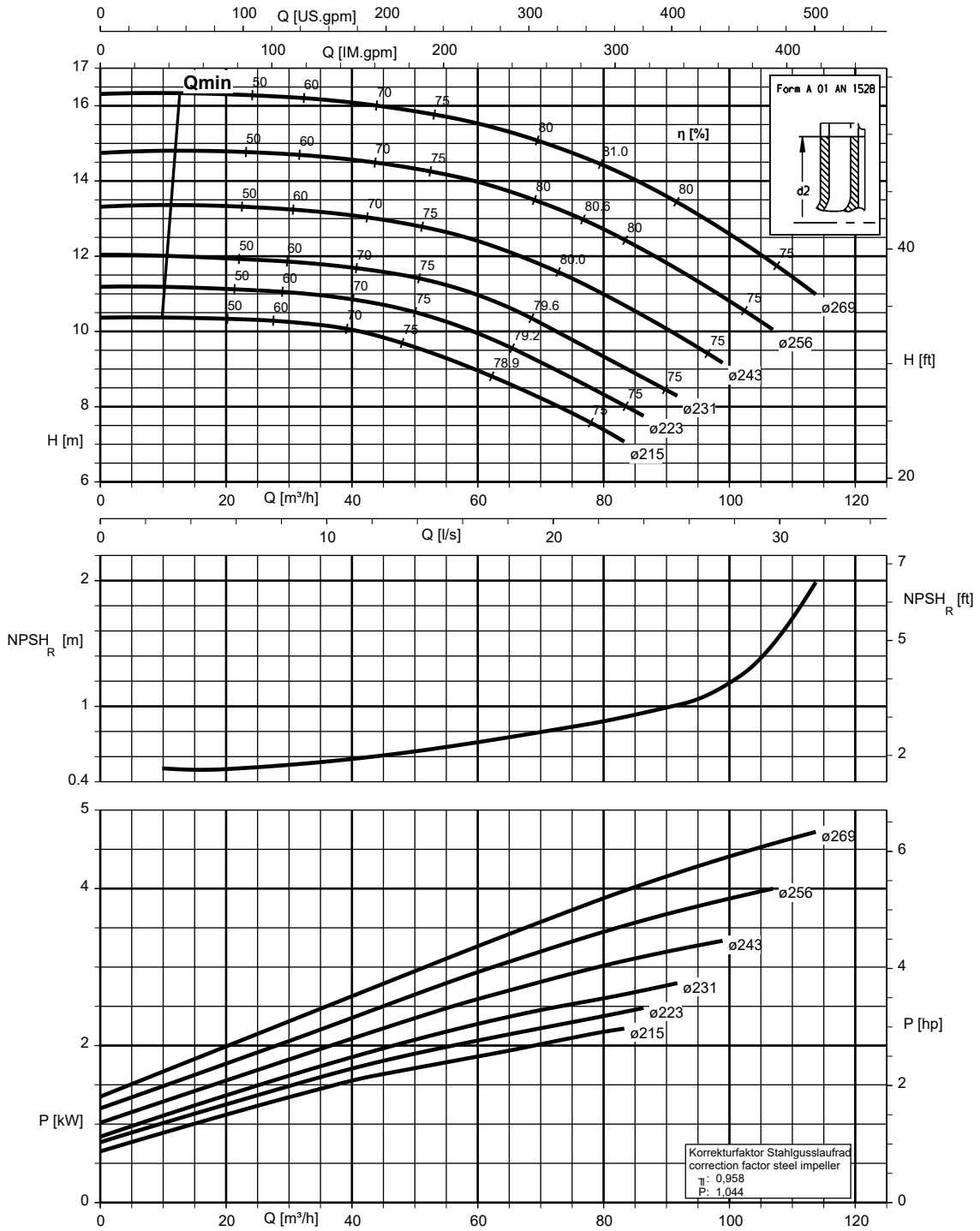
Etanorm SYT, Etabloc



1311.46/11-EN-US

Etanorm 100-080-250, n = 1160 rpm

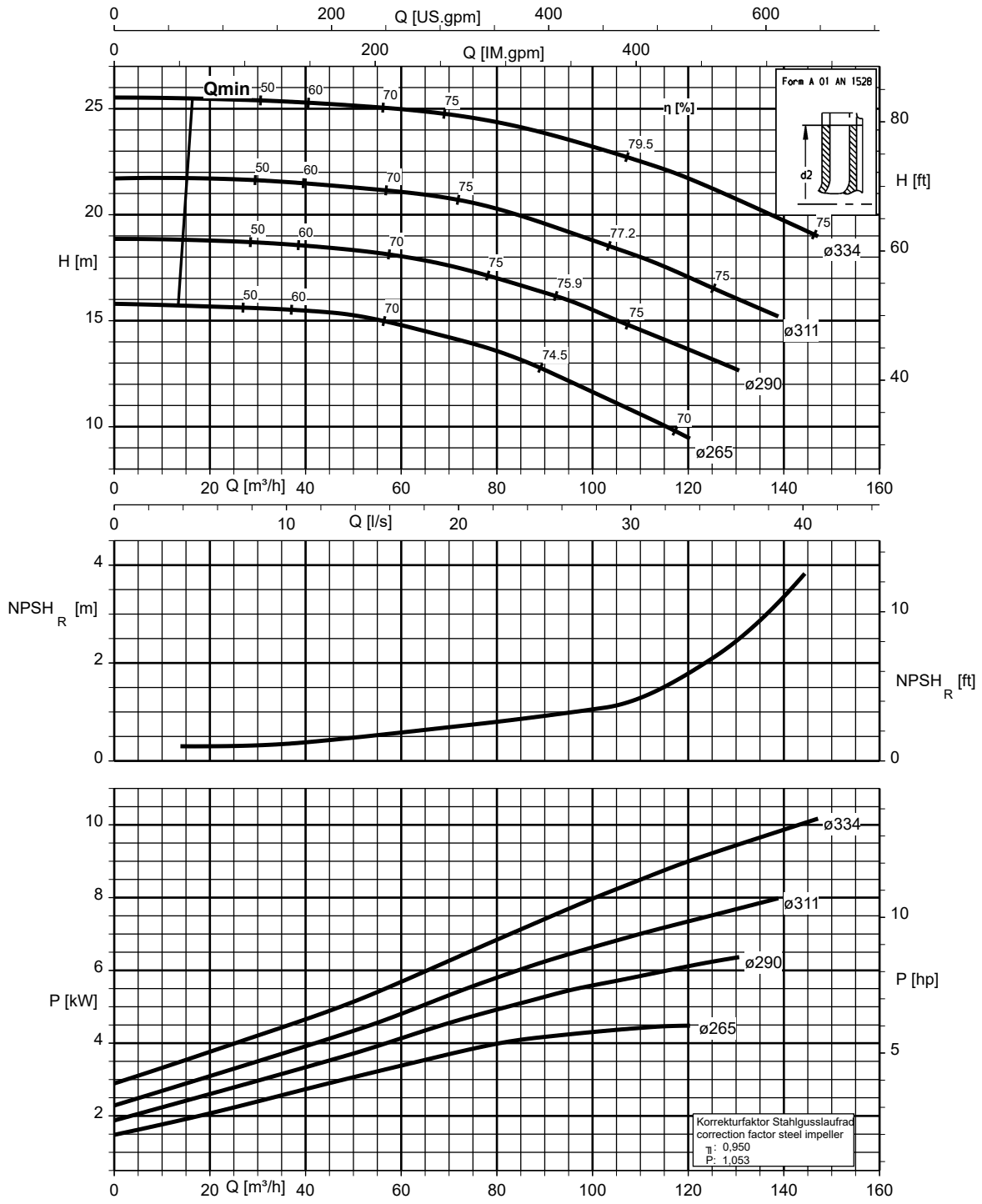
Etanorm SYT, Etabloc



K1311.466/42/2

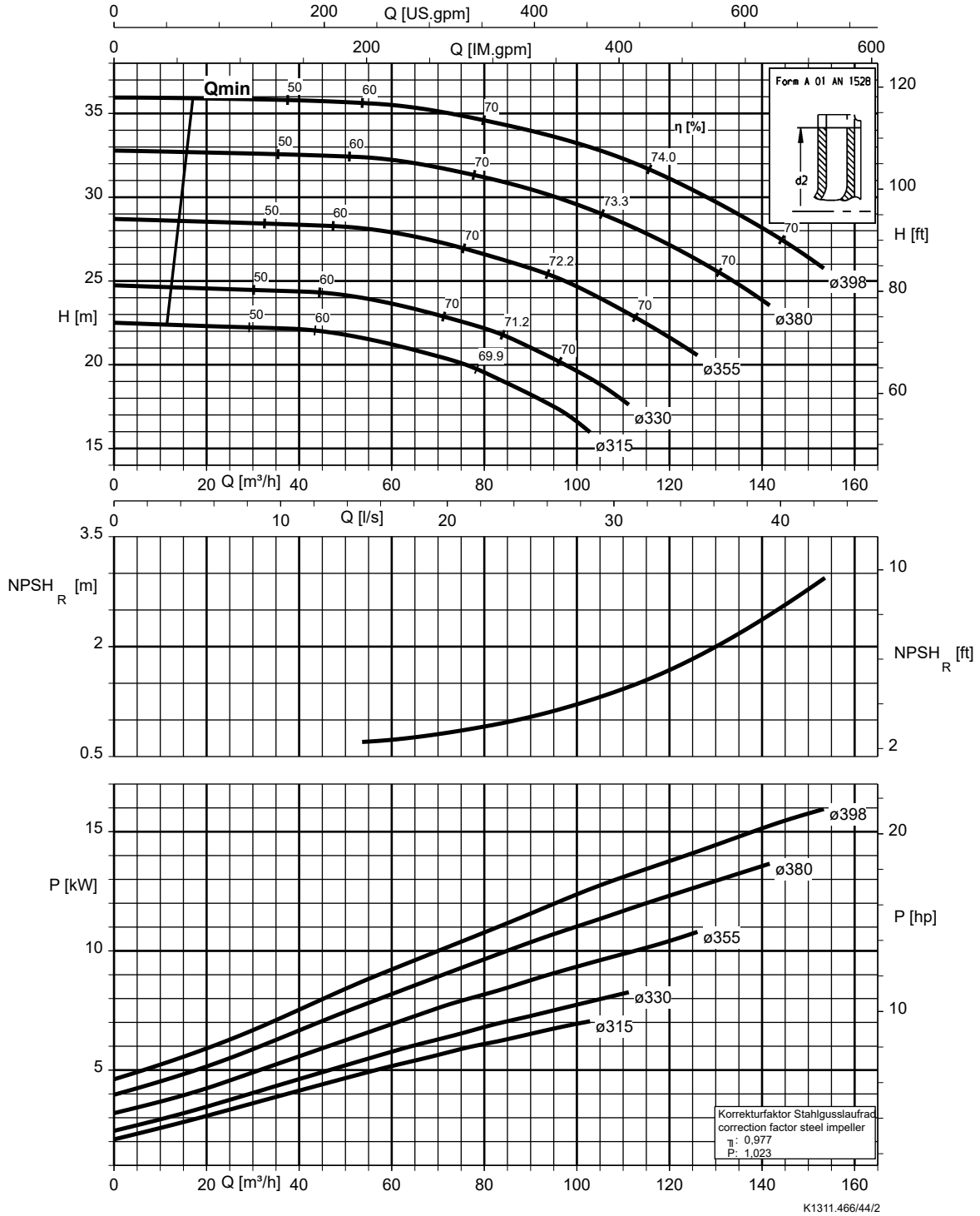
Etanorm 100-080-315, n = 1160 rpm

Etanorm SYT, Etabloc



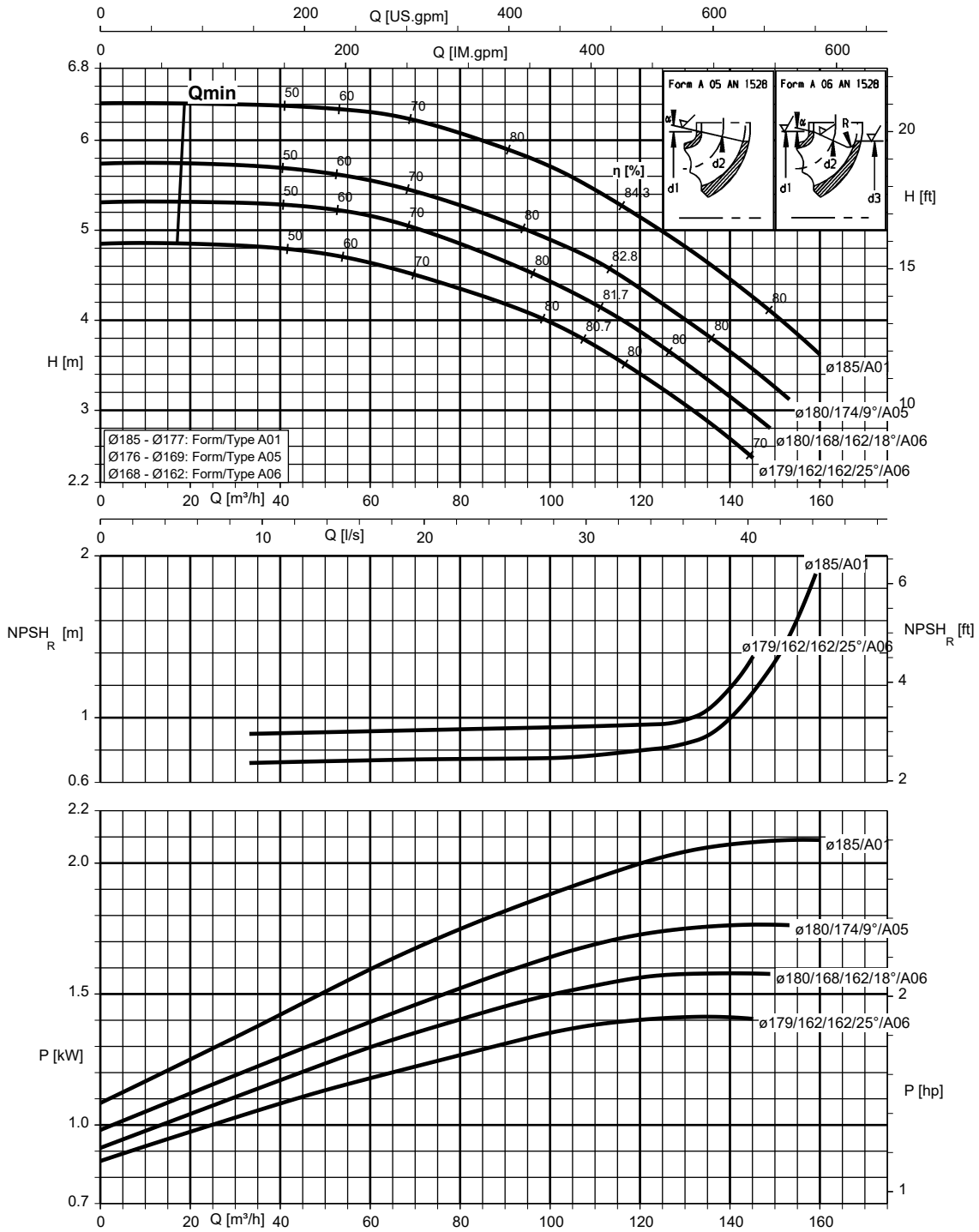
1311.46/11-EN-US

Etanorm 100-080-400, n = 1160 rpm



Etanorm 125-100-160, n = 1160 rpm

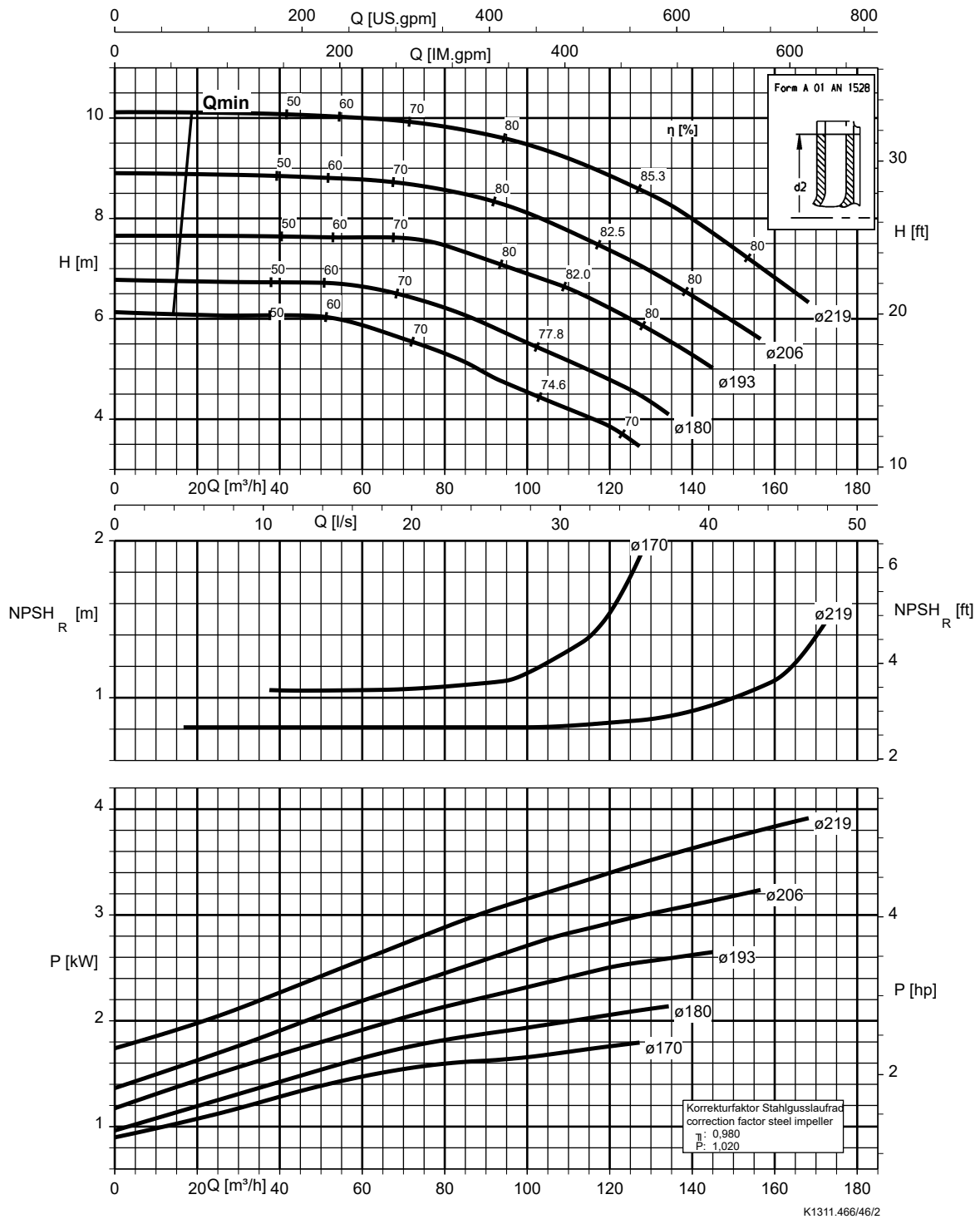
Etanorm SYT, Etabloc



K1311.466/45/2

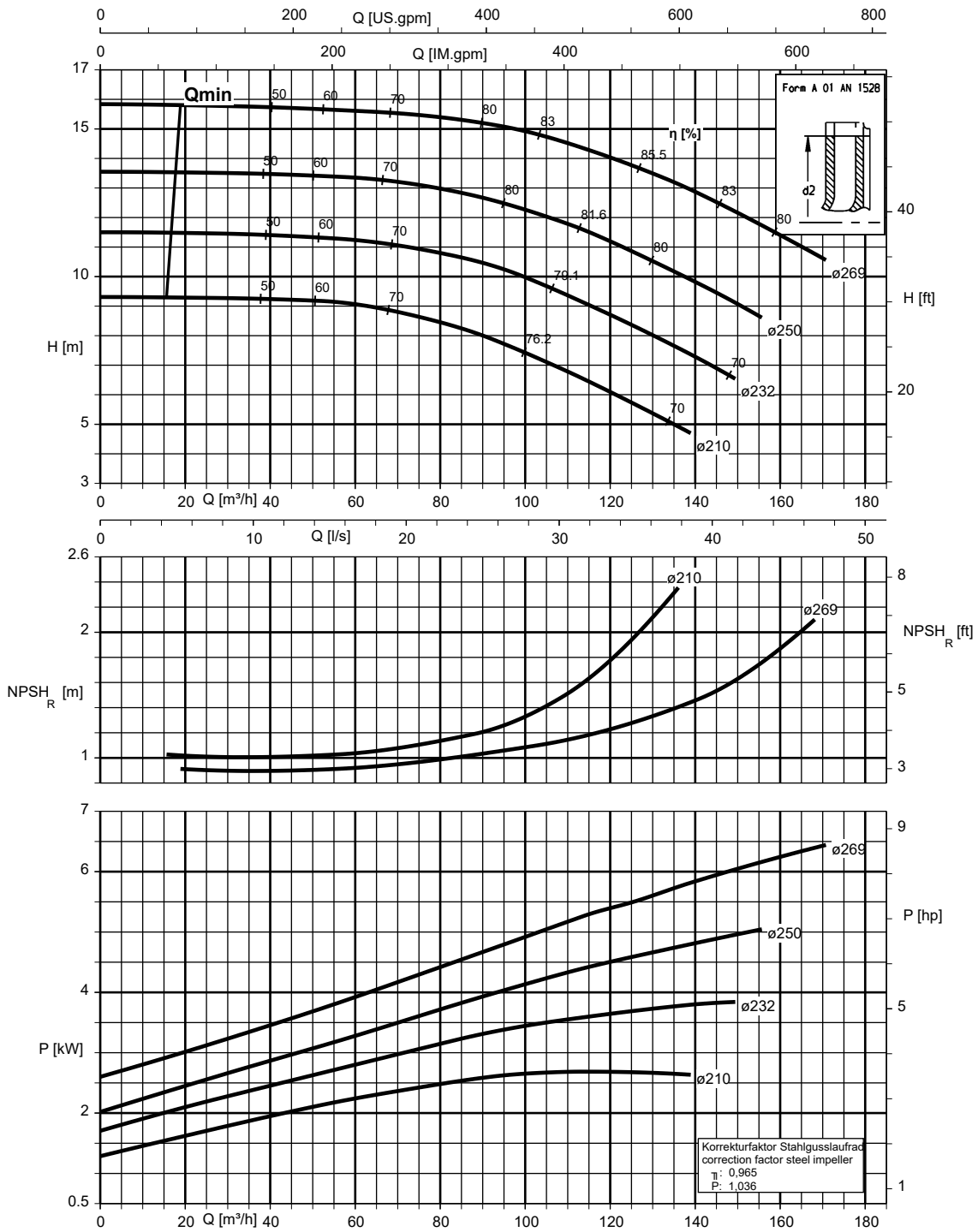
Etanorm 125-100-200, n = 1160 rpm

Etanorm SYT, Etabloc



Etanorm 125-100-250, n = 1160 rpm

Etanorm SYT, Etabloc

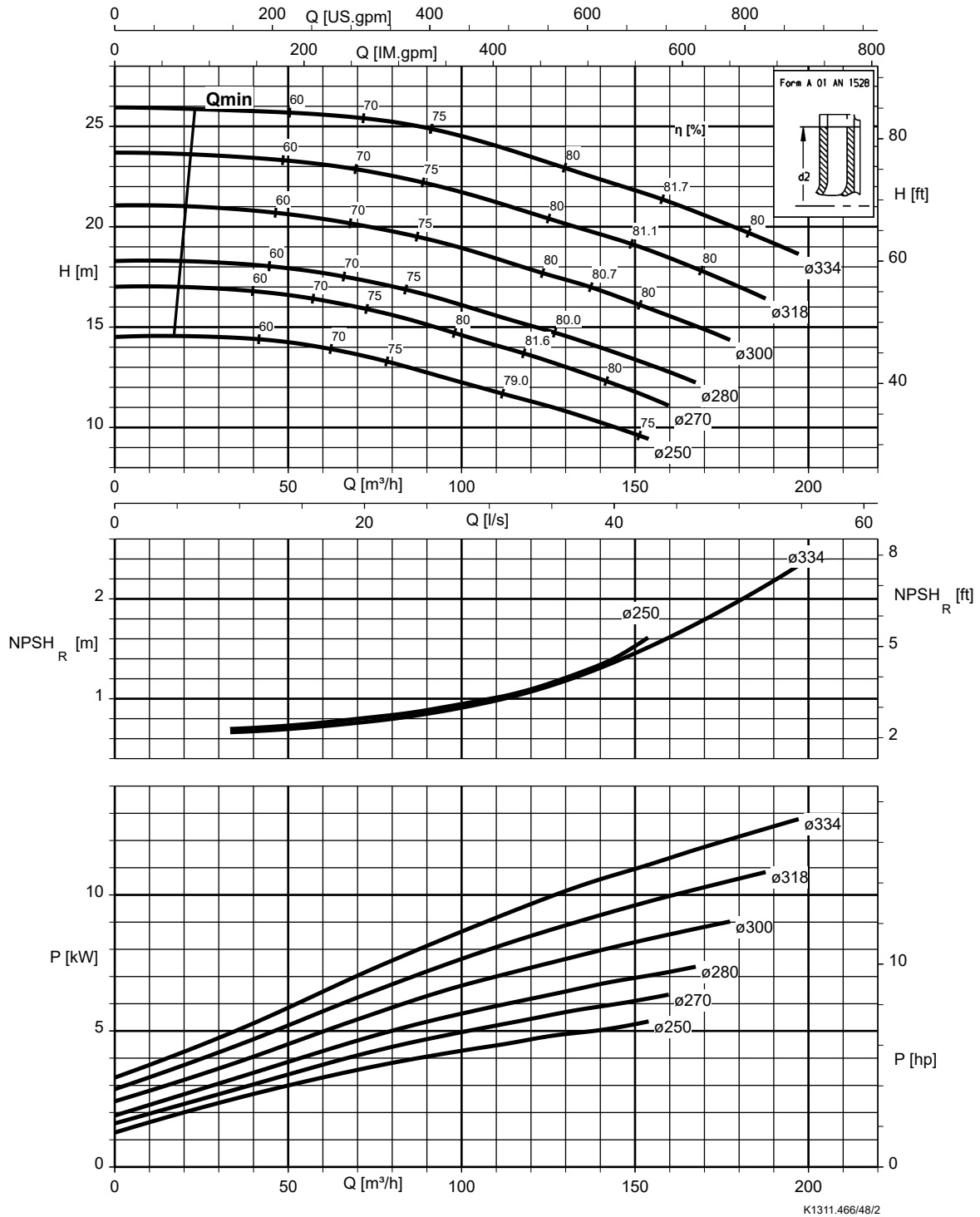


K1311.466/47/2

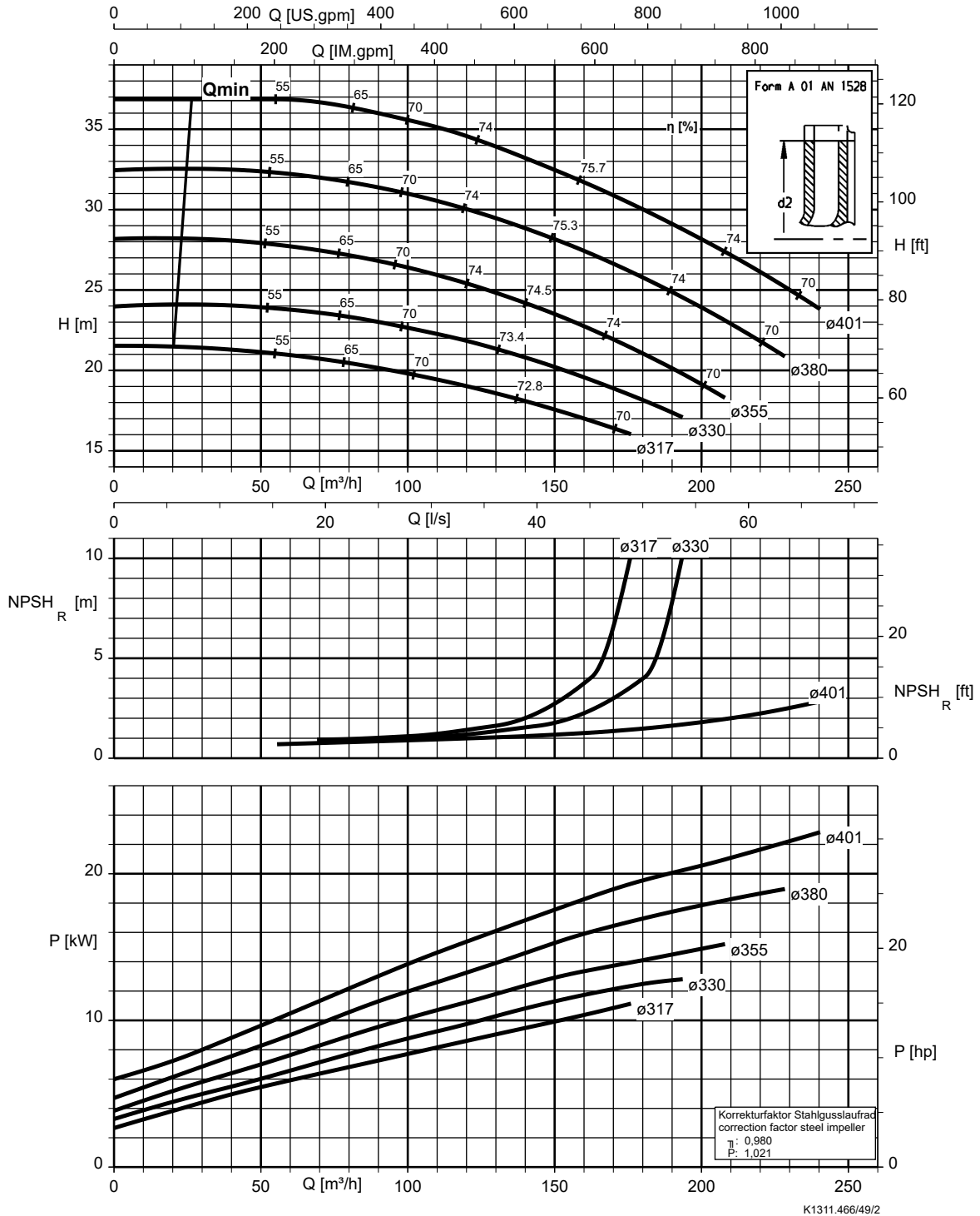
1311.46/11-EN-US

Etanorm 125-100-315, n = 1160 rpm

Etanorm SYT, Etabloc



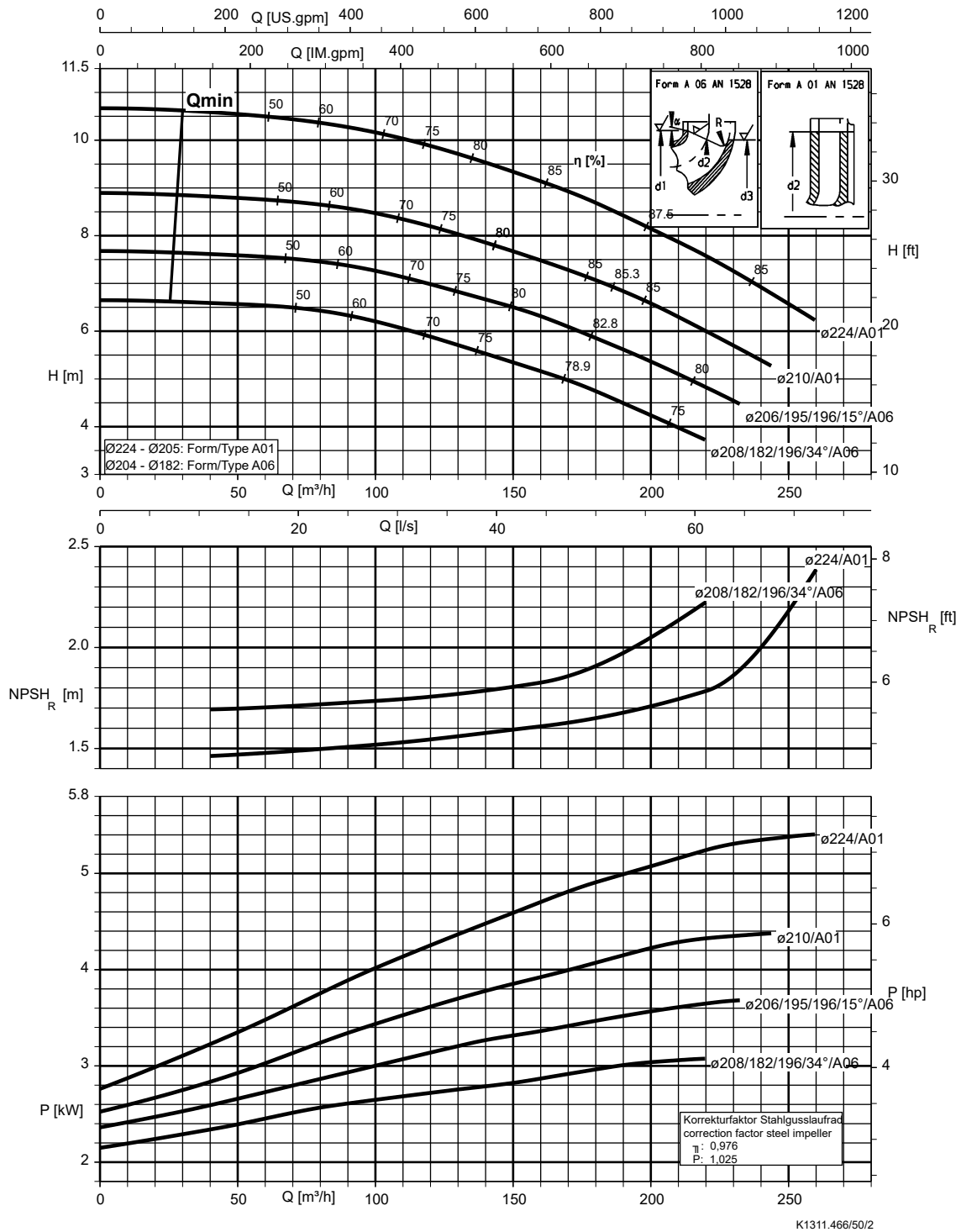
Etanorm 125-100-400, n = 1160 rpm



K1311.466/49/2

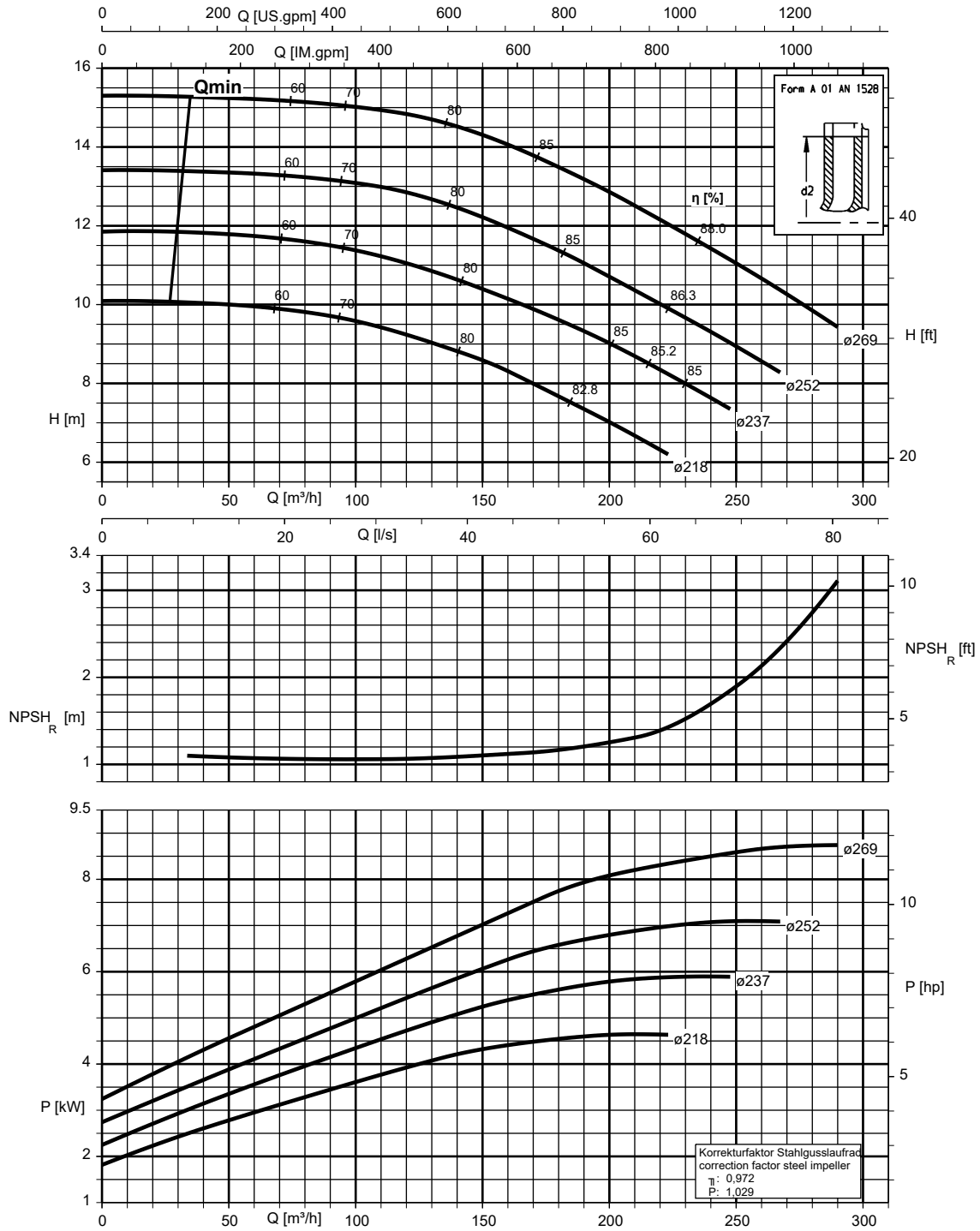
Etanorm 150-125-200, n = 1160 rpm

Etanorm SYT, Etabloc



Etanorm 150-125-250, n = 1160 rpm

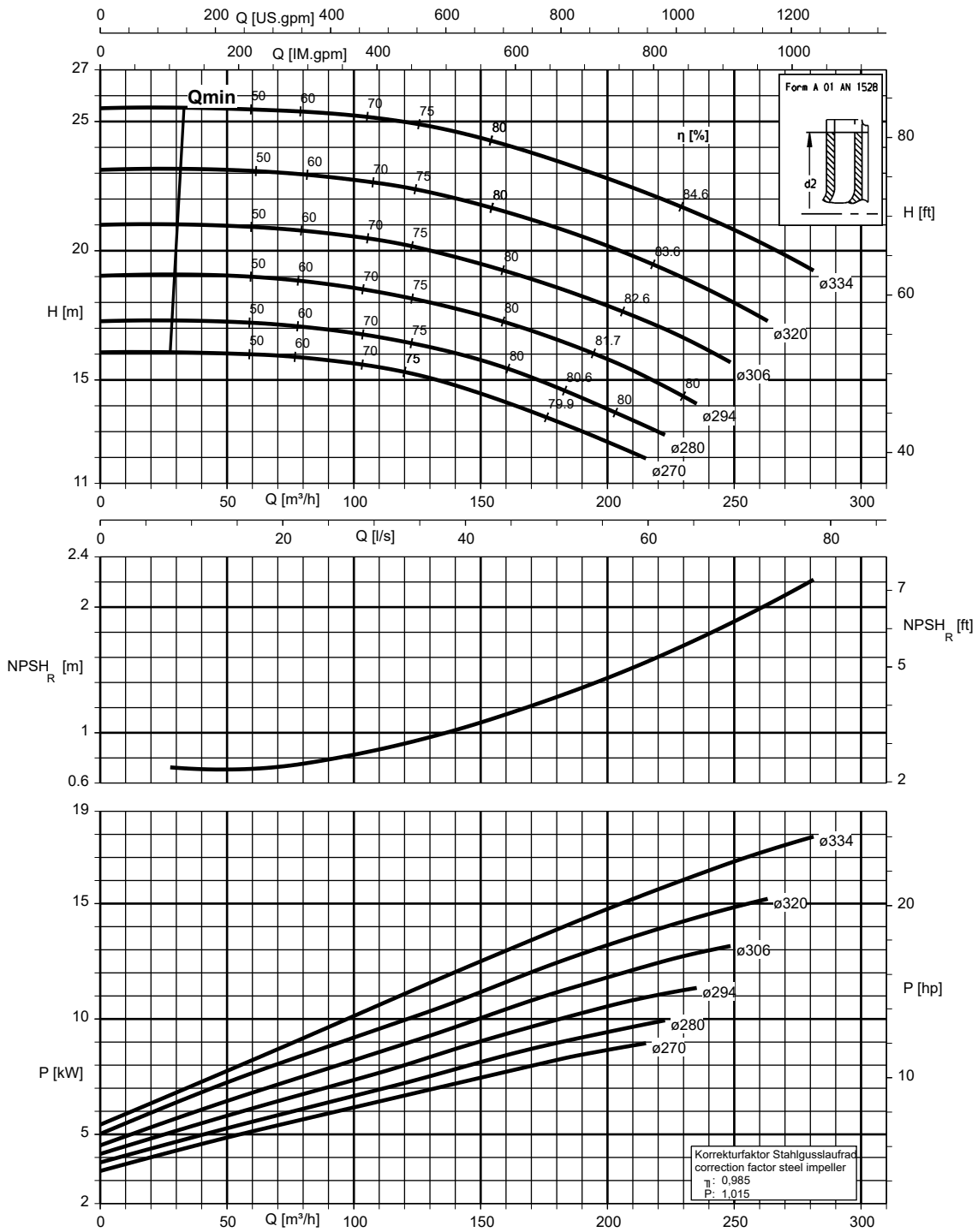
Etanorm SYT, Etabloc



K1311.466/51/2

Etanorm 150-125-315, n = 1160 rpm

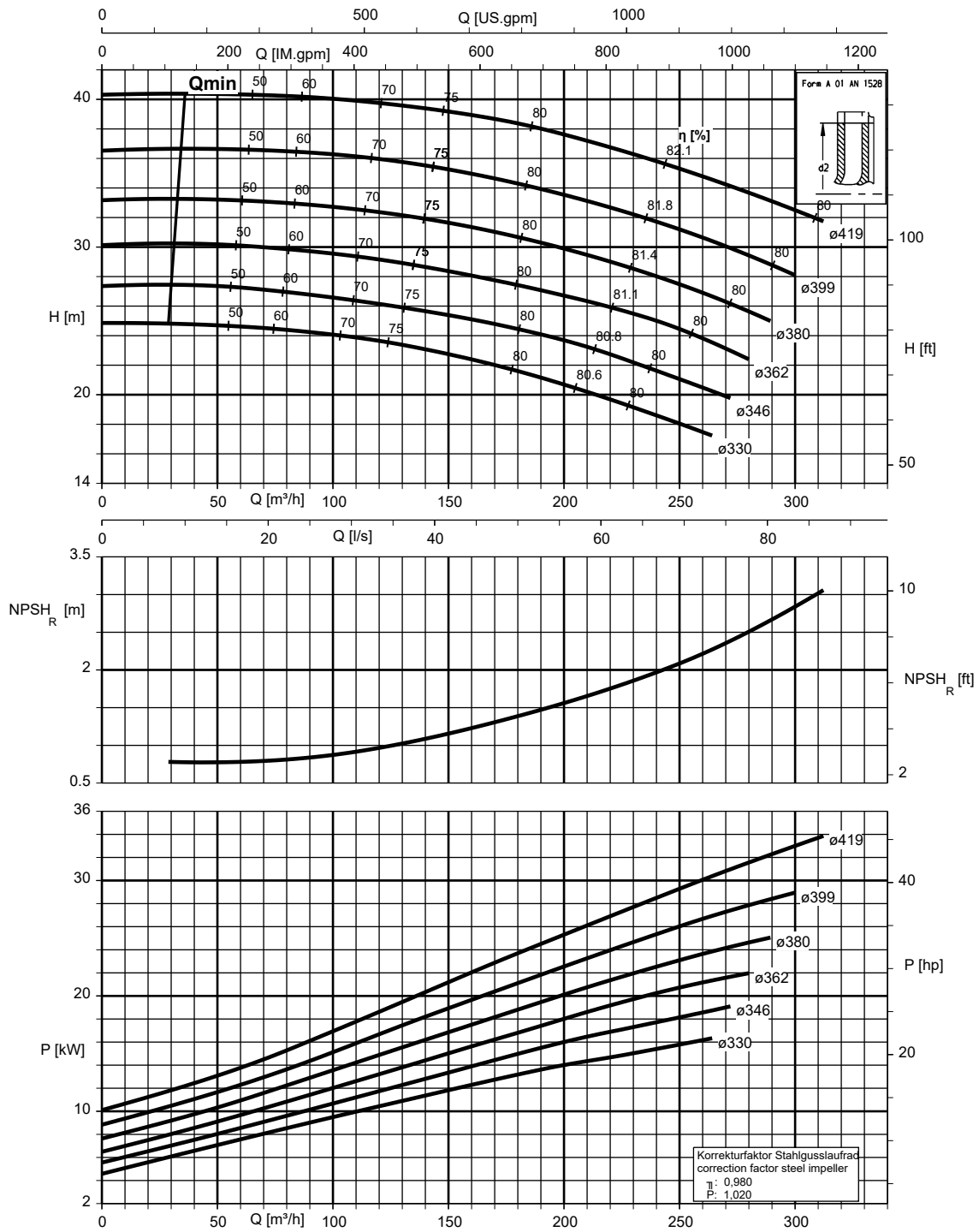
Etanorm SYT



K1311.466/52/2

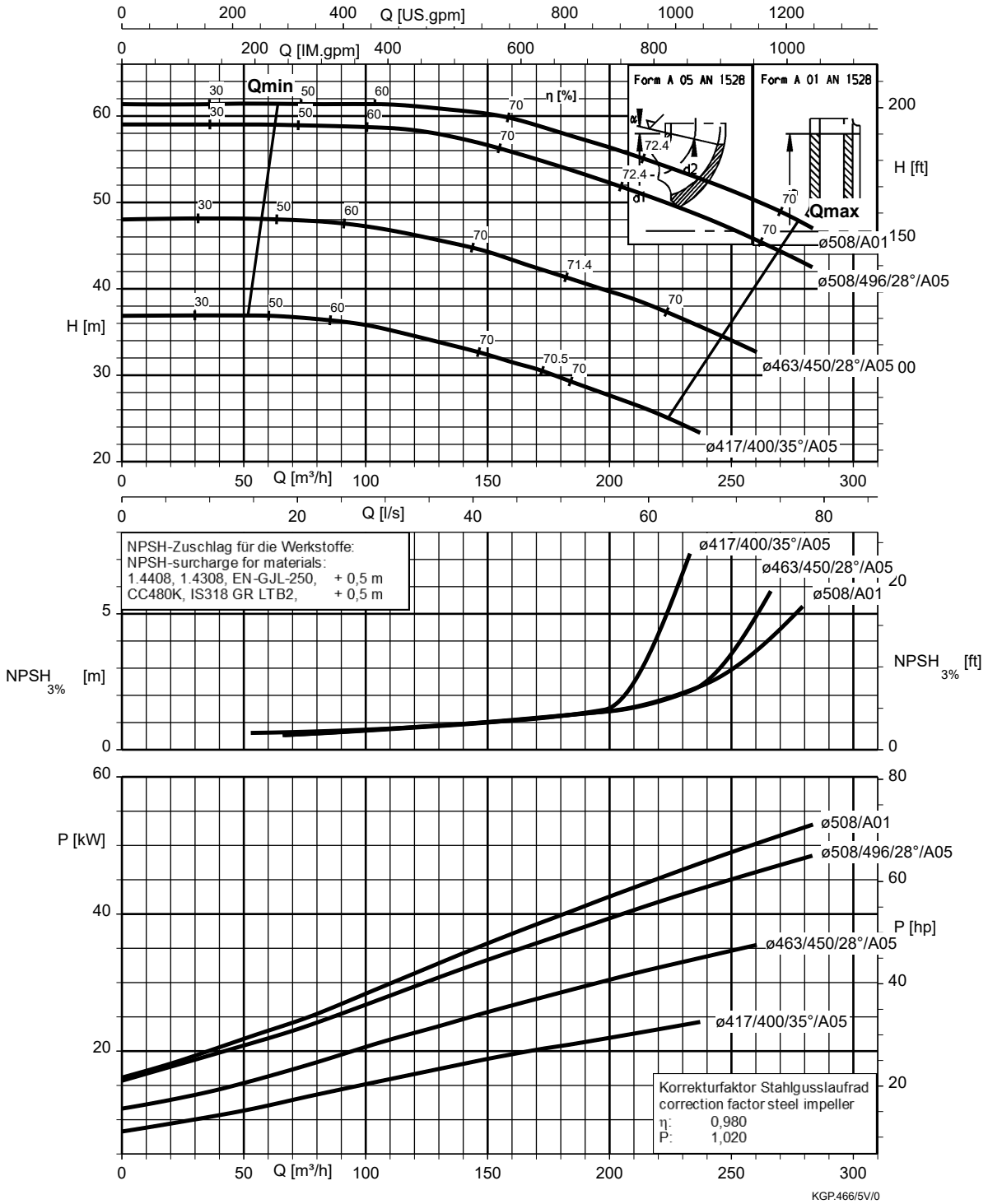
Etanorm 150-125-400, n = 1160 rpm

Etanorm SYT



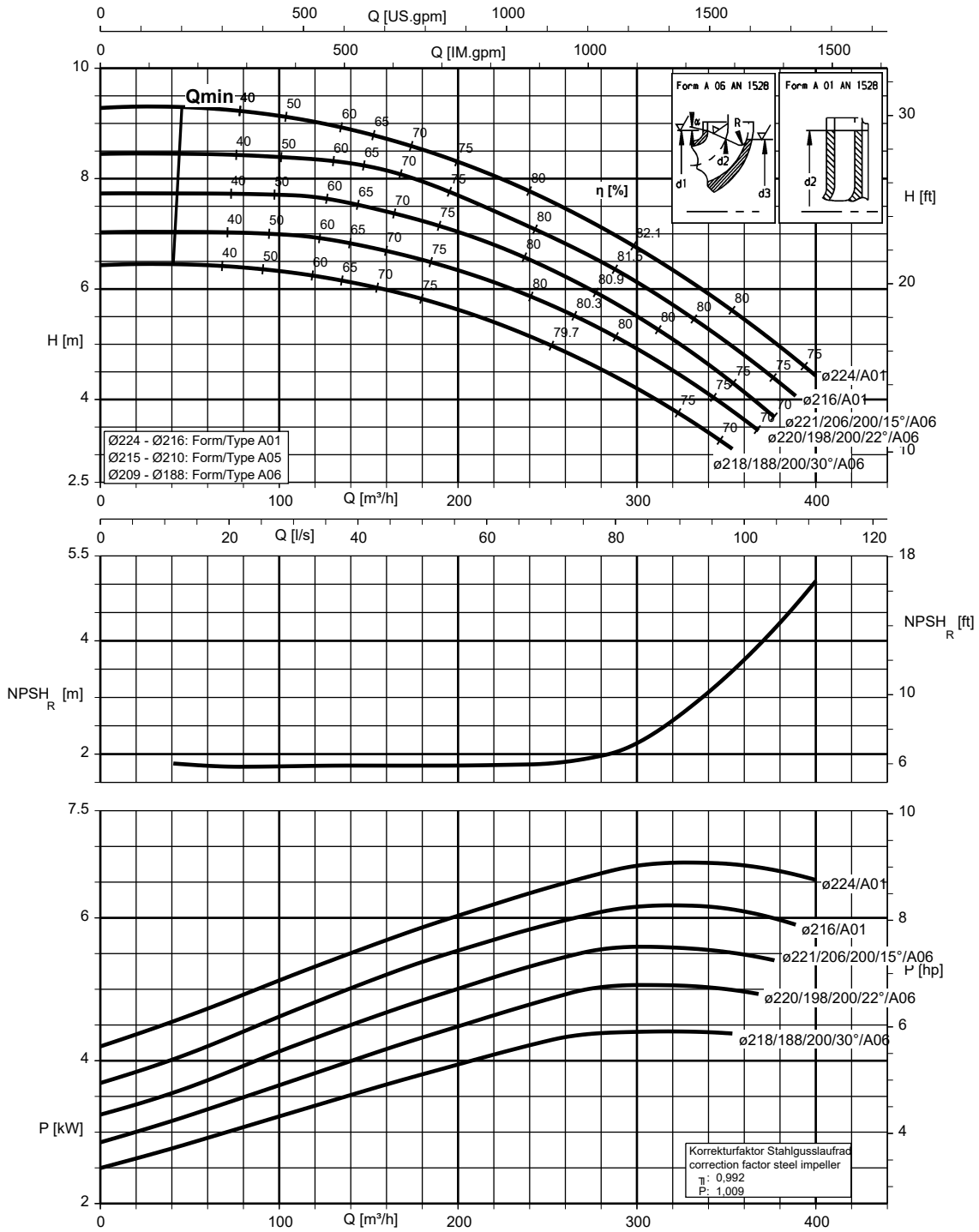
K1311.466/53/2

Etanorm 150-125-510, n = 1160 min⁻¹



Etanorm 200-150-200, n = 1160 rpm

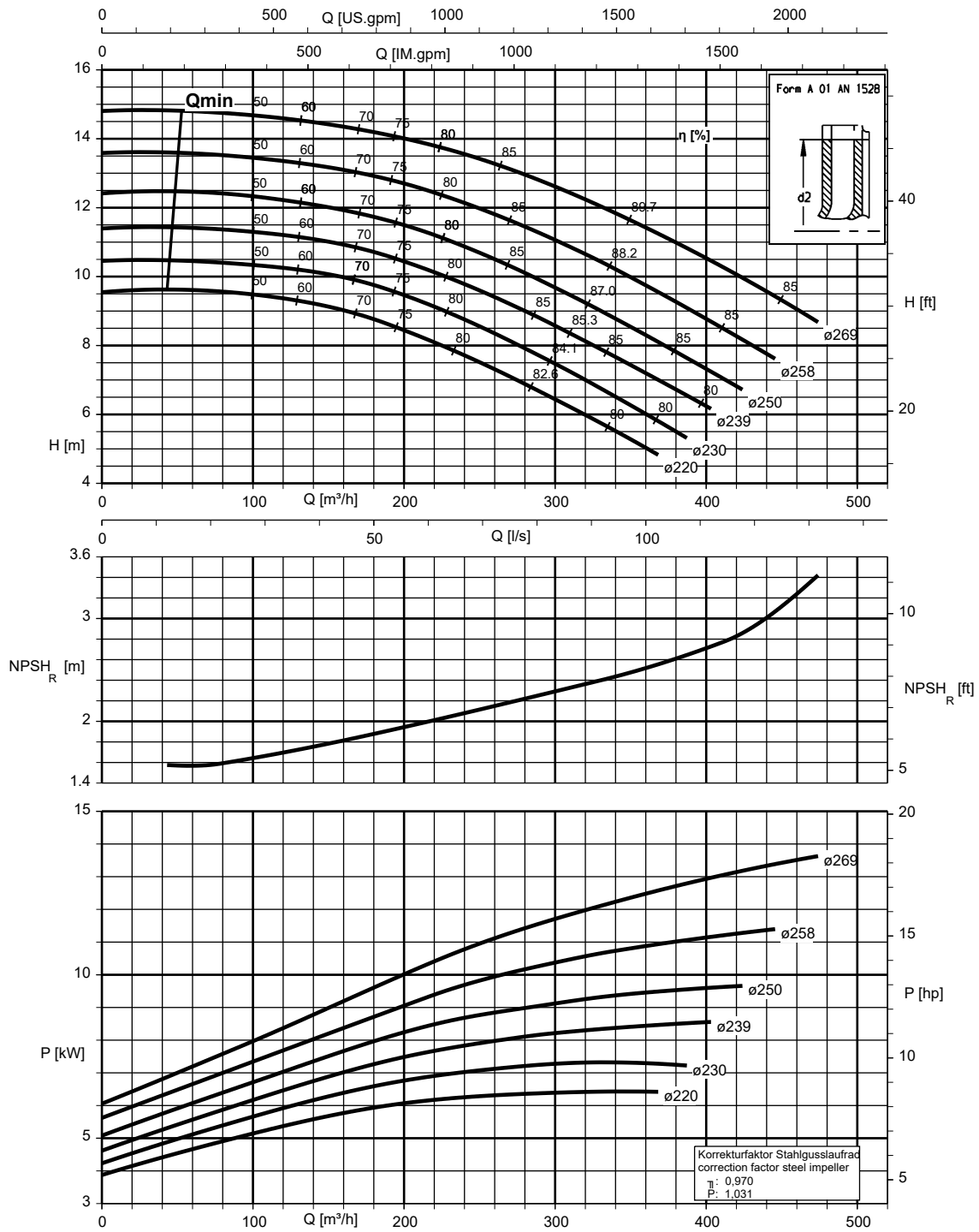
Etabloc



K1311.466/55/2

Etanorm 200-150-250, n = 1160 rpm

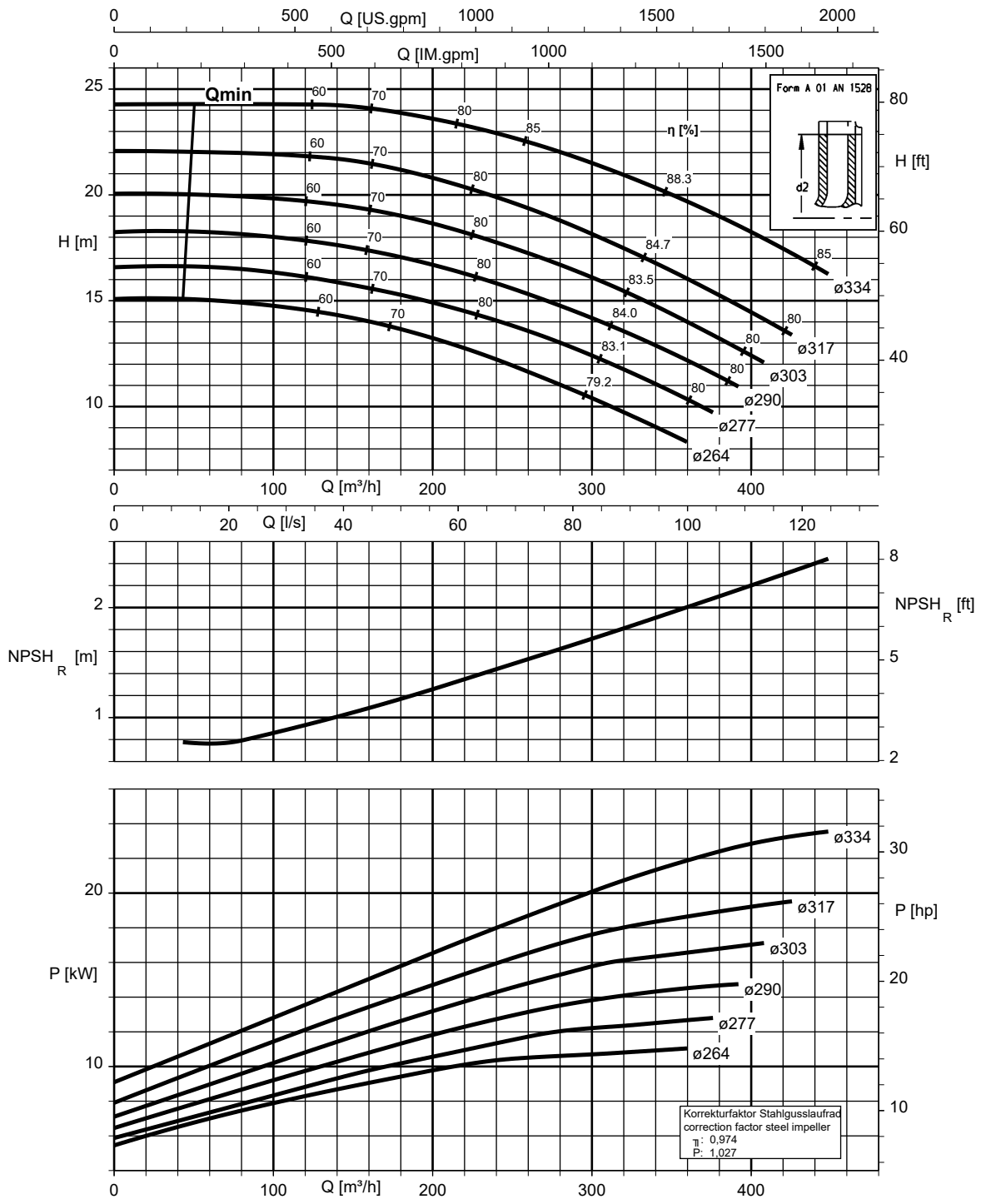
Etabloc



K1311.466/56/2

Etanorm 200-150-315, n = 1160 rpm

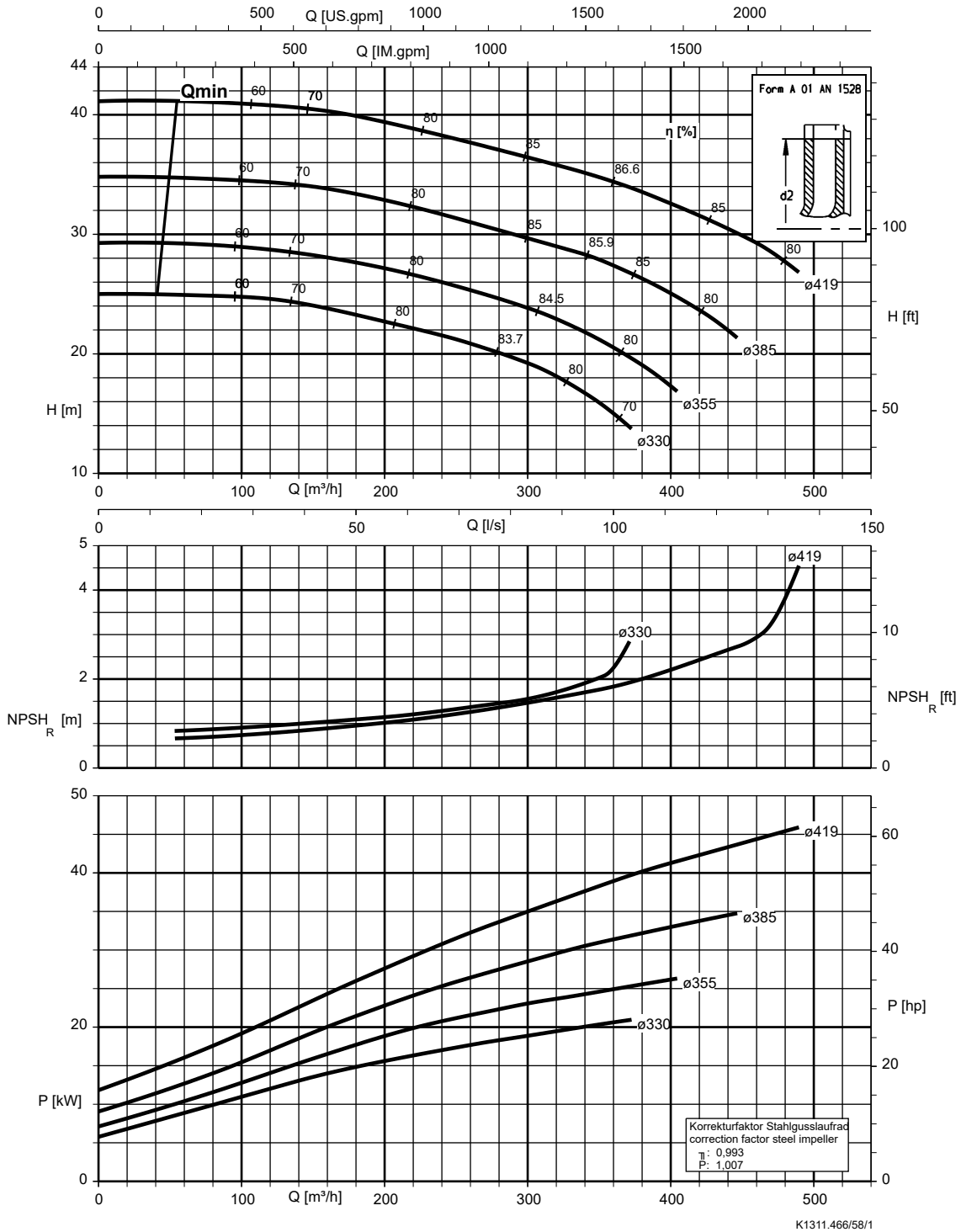
Etanorm SYT



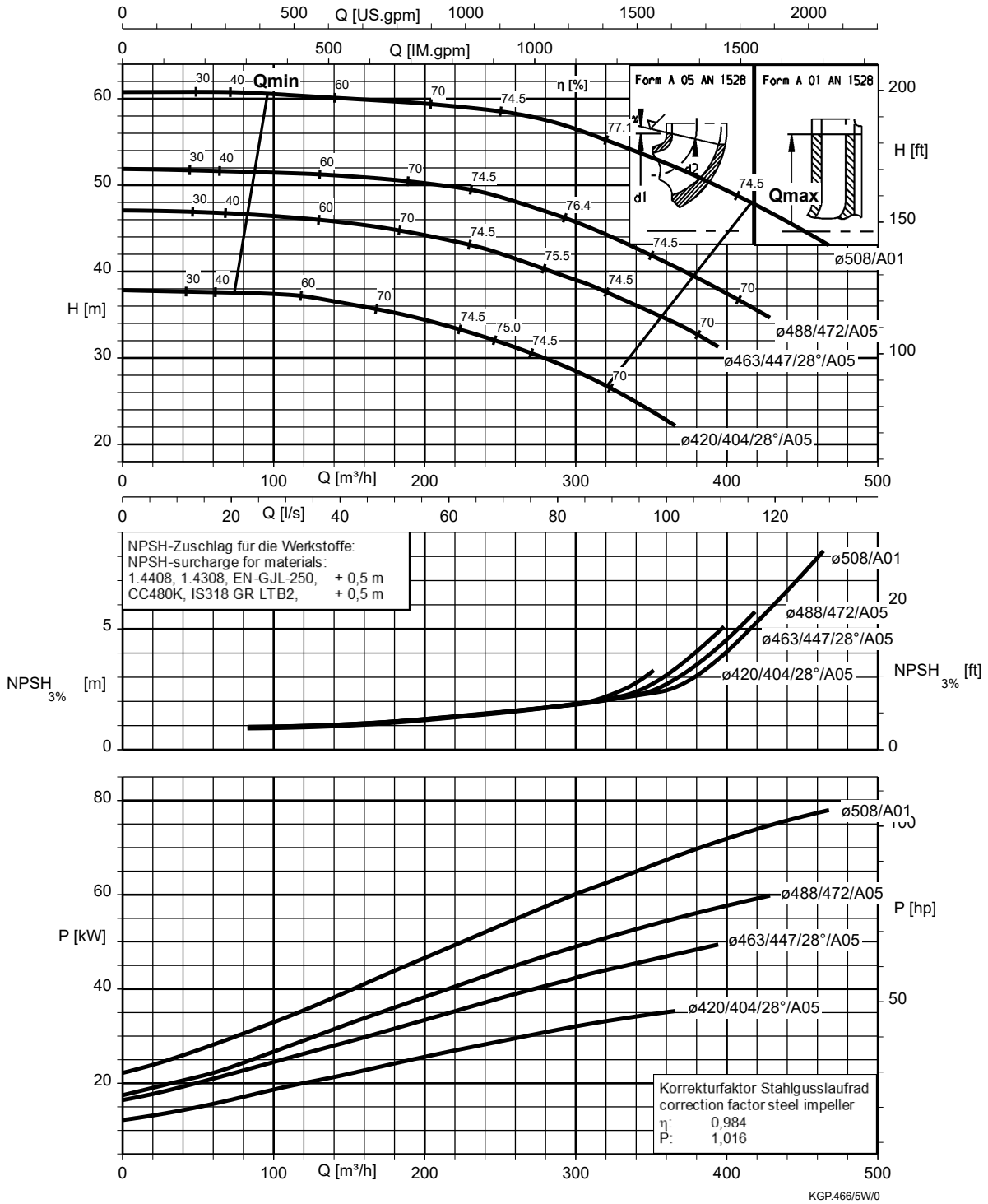
K1311.466/57/3

Etanorm 200-150-400, n = 1160 rpm

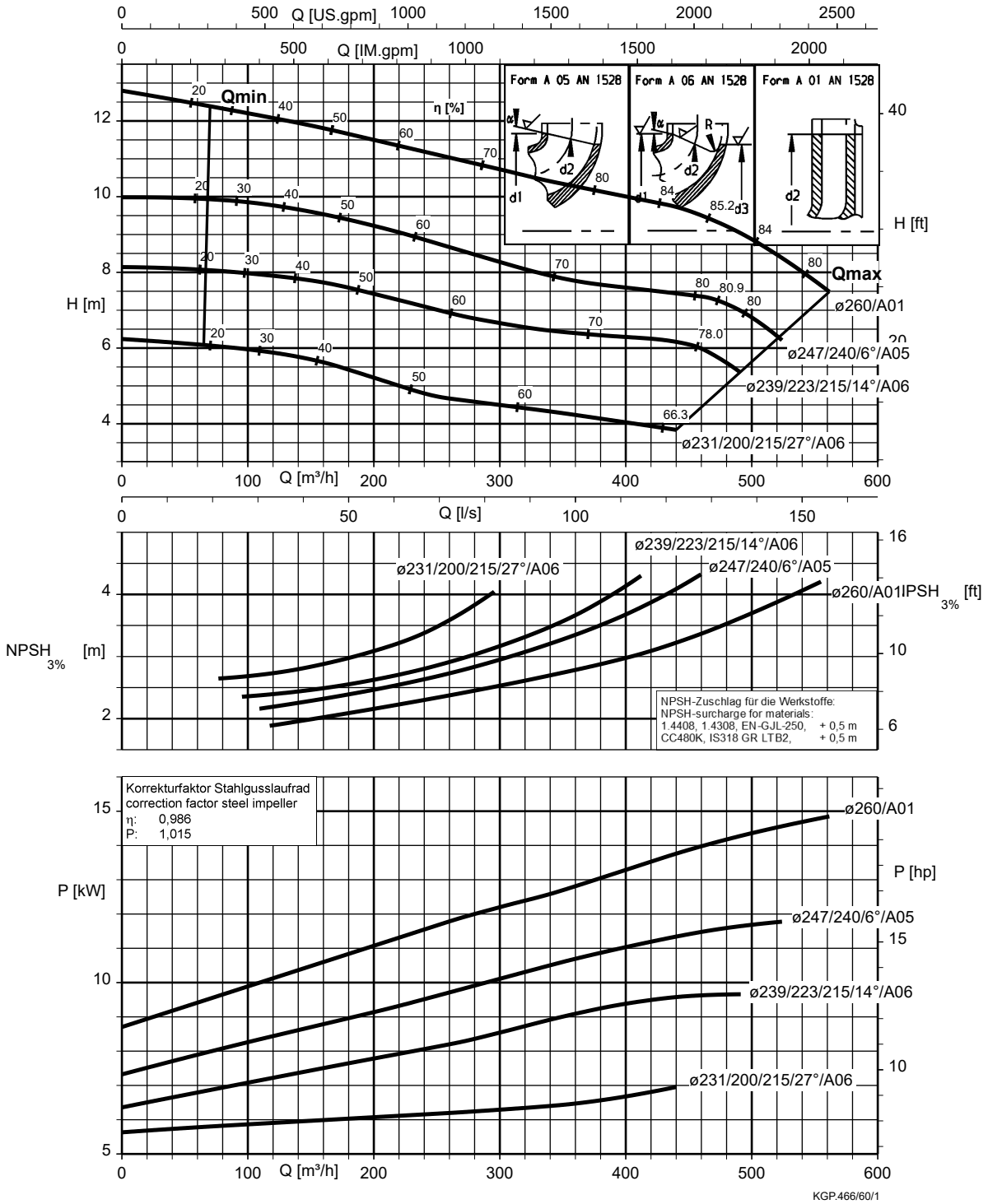
Etanorm SYT



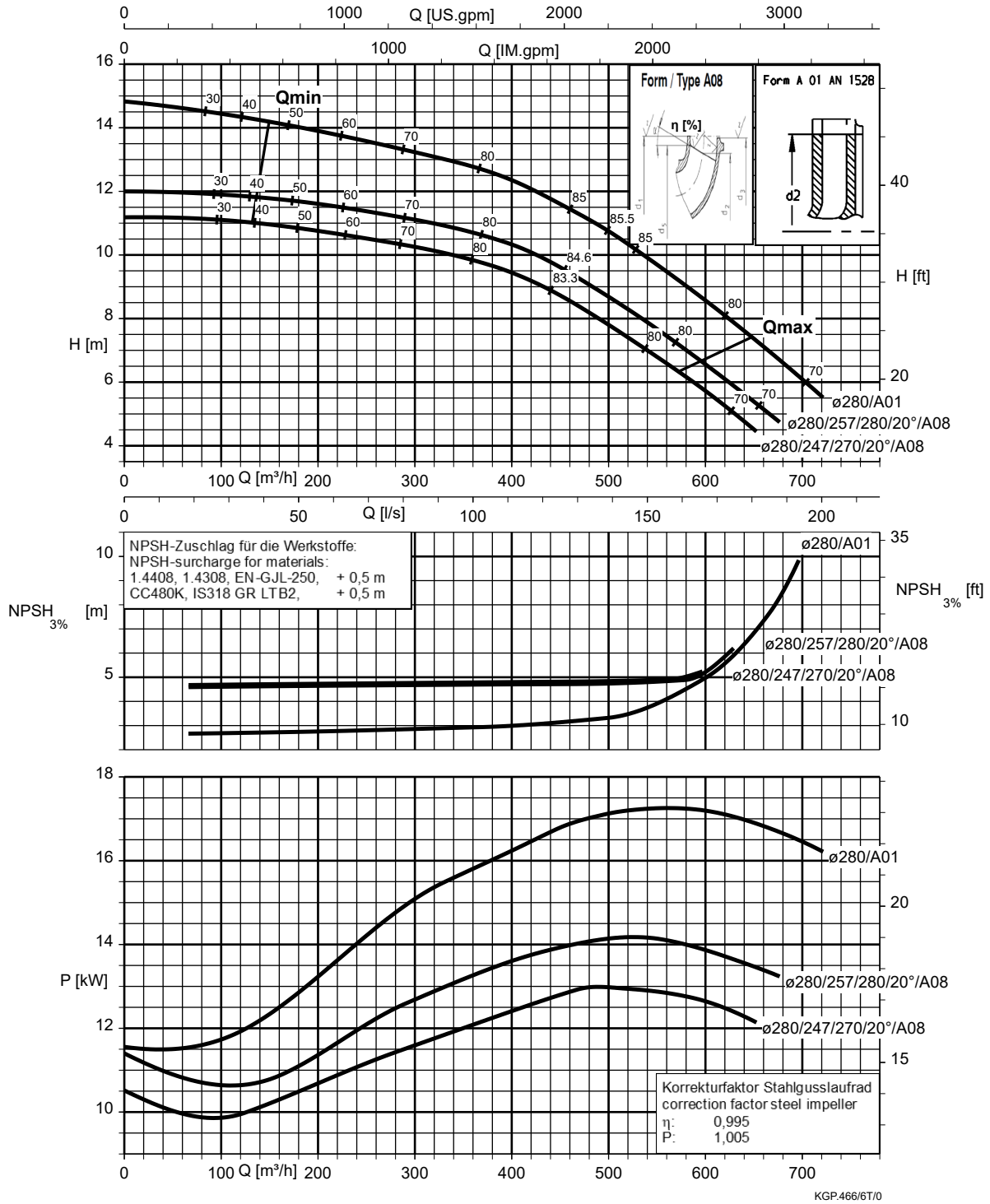
Etanorm 200-150-510, n = 1160 min⁻¹



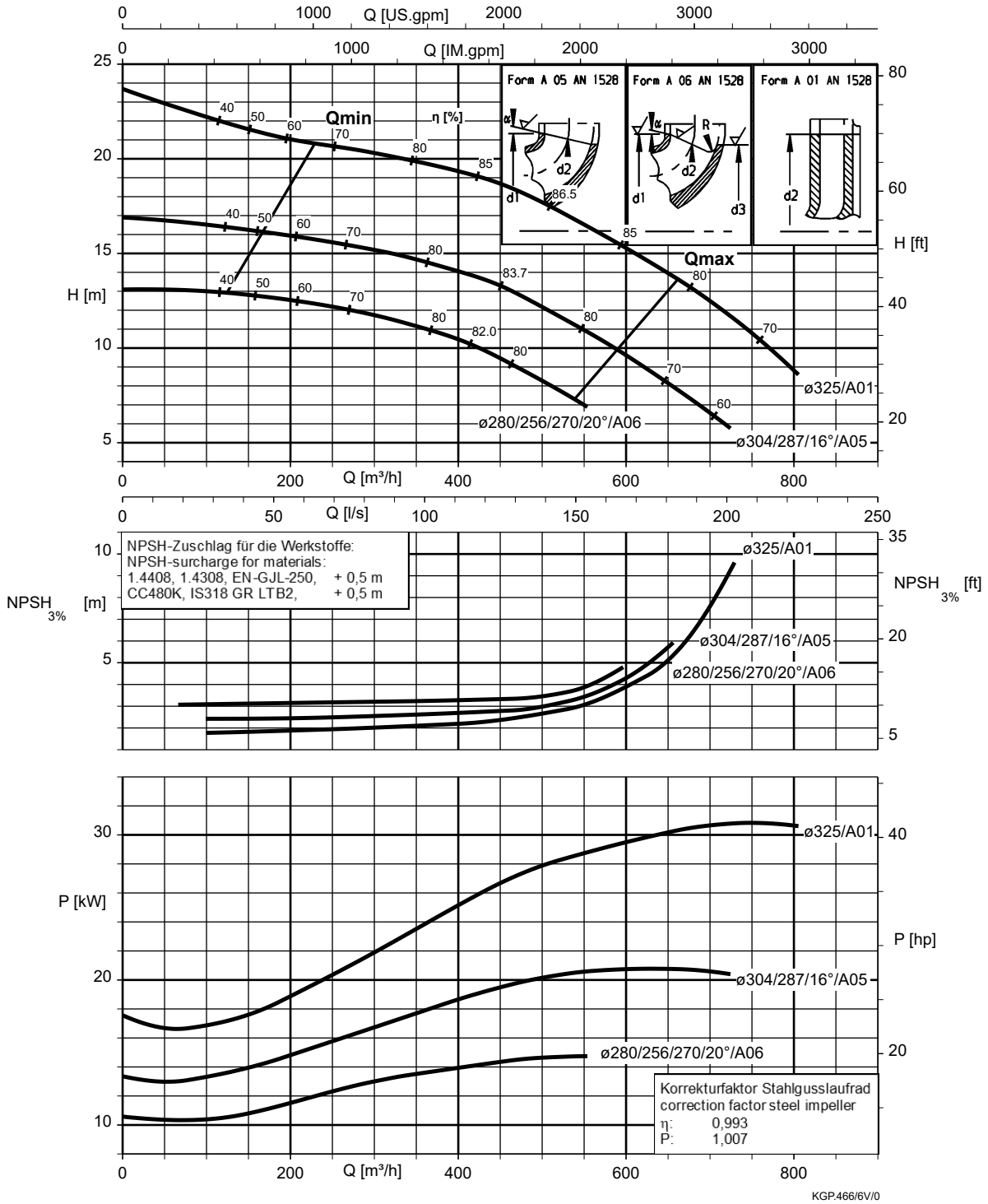
Etanorm 200-200-250, n = 1160 min⁻¹



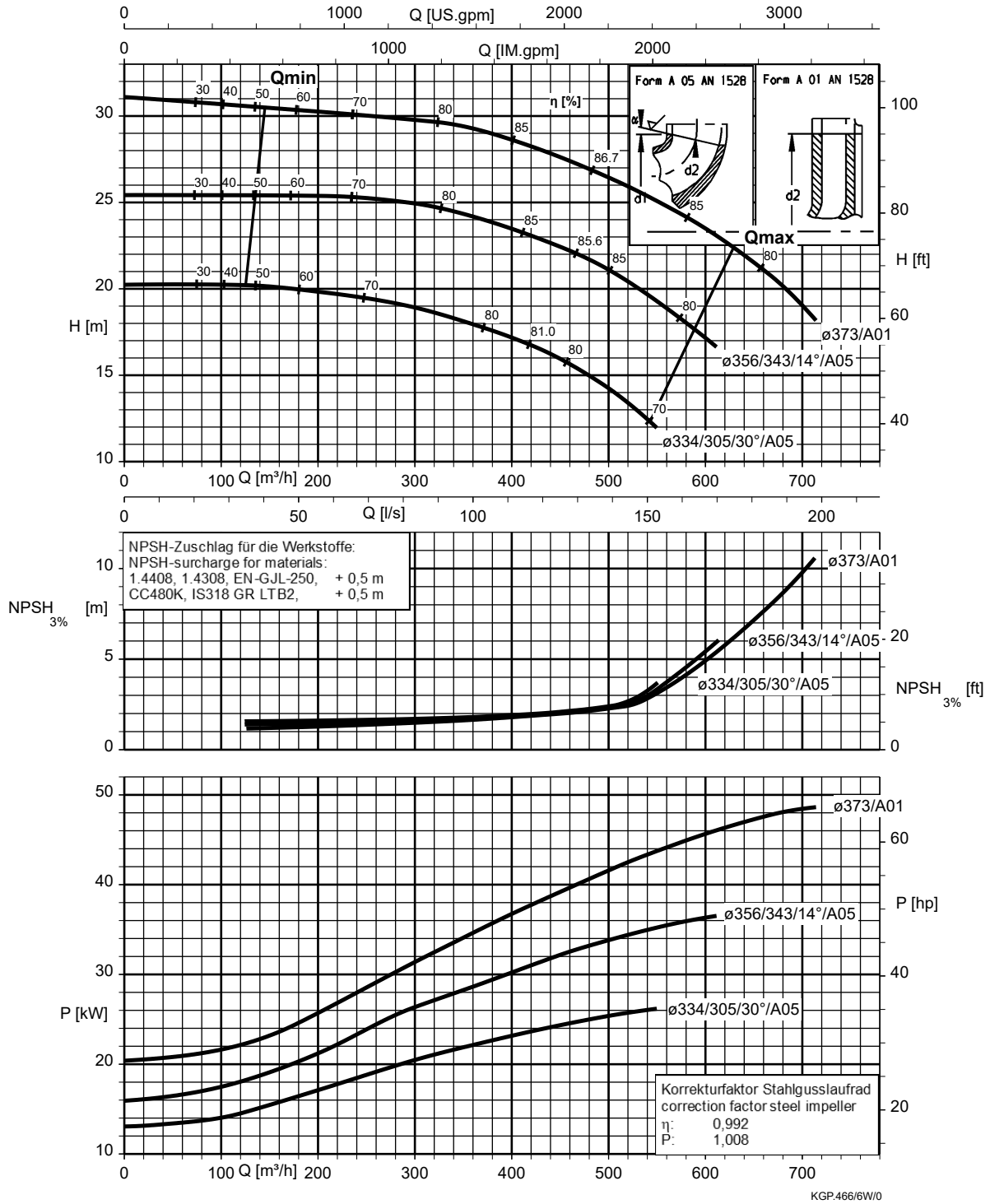
Etanorm 250-200-275, n = 1160 min⁻¹



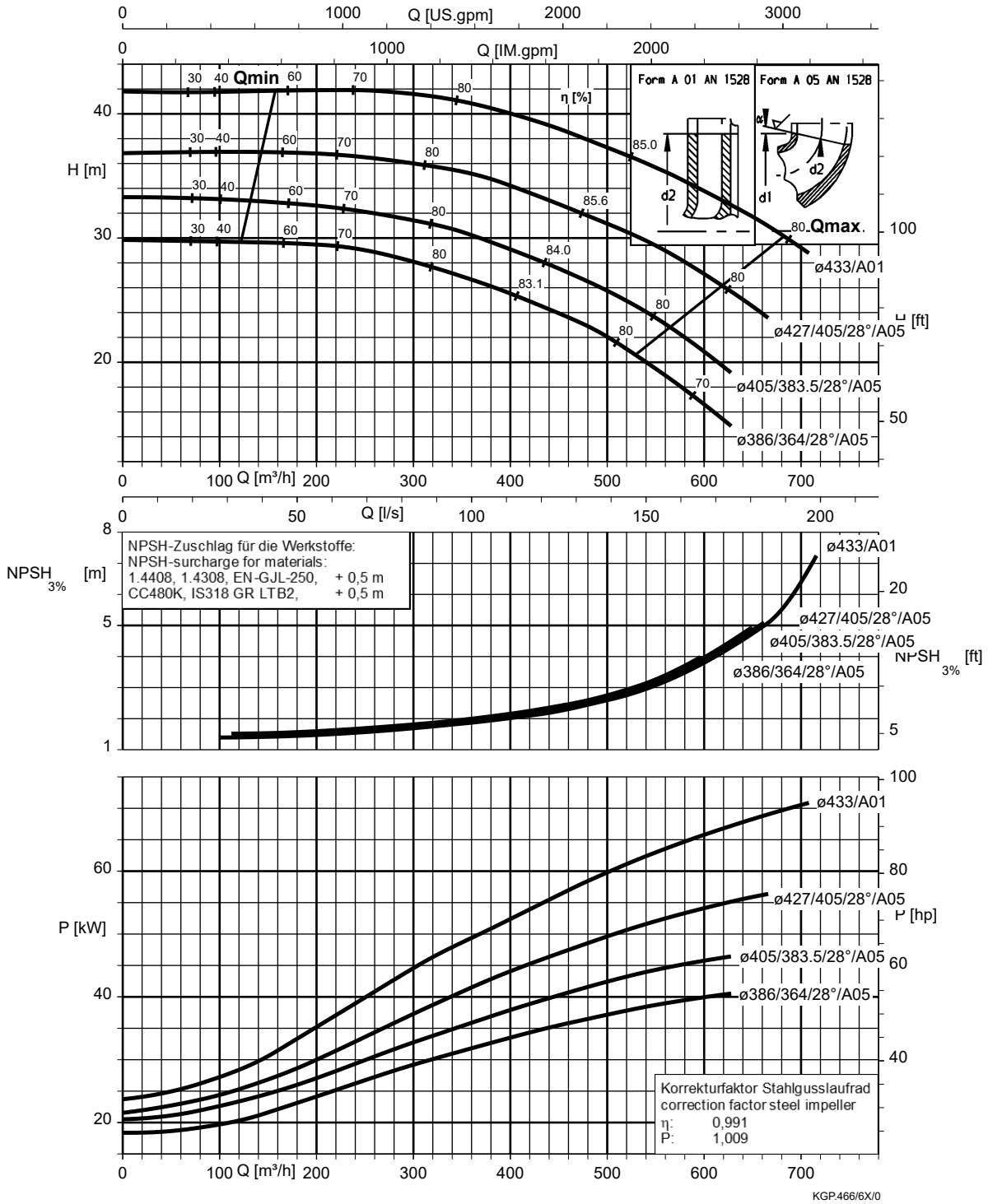
Etanorm 250-200-320, $n = 1160 \text{ min}^{-1}$



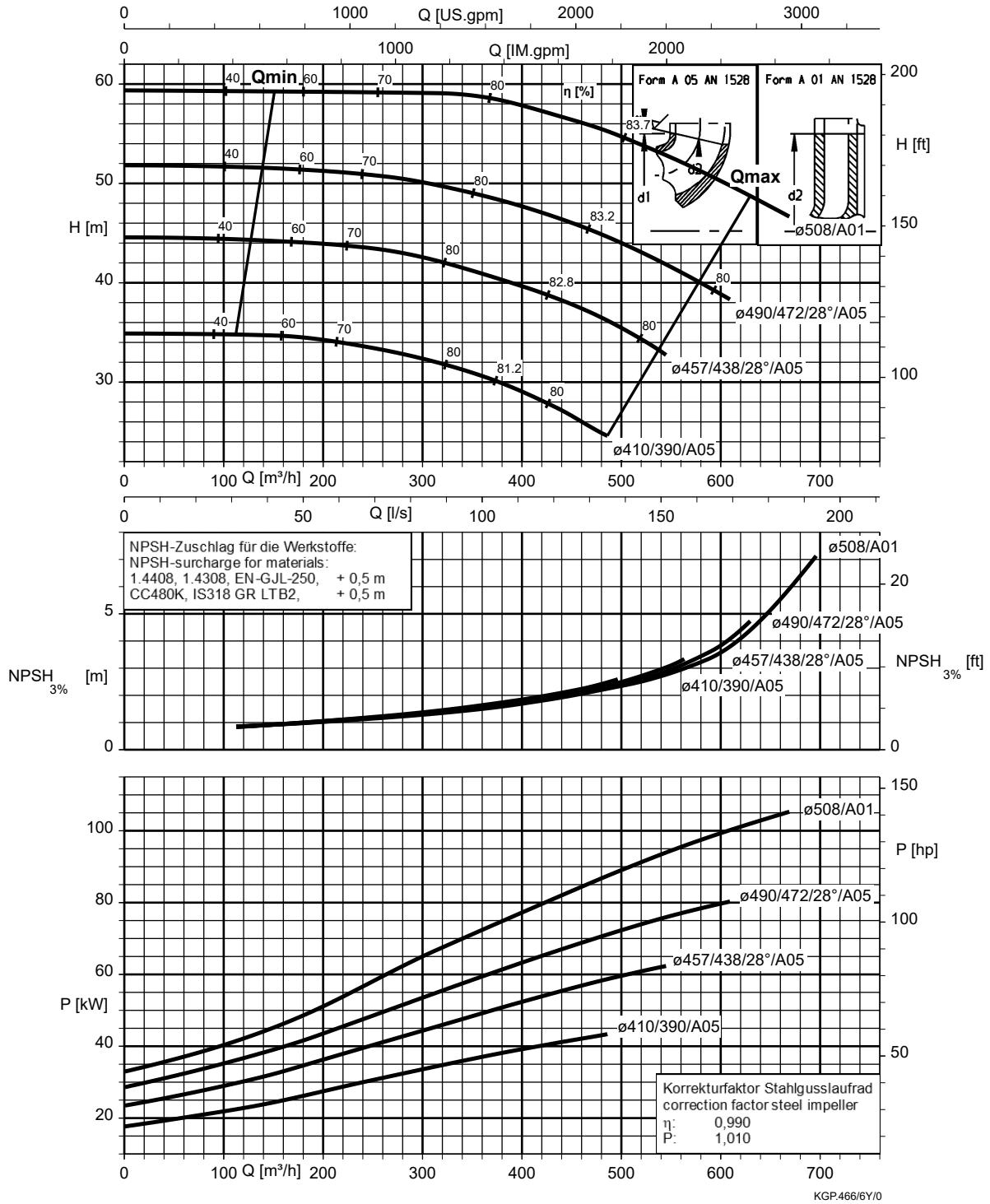
Etanorm 250-200-375, $n = 1160 \text{ min}^{-1}$



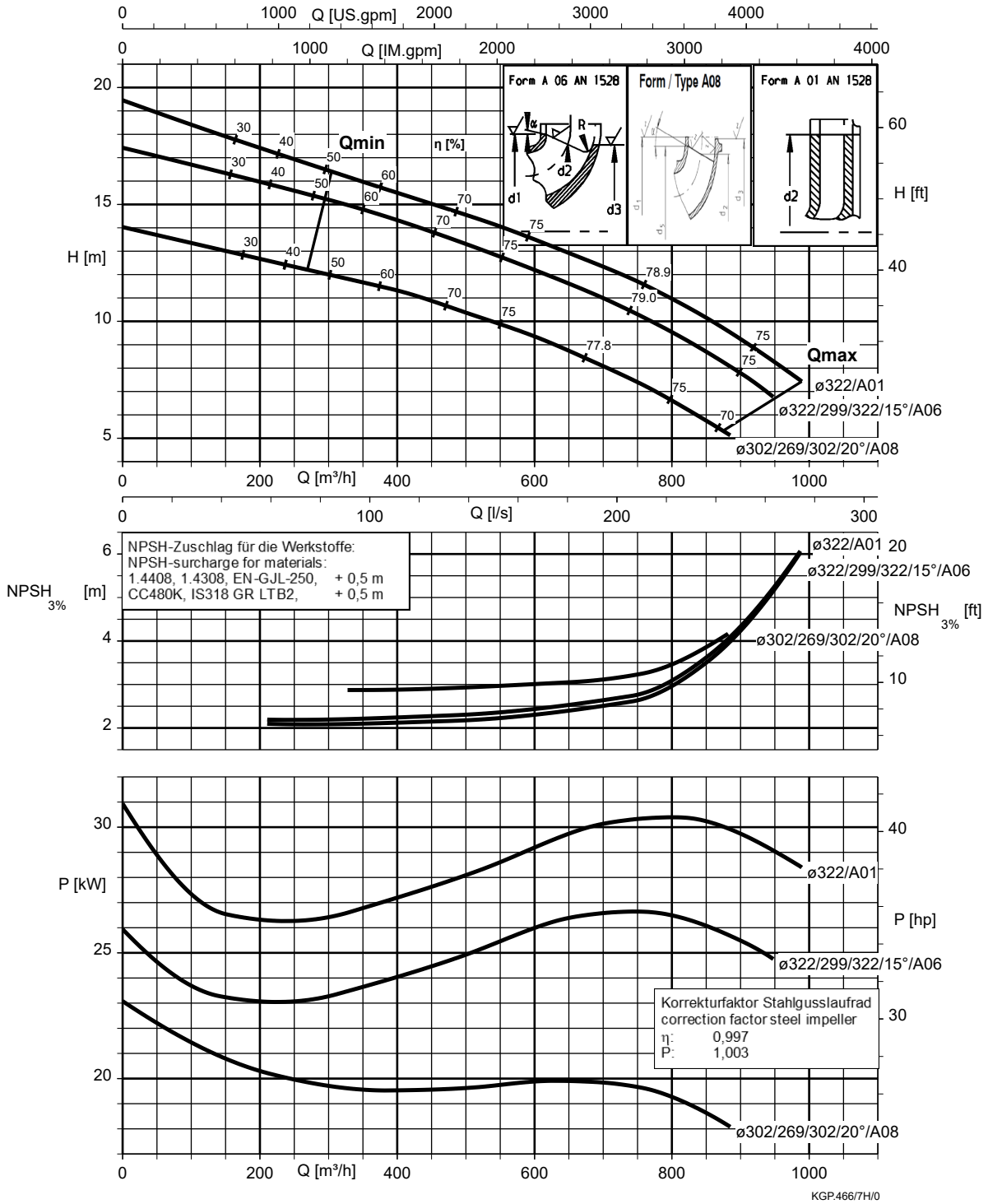
Etanorm 250-200-435, n = 1160 min⁻¹



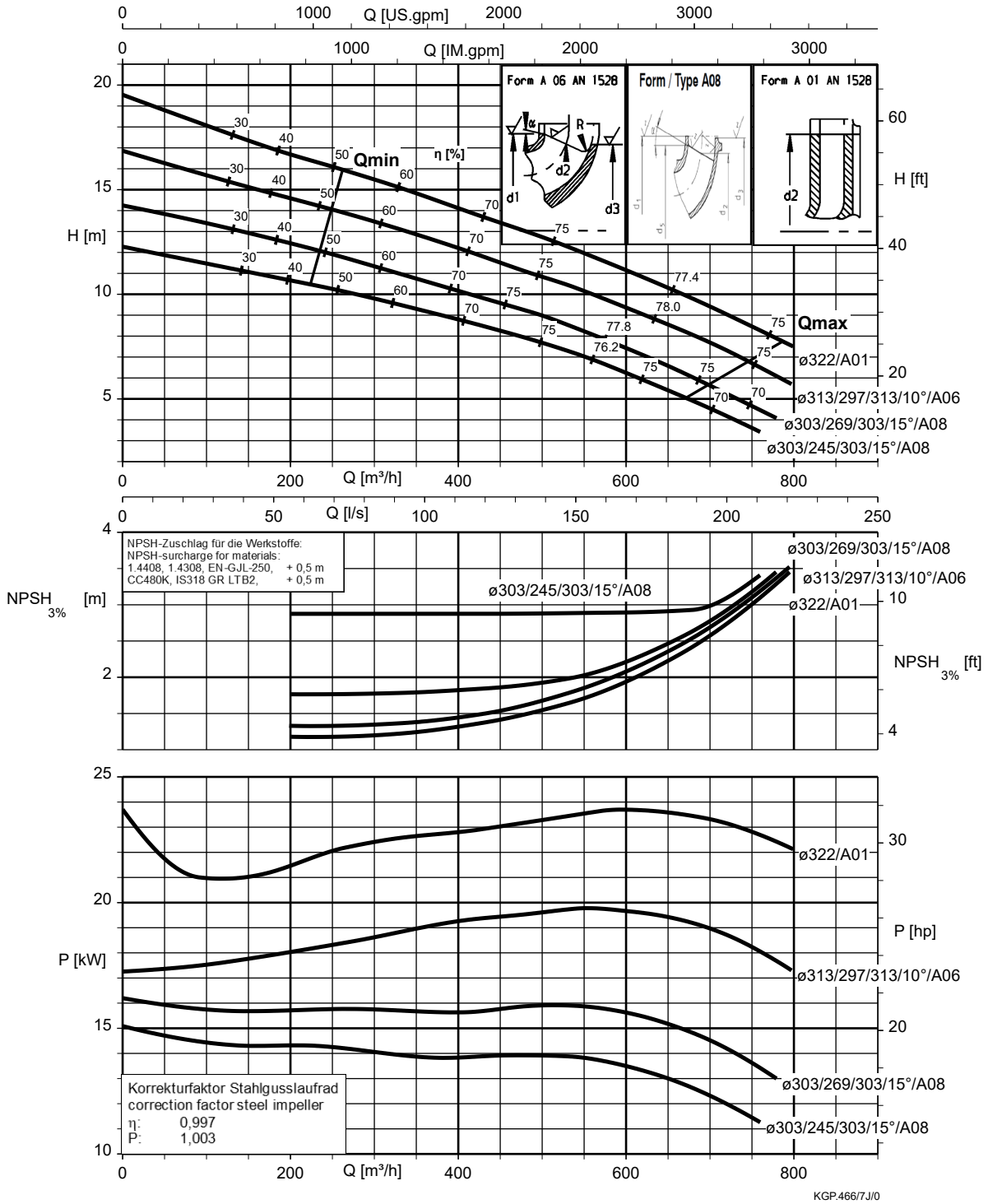
Etanorm 250-200-510 , n = 1160 min⁻¹



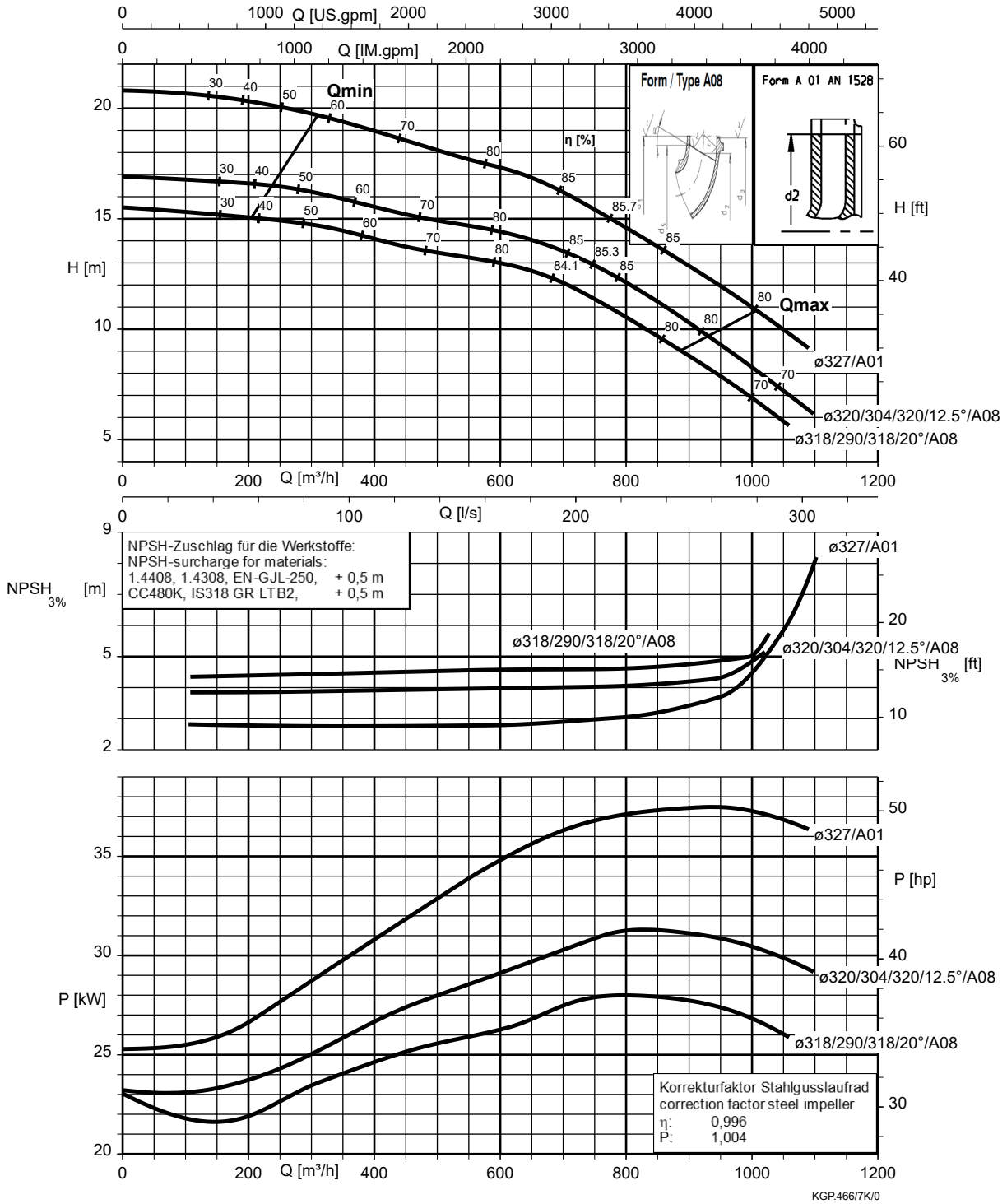
Etanorm 300-250-295, n = 1160 min⁻¹



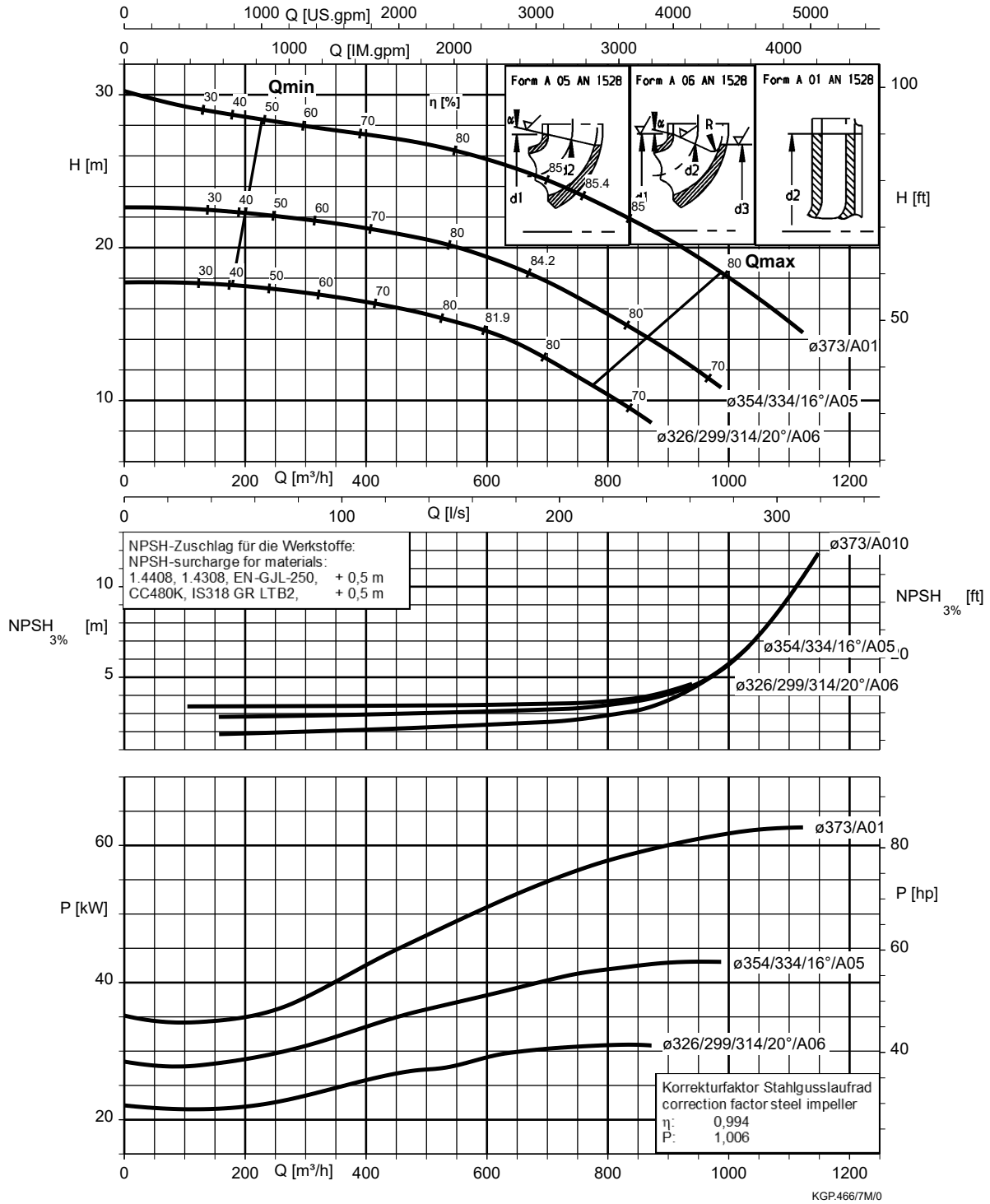
Etanorm 300-250-295.1, n = 1160 min⁻¹



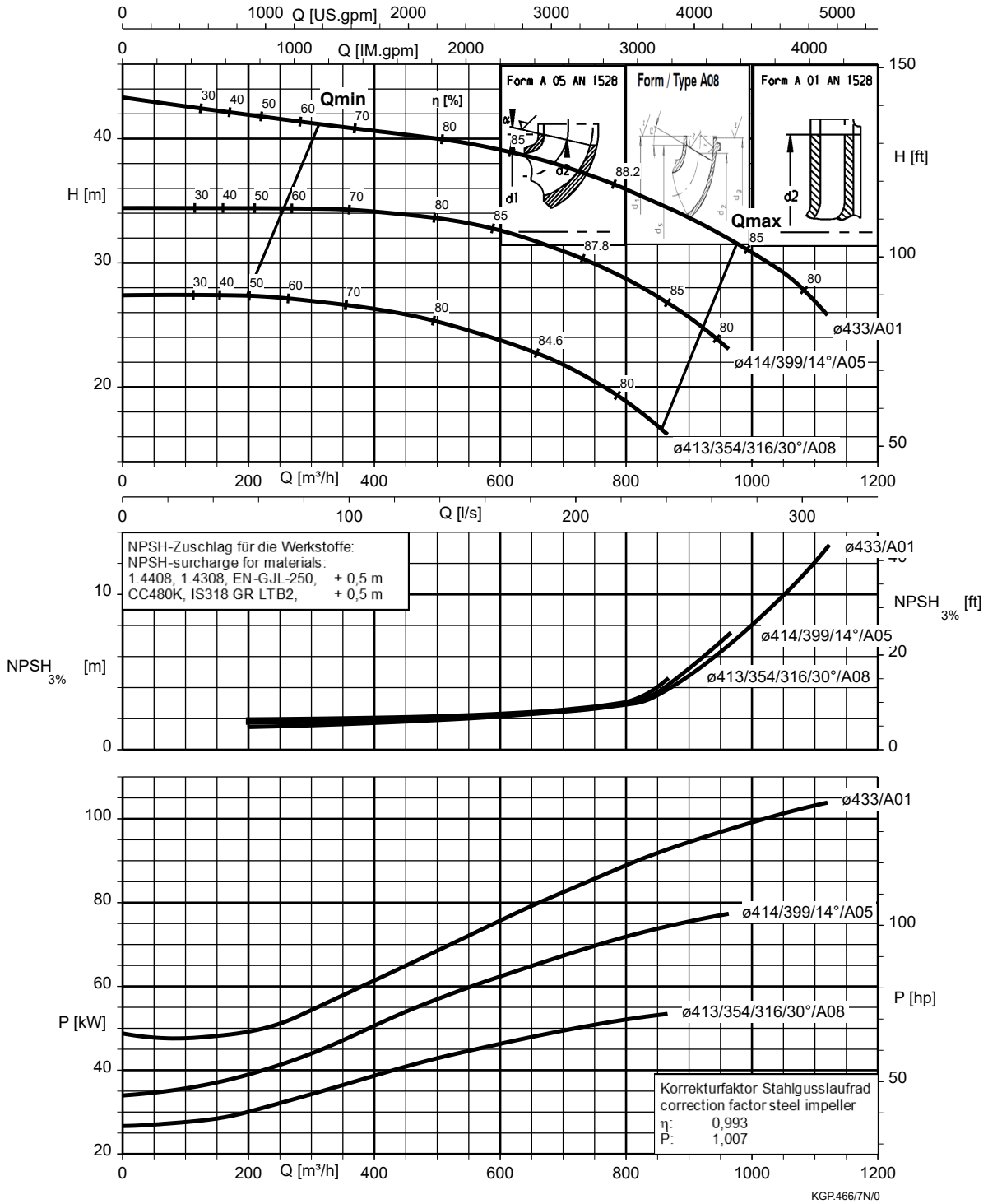
Etanorm 300-250-320 , n = 1160 min⁻¹



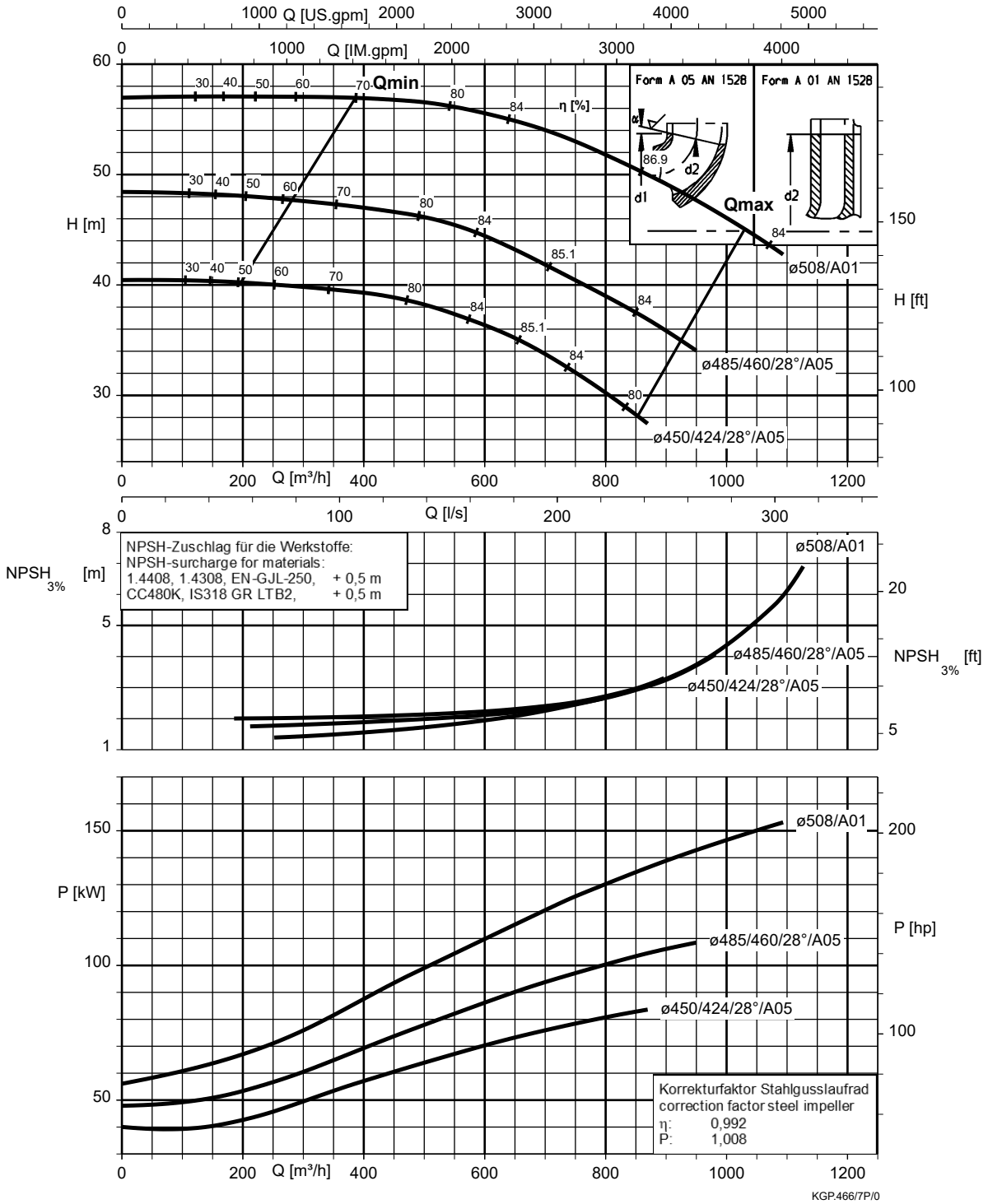
Etanorm 300-250-375, n = 1160 min⁻¹



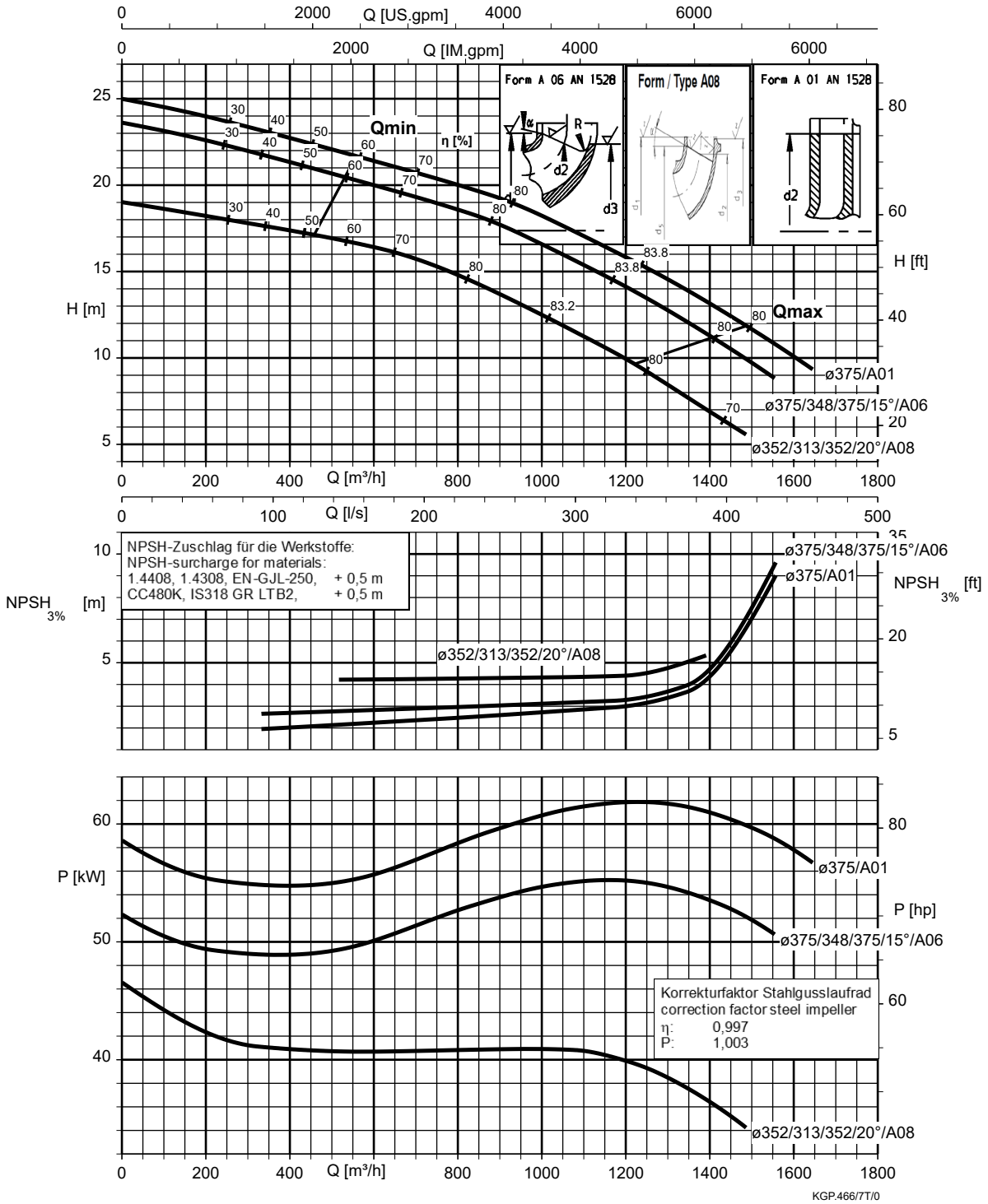
Etanorm 300-250-435, $n = 1160 \text{ min}^{-1}$



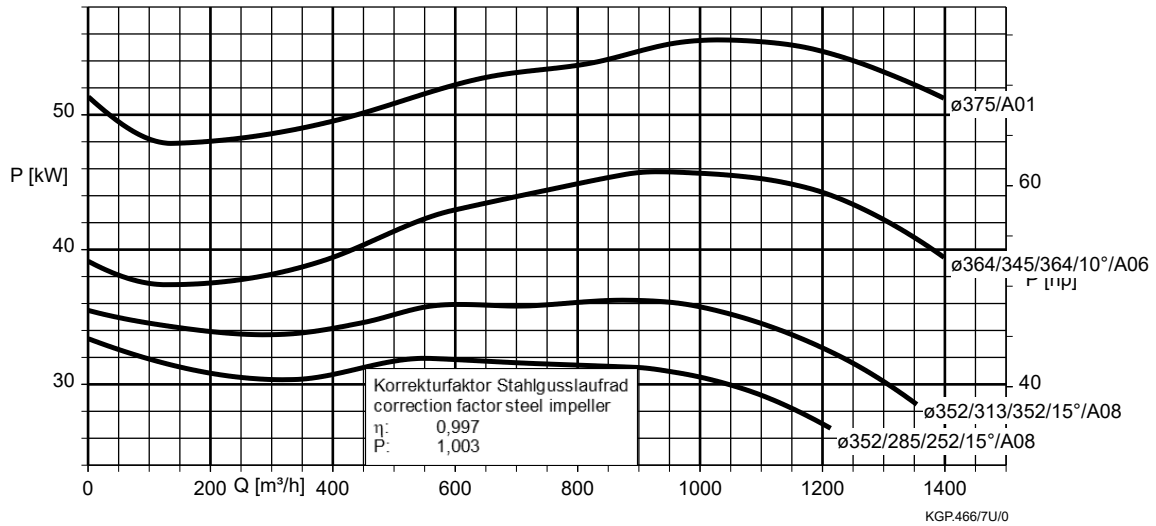
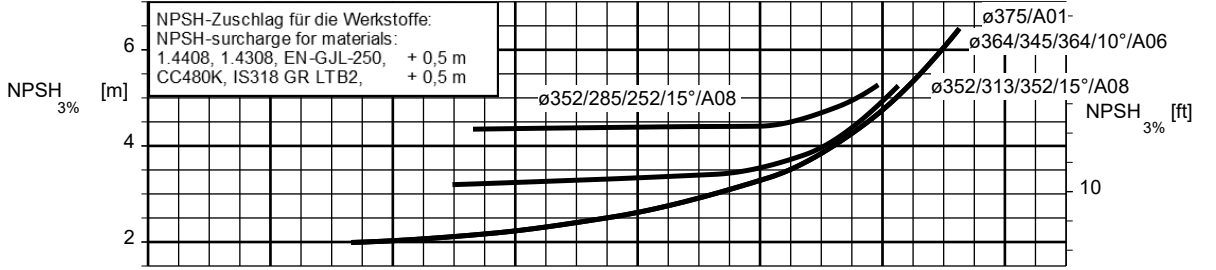
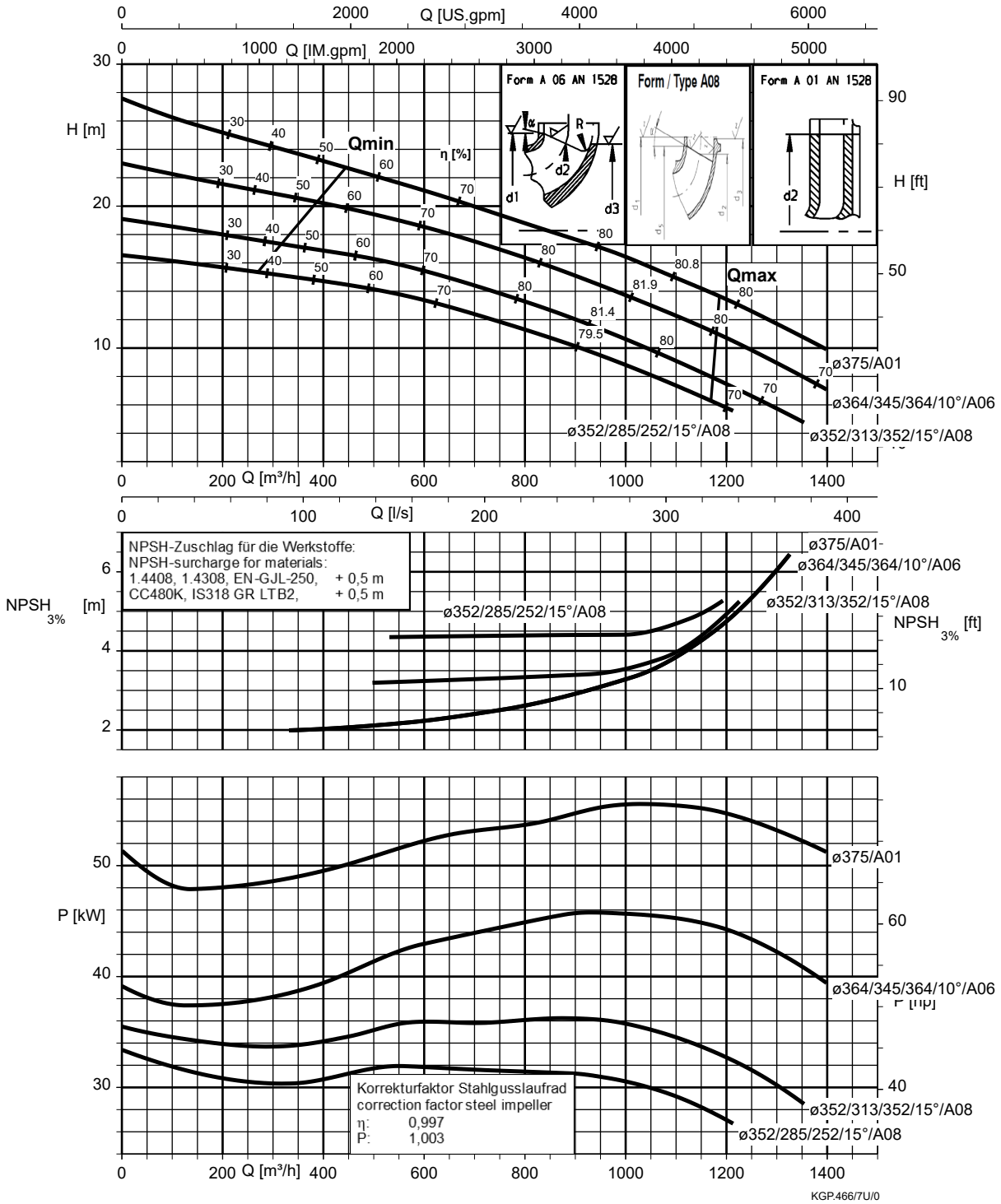
Etanorm 300-250-510, $n = 1160 \text{ min}^{-1}$



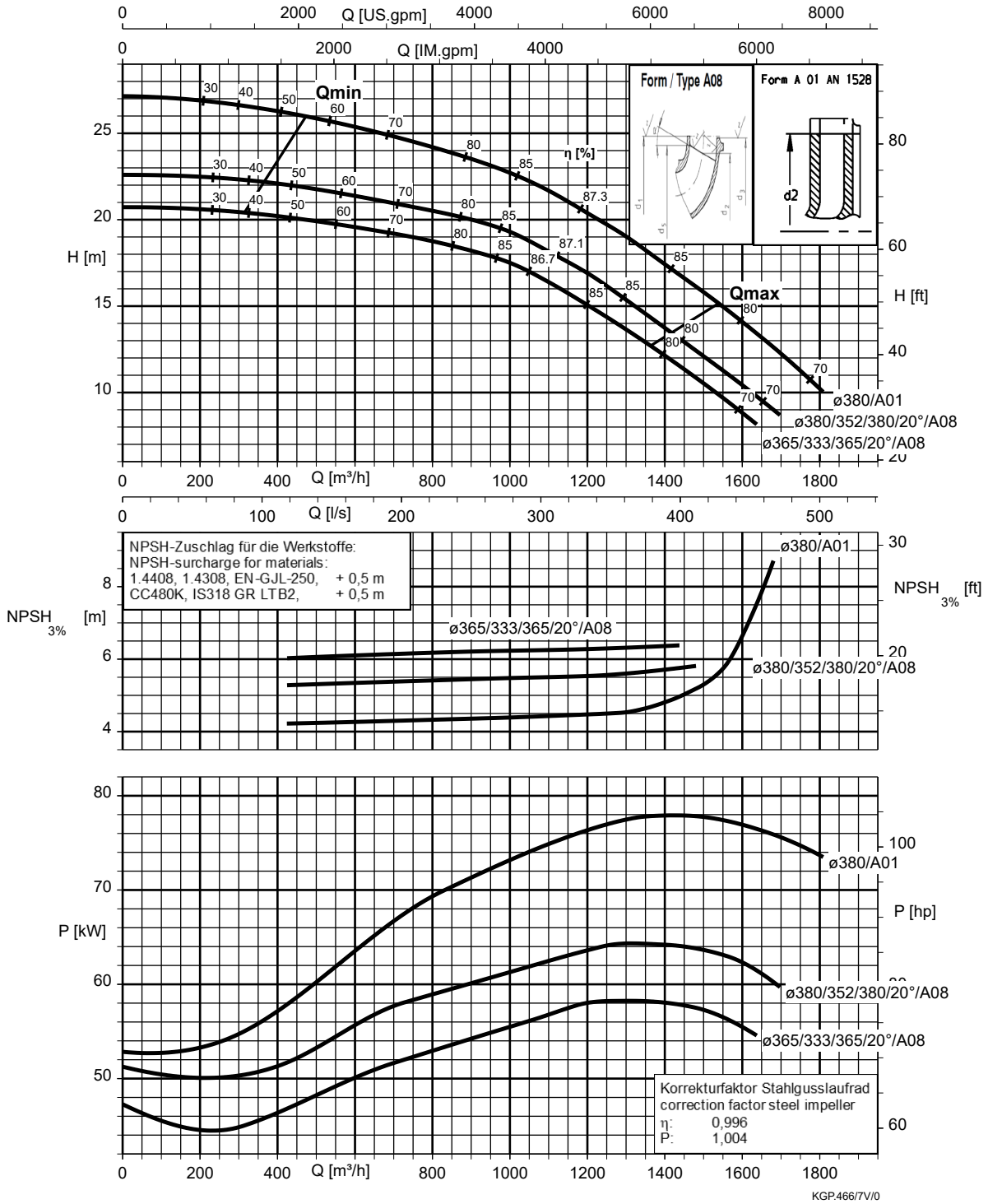
Etanorm 350-300-350, n = 1160 min⁻¹



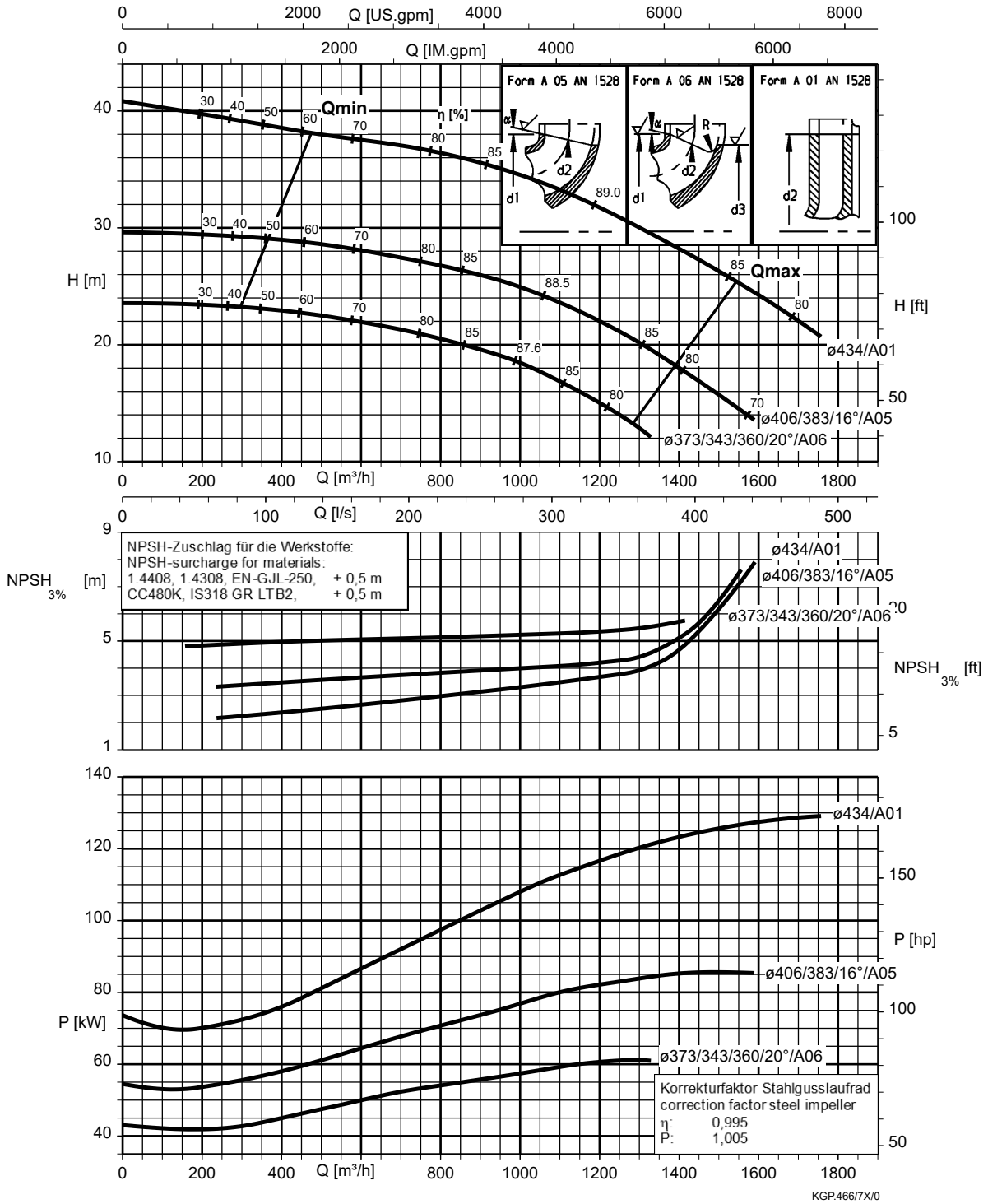
Etanorm 350-300-350.1, n = 1160 min⁻¹



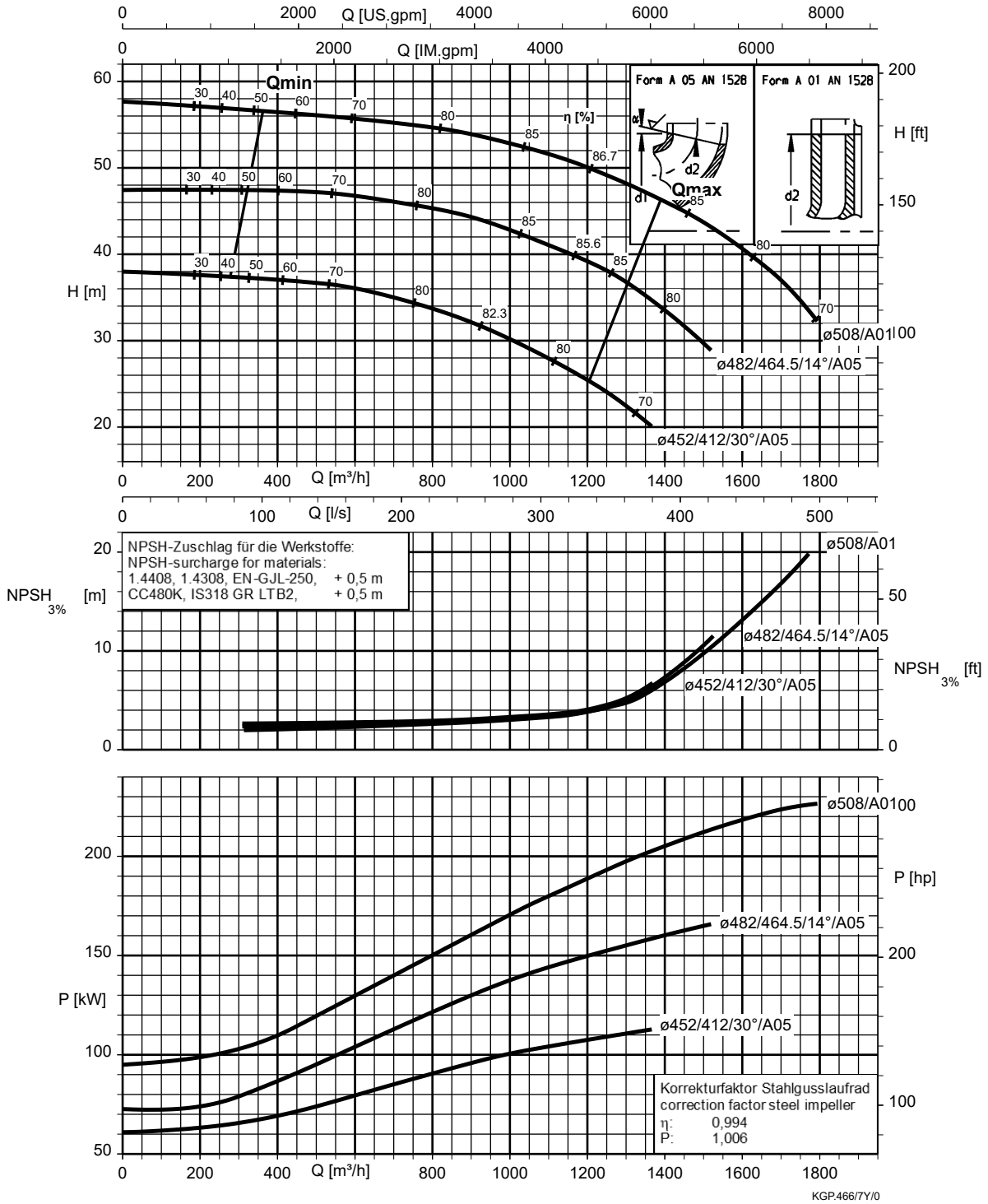
Etanorm 350-300-375, $n = 1160 \text{ min}^{-1}$



Etanorm 350-300-435, n = 1160 min⁻¹



Etanorm 350-300-510 , n = 1160 min⁻¹



Etanorm-RSY 125-500.2, n = 1160 rpm

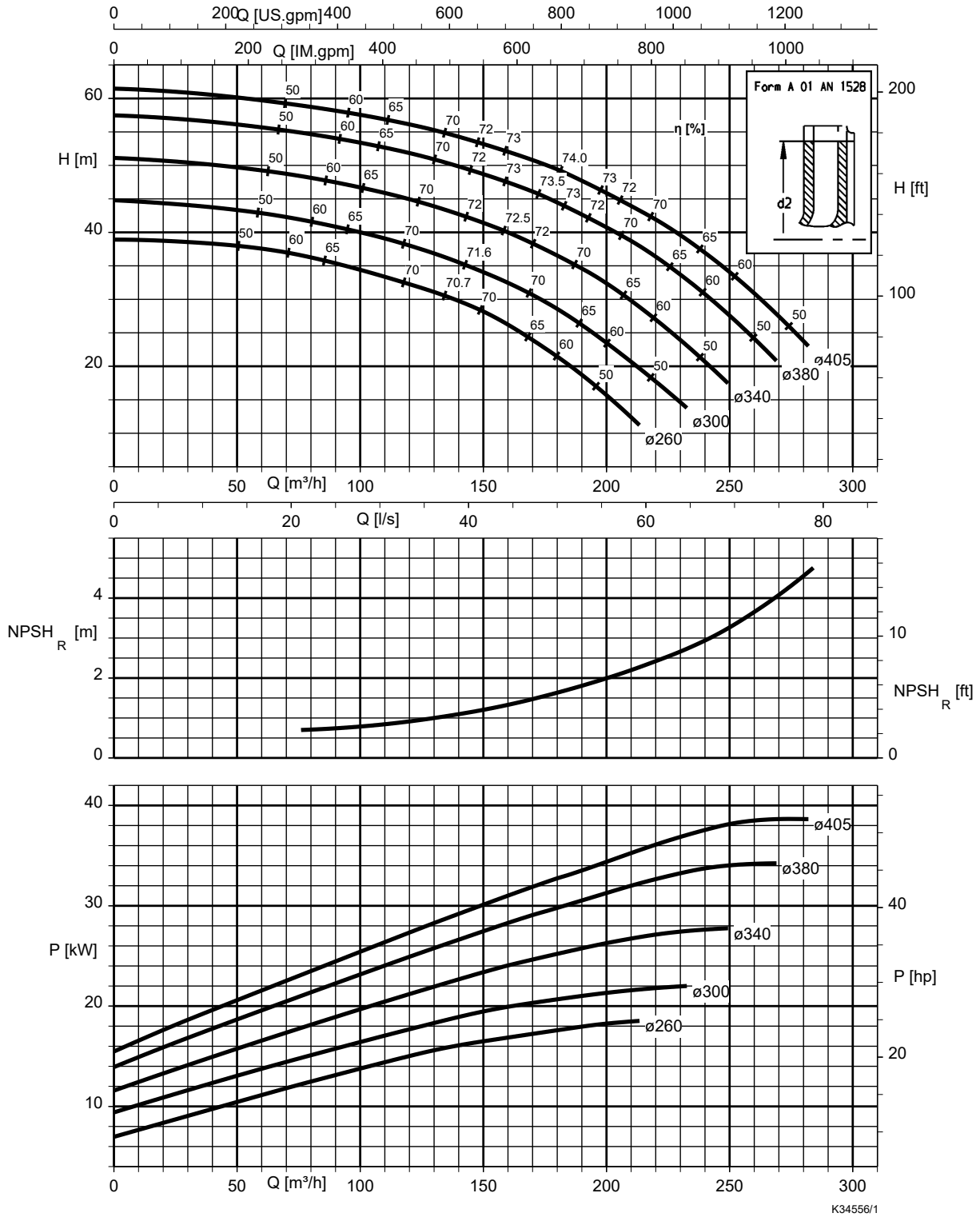


Table 13: Correction values

Impeller material	Correction value S [m]	Calculation
EN-GJL-250	0,5	$NPSH_{System} \geq NPSH + \text{correction value S}$
CC480K-GS	0,5	
1.4408	0,5	

Etanorm-RSY 150-500.1, n = 1160 rpm

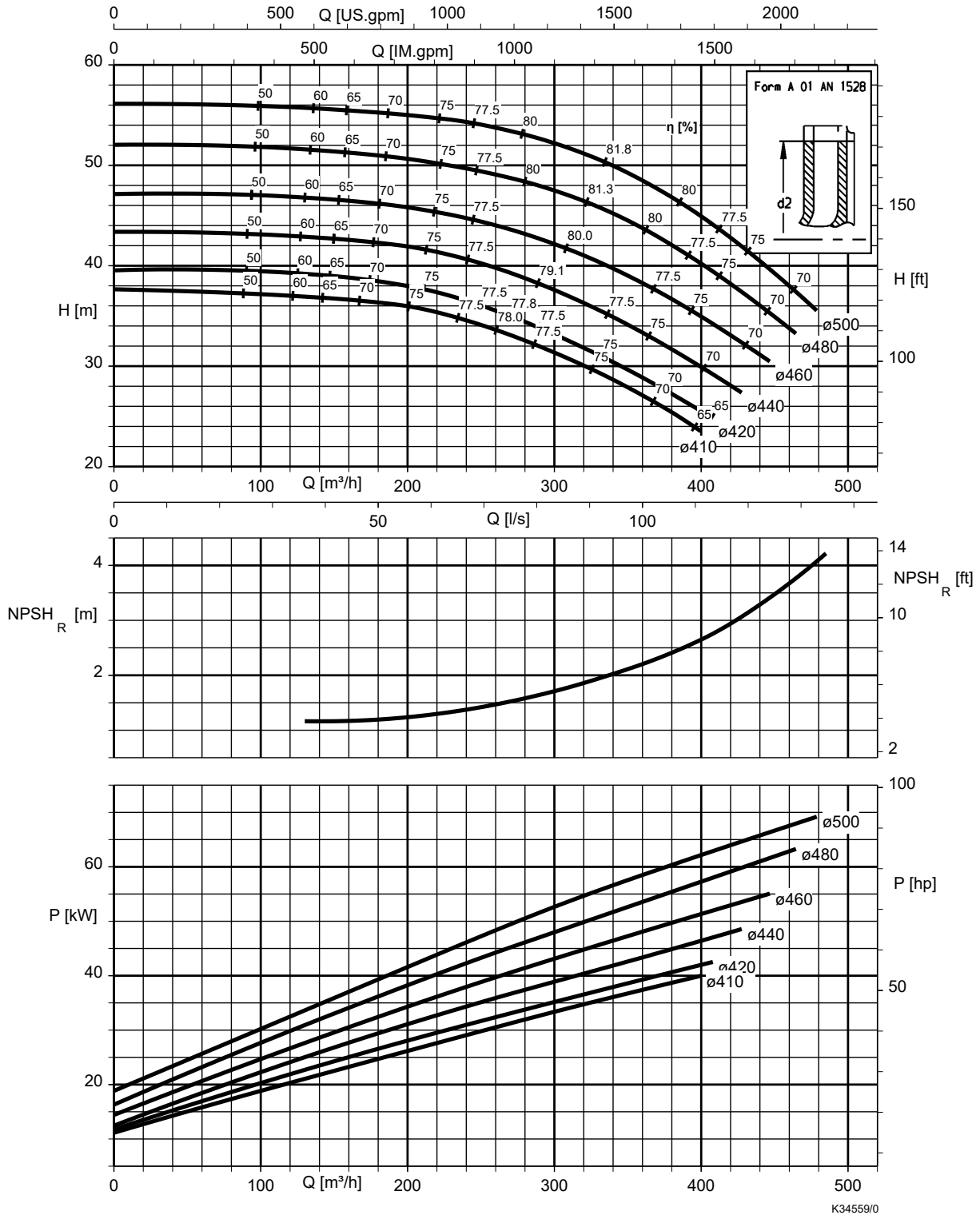


Table 14: Correction values

Impeller material	Correction value S [m]	Calculation
EN-GJL-250	0,5	$NPSH_{System} \geq NPSH + \text{correction value } S$
CC480K-GS	0,5	
1.4408	0,5	

Etanorm-RSY 200-330, n = 1160 rpm

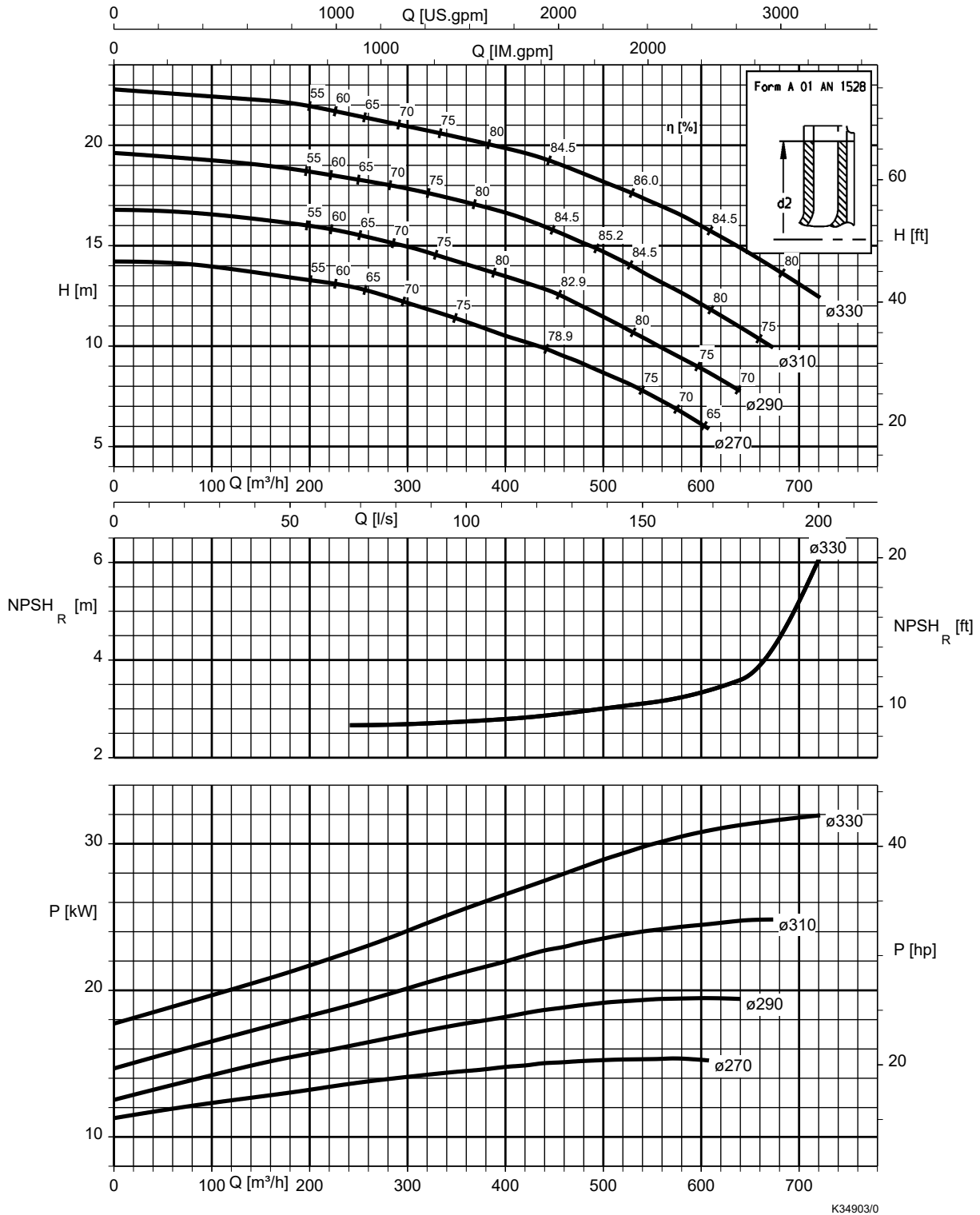


Table 15: Correction values

Impeller material	Correction value S [m]	Calculation
EN-GJL-250	0,5	$NPSH_{System} \geq NPSH + \text{correction value } S$
CC480K-GS	0,5	
1.4408	0,5	

Etanorm-RSY 200-400, n = 1160 rpm

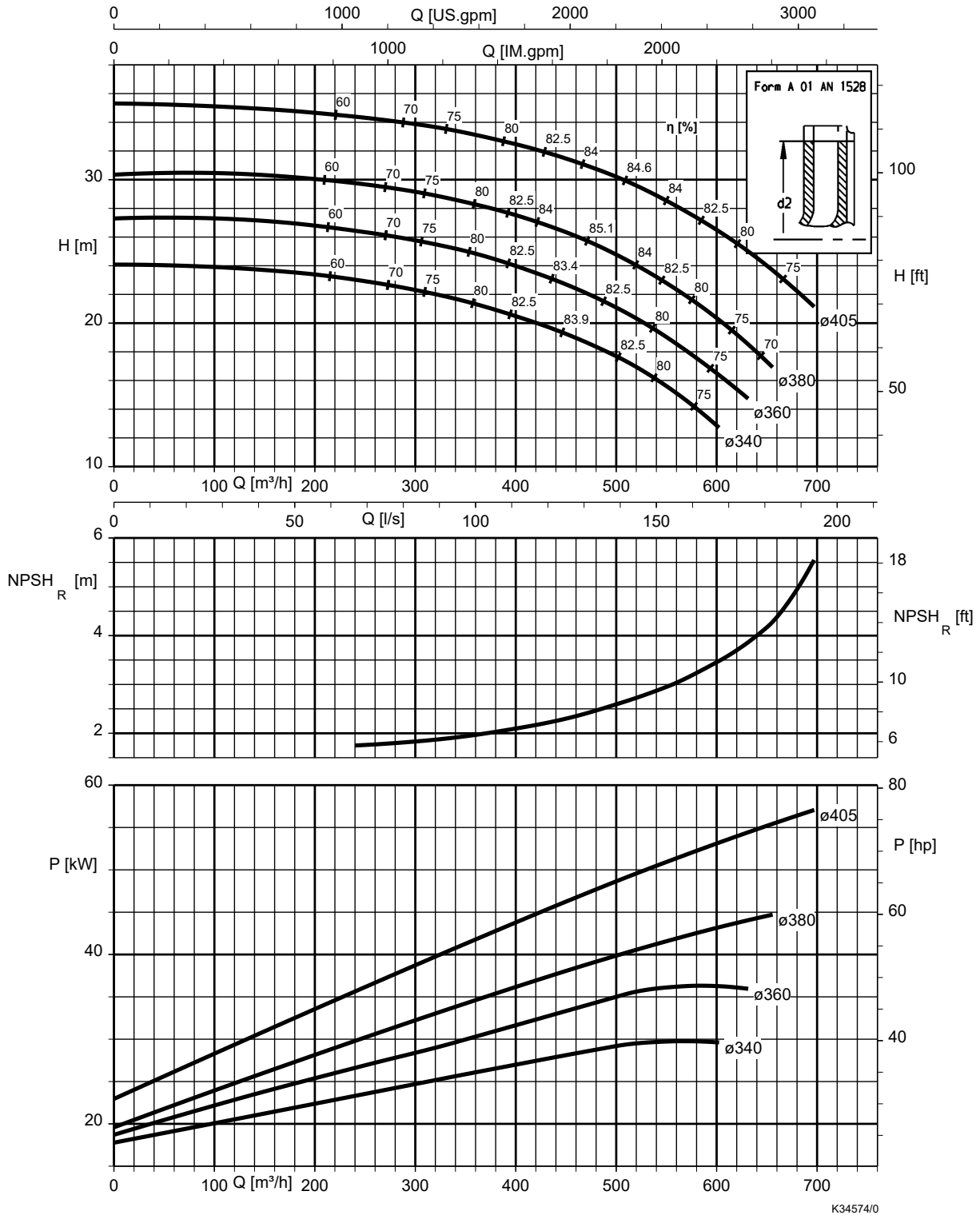


Table 16: Correction values

Impeller material	Correction value S [m]	Calculation
EN-GJL-250	0,5	$NPSH_{System} \geq NPSH + \text{correction value } S$
CC480K-GS	0,5	
1.4408	0,5	

Etanorm-RSY 200-500, n = 1160 rpm

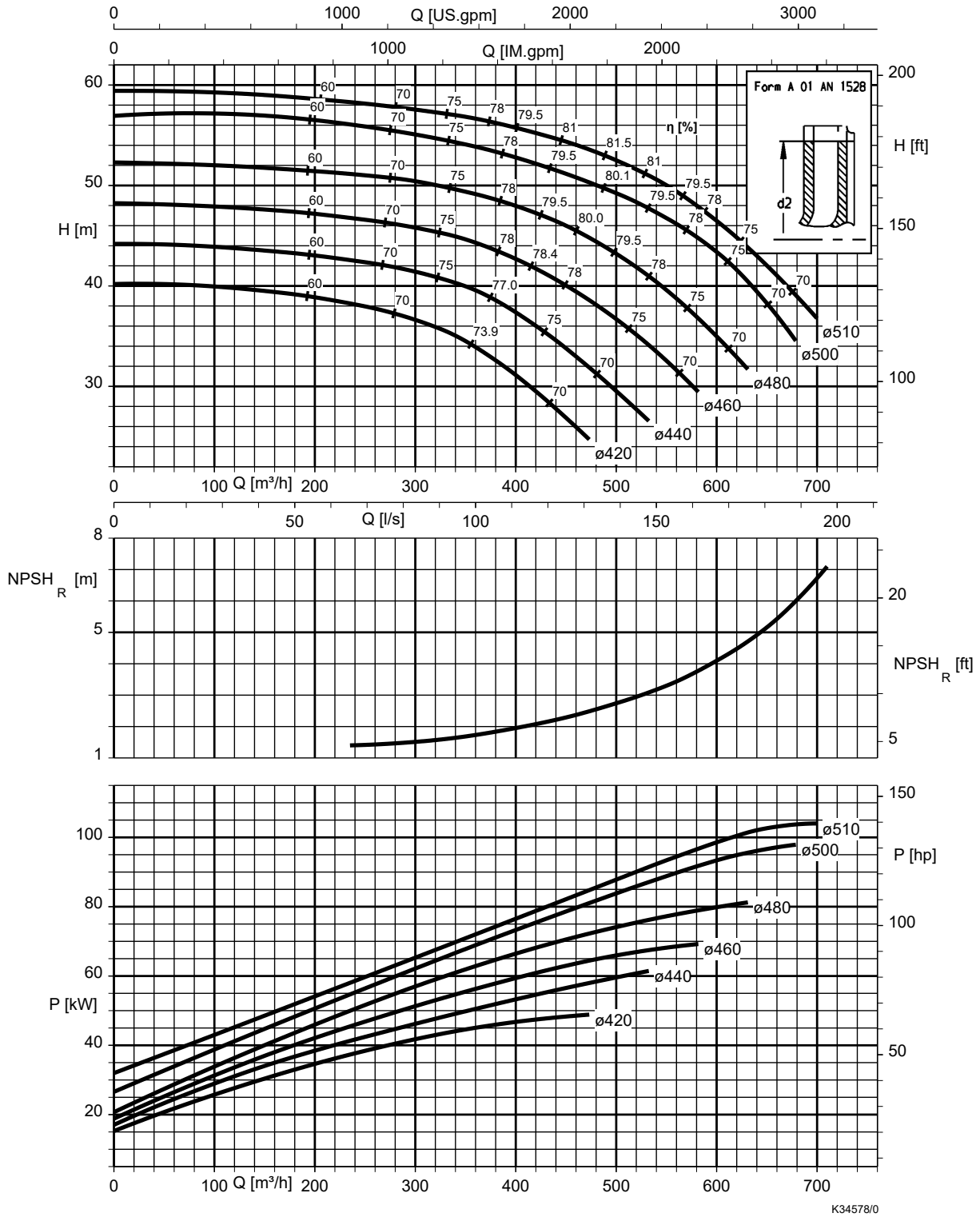


Table 17: Correction values

Impeller material	Correction value S [m]	Calculation
EN-GJL-250	0,5	$NPSH_{System} \geq NPSH + \text{correction value } S$
CC480K-GS	0,5	
1.4408	0,5	

Etanorm-RSY 250-330, n = 1160 rpm

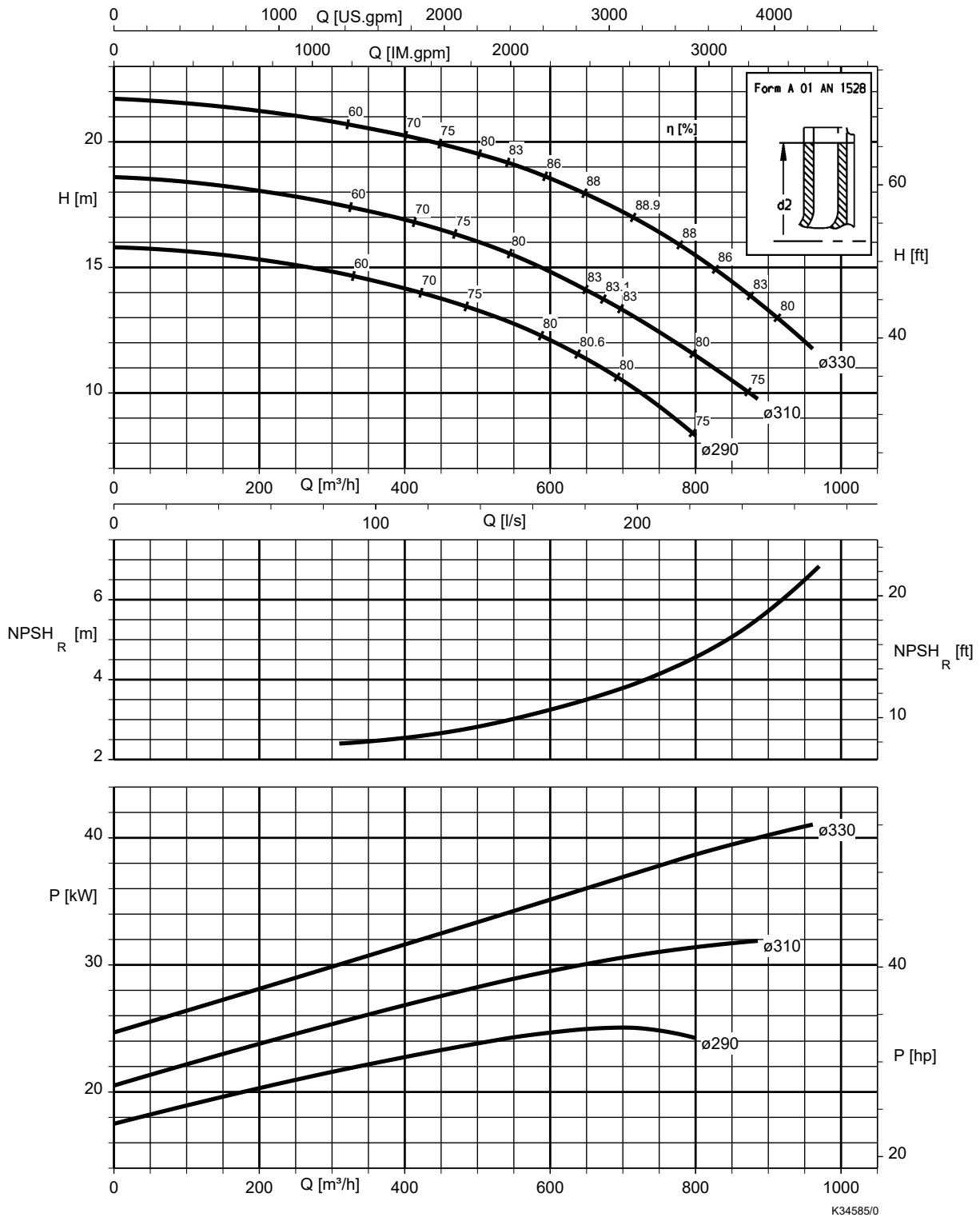


Table 18: Correction values

Impeller material	Correction value S [m]	Calculation
EN-GJL-250	1,5	$NPSH_{System} \geq NPSH + \text{correction value } S$
CC480K-GS	0,5	
1.4408	0,5	

Etanorm-RSY 250-400, n = 1160 rpm

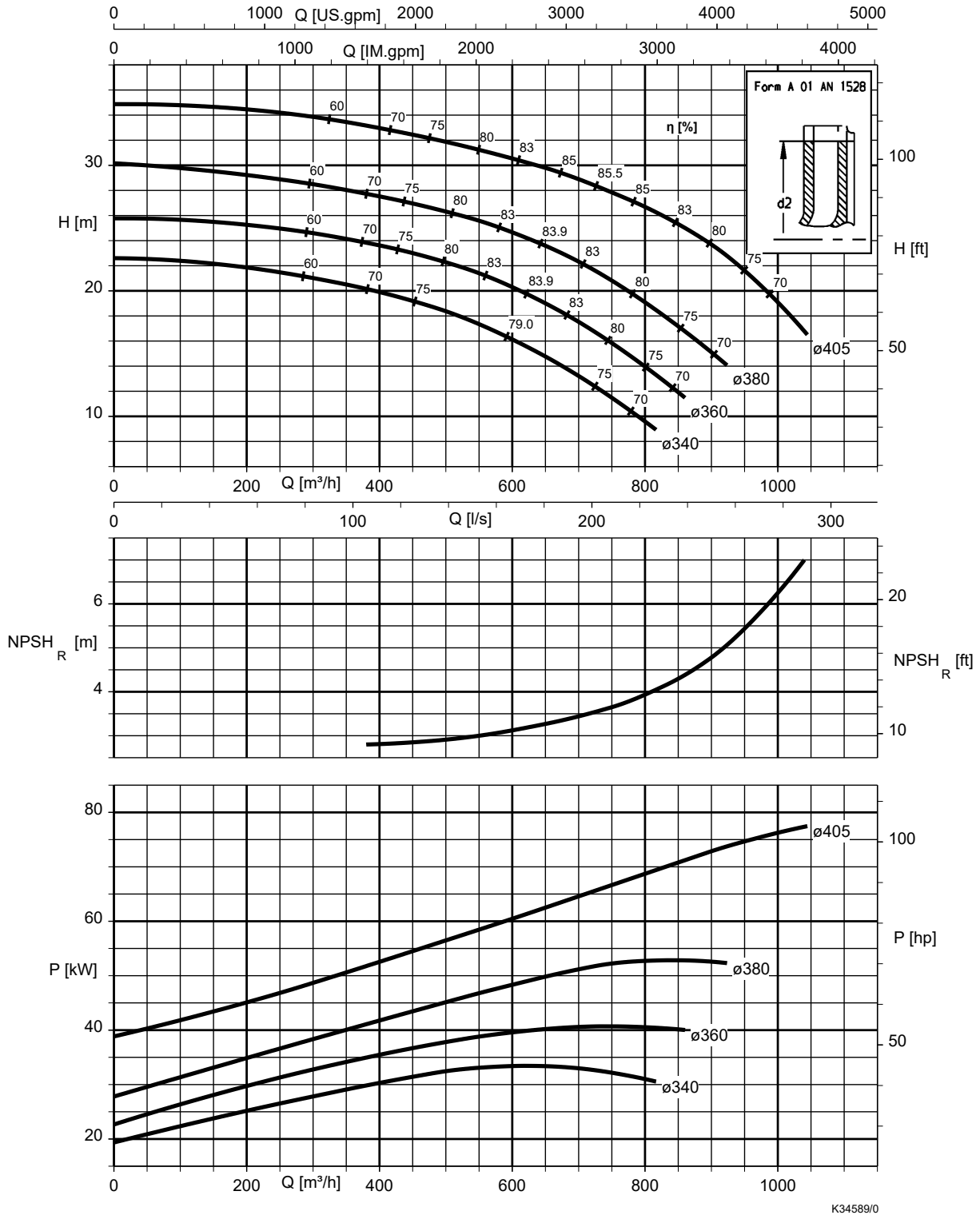


Table 19: Correction values

Impeller material	Correction value S [m]	Calculation
EN-GJL-250	1,0	$NPSH_{System} \geq NPSH + \text{correction value } S$
CC480K-GS	0,5	
1.4408	0,5	

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Etanorm-RSY 250-500, n = 1160 rpm

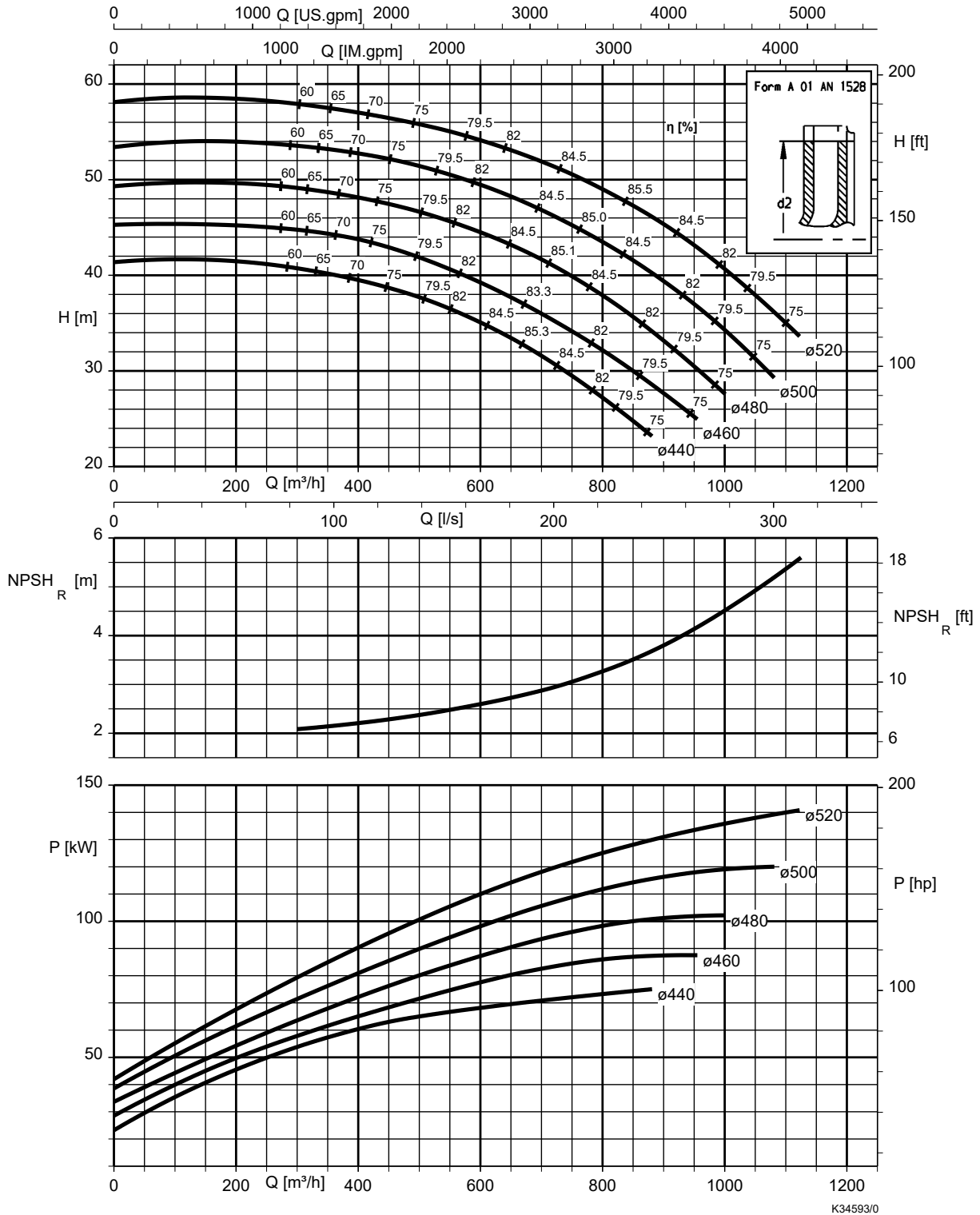


Table 20: Correction values

Impeller material	Correction value S [m]	Calculation
EN-GJL-250	1,0	$NPSH_{System} \geq NPSH + \text{correction value } S$
CC480K-GS	0,5	
1.4408	0,5	

Etanorm-RSY 300-340, n = 1160 rpm

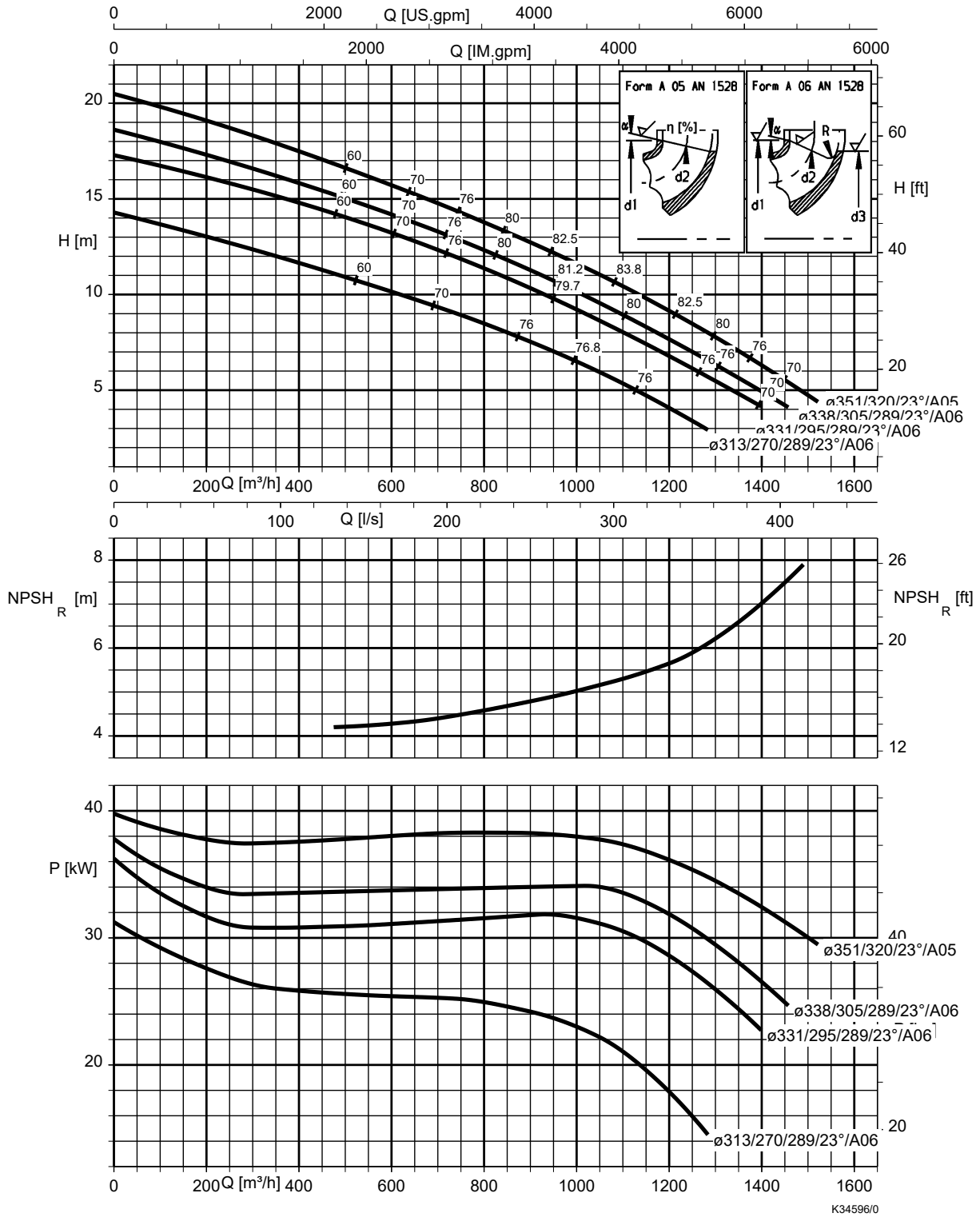


Table 21: Correction values

Impeller material	Correction value S [m]	Calculation
EN-GJL-250	3,0	$NPSH_{System} \geq NPSH + \text{correction value } S$
CC480K-GS	1,5	
1.4408	0,5	

Etanorm-RSY 300-360, n = 1160 rpm

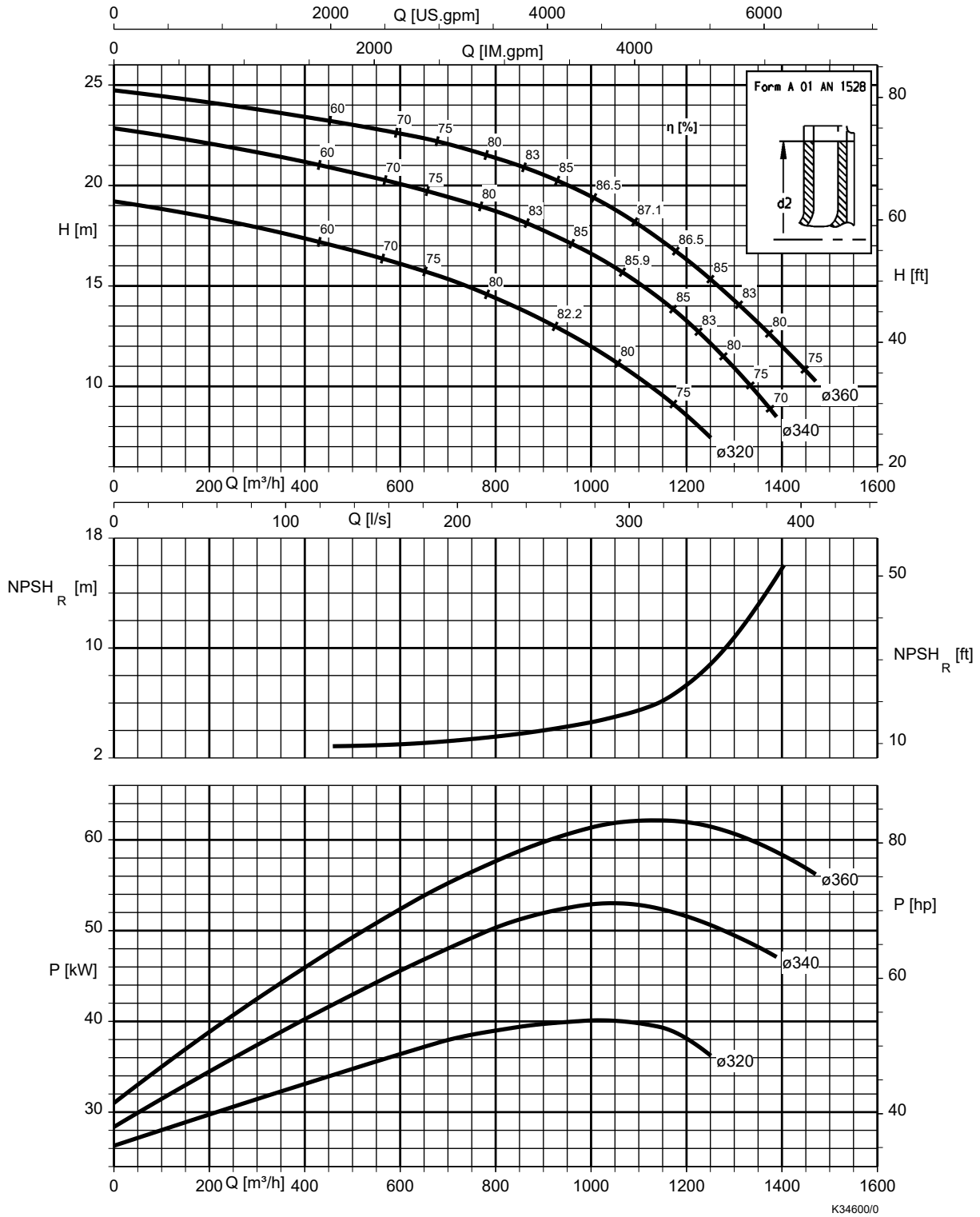


Table 22: Correction values

Impeller material	Correction value S [m]	Calculation
EN-GJL-250	1,8	$NPSH_{System} \geq NPSH + \text{correction value } S$
CC480K-GS	1,0	
1.4408	0,5	

Etanorm-RSY 300-500, n = 1160 rpm

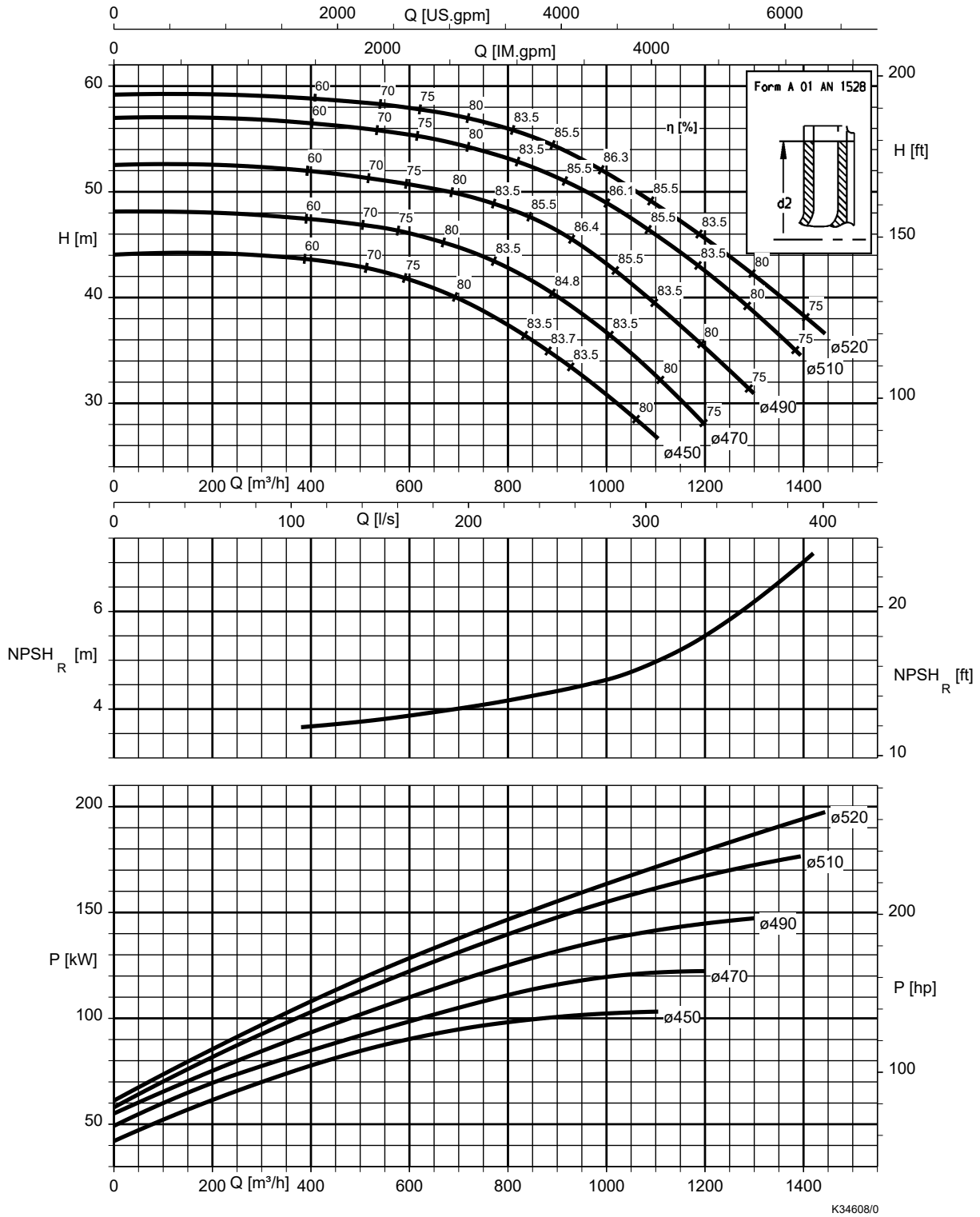


Table 23: Correction values

Impeller material	Correction value S [m]	Calculation
EN-GJL-250	1,5	$NPSH_{System} \geq NPSH + \text{correction value } S$
CC480K-GS	0,5	
1.4408	0,5	



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