

Prozesspumpe

RPH-V

50 Hz und 60 Hz

Kennlinienheft



Impressum

Kennlinienheft RPH-V

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Generell gilt: Technische Änderungen vorbehalten.

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Kreiselpumpen mit Wellendichtung

Prozesspumpen

RPH-V



Allgemein

Vertikal aufgehängte, einstufige, einflutige, einwandige, wellengetriebene Spiralgehäusepumpe mit integrierter Axiallagerung und separater Druckleitung gemäß API 610 / ISO 13709 (VS4).

Abnahmeklasse

ISO 9906 / ANSI/HI 14.6 Class 1B oder API 610 11ed. Tabelle 16

Garantie der Förderdaten

Förderdaten werden für einen Betriebspunkt gemäß den Toleranzen der Norm ISO 9906 / ANSI/HI 14.6 Klasse 1B oder API 610, 11. Ausgabe, garantiert. Garantien für weitere Betriebspunkte entlang der Kennlinie sind ausschließlich auf Rückfrage erhältlich.

Die Förderhöhen und Leistungsangaben gelten für Fördermedien mit einer Dichte $\rho=1000 \text{ kg/m}^3$ und kinematischen Viskosität ν bis max. $20 \text{ mm}^2/\text{s}$. Ist die Dichte ungleich 1000 kg/m^3 , muss die Leistung mit ρ multipliziert werden.

Maximaler Förderstrom

Die maximal zulässigen Förderströme $Q_{\max}$ ergeben sich aus den für Betrieb der Pumpe erforderlichen NPSH-Werten (NPSH₃) und den von der Anlage zur Verfügung stehenden NPSH-Werten (NPSH_A). Der Betriebsbereich wird zusätzlich durch mechanische Grenzen der Pumpe eingeschränkt. Die mechanischen Grenzen werden durch $Q_{\max}$ dargestellt. $Q_{\max}$ darf nicht überschritten werden.

Minimaler Förderstrom

Die minimalen Förderströme sind in den Kennlinien mit $Q_{\min}$ gekennzeichnet und dürfen im Normalbetrieb nicht unterschritten werden. Im Bereich des Förderstroms $Q < Q_{\min}$ unterliegt der Kennlinienverlauf, physikalisch bedingt, beeinflusst durch Pumpe und Anlage, größeren Toleranzen. Dieses ist besonders bei der Auslegung für Anlagen mit hohem statischen Anteil an der Förderhöhe, z. B. Betrieb mehrerer Pumpen auf einen Sammler und bei drehzahlgeregelten Pumpen zu beachten.

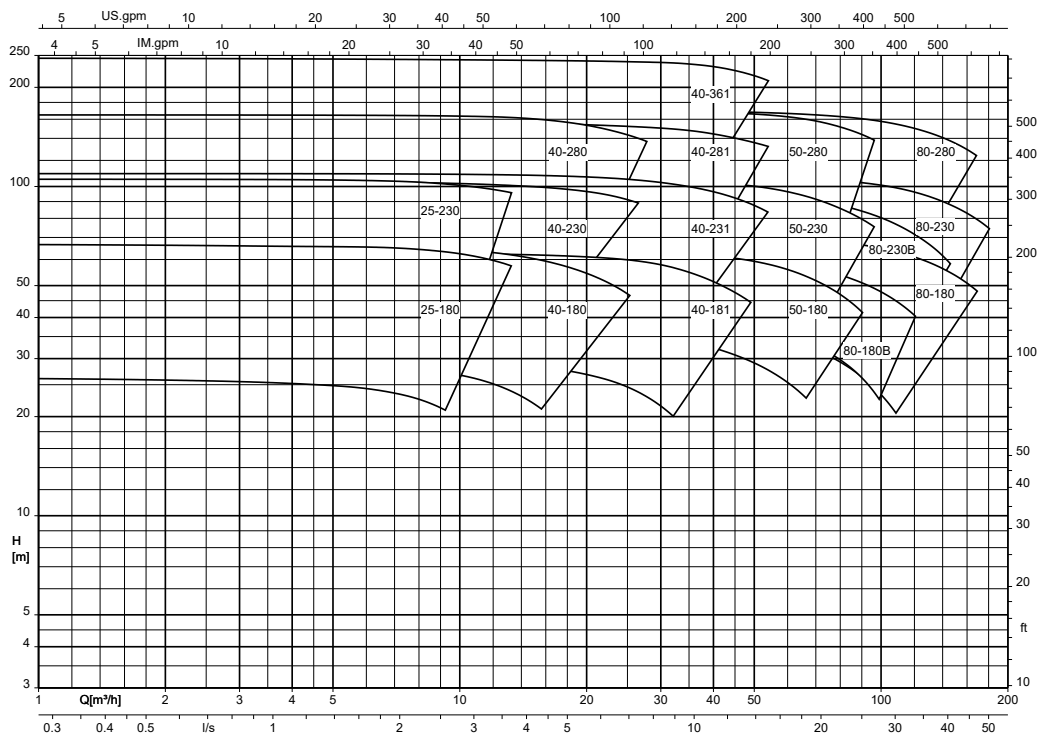
Baugrößenübersicht

Baugrößenübersicht

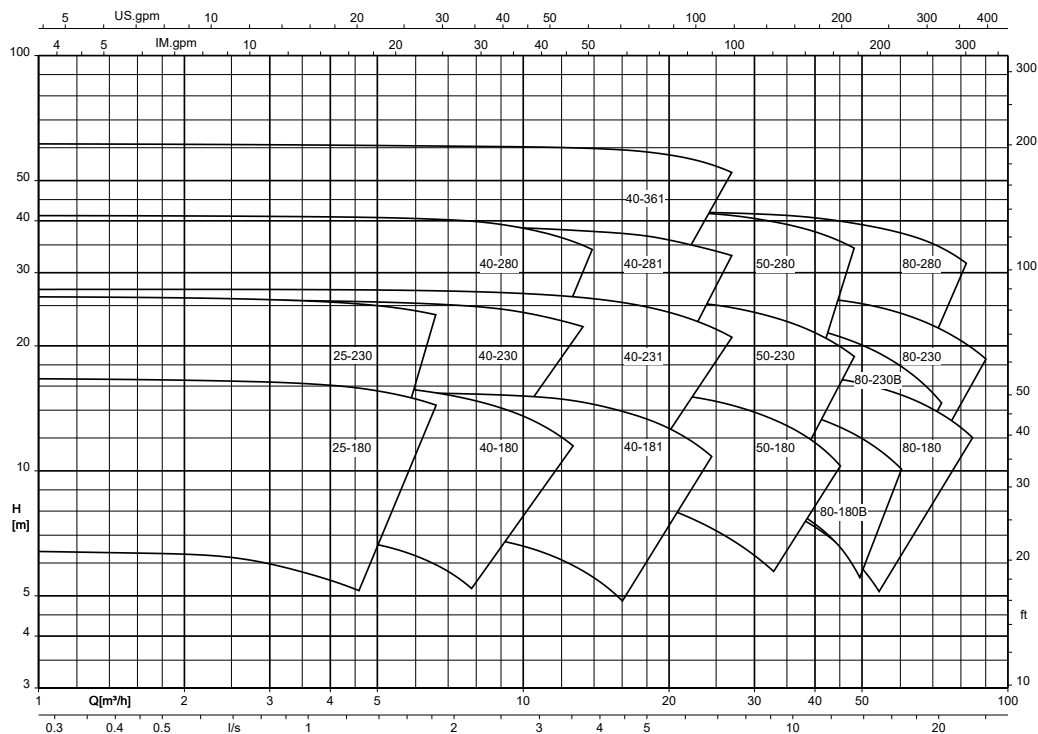
Baugröße	Drehzahl			
	2900 min ⁻¹	1450 min ⁻¹	3500 min ⁻¹	1750 min ⁻¹
25-180	(⇒ Seite 7)	(⇒ Seite 24)	(⇒ Seite 41)	(⇒ Seite 58)
25-230	(⇒ Seite 8)	(⇒ Seite 25)	(⇒ Seite 42)	(⇒ Seite 59)
40-180	(⇒ Seite 9)	(⇒ Seite 26)	(⇒ Seite 43)	(⇒ Seite 60)
40-230	(⇒ Seite 11)	(⇒ Seite 28)	(⇒ Seite 45)	(⇒ Seite 62)
40-280	(⇒ Seite 13)	(⇒ Seite 30)	(⇒ Seite 47)	(⇒ Seite 64)
40-181	(⇒ Seite 10)	(⇒ Seite 27)	(⇒ Seite 44)	(⇒ Seite 61)
40-231	(⇒ Seite 12)	(⇒ Seite 29)	(⇒ Seite 46)	(⇒ Seite 63)
40-281	(⇒ Seite 14)	(⇒ Seite 31)	(⇒ Seite 48)	(⇒ Seite 65)
40-361	(⇒ Seite 15)	(⇒ Seite 32)	(⇒ Seite 49)	(⇒ Seite 66)
50-180	(⇒ Seite 16)	(⇒ Seite 33)	(⇒ Seite 50)	(⇒ Seite 67)
50-230	(⇒ Seite 17)	(⇒ Seite 34)	(⇒ Seite 51)	(⇒ Seite 68)
50-280	(⇒ Seite 18)	(⇒ Seite 35)	(⇒ Seite 52)	(⇒ Seite 69)
80-180	(⇒ Seite 19)	(⇒ Seite 36)	(⇒ Seite 53)	(⇒ Seite 70)
80-180B	(⇒ Seite 20)	(⇒ Seite 37)	(⇒ Seite 54)	(⇒ Seite 71)
80-230	(⇒ Seite 21)	(⇒ Seite 38)	(⇒ Seite 55)	(⇒ Seite 72)
80-230B	(⇒ Seite 22)	(⇒ Seite 39)	(⇒ Seite 56)	(⇒ Seite 73)
80-280	(⇒ Seite 23)	(⇒ Seite 40)	(⇒ Seite 57)	(⇒ Seite 74)

Kennfelder

RPH-V, 60 Hz $n = 3500 \text{ min}^{-1}$

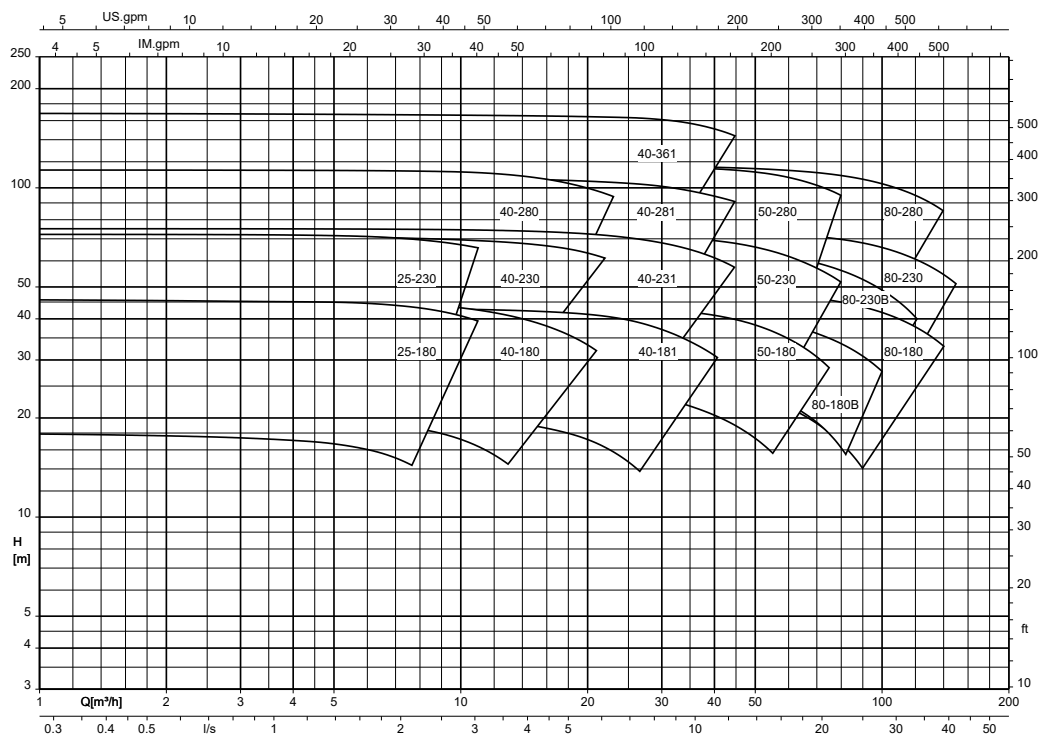


RPH-V, 60 Hz $n = 1750 \text{ min}^{-1}$

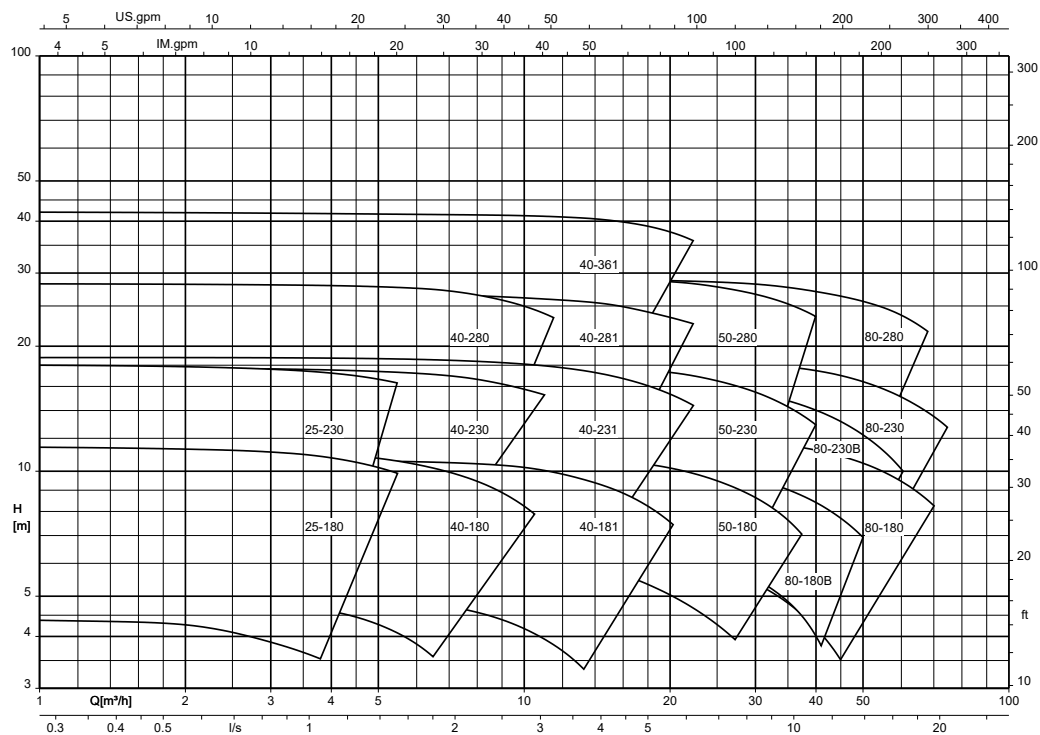


1308.450/01-DE

RPH-V, 50 Hz $n = 2900 \text{ min}^{-1}$



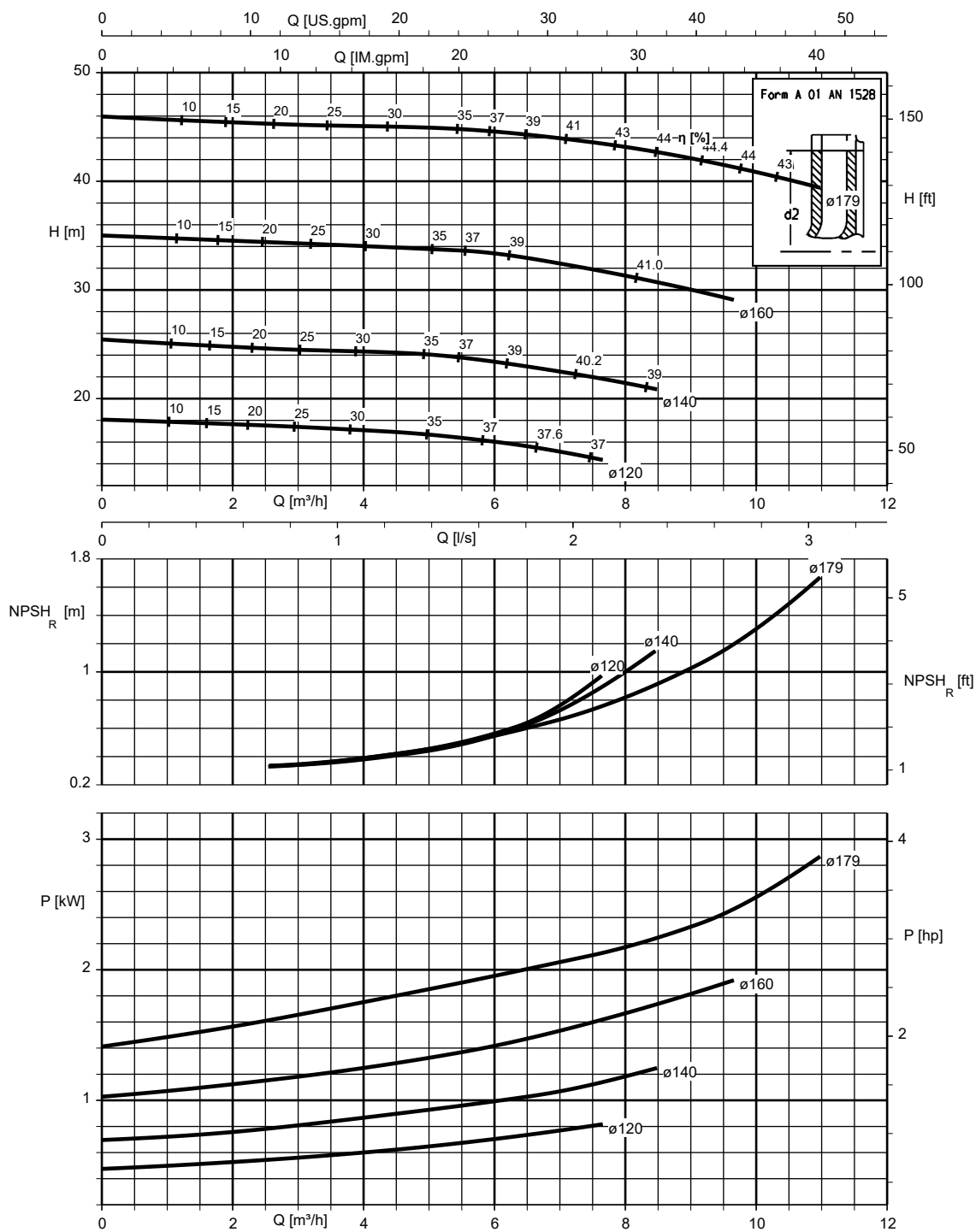
RPH-V, 50 Hz $n = 1450 \text{ min}^{-1}$



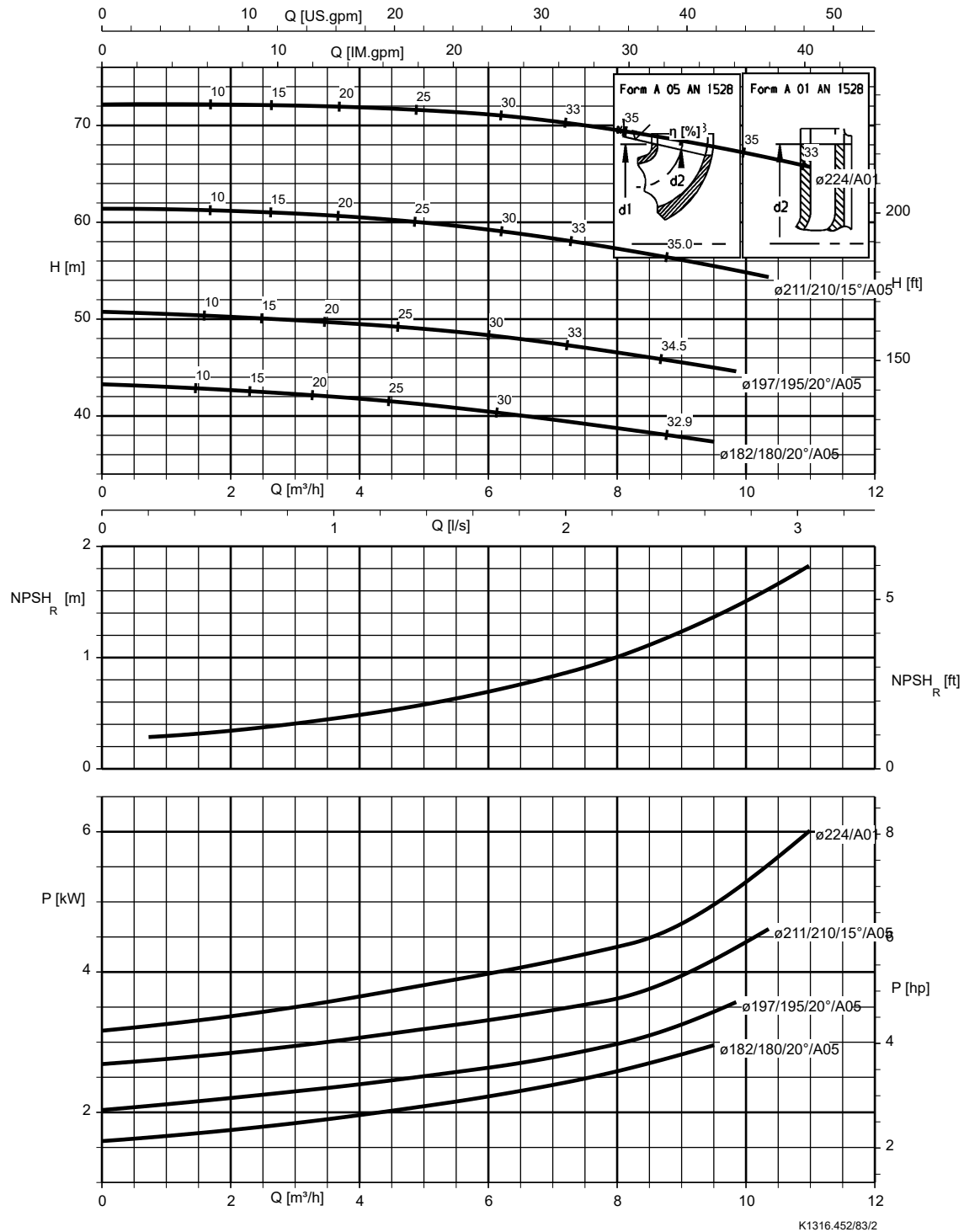
Kennlinien

$n = 2900 \text{ min}^{-1}$

RPH-V 25-180, $n = 2900 \text{ min}^{-1}$

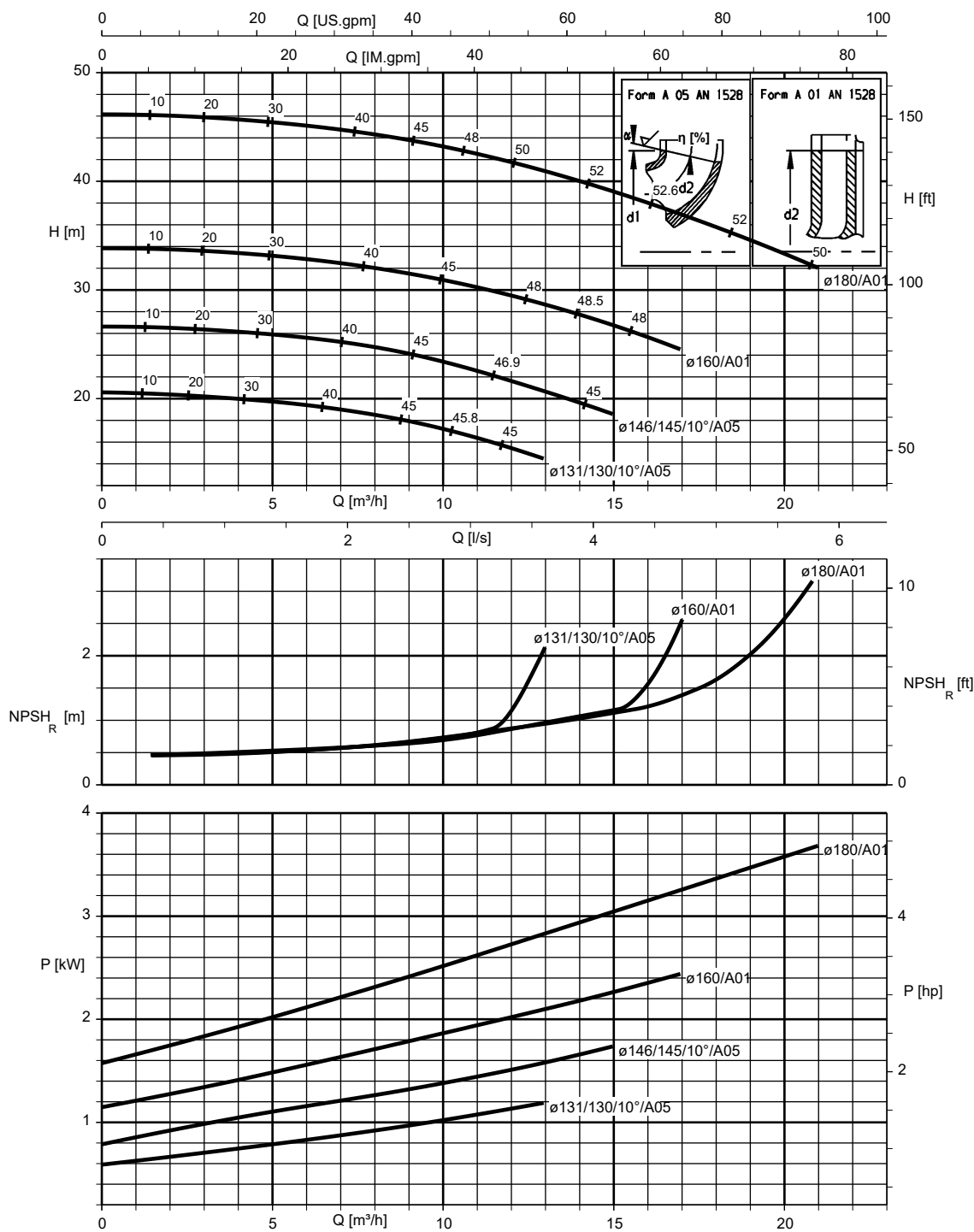


RPH-V 25-230, $n = 2900 \text{ min}^{-1}$



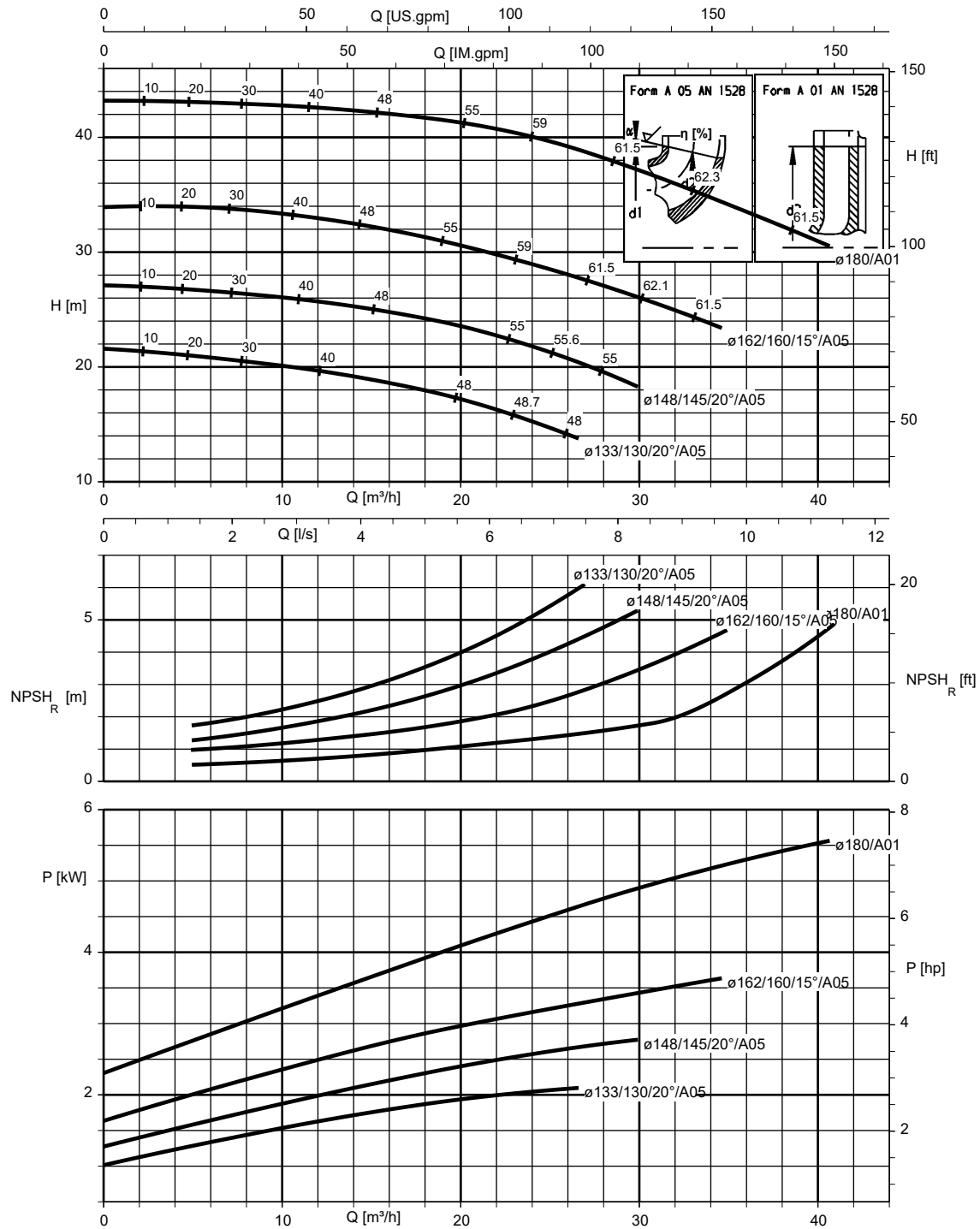
K1316.452/83/2

RPH-V 40-180, $n = 2900 \text{ min}^{-1}$

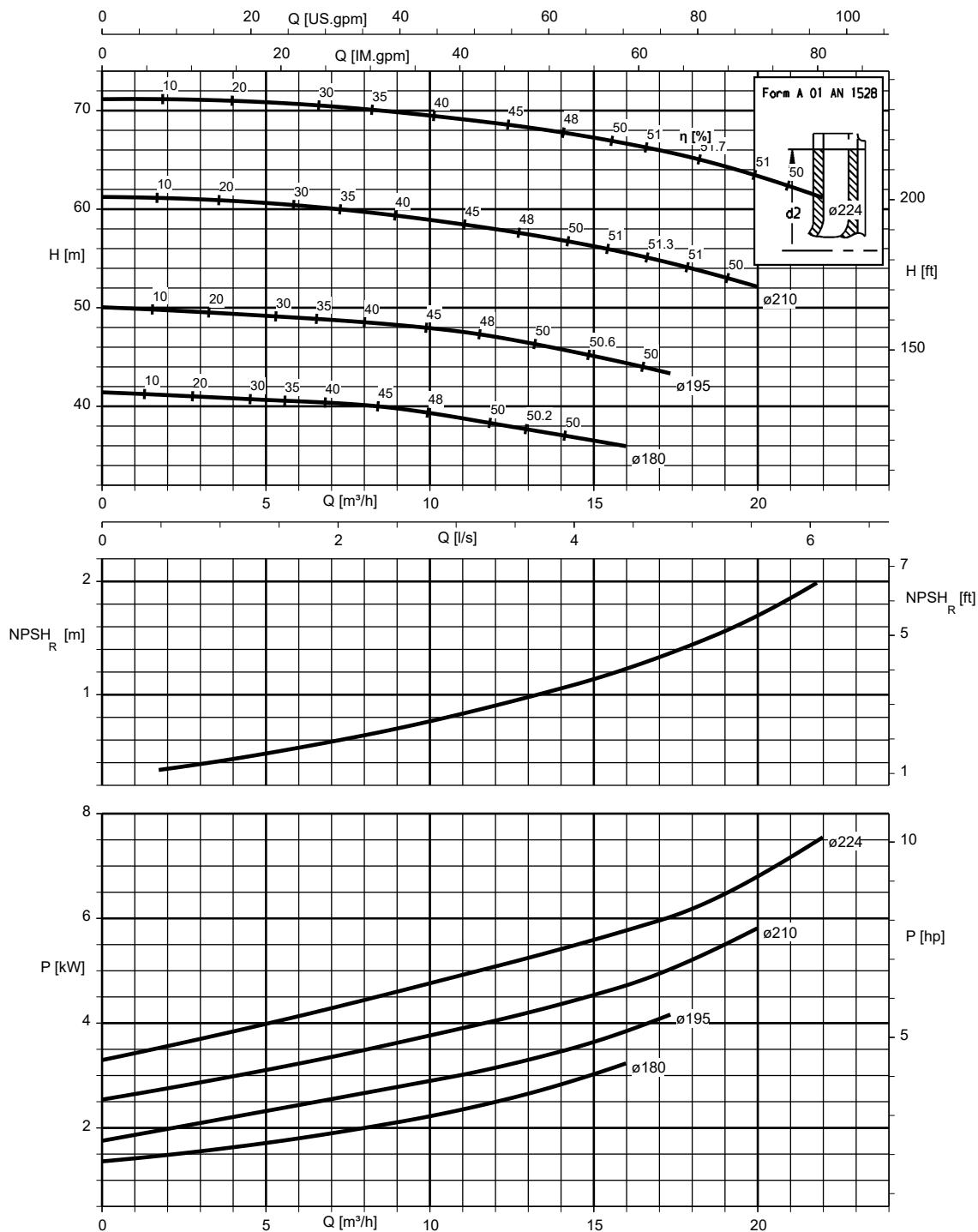


K1316.452/142/2

RPH-V 40-181, $n = 2900 \text{ min}^{-1}$

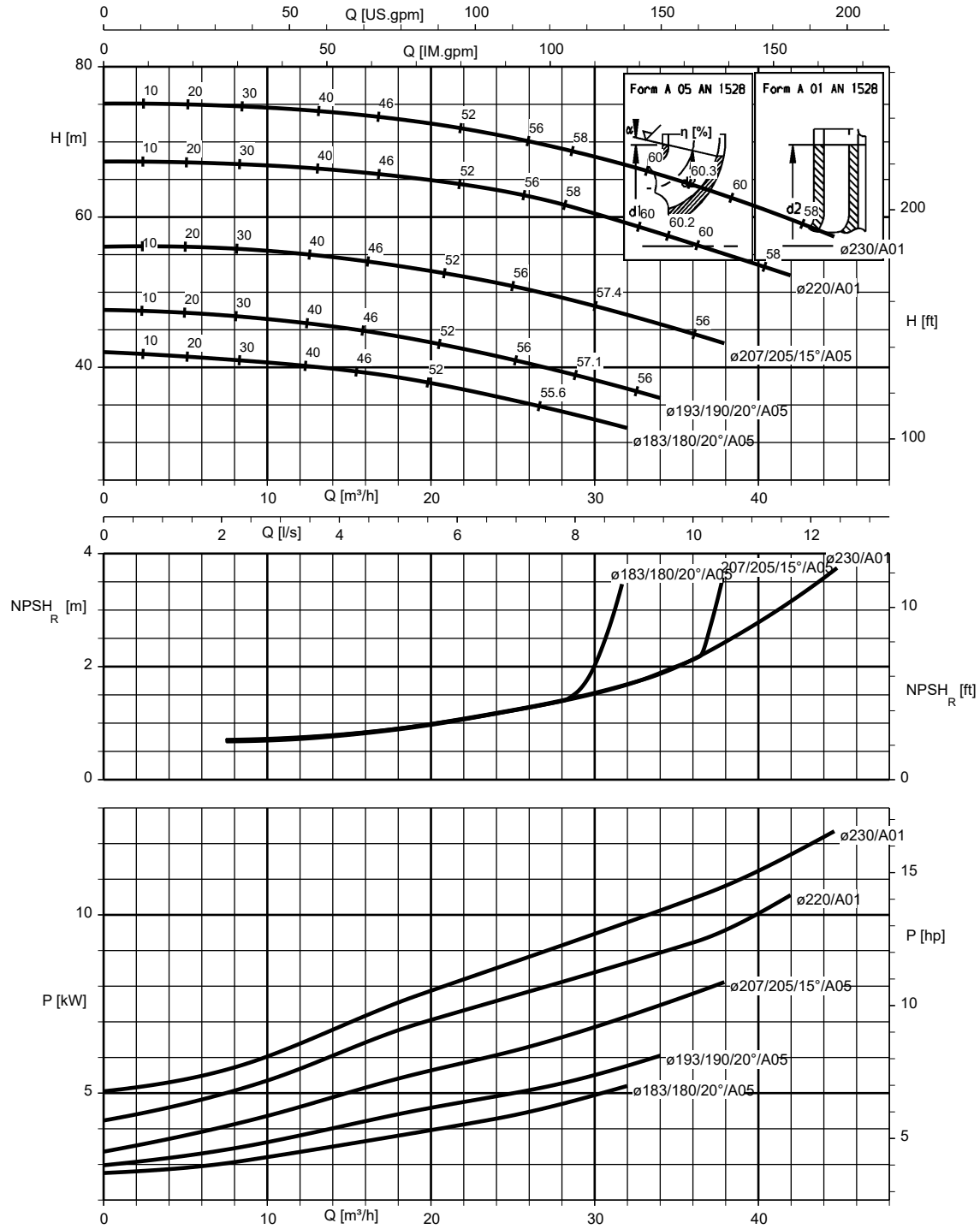


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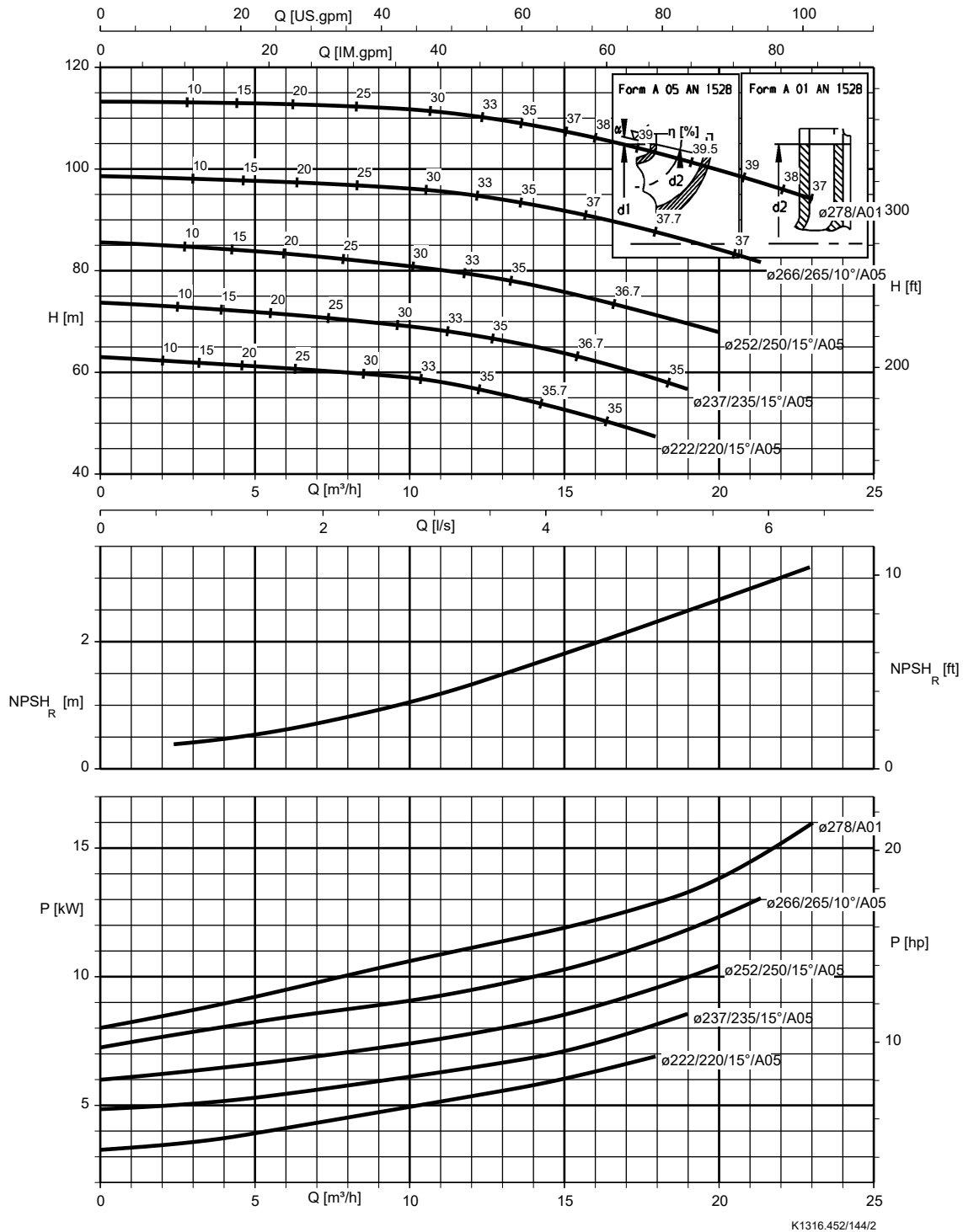
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RPH-V 40-231, $n = 2900 \text{ min}^{-1}$

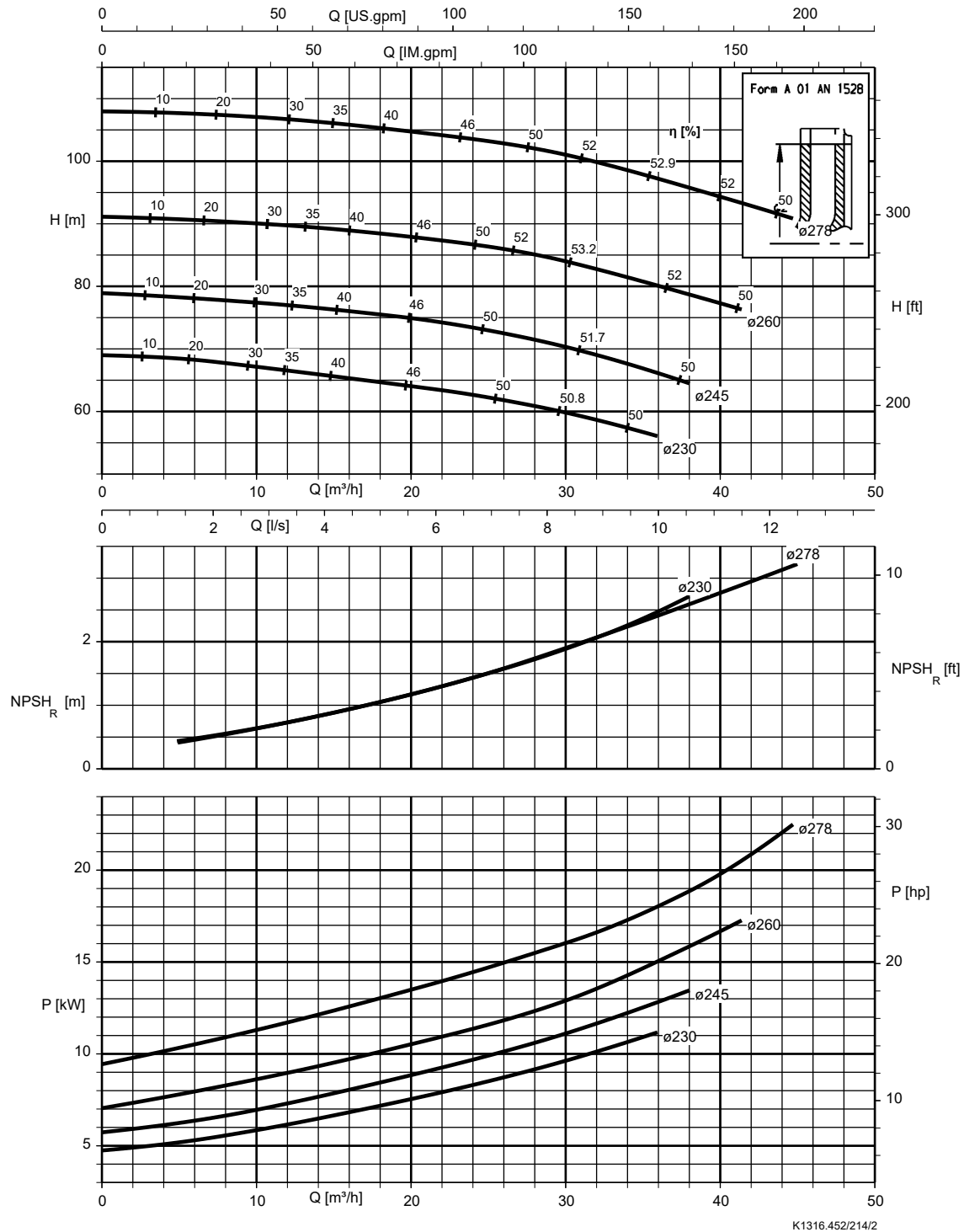


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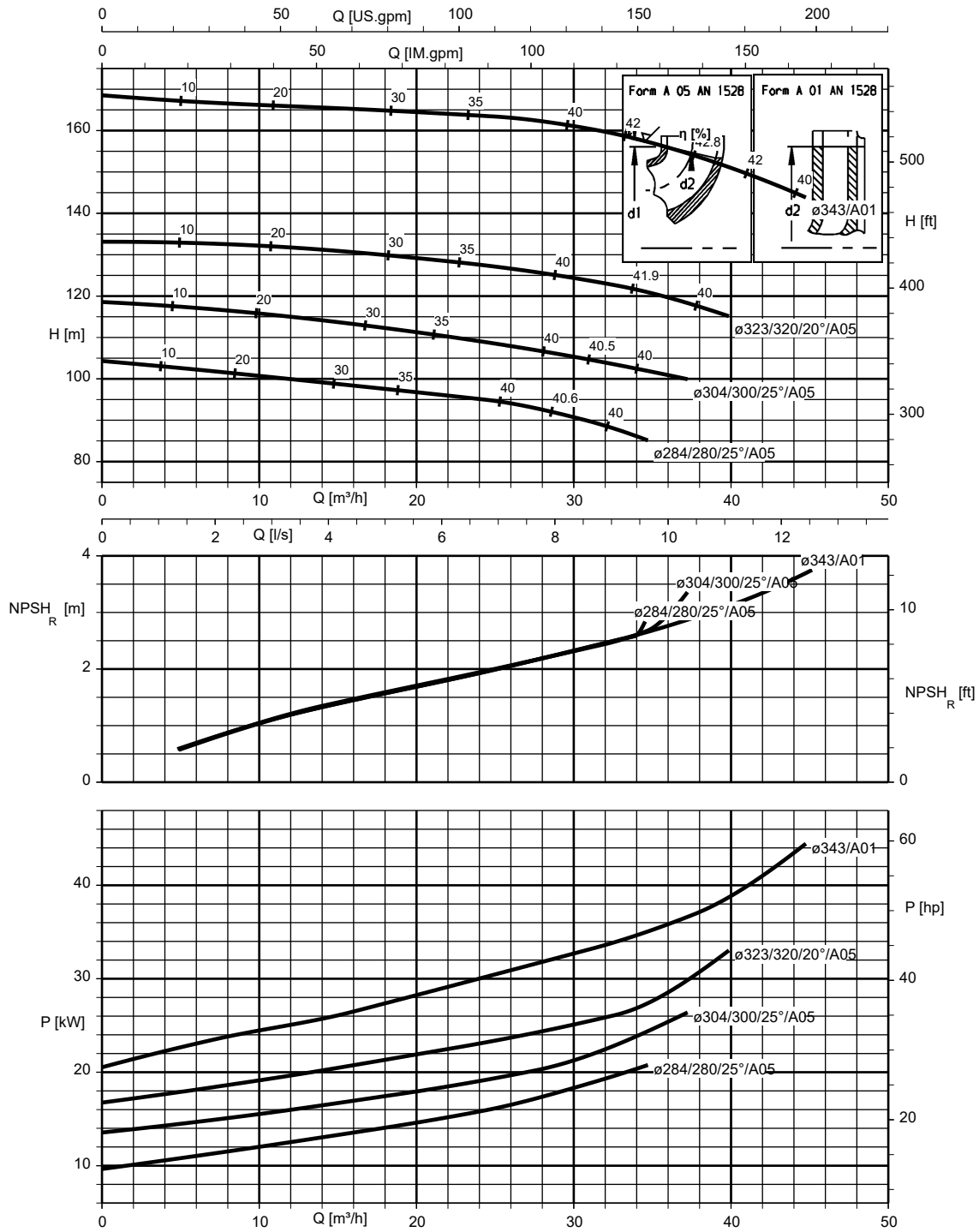
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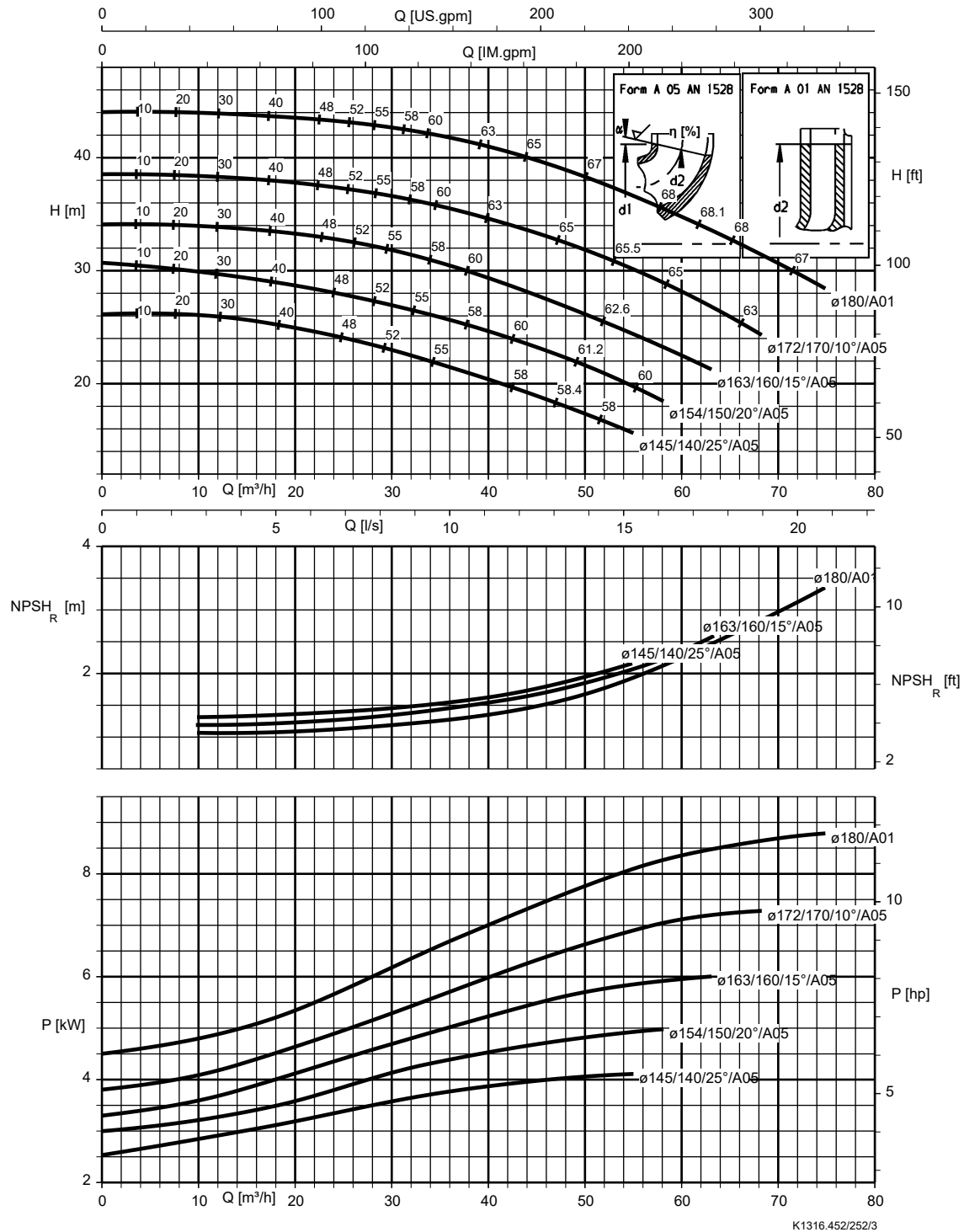
RPH-V 40-281, $n = 2900 \text{ min}^{-1}$



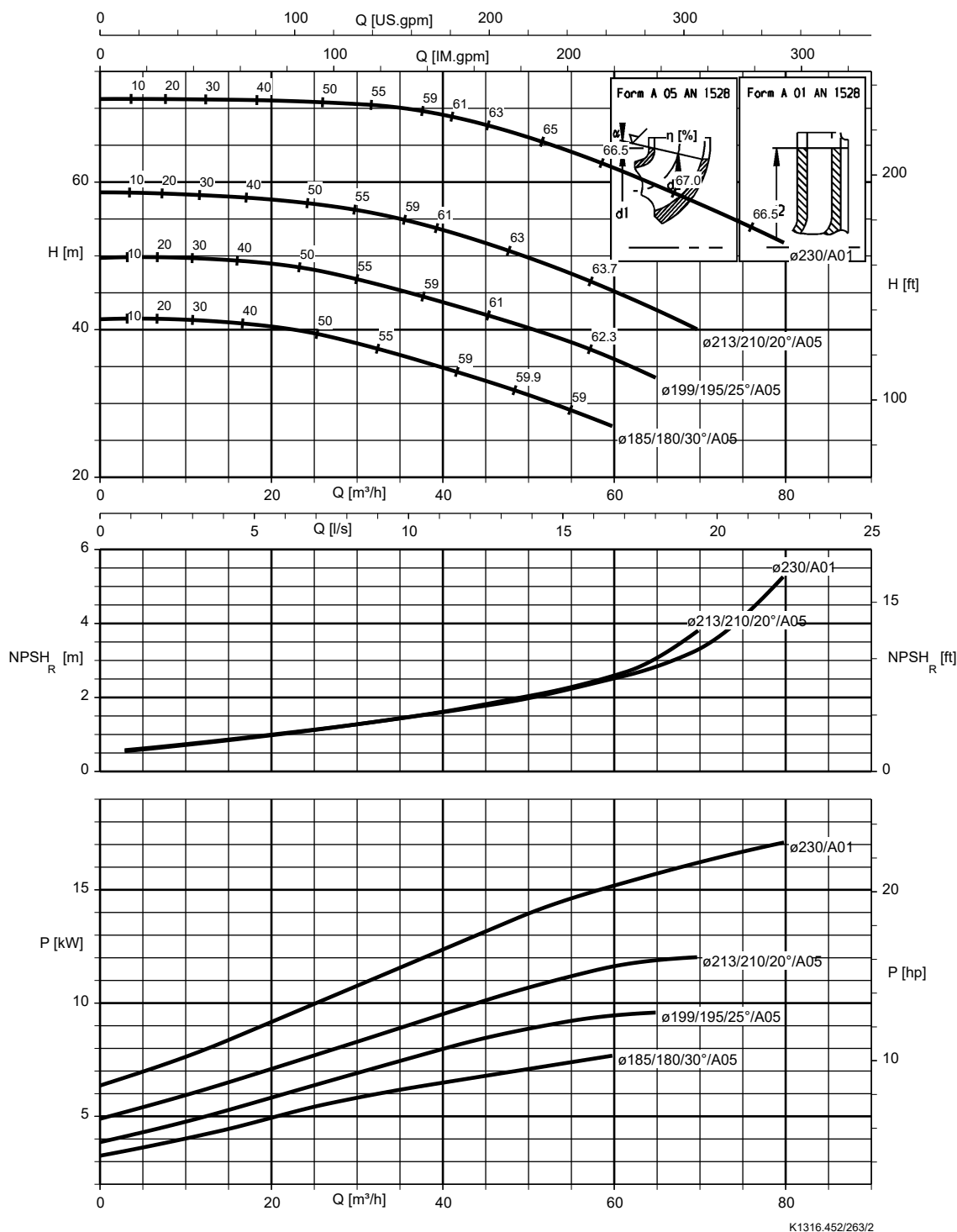
RPH-V 40-361, $n = 2900 \text{ min}^{-1}$



RPH-V 50-180, $n = 2900 \text{ min}^{-1}$

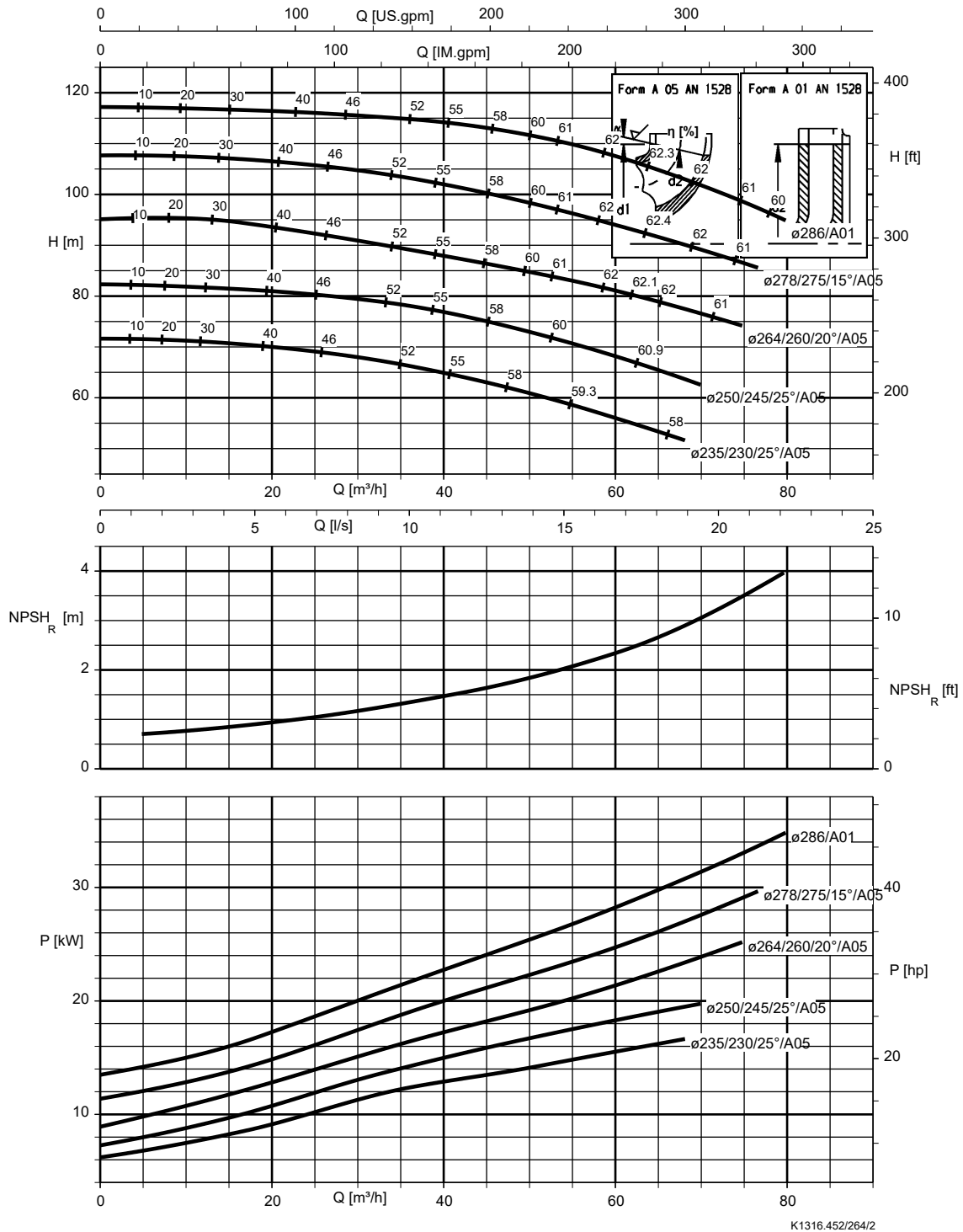


RPH-V 50-230, $n = 2900 \text{ min}^{-1}$

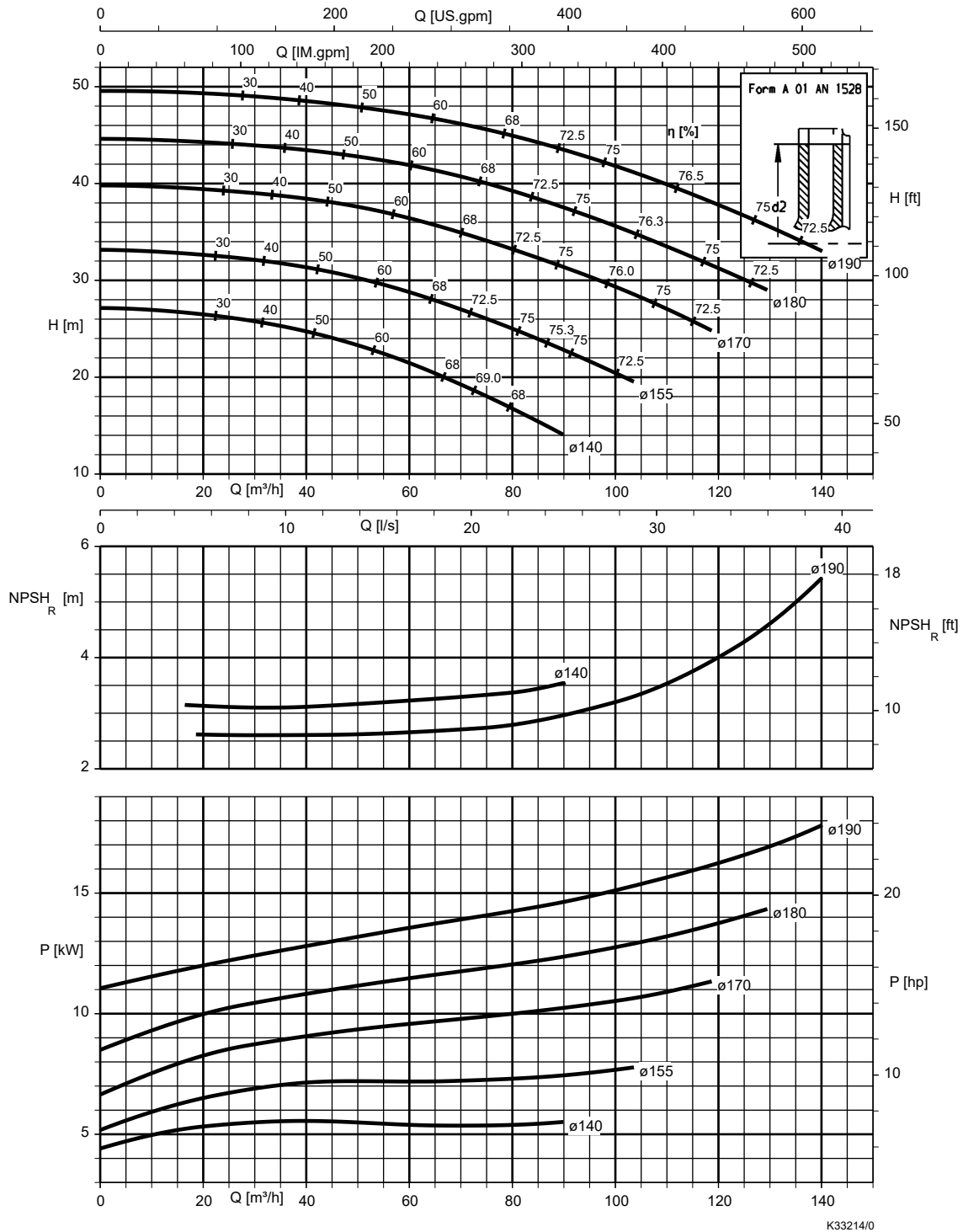


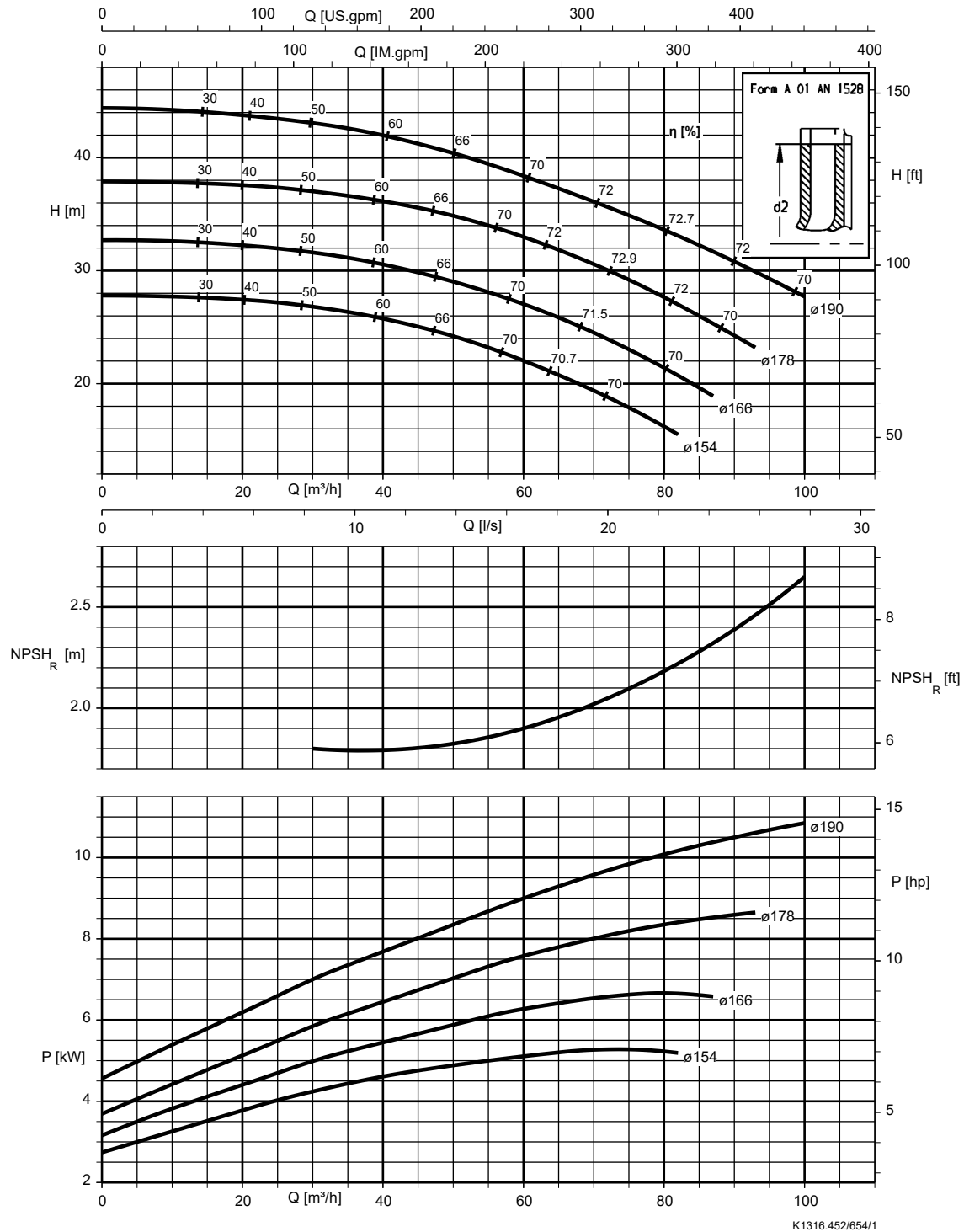
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RPH-V 50-280, $n = 2900 \text{ min}^{-1}$

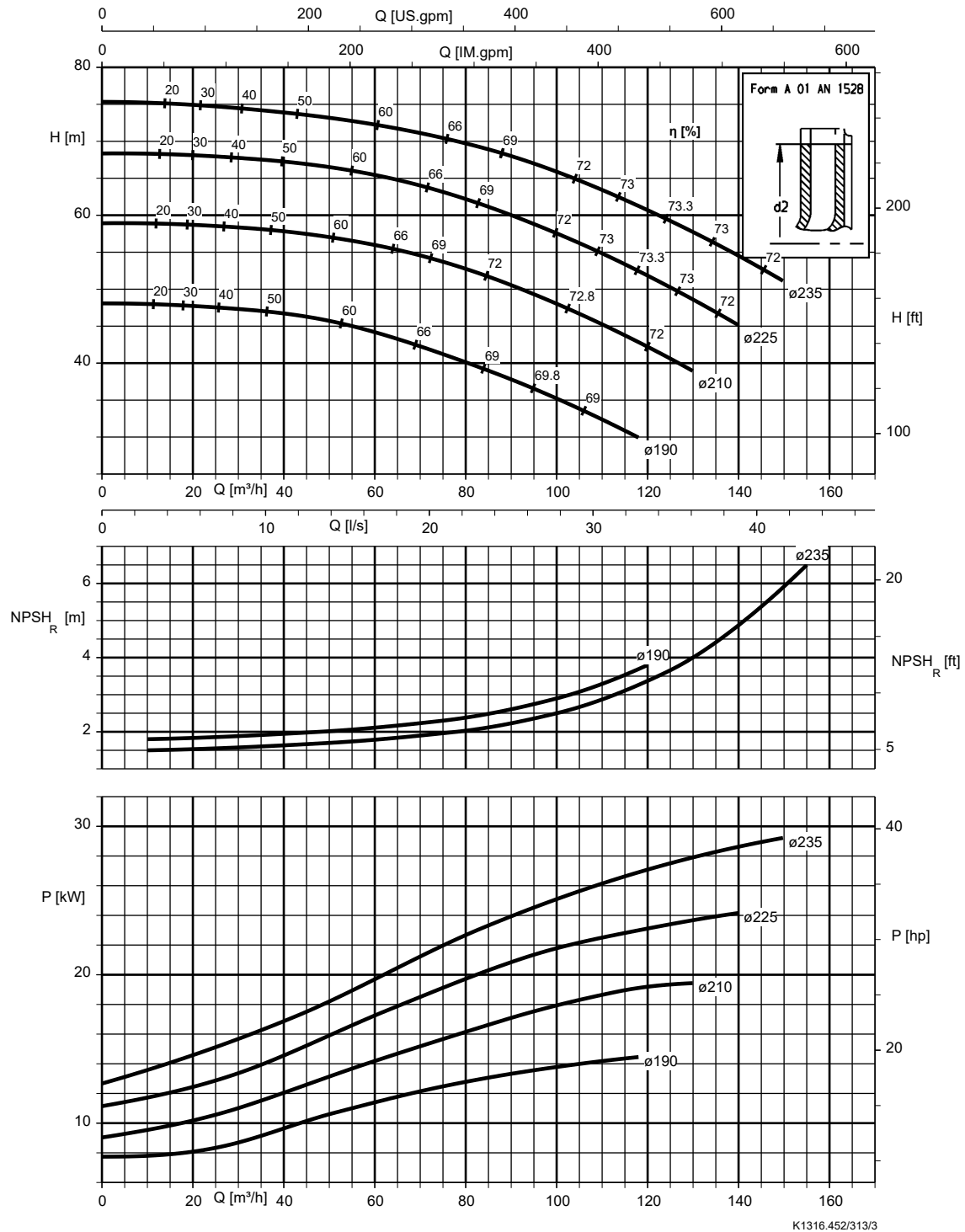


RPH-V 80-180, $n = 2900 \text{ min}^{-1}$

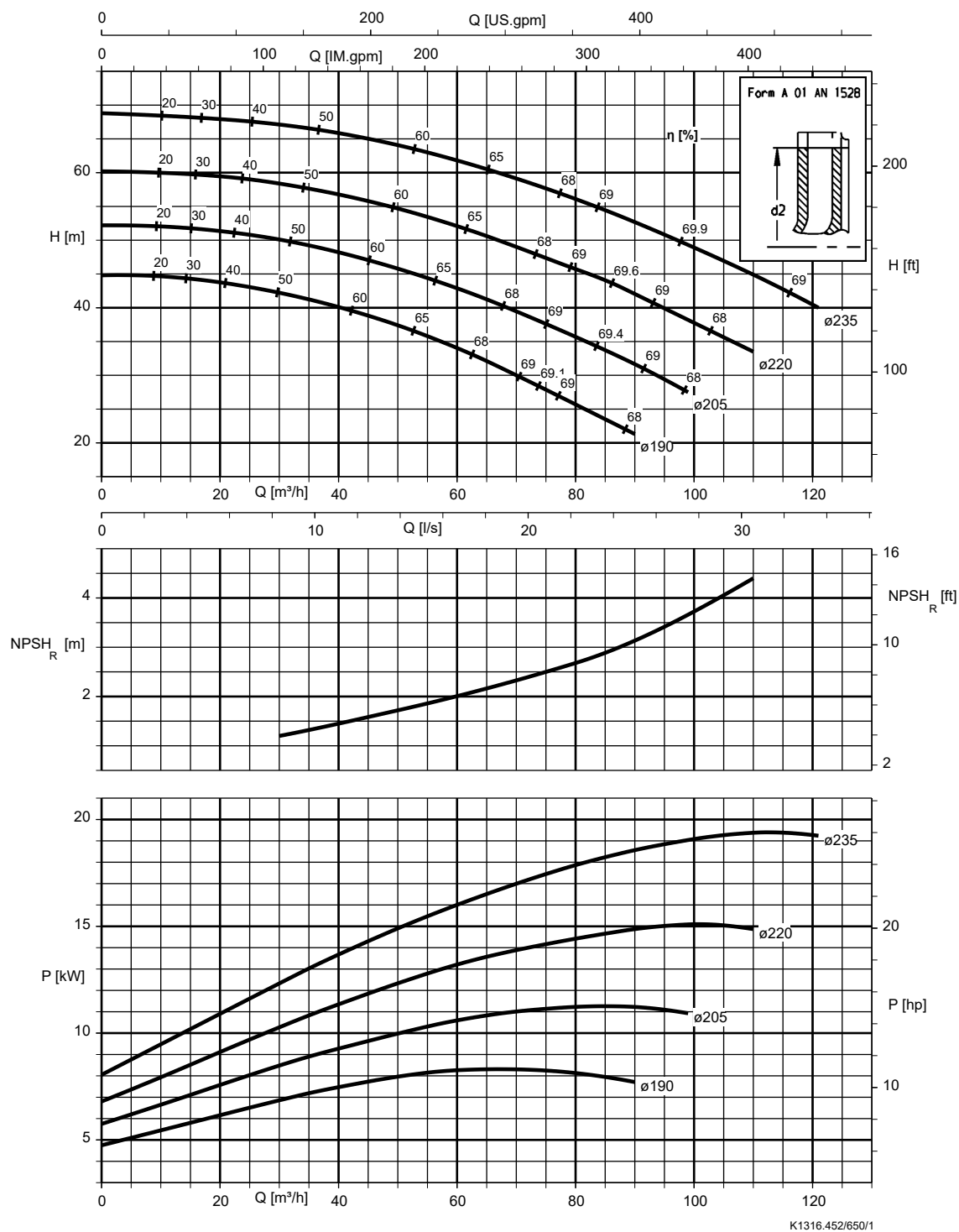


RPH-V 80-180B, $n = 2900 \text{ min}^{-1}$ 

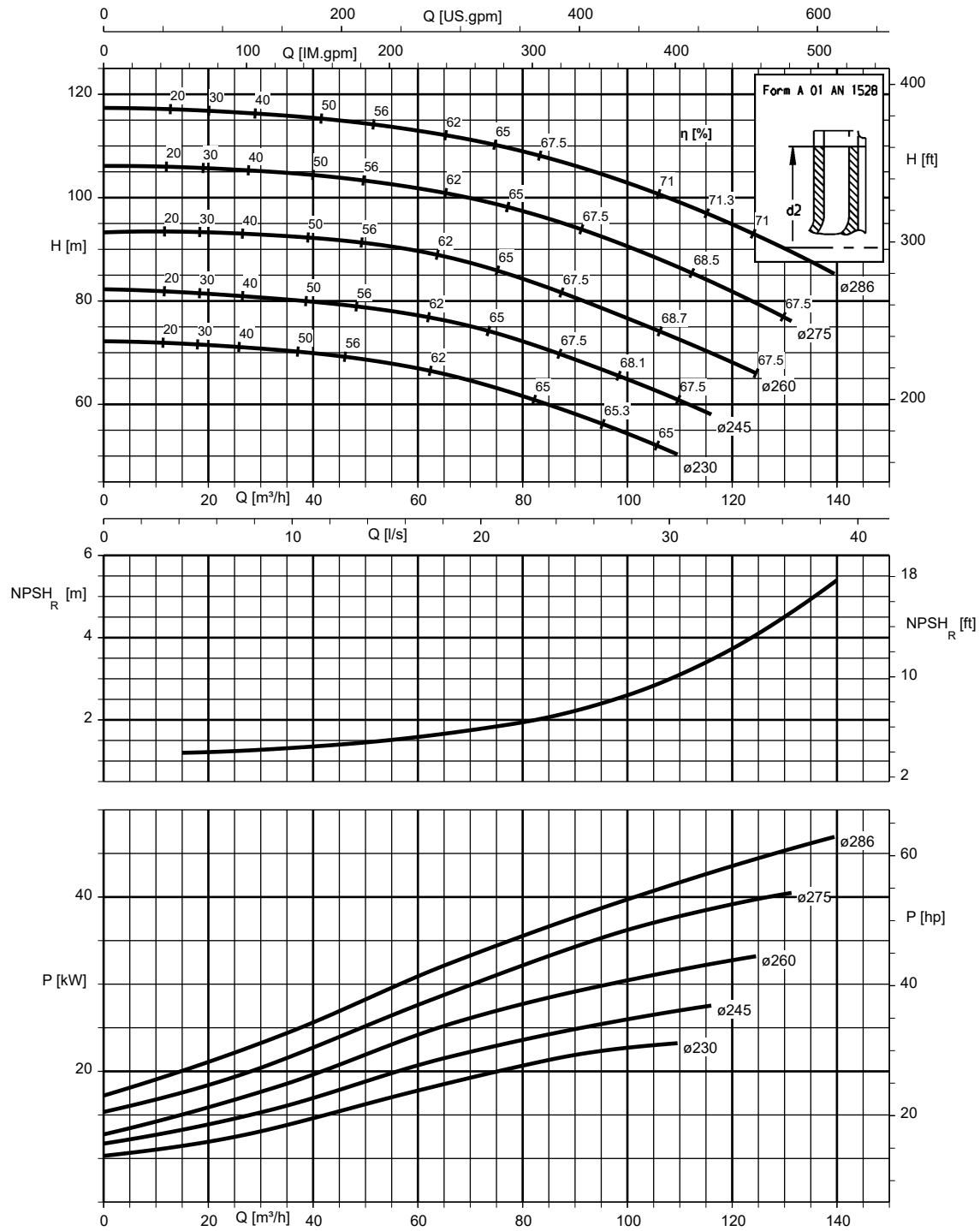
RPH-V 80-230, $n = 2900 \text{ min}^{-1}$



RPH-V 80-230B, $n = 2900 \text{ min}^{-1}$



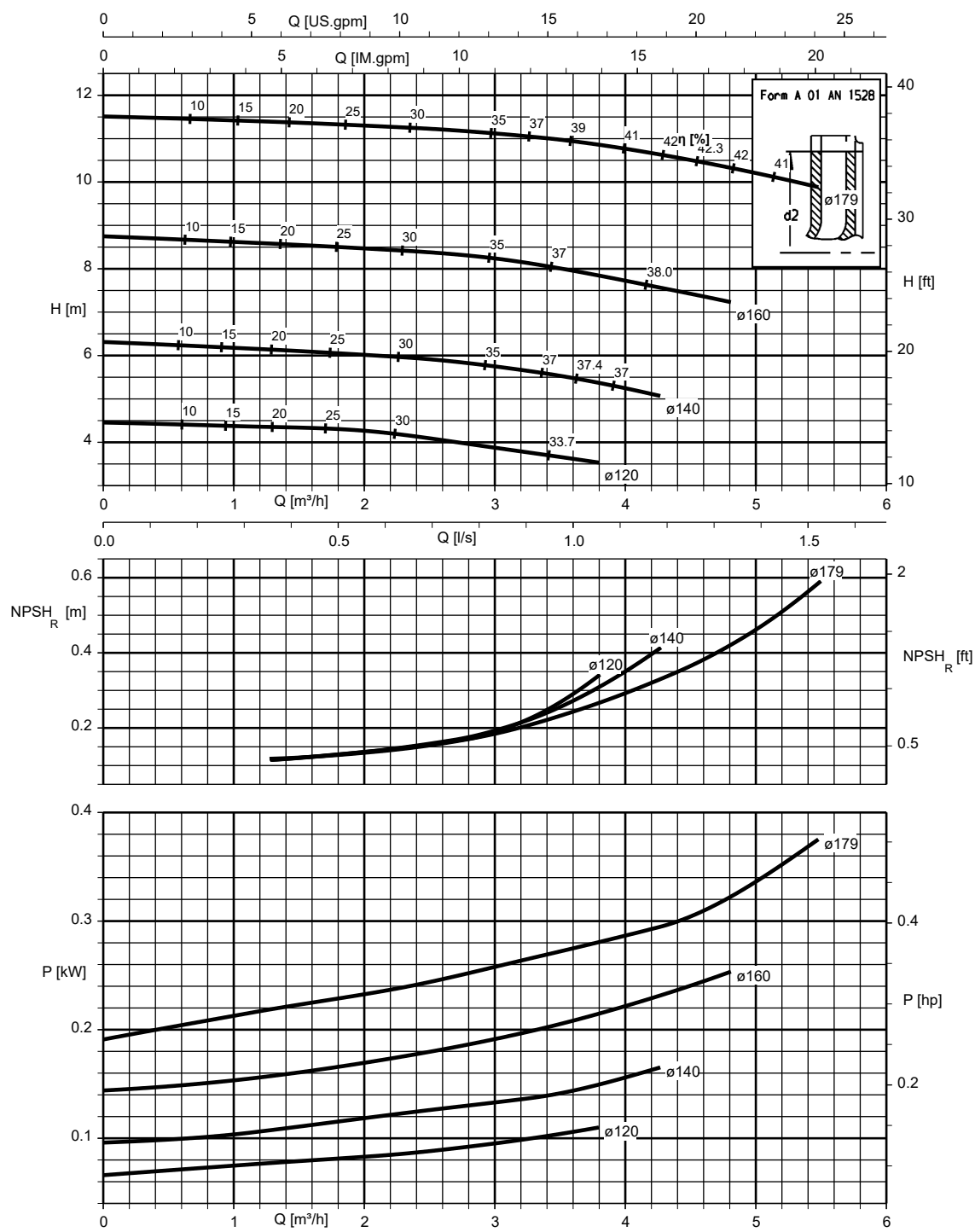
RPH-V 80-280, $n = 2900 \text{ min}^{-1}$



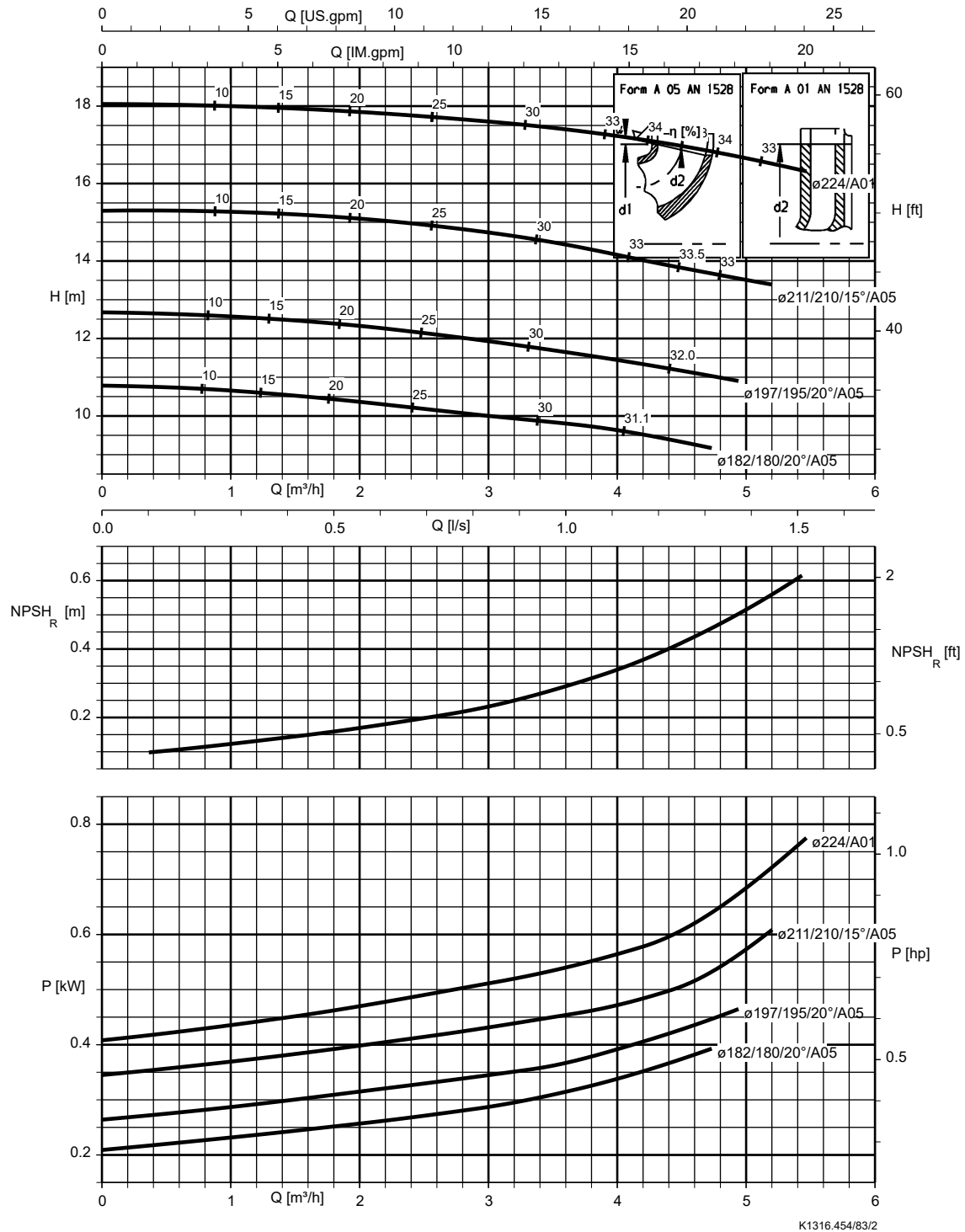
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$n = 1450 \text{ min}^{-1}$

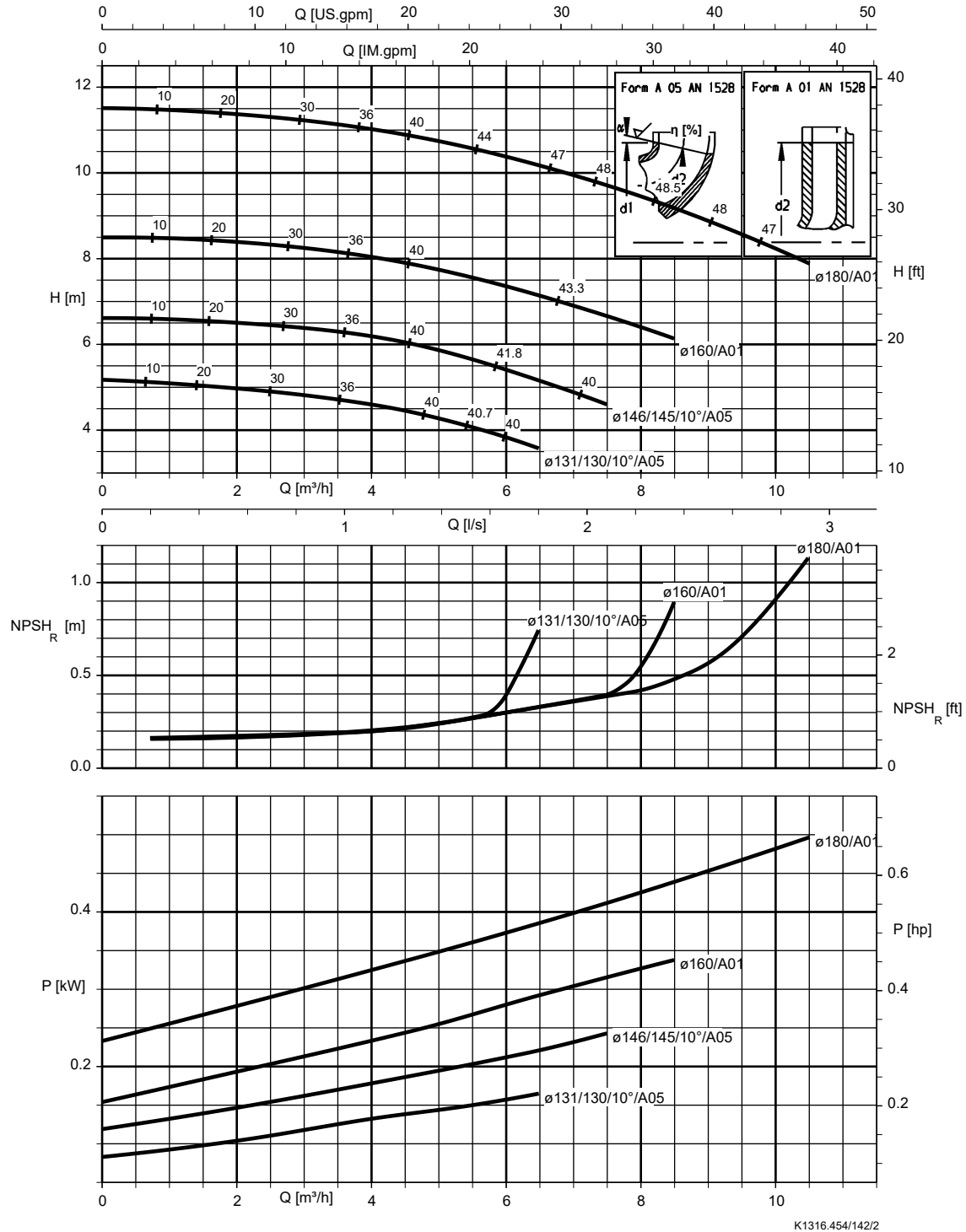
RPH-V 25-180, $n = 1450 \text{ min}^{-1}$



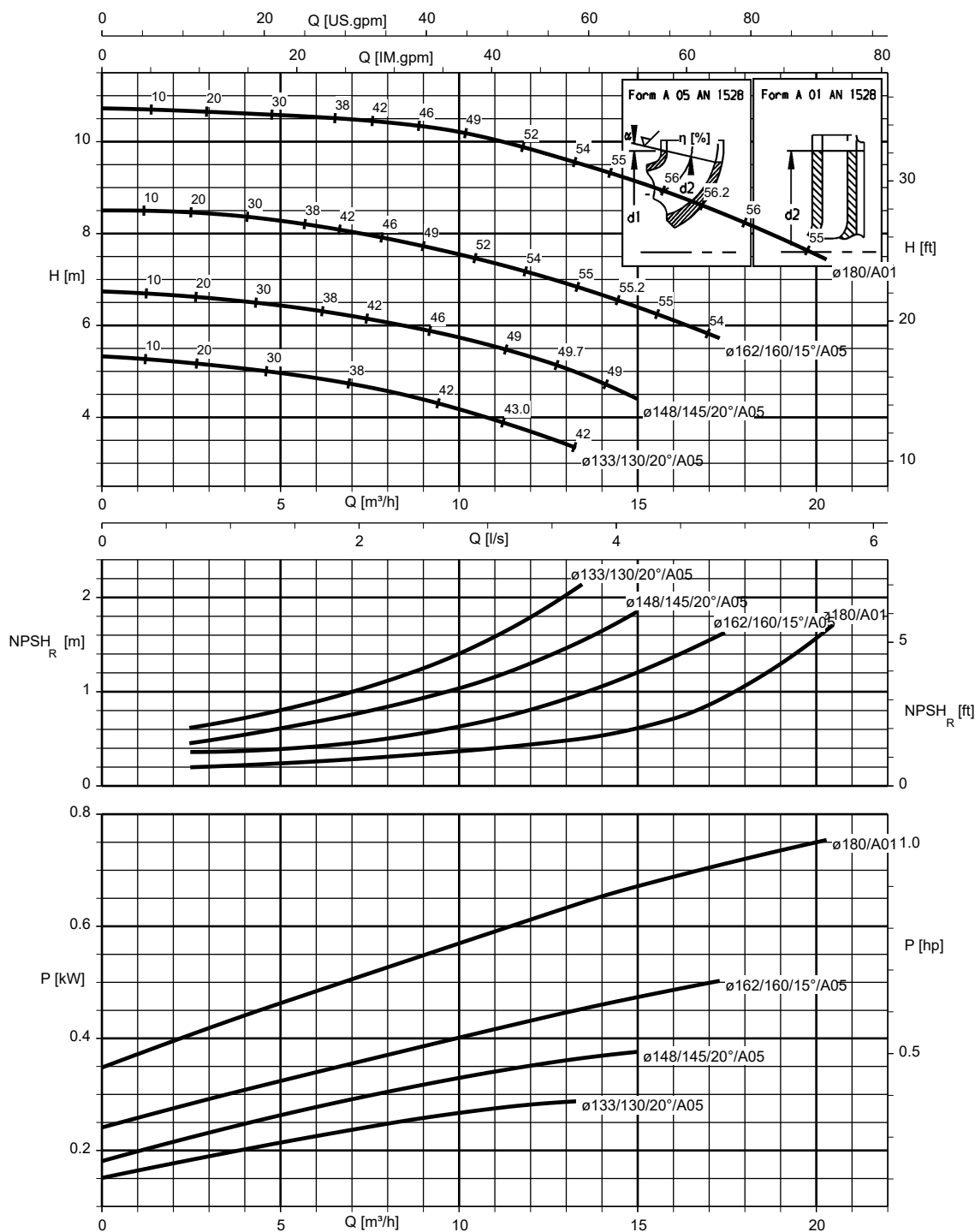
RPH-V 25-230, $n = 1450 \text{ min}^{-1}$



RPH-V 40-180, $n = 1450 \text{ min}^{-1}$

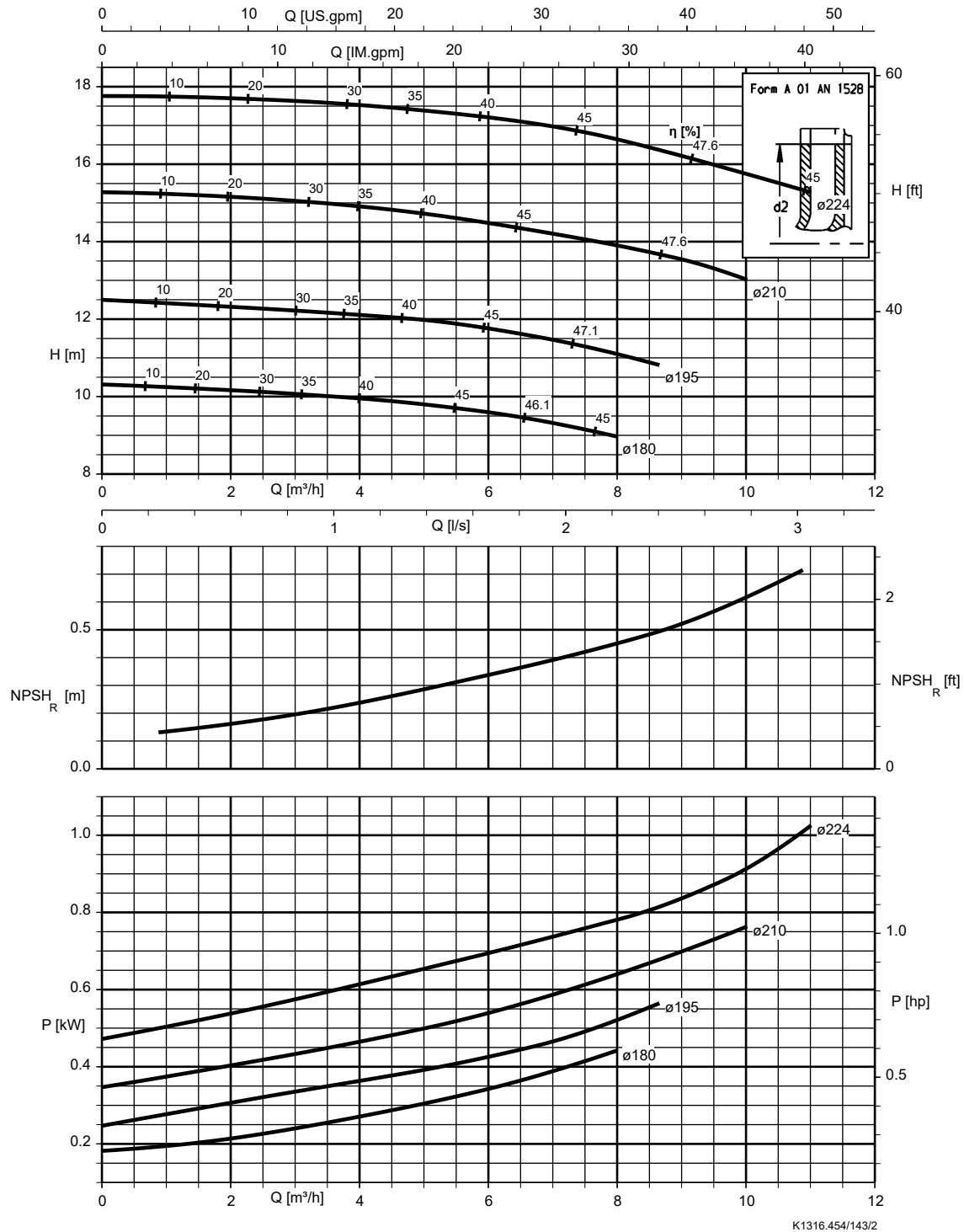


RPH-V 40-181, $n = 1450 \text{ min}^{-1}$

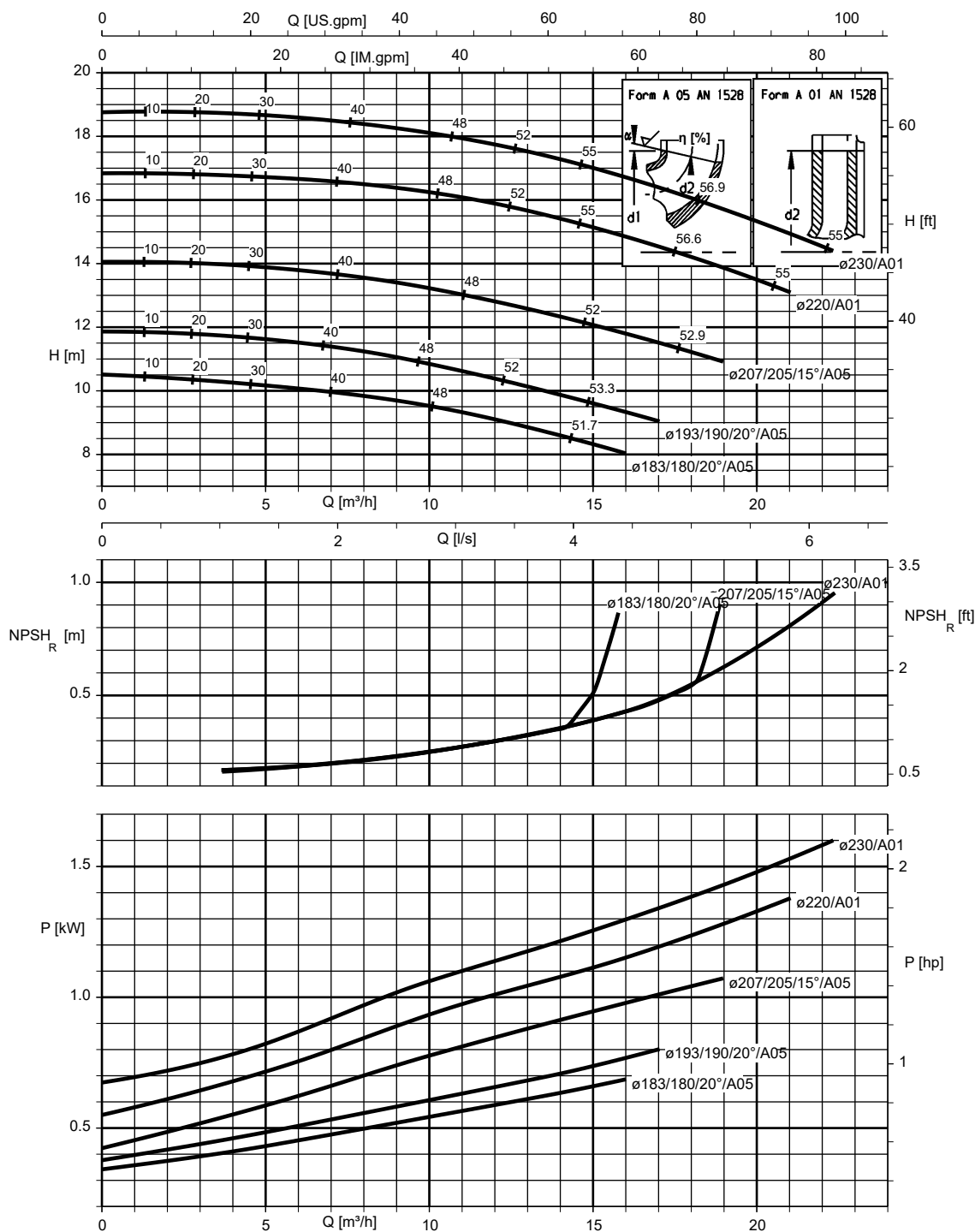


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RPH-V 40-230, $n = 1450 \text{ min}^{-1}$

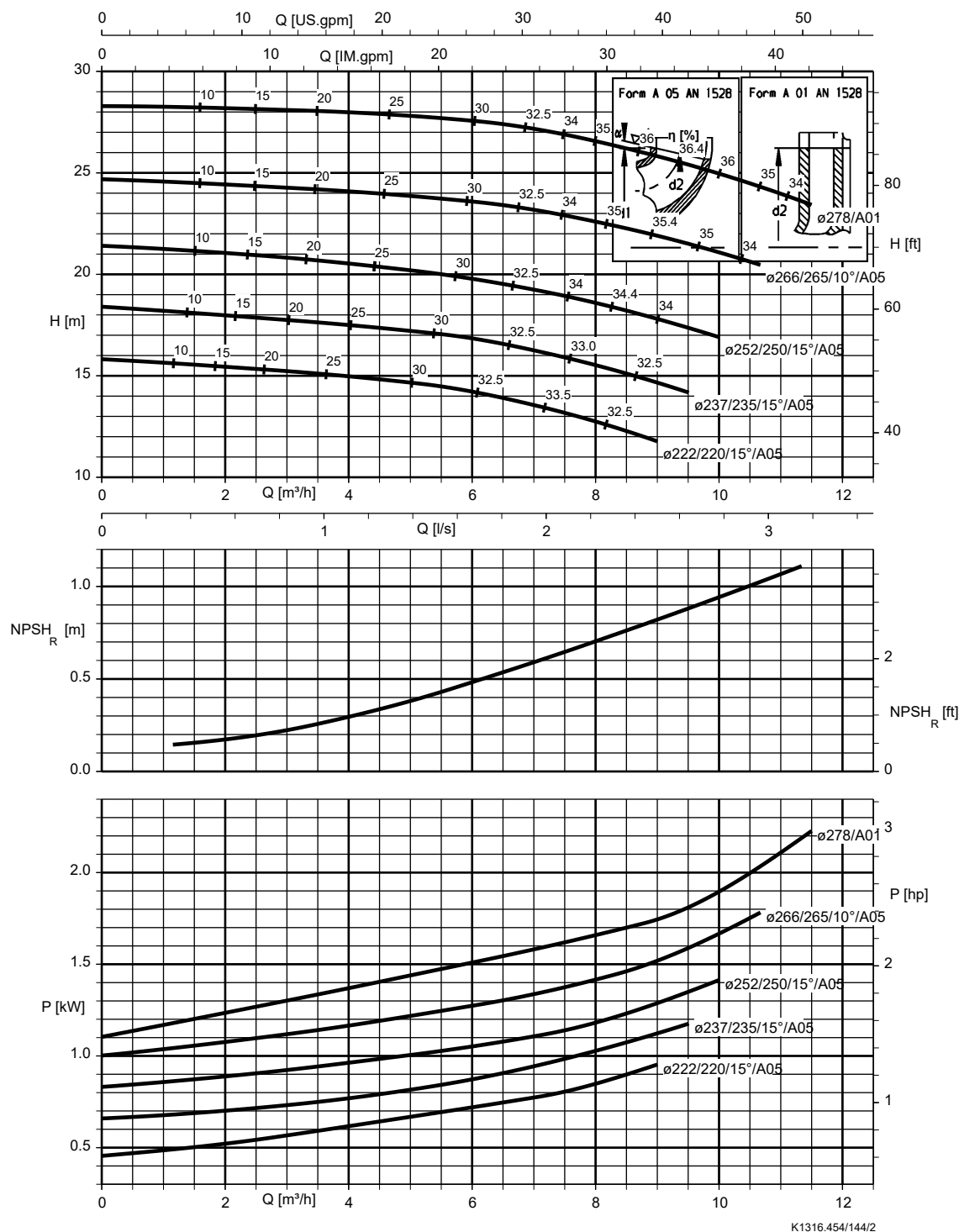


RPH-V 40-231, $n = 1450 \text{ min}^{-1}$

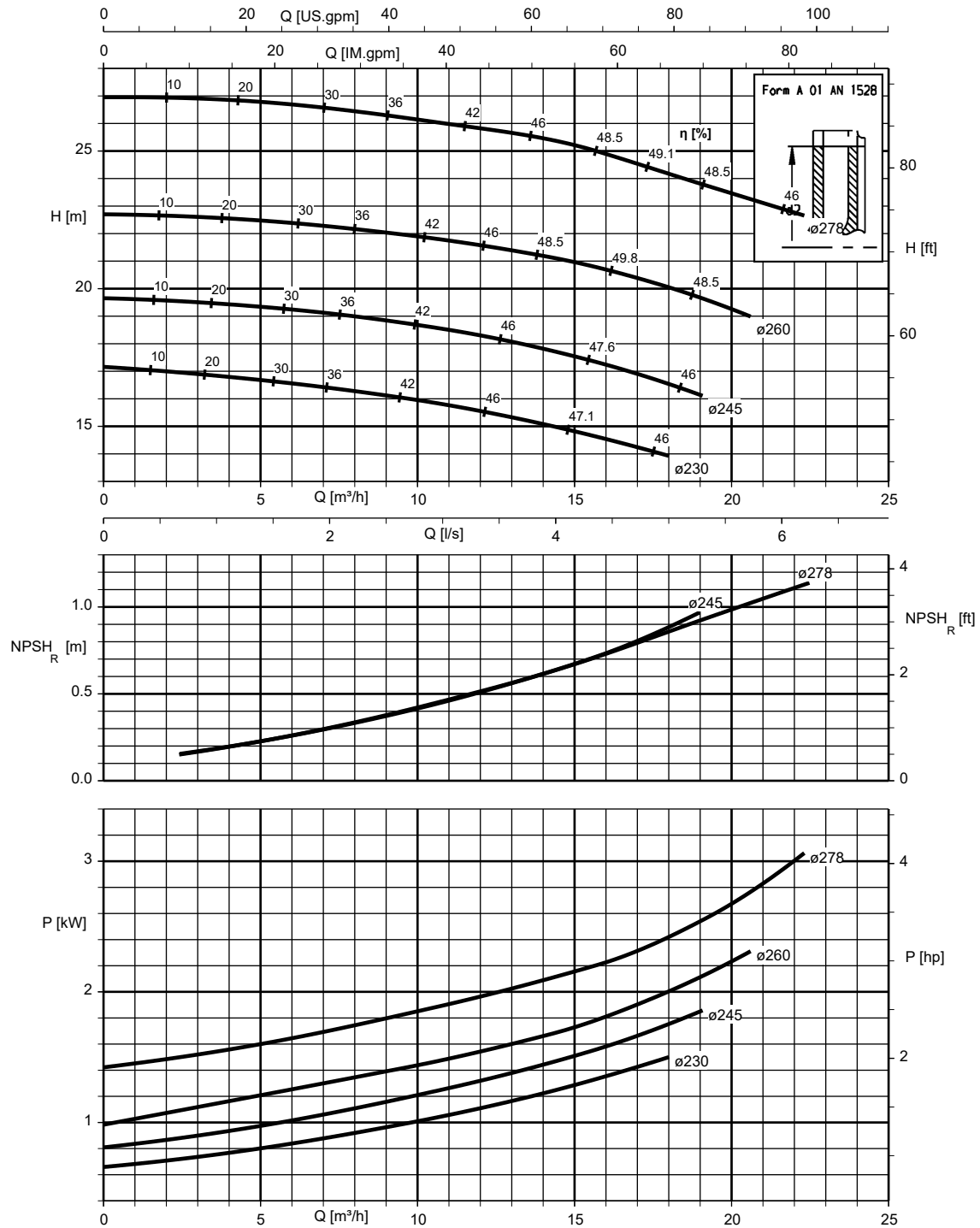


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RPH-V 40-280, $n = 1450 \text{ min}^{-1}$

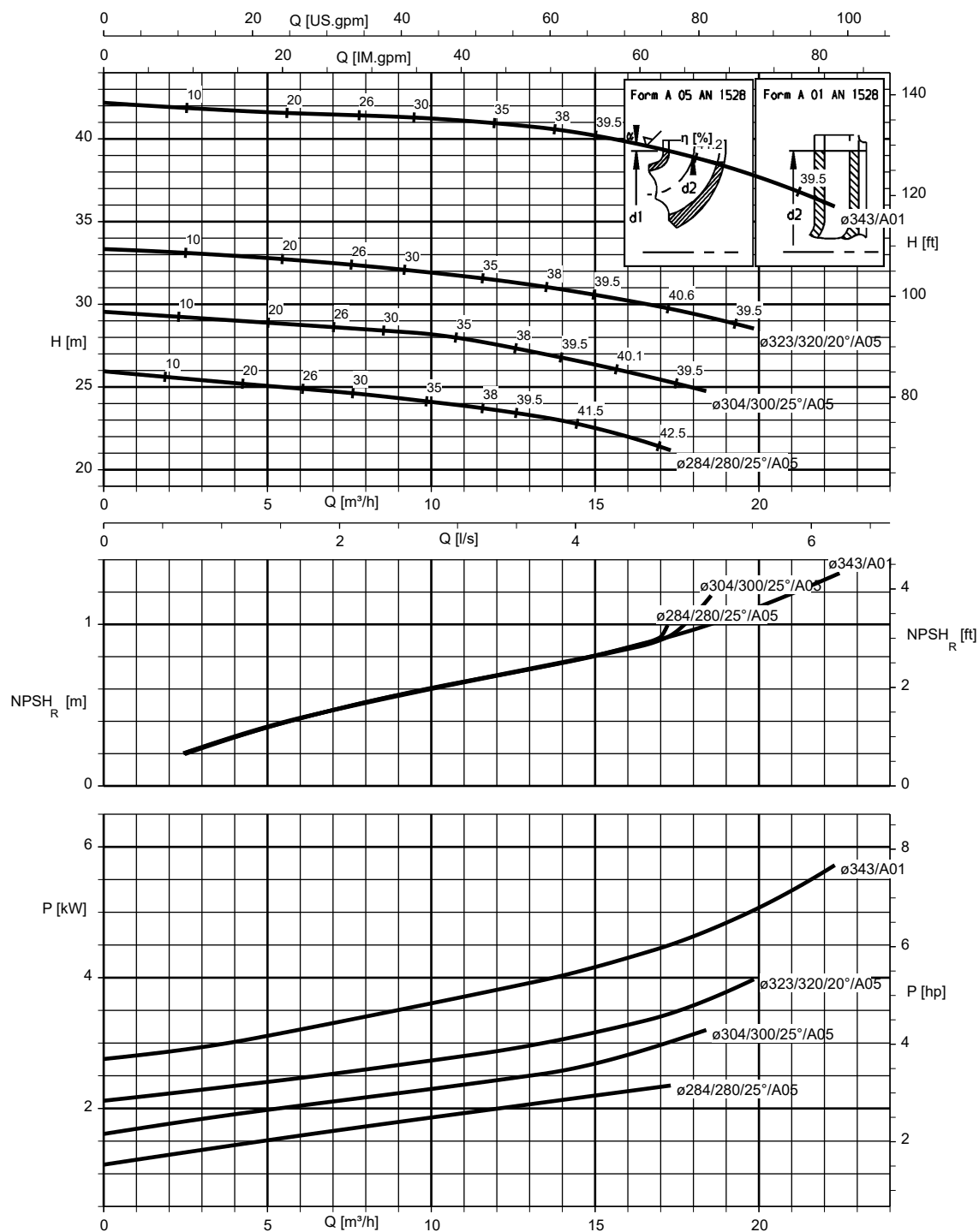


RPH-V 40-281, $n = 1450 \text{ min}^{-1}$



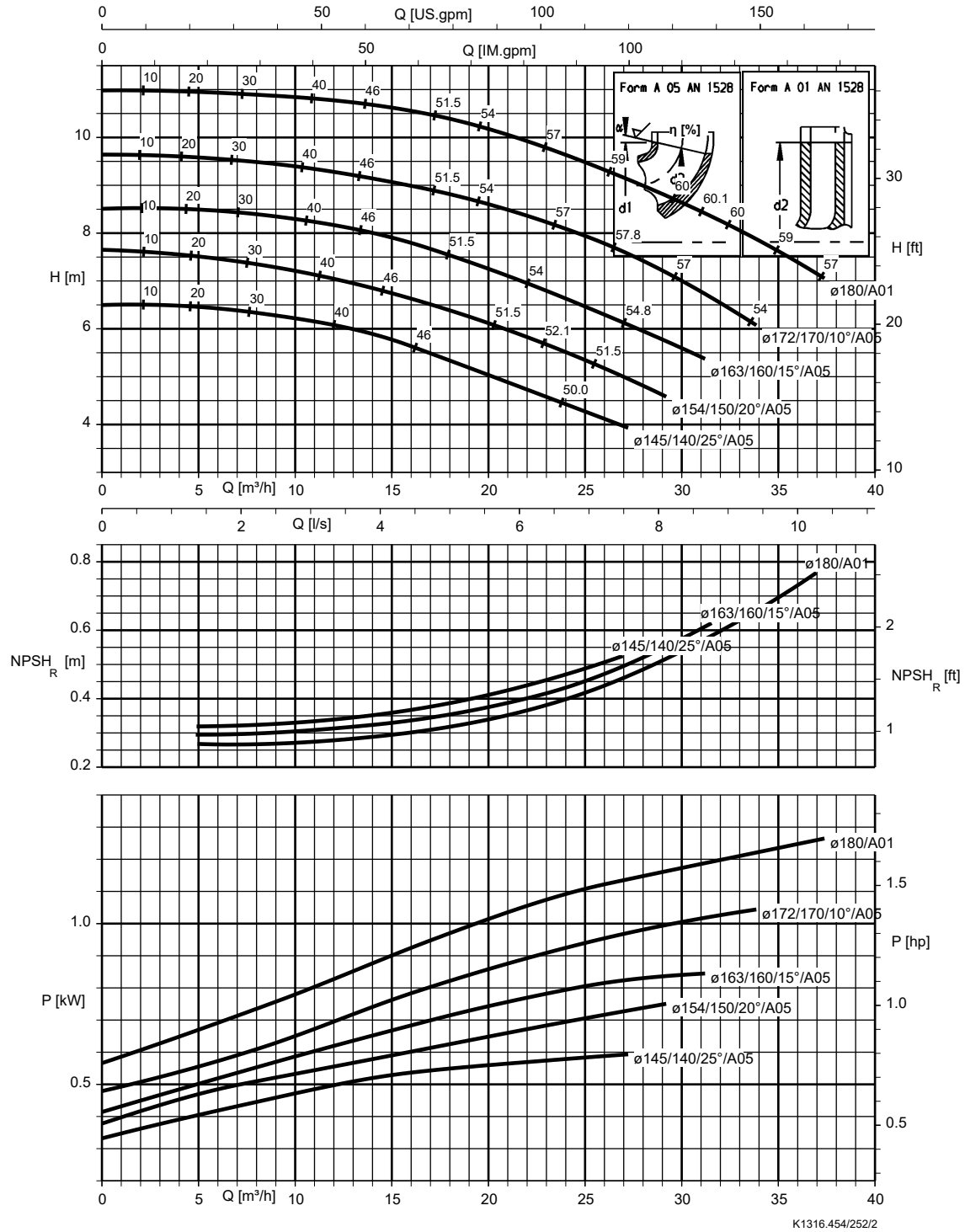
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RPH-V 40-361, $n = 1450 \text{ min}^{-1}$

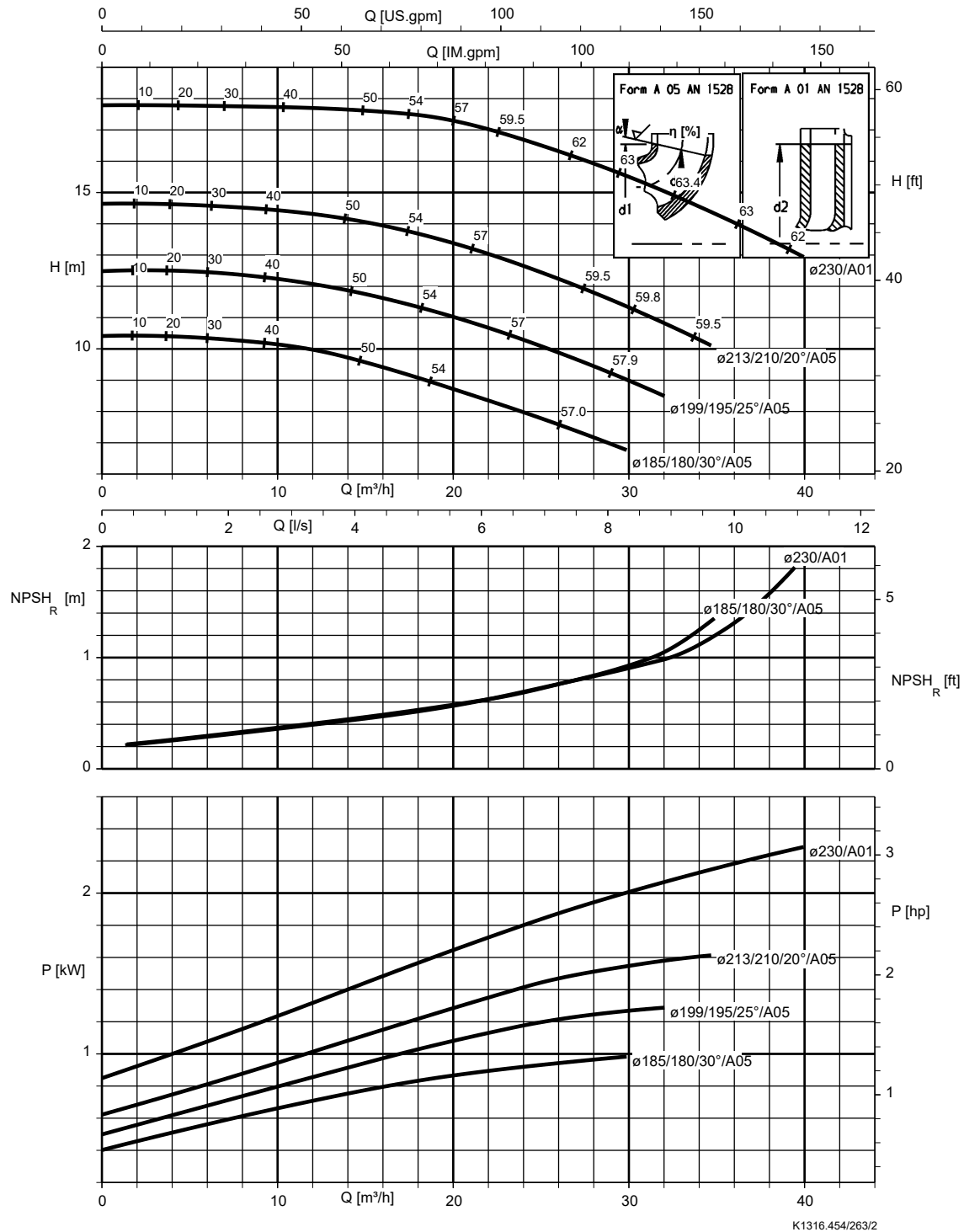


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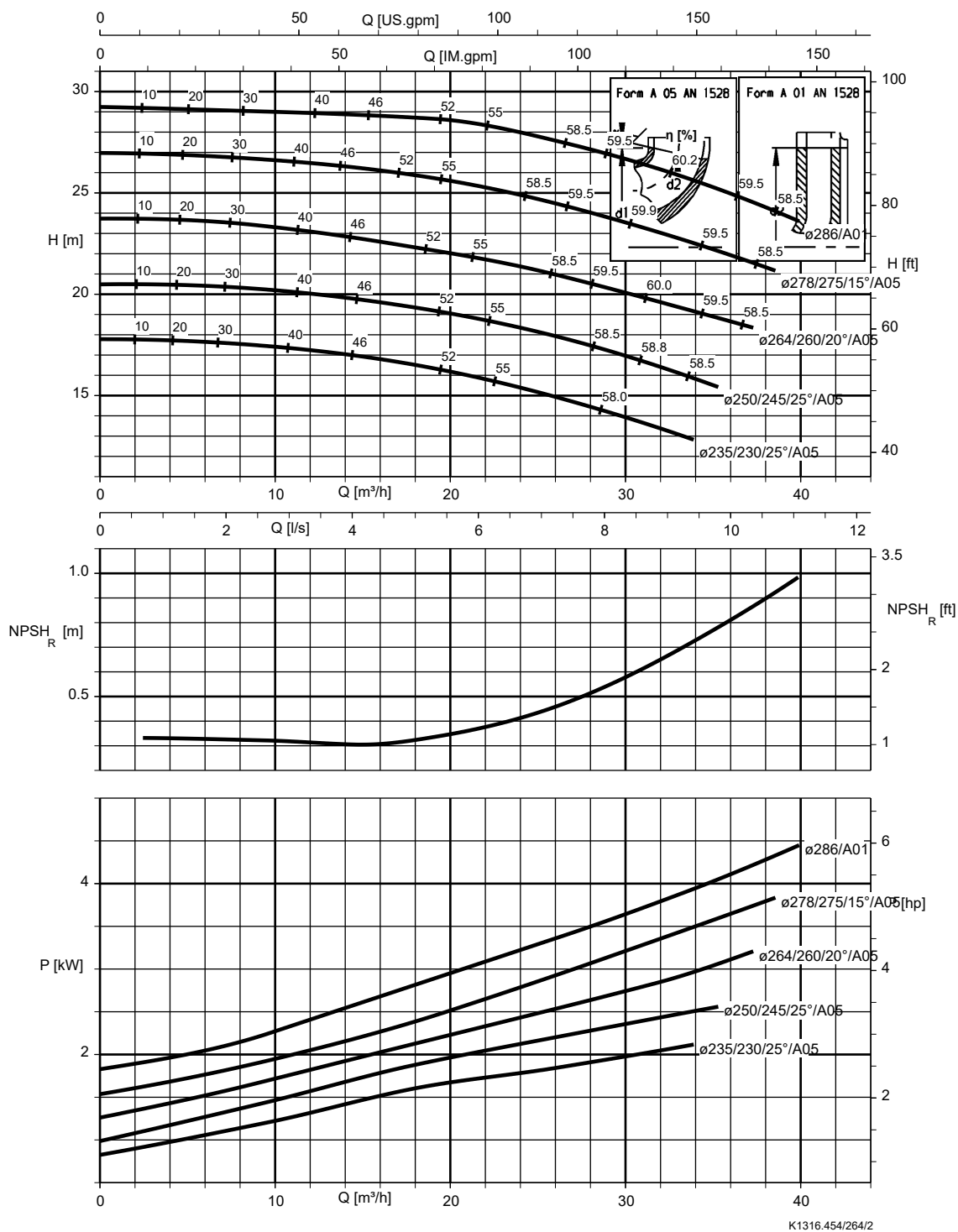
RPH-V 50-180, $n = 1450 \text{ min}^{-1}$



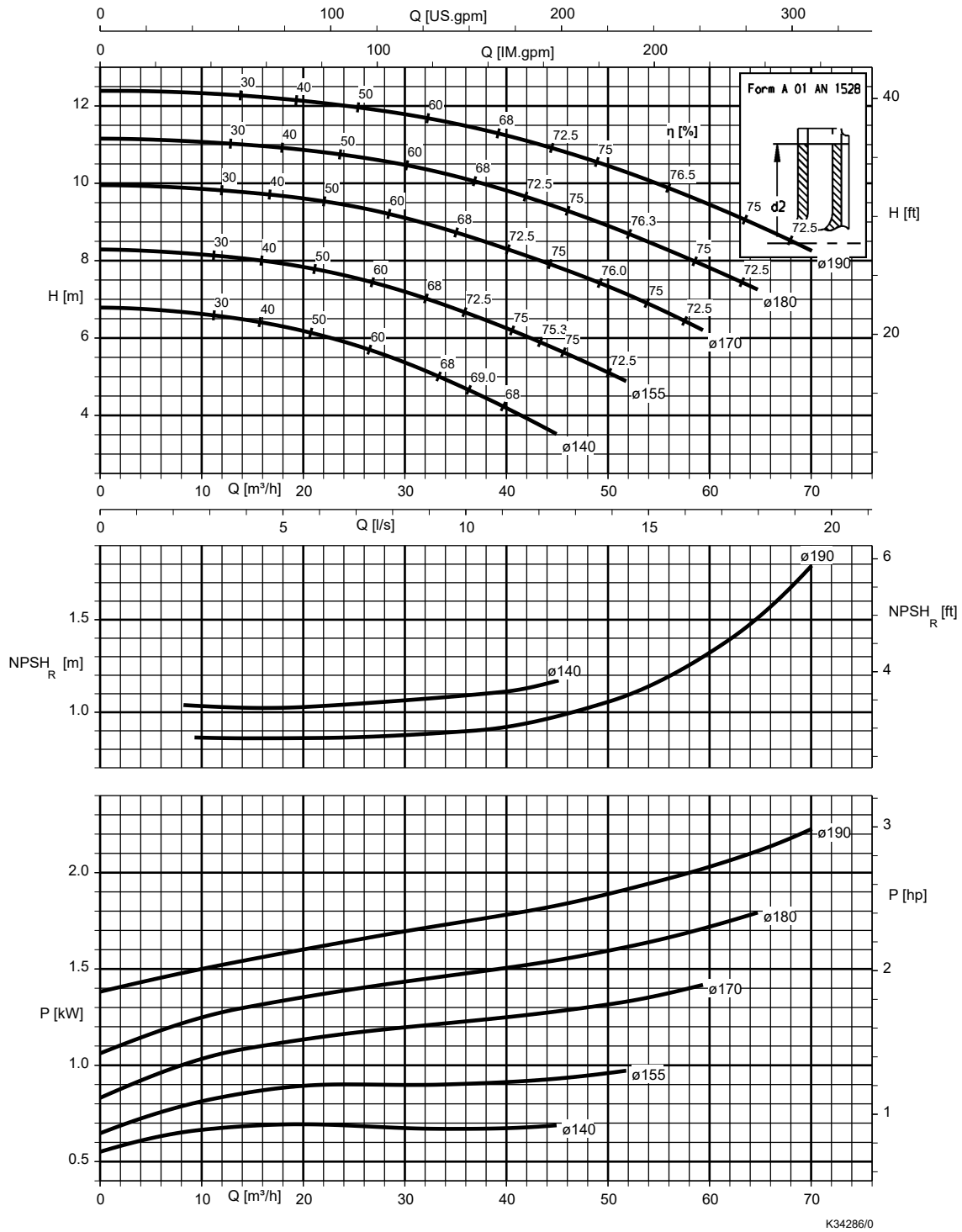
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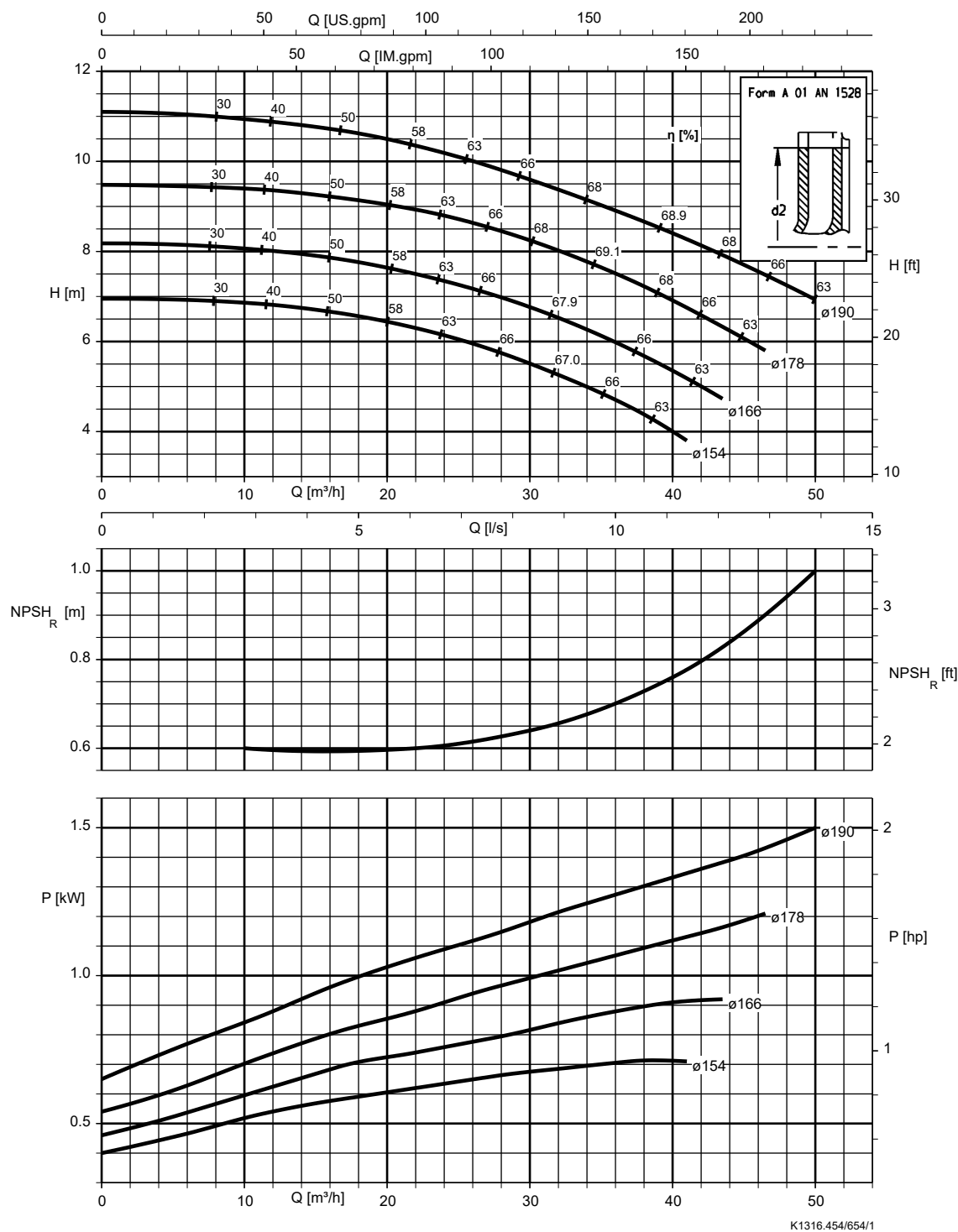
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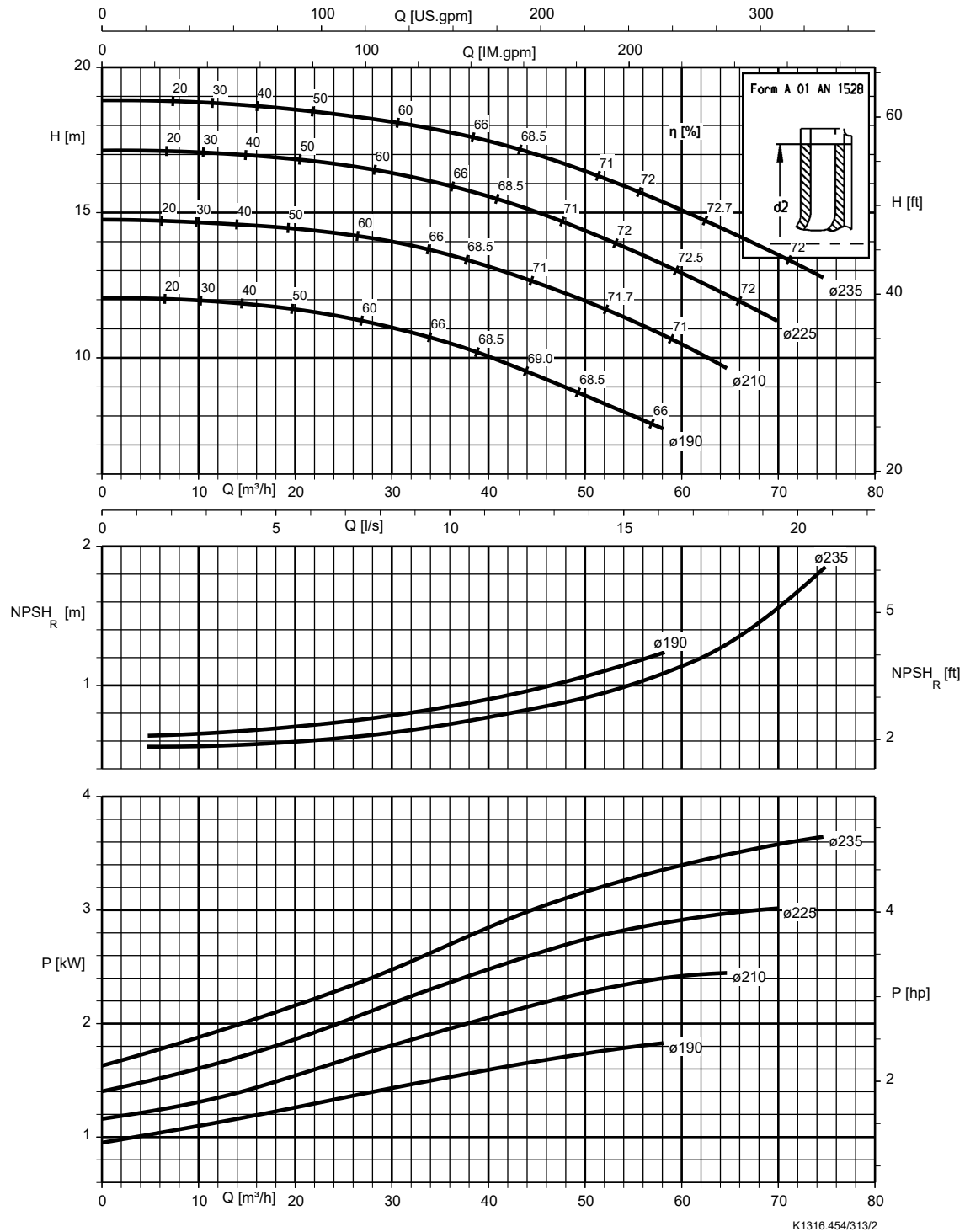
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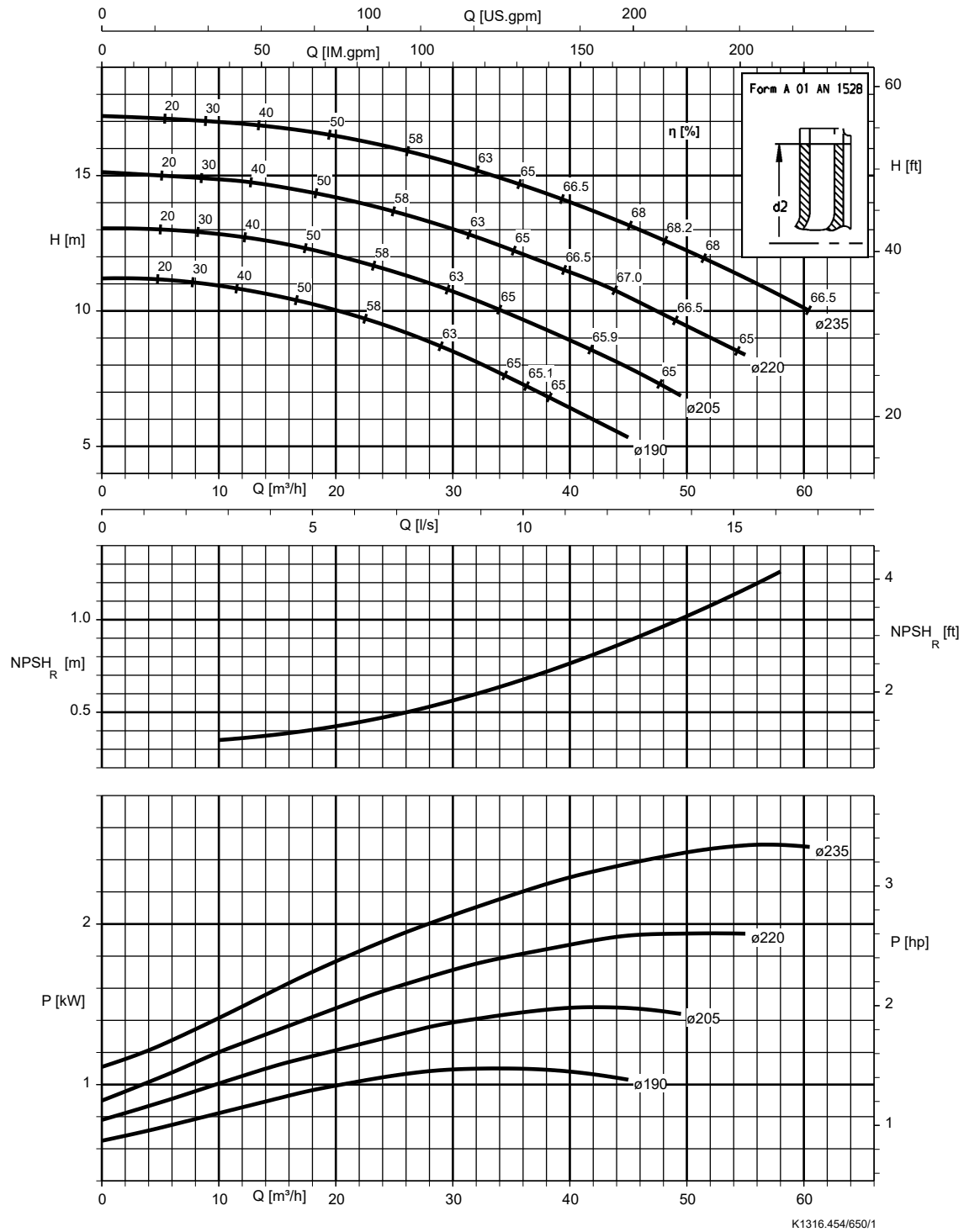
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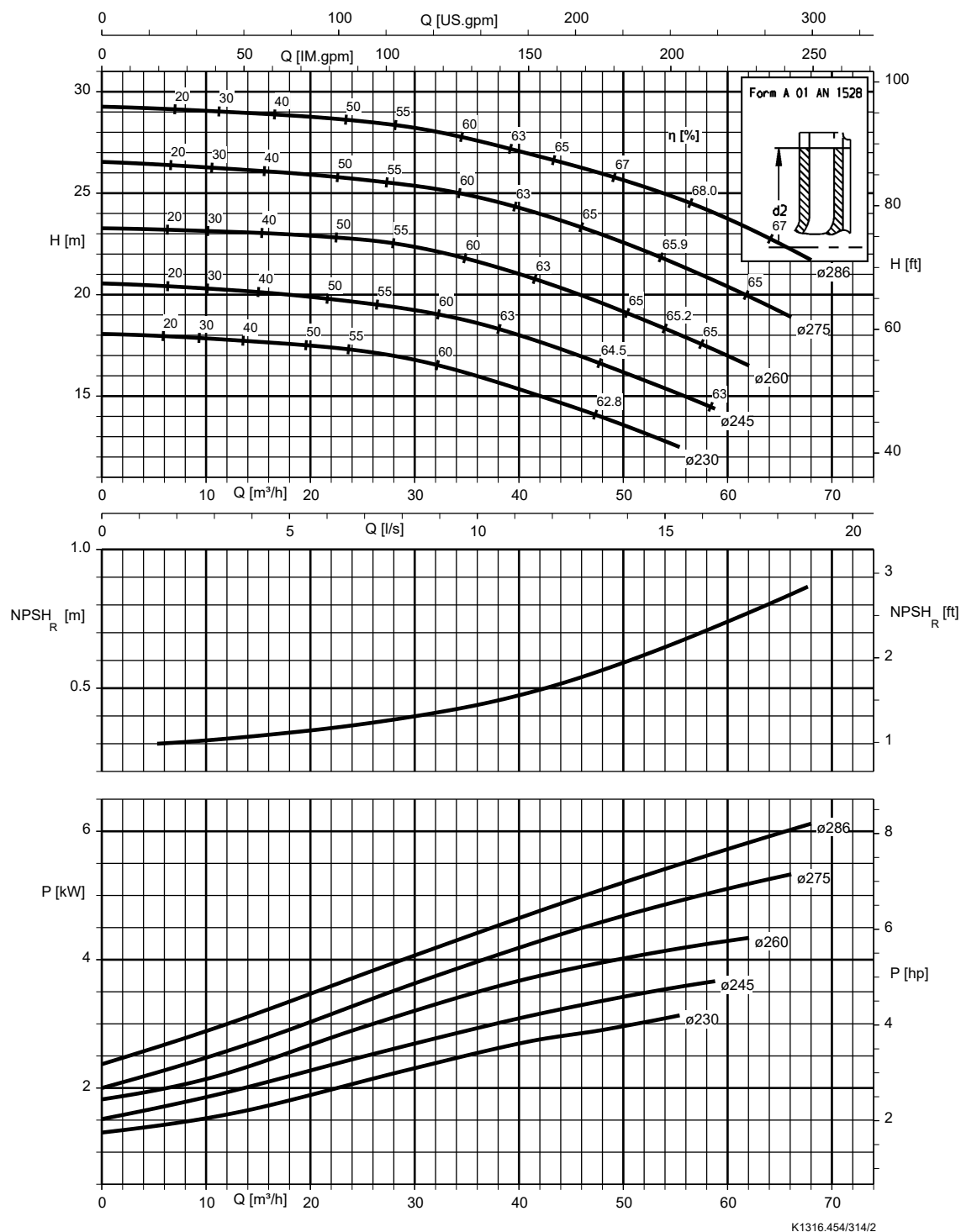
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RPH-V 80-230B, $n = 1450 \text{ min}^{-1}$

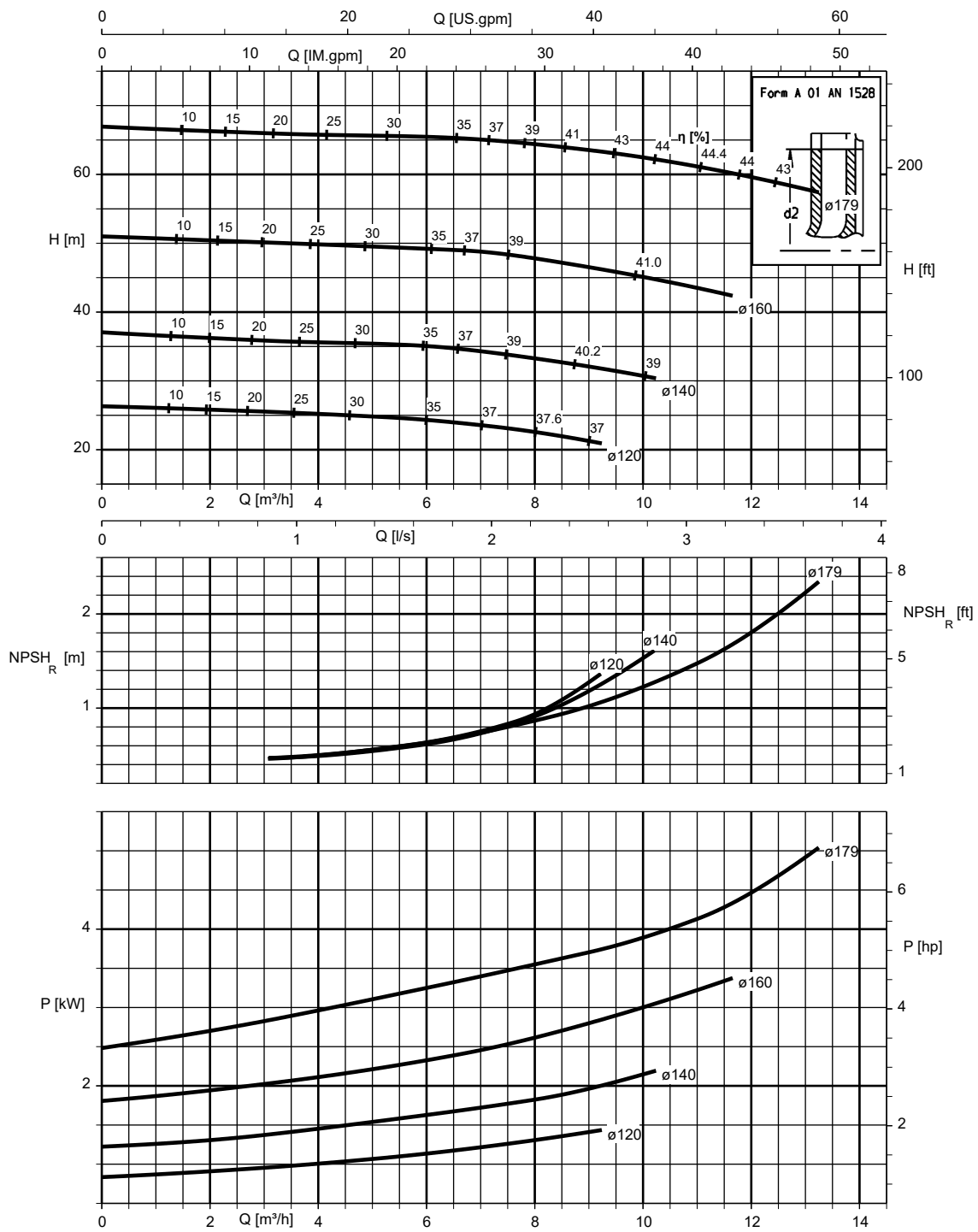


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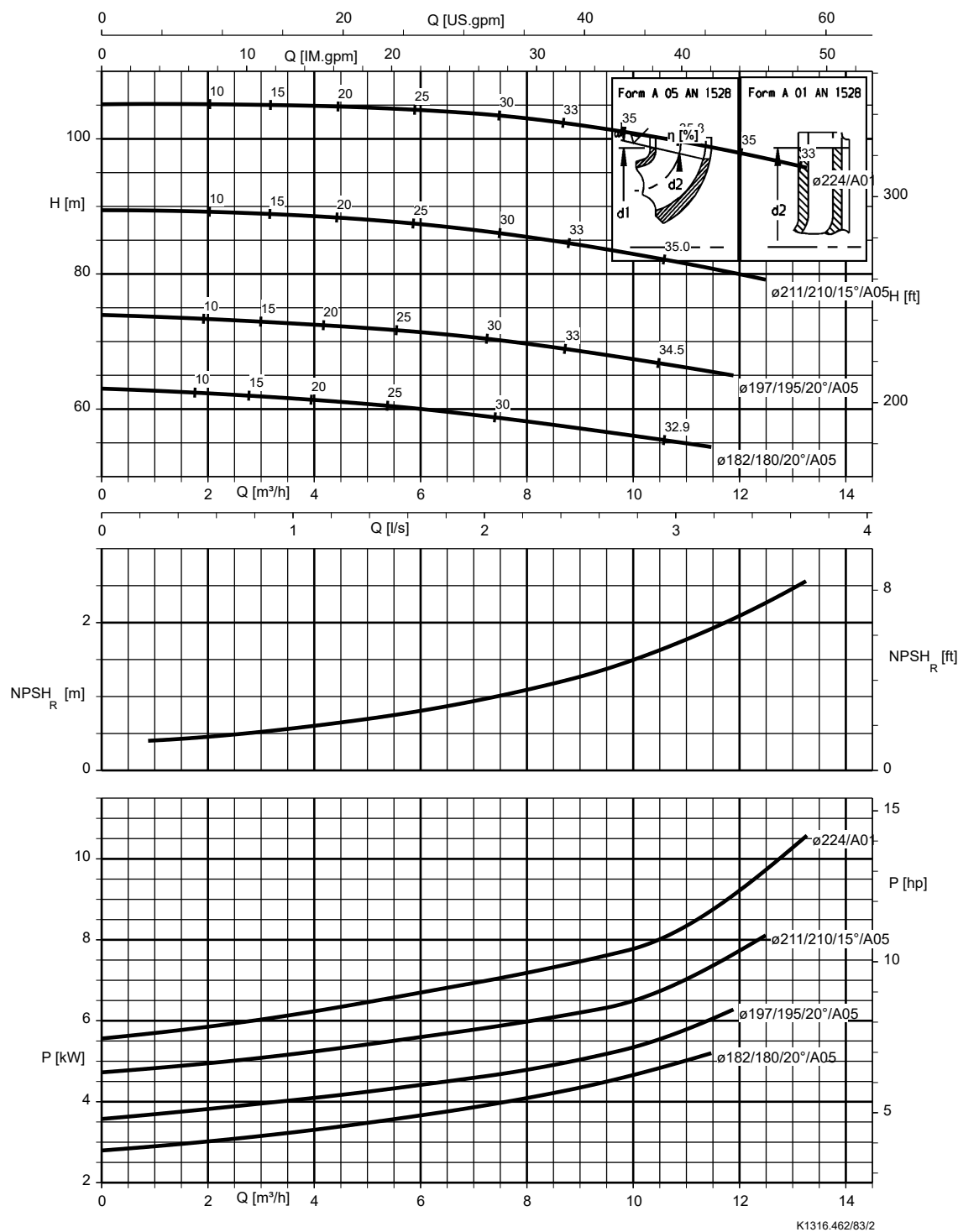
$n = 3500 \text{ min}^{-1}$

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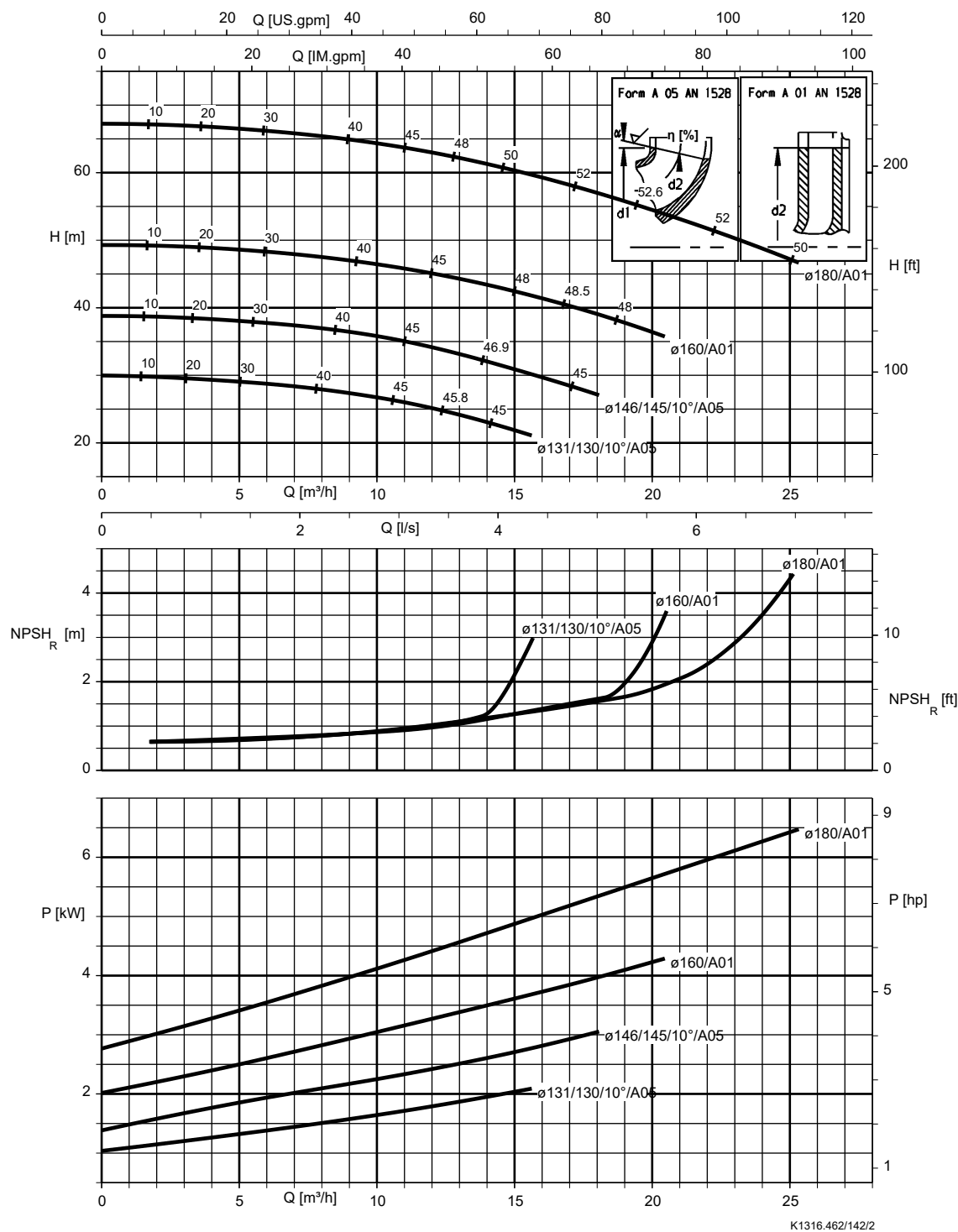


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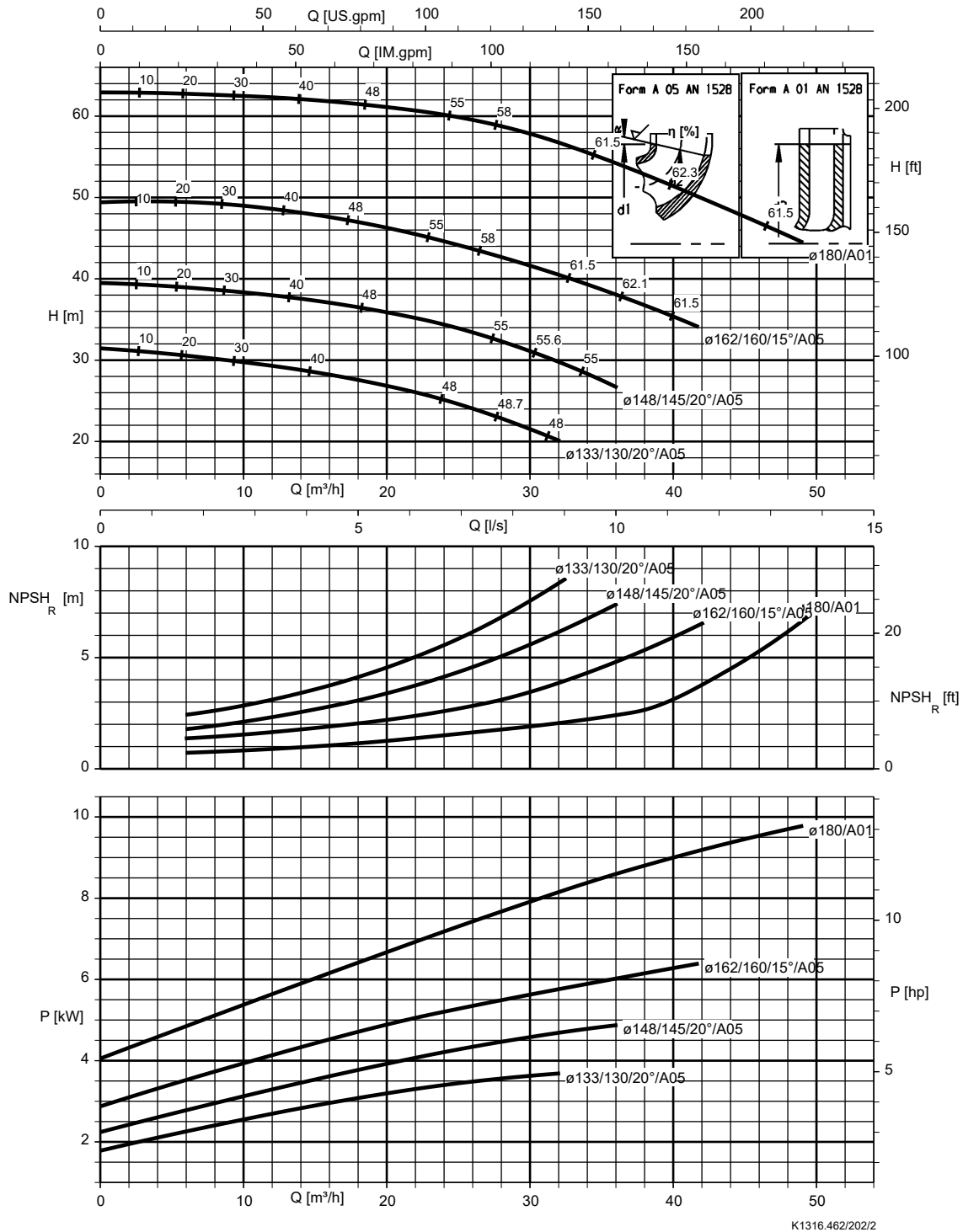
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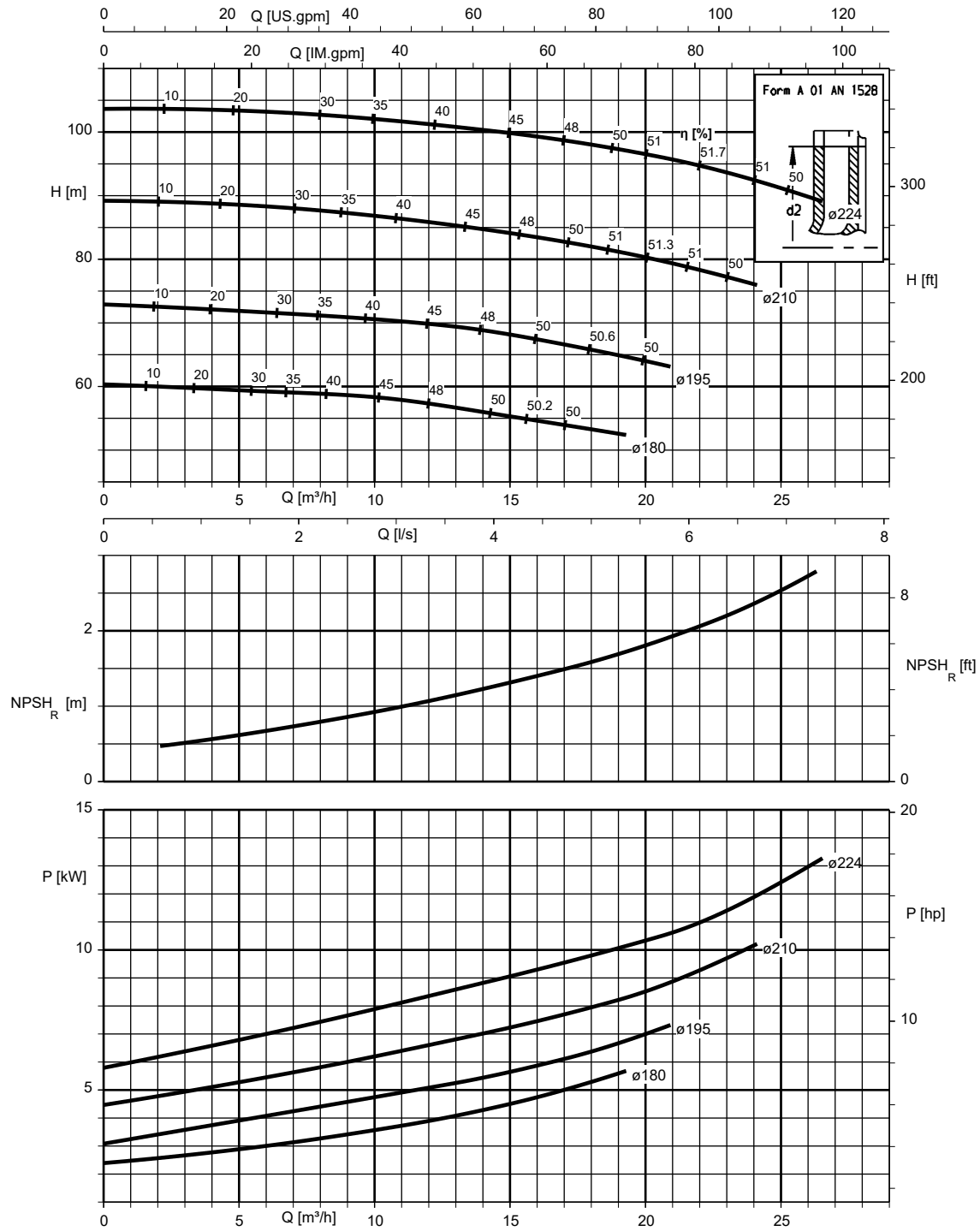
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RPH-V 40-181, $n = 3500 \text{ min}^{-1}$

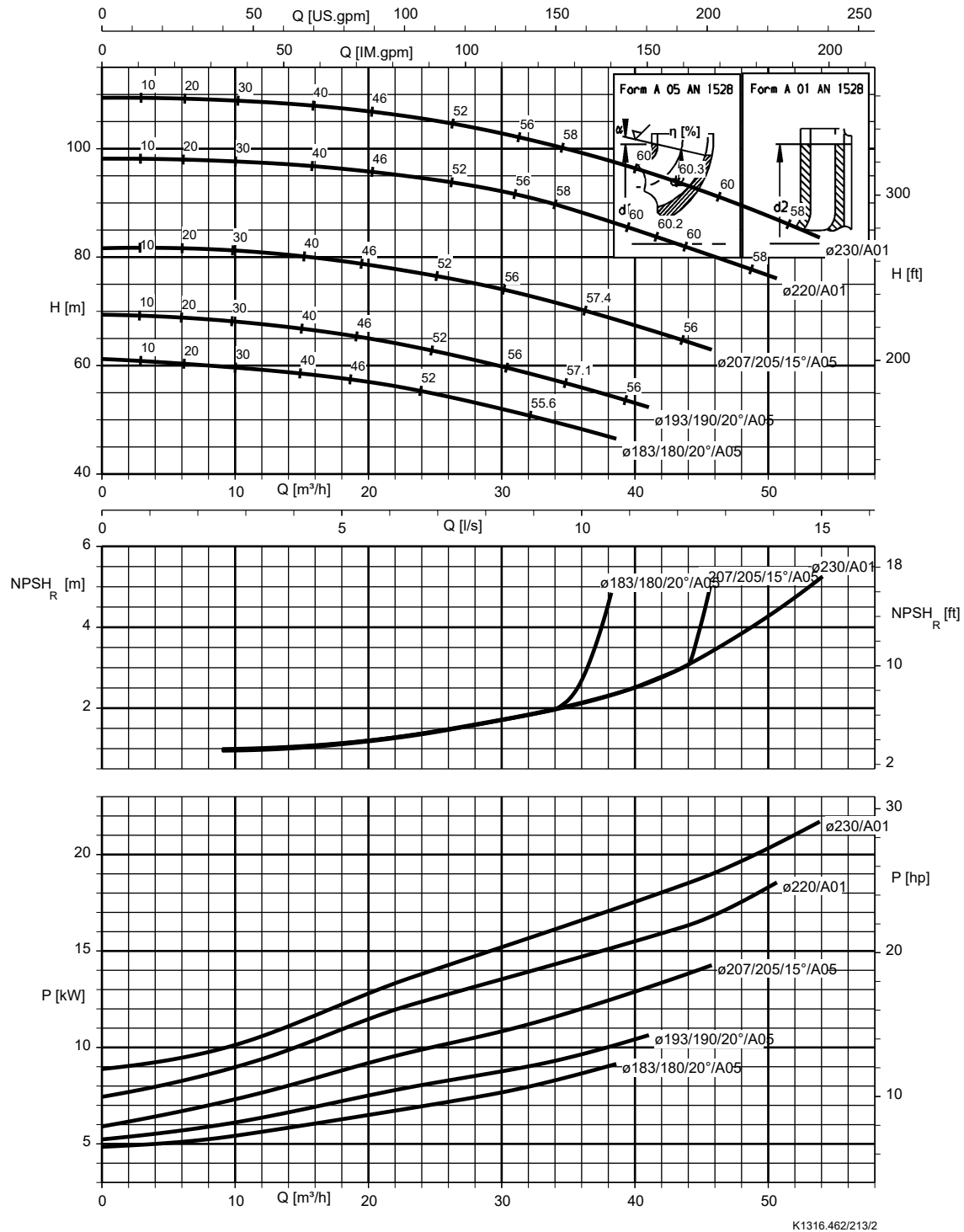


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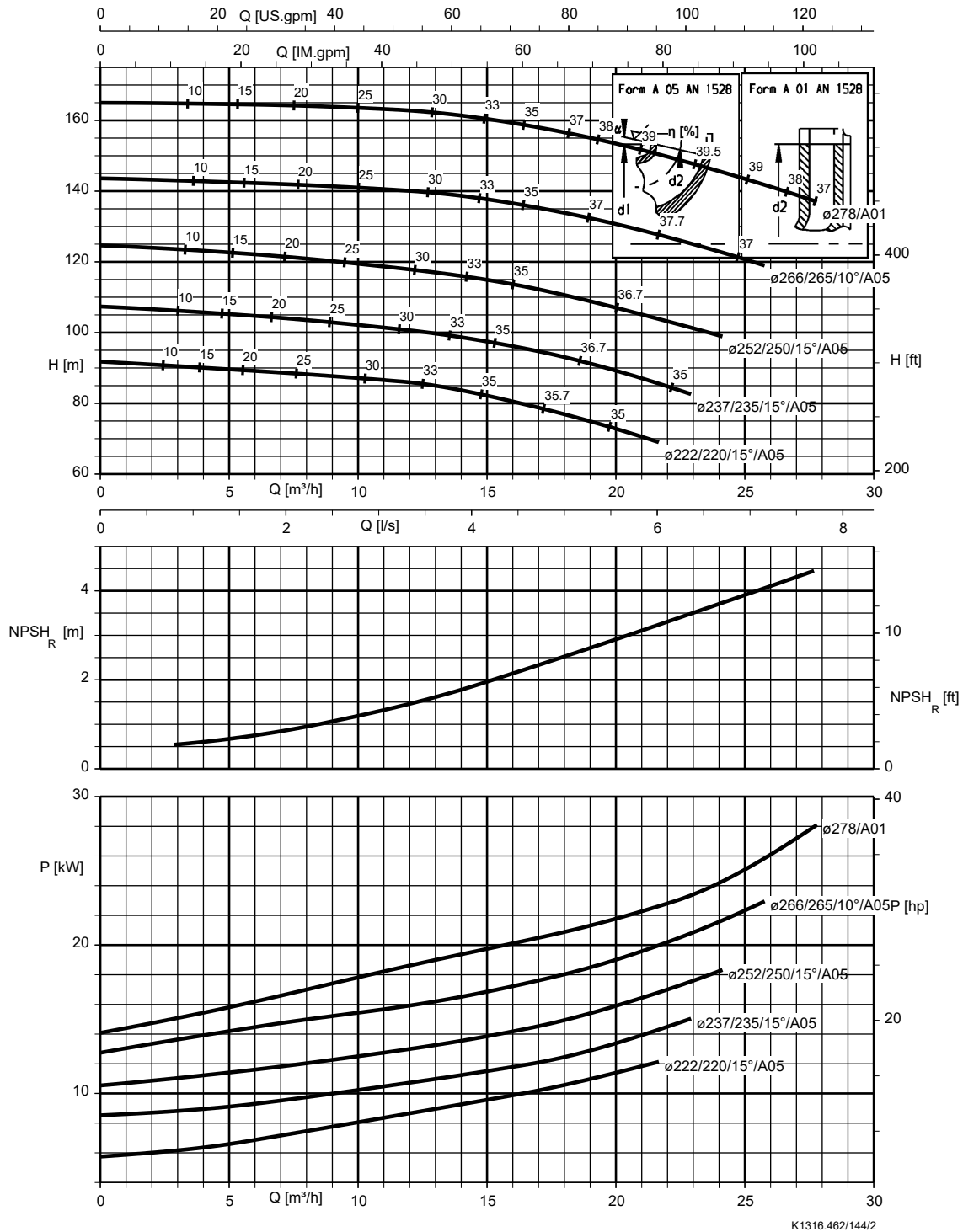


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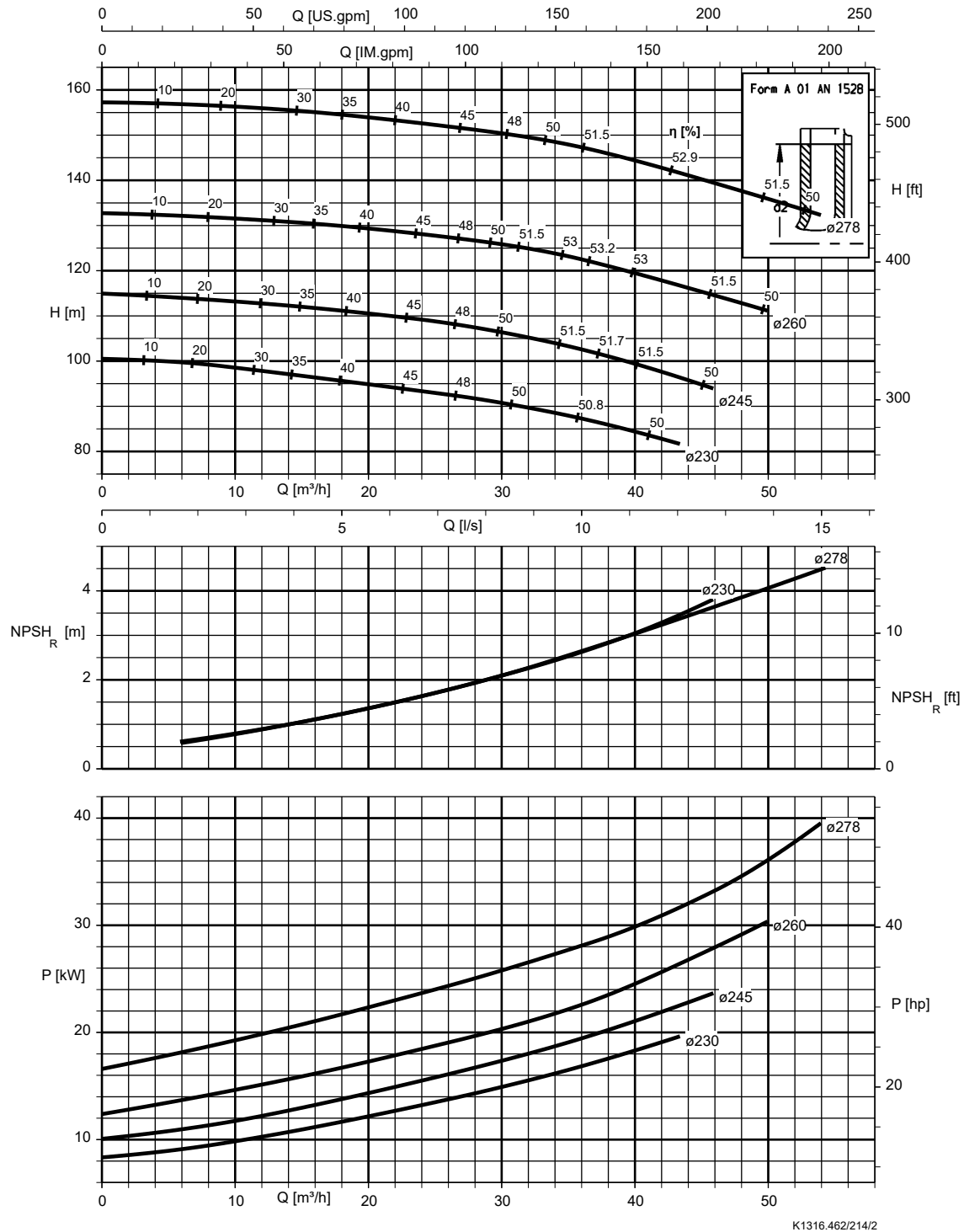
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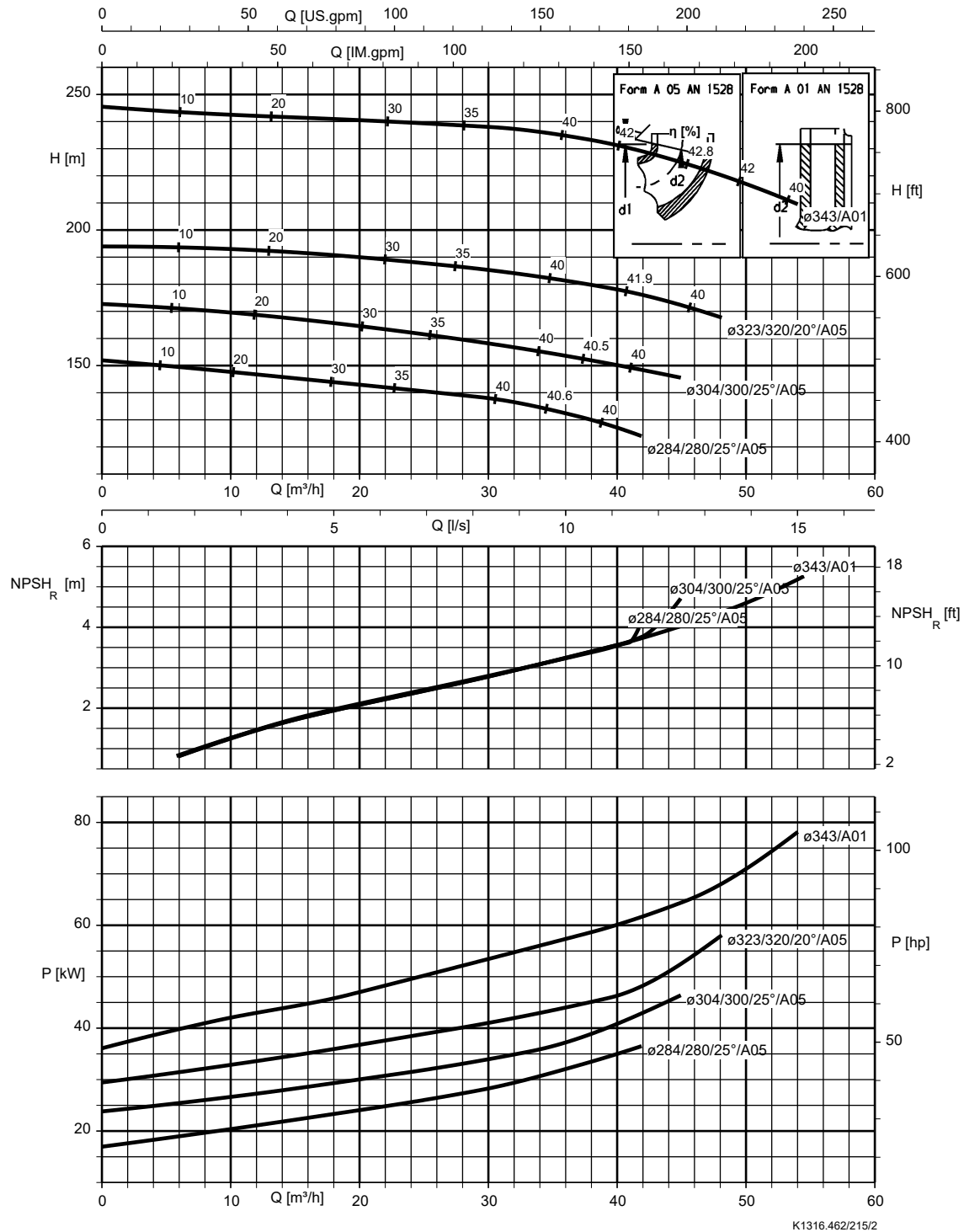
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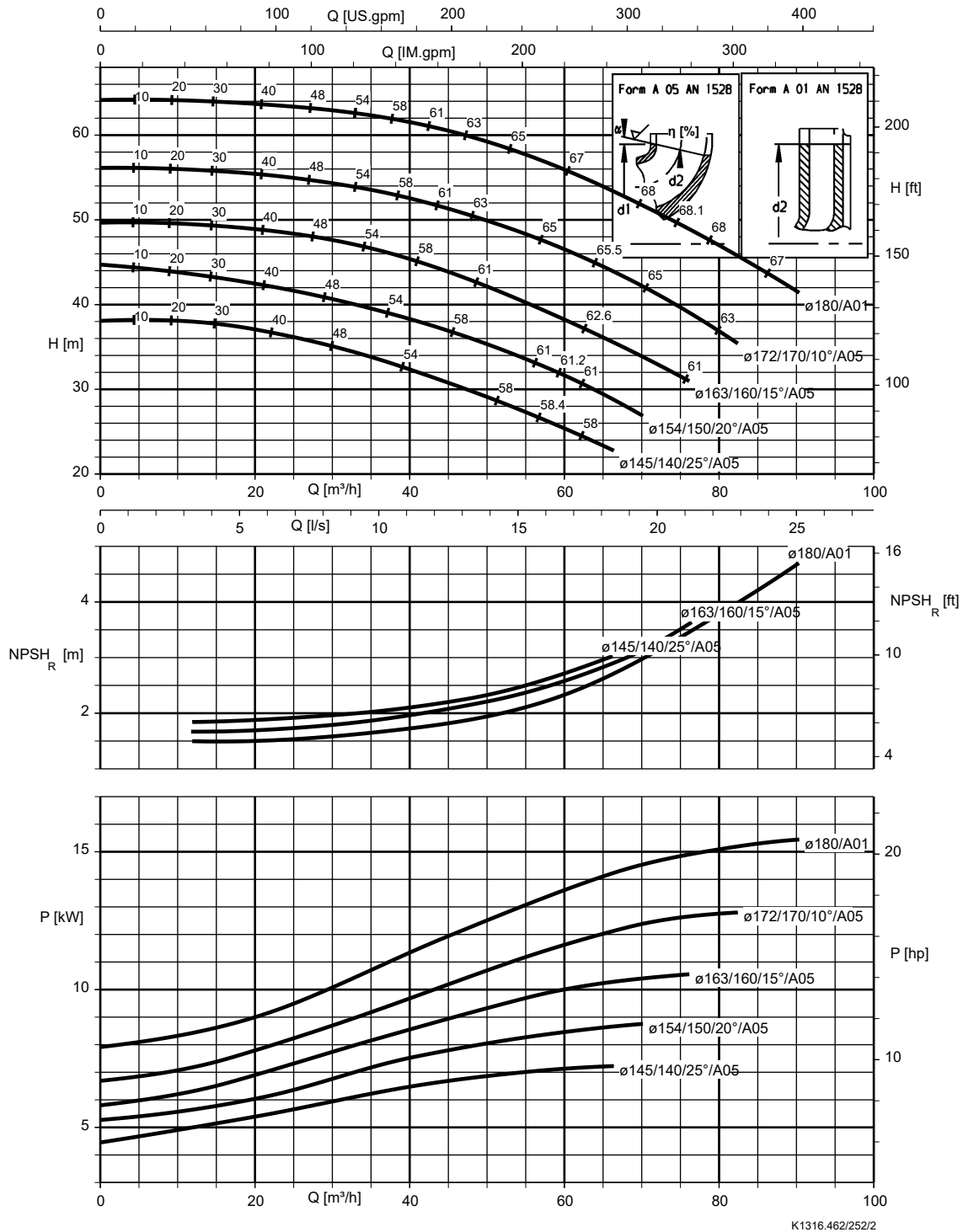
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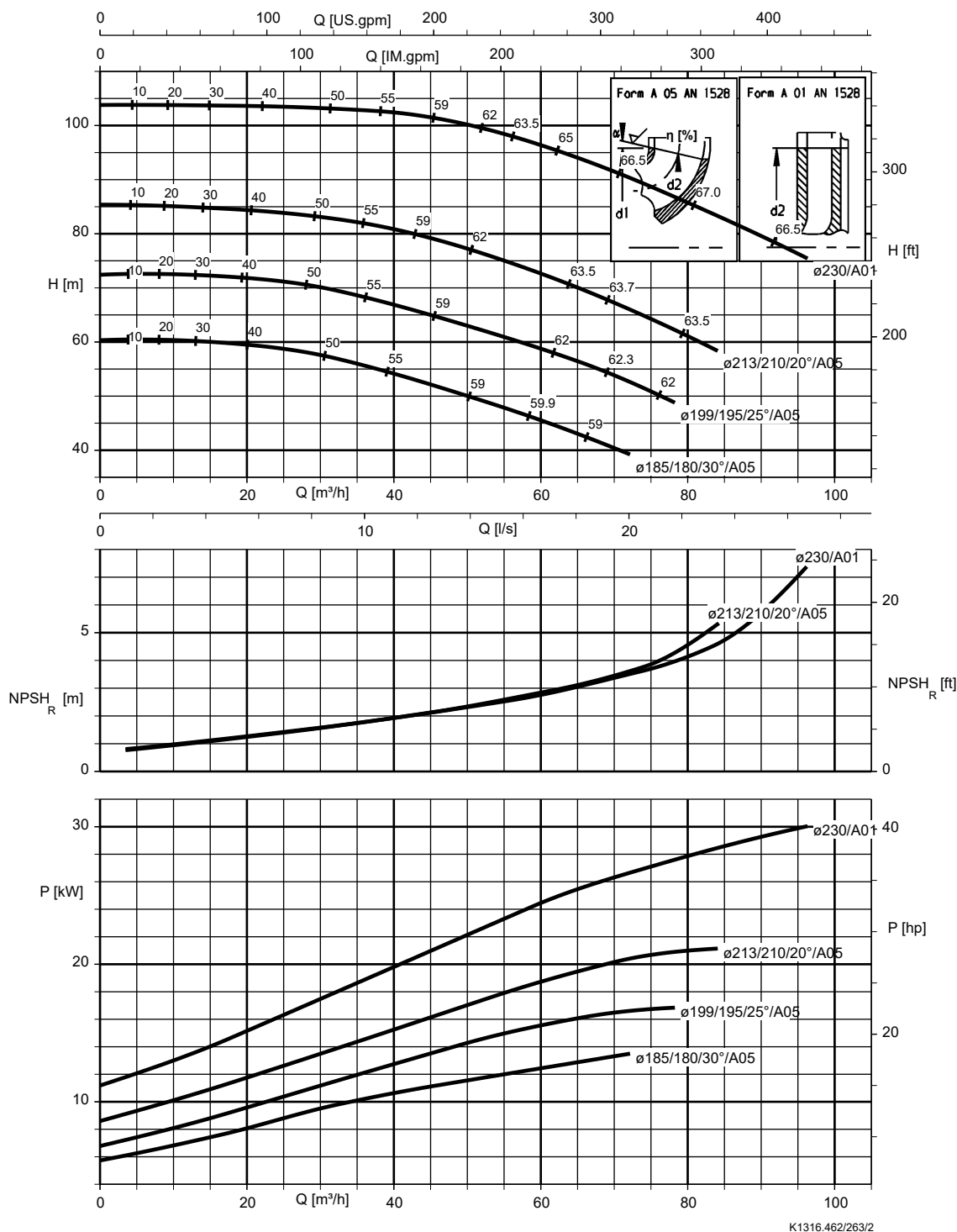
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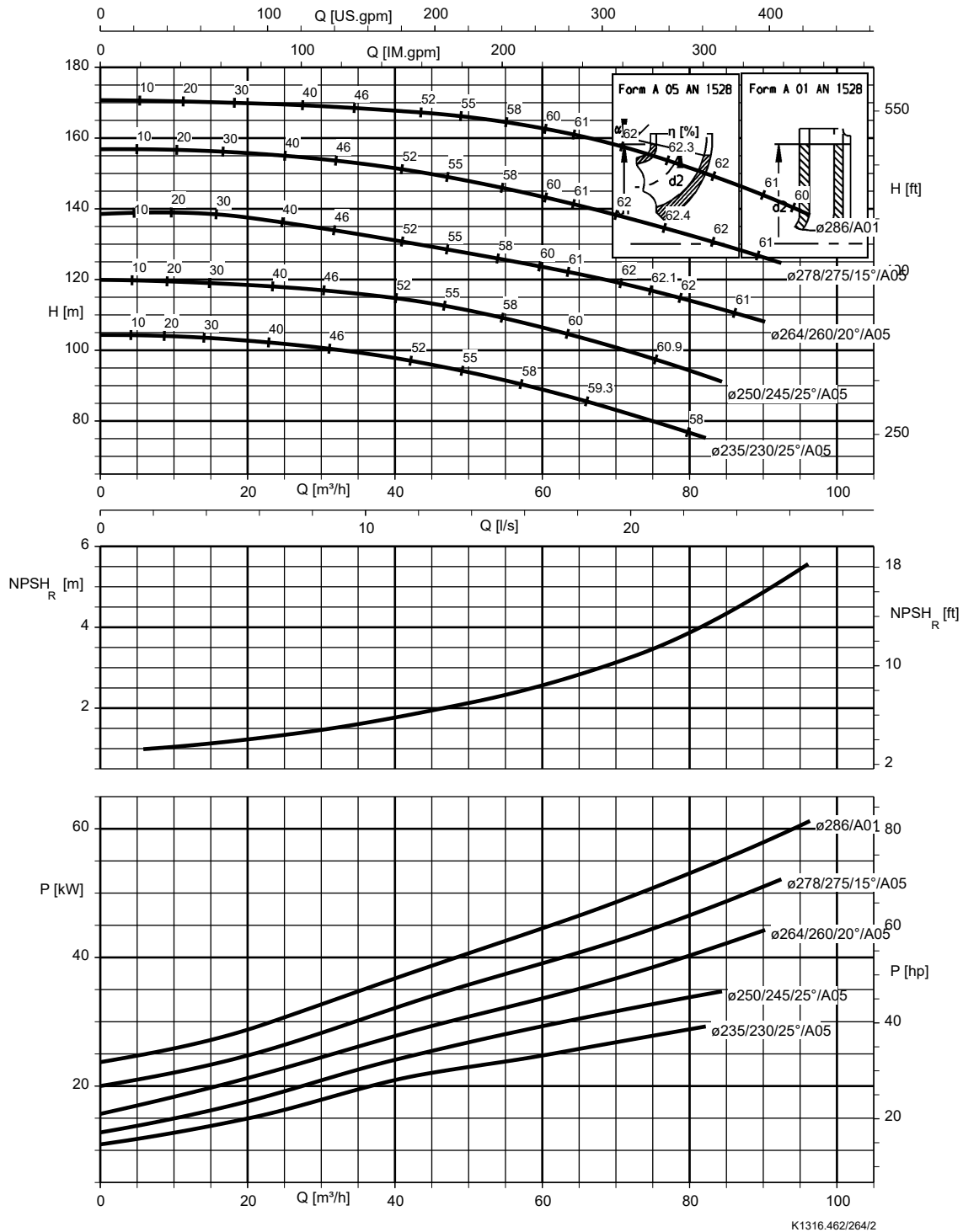
RPH-V 50-180, $n = 3500 \text{ min}^{-1}$



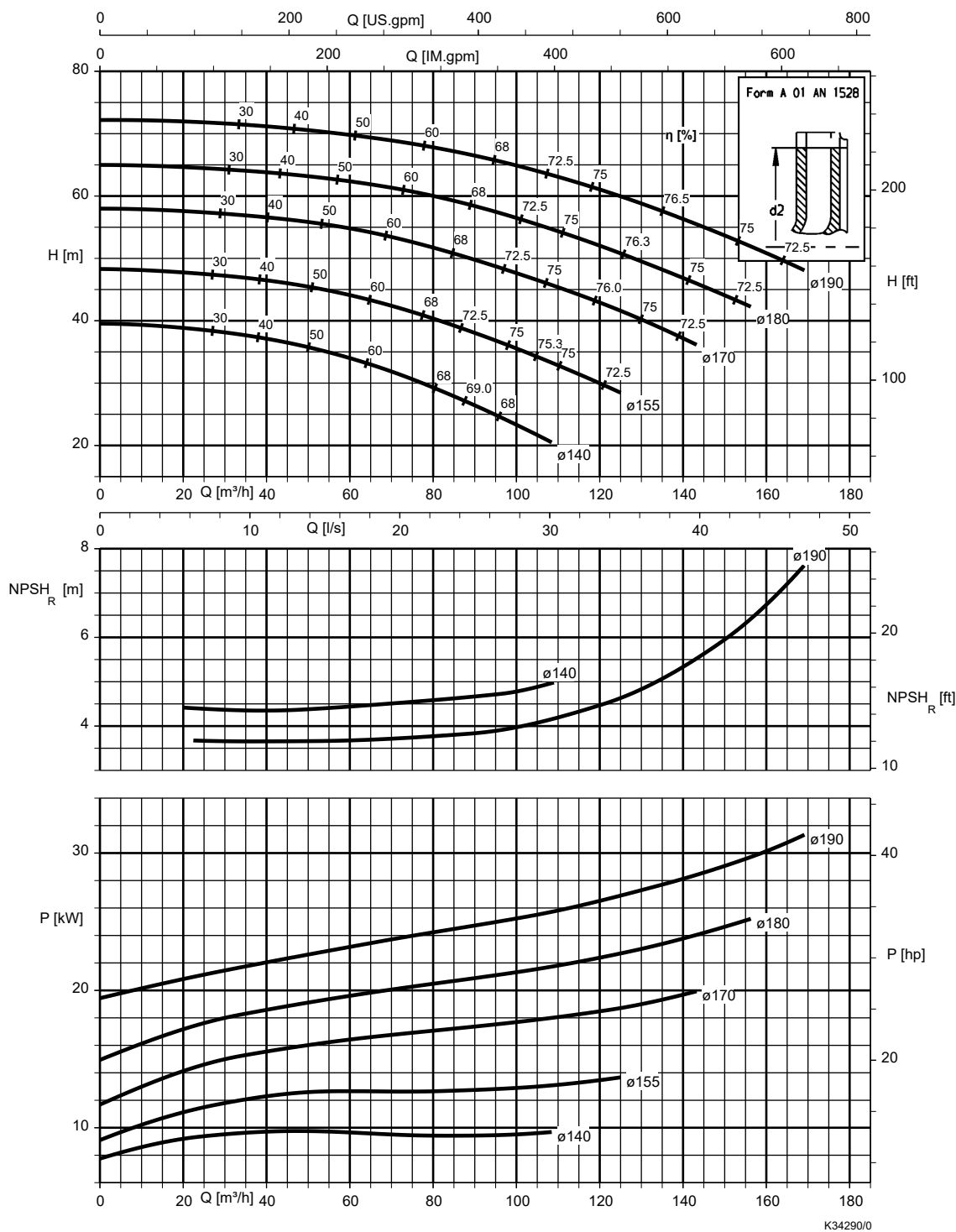
RPH-V 50-230, $n = 3500 \text{ min}^{-1}$



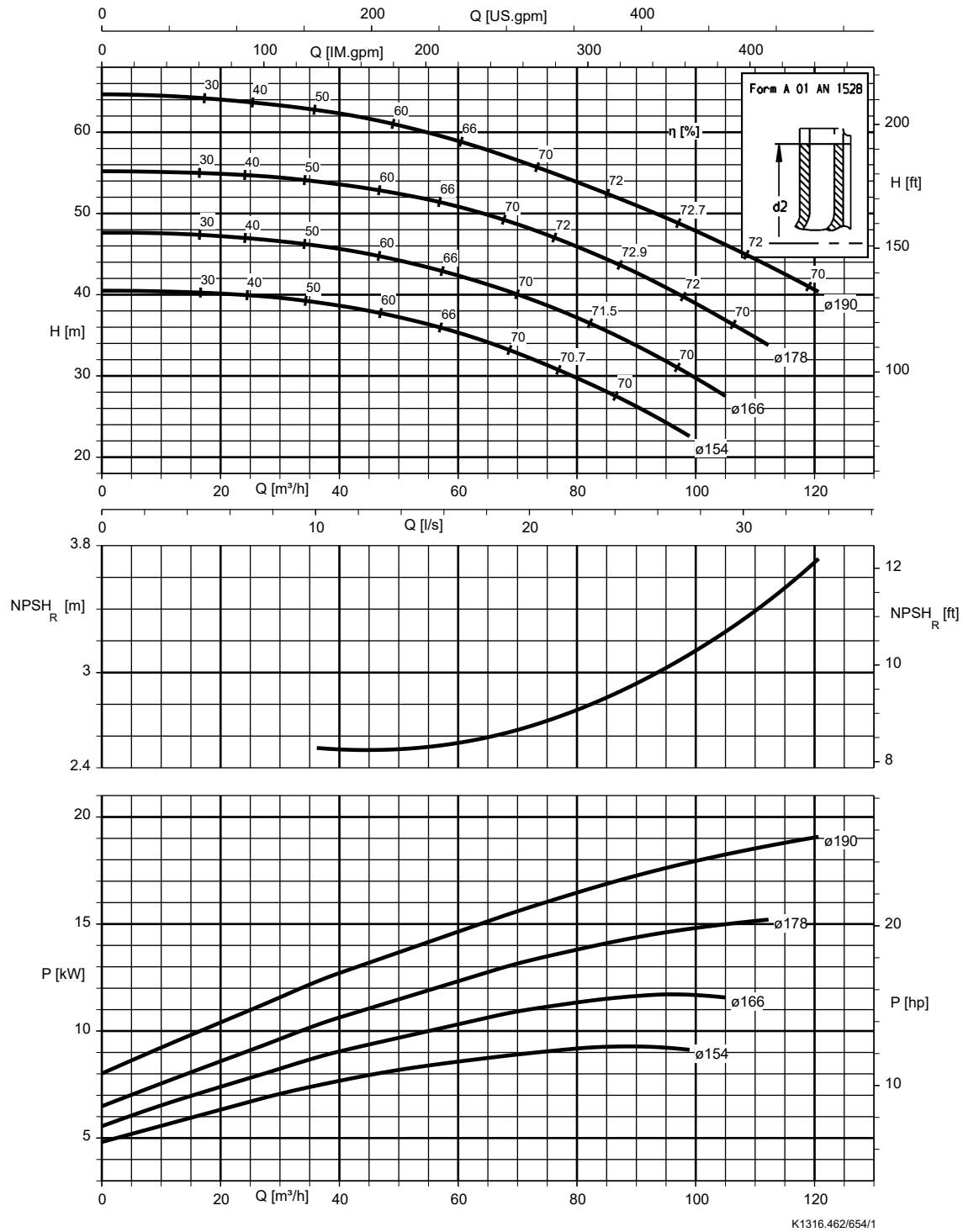
RPH-V 50-280, $n = 3500 \text{ min}^{-1}$



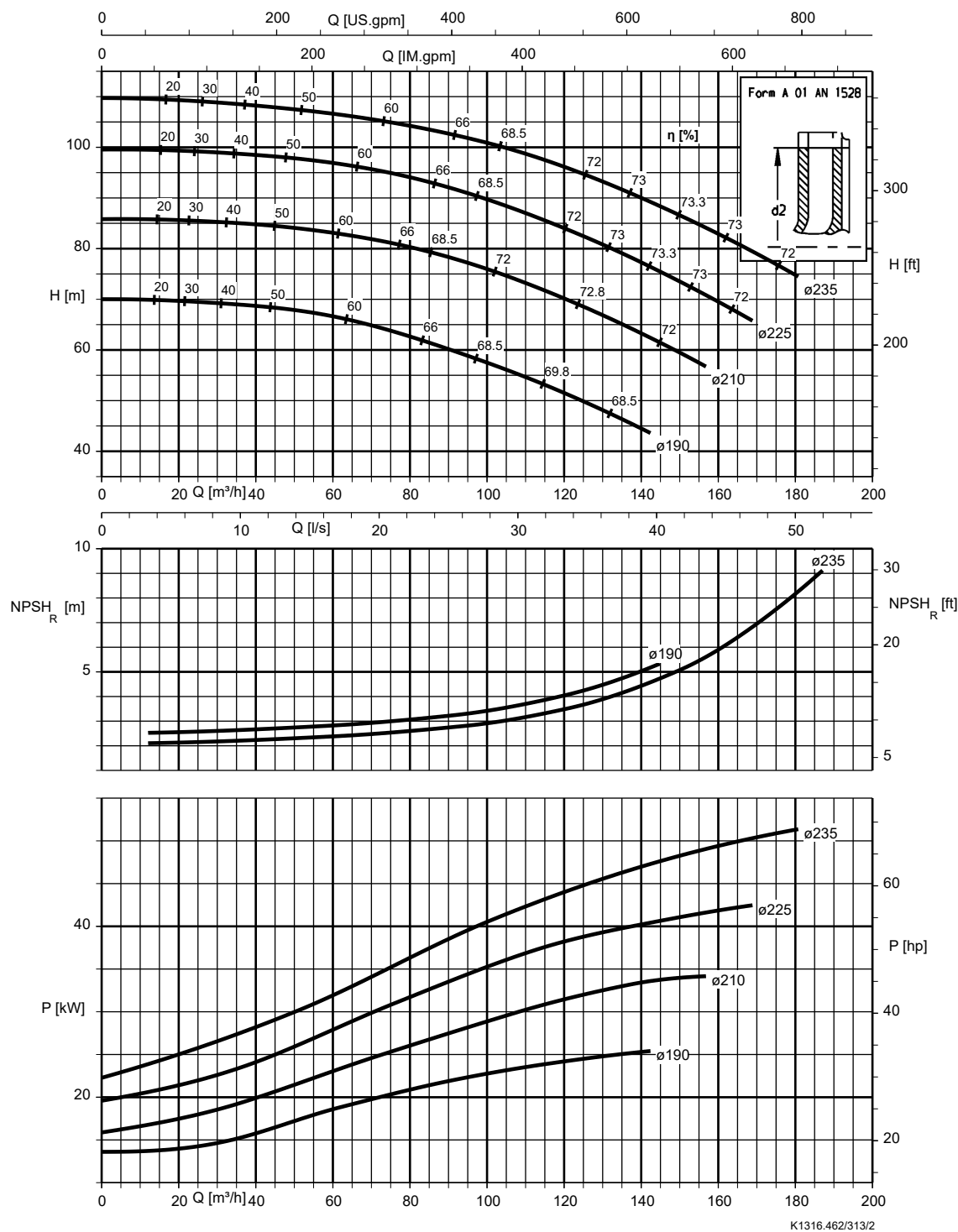
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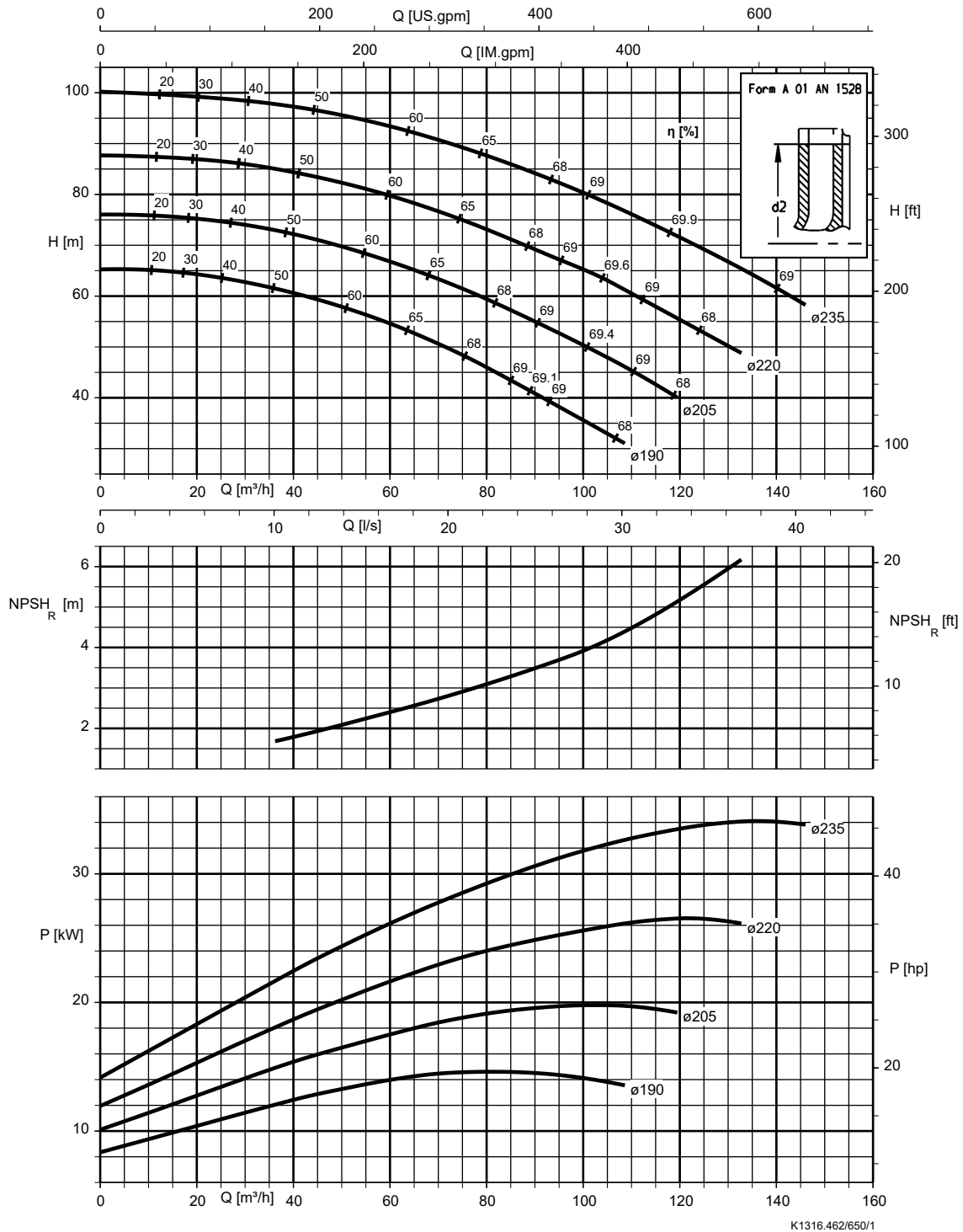
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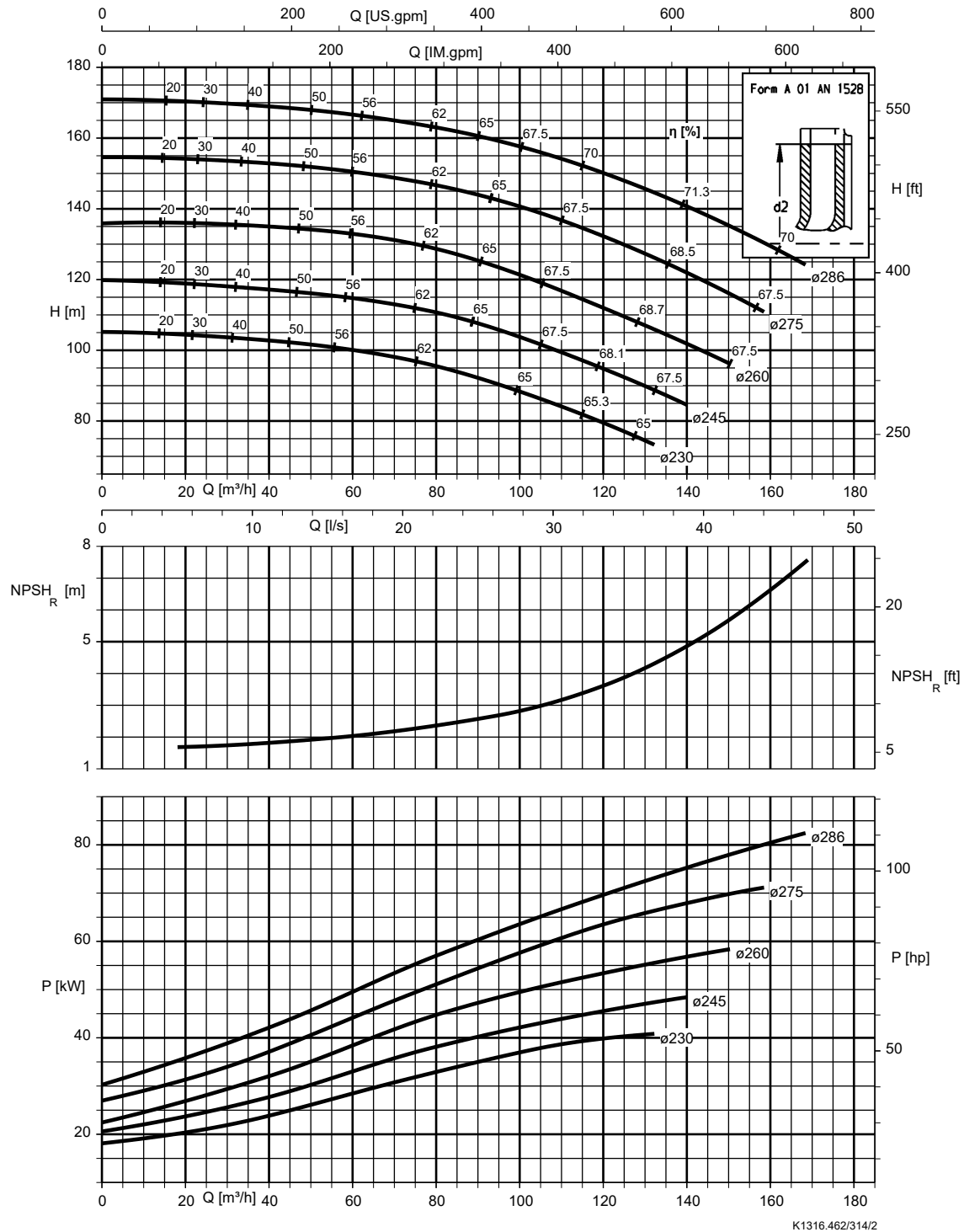


RPH-V 80-230, $n = 3500 \text{ min}^{-1}$



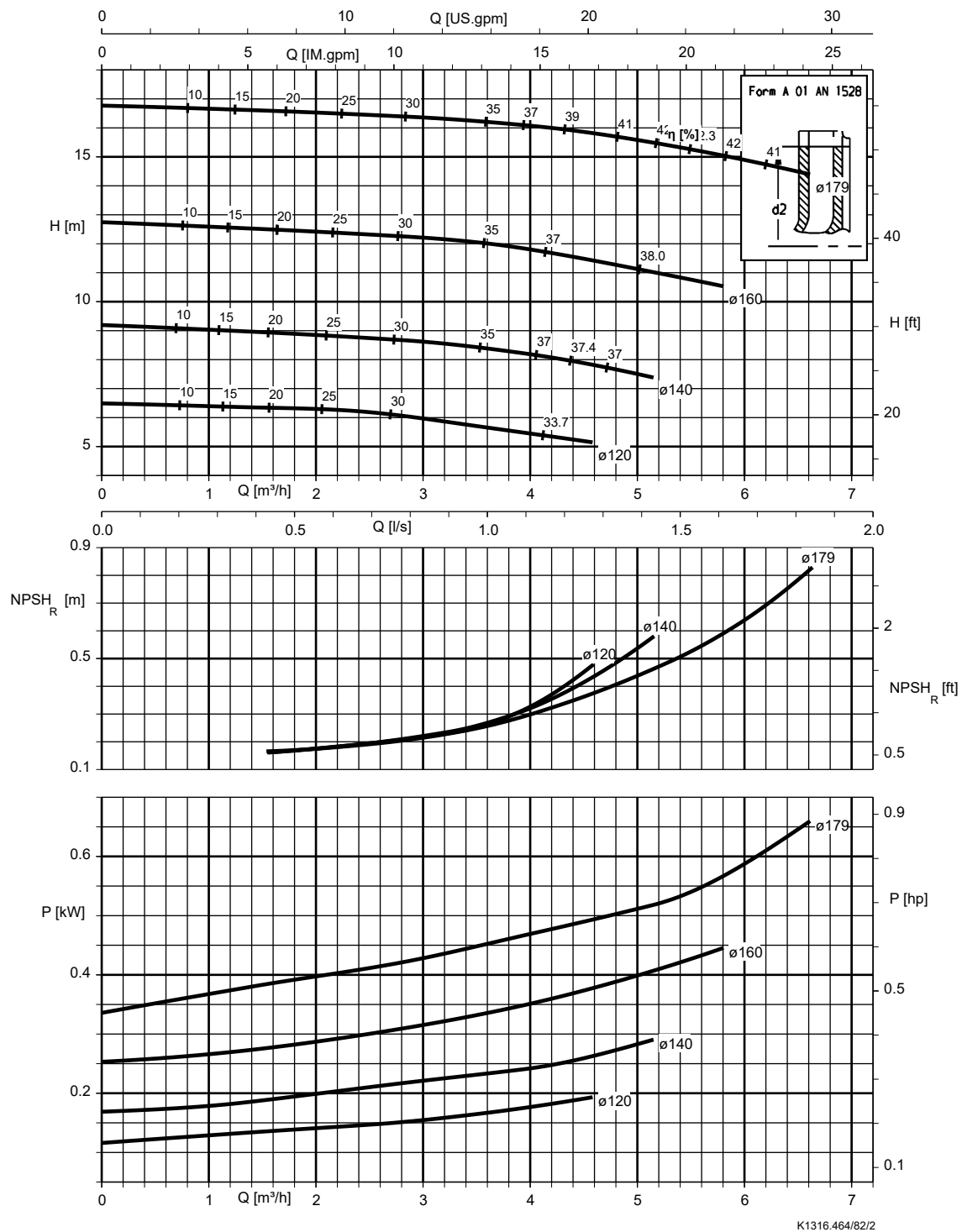
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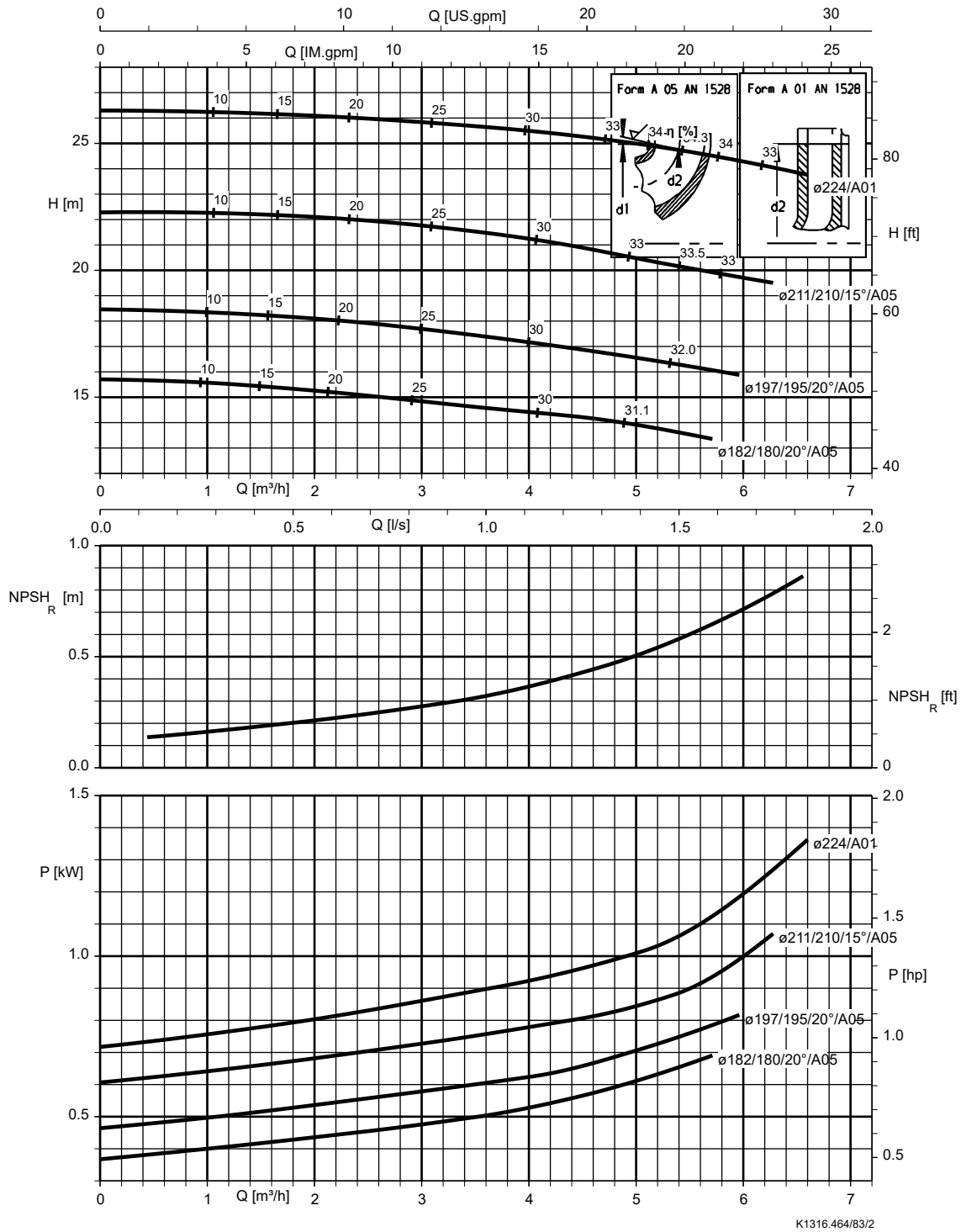
RPH-V 80-280, $n = 3500 \text{ min}^{-1}$ 

$n = 1750 \text{ min}^{-1}$

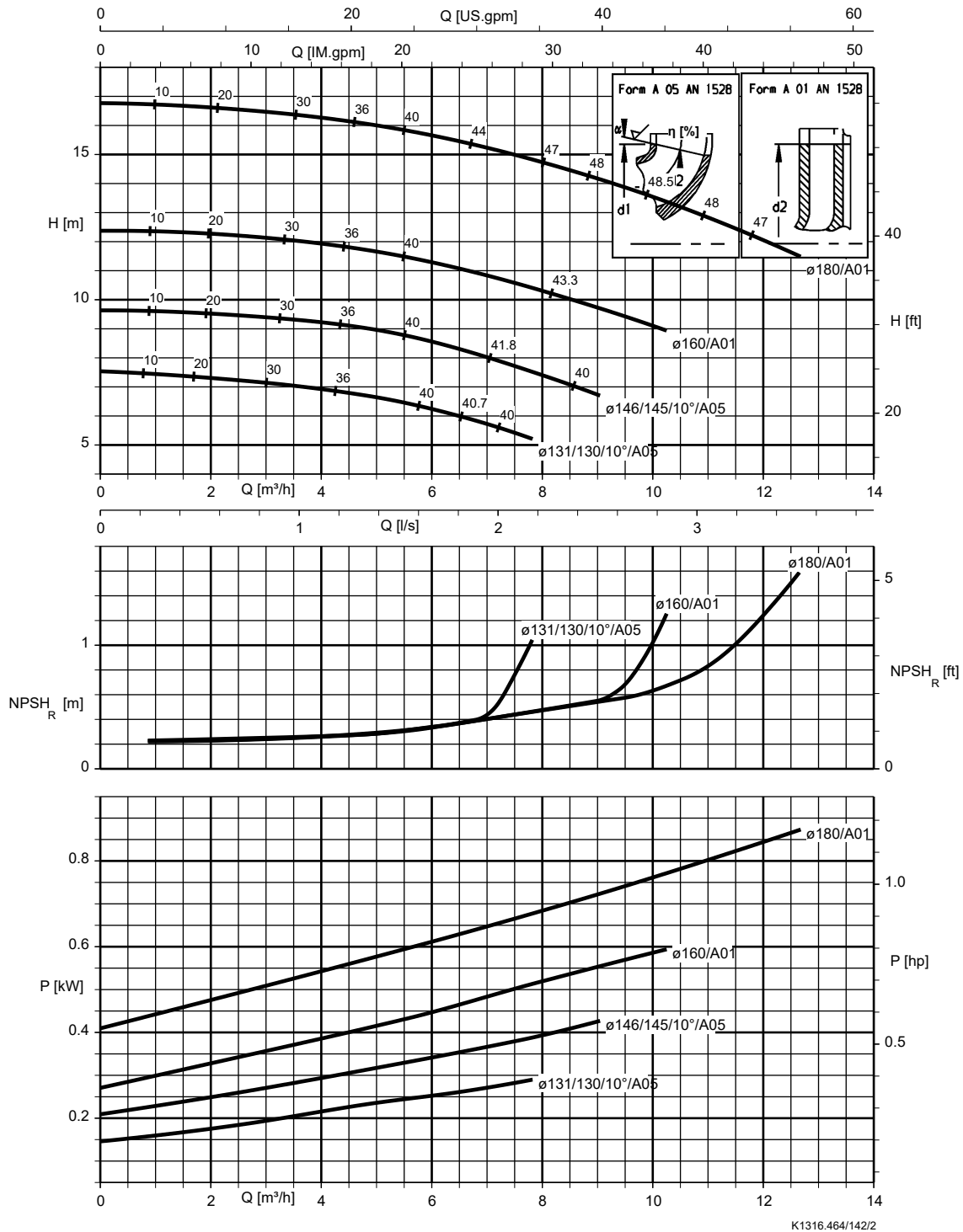
RPH-V 25-180, $n = 1750 \text{ min}^{-1}$



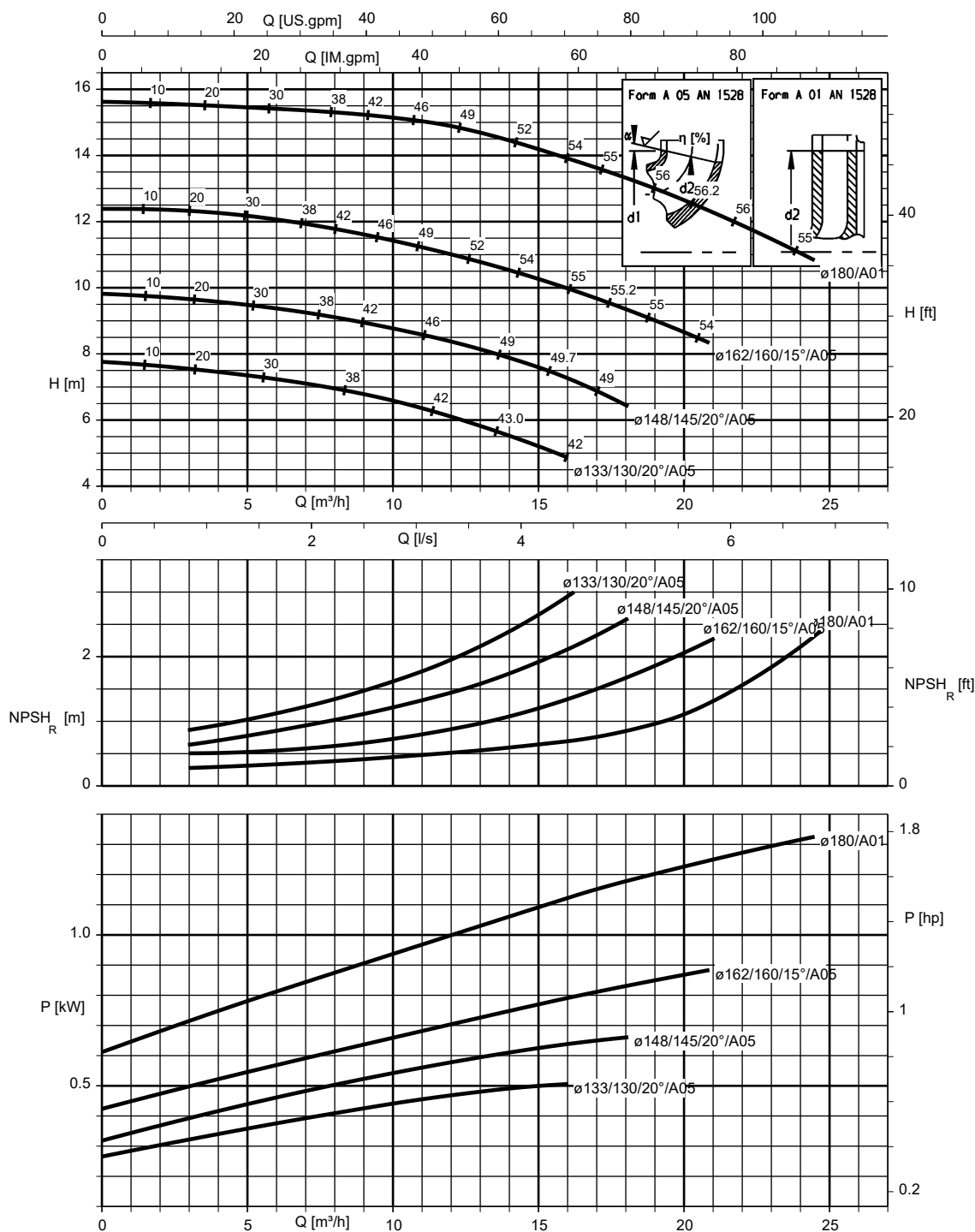
RPH-V 25-230, $n = 1750 \text{ min}^{-1}$



RPH-V 40-180, $n = 1750 \text{ min}^{-1}$

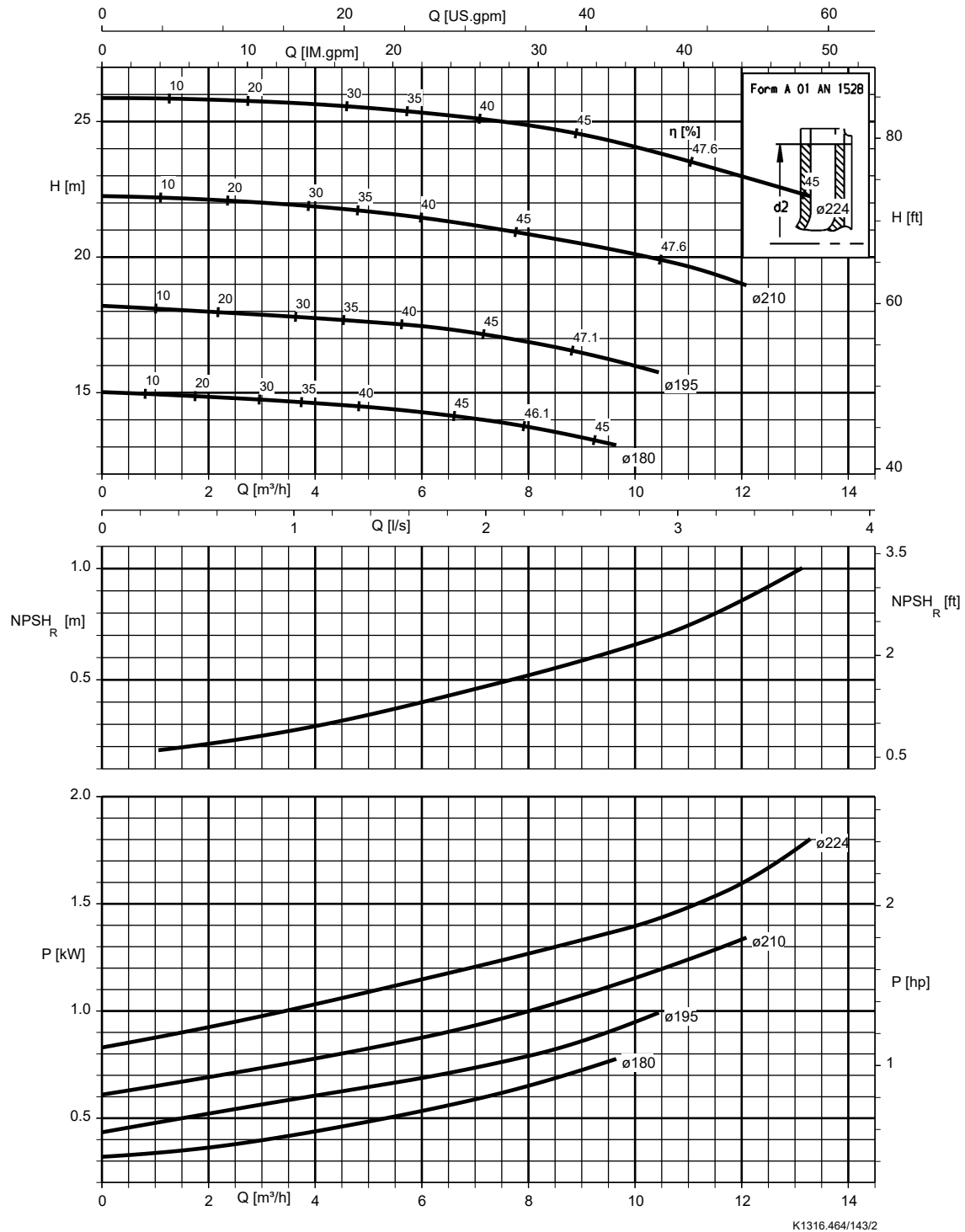


RPH-V 40-181, $n = 1750 \text{ min}^{-1}$

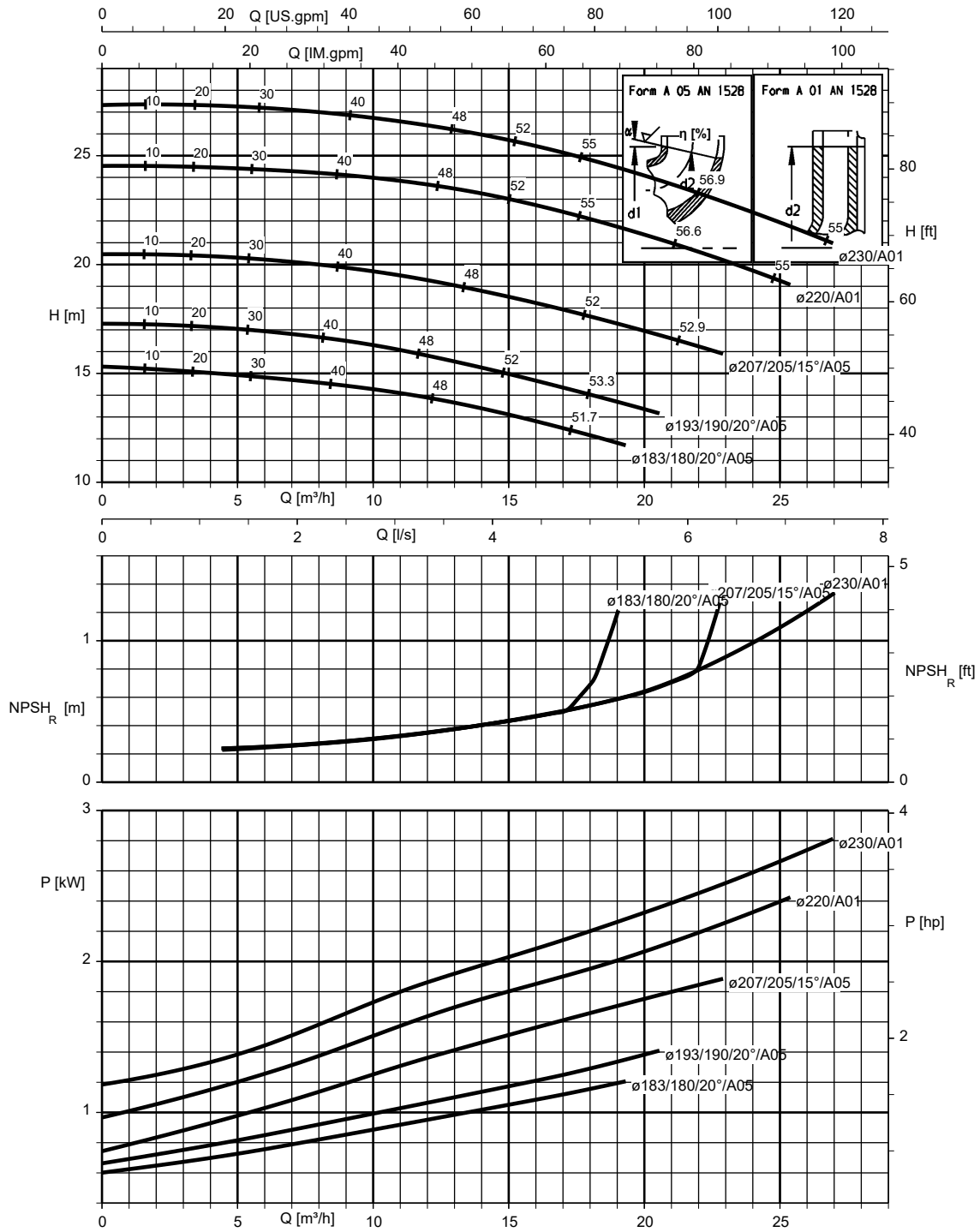


K1316.464/202/2

RPH-V 40-230, $n = 1750 \text{ min}^{-1}$

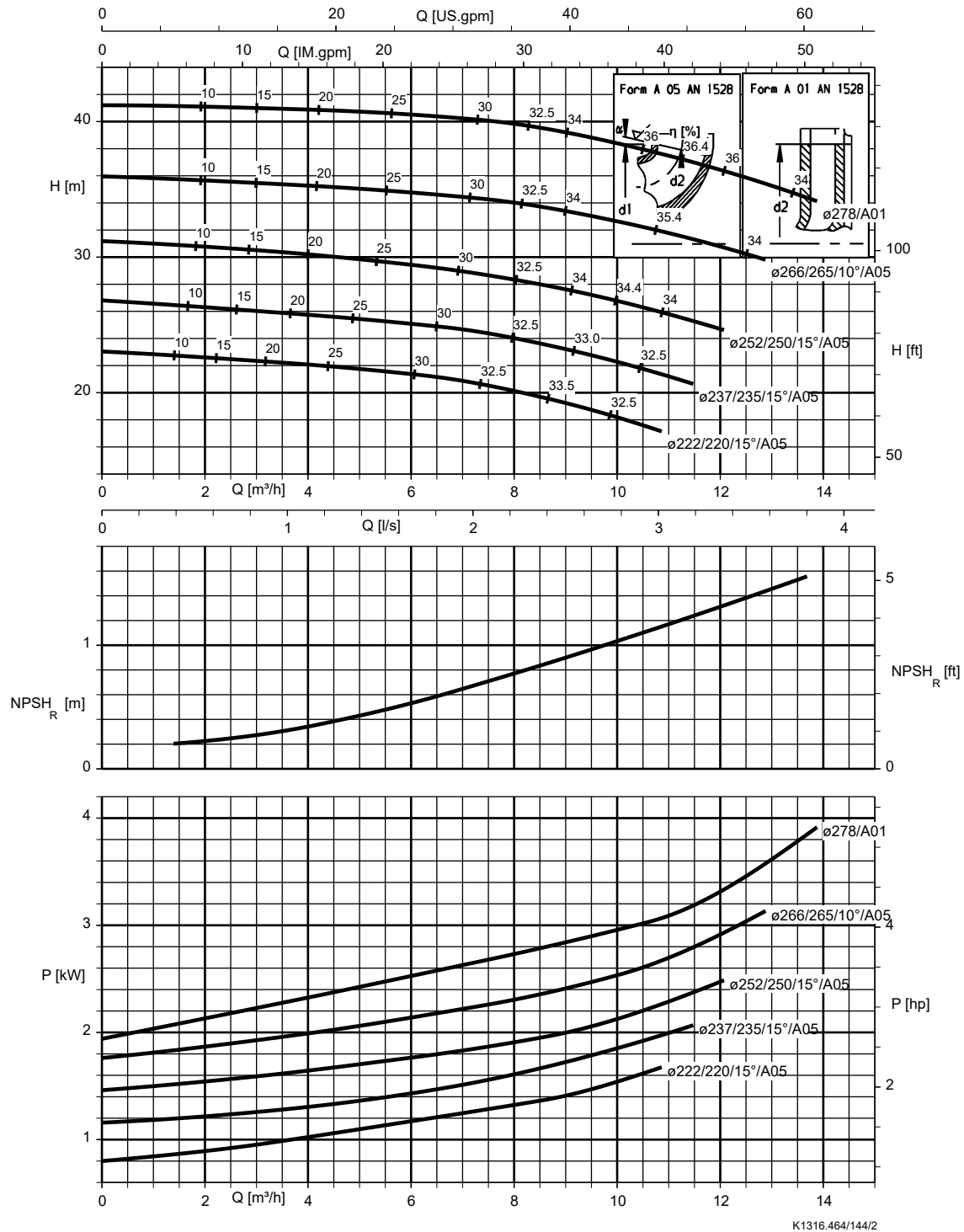


RPH-V 40-231, $n = 1750 \text{ min}^{-1}$

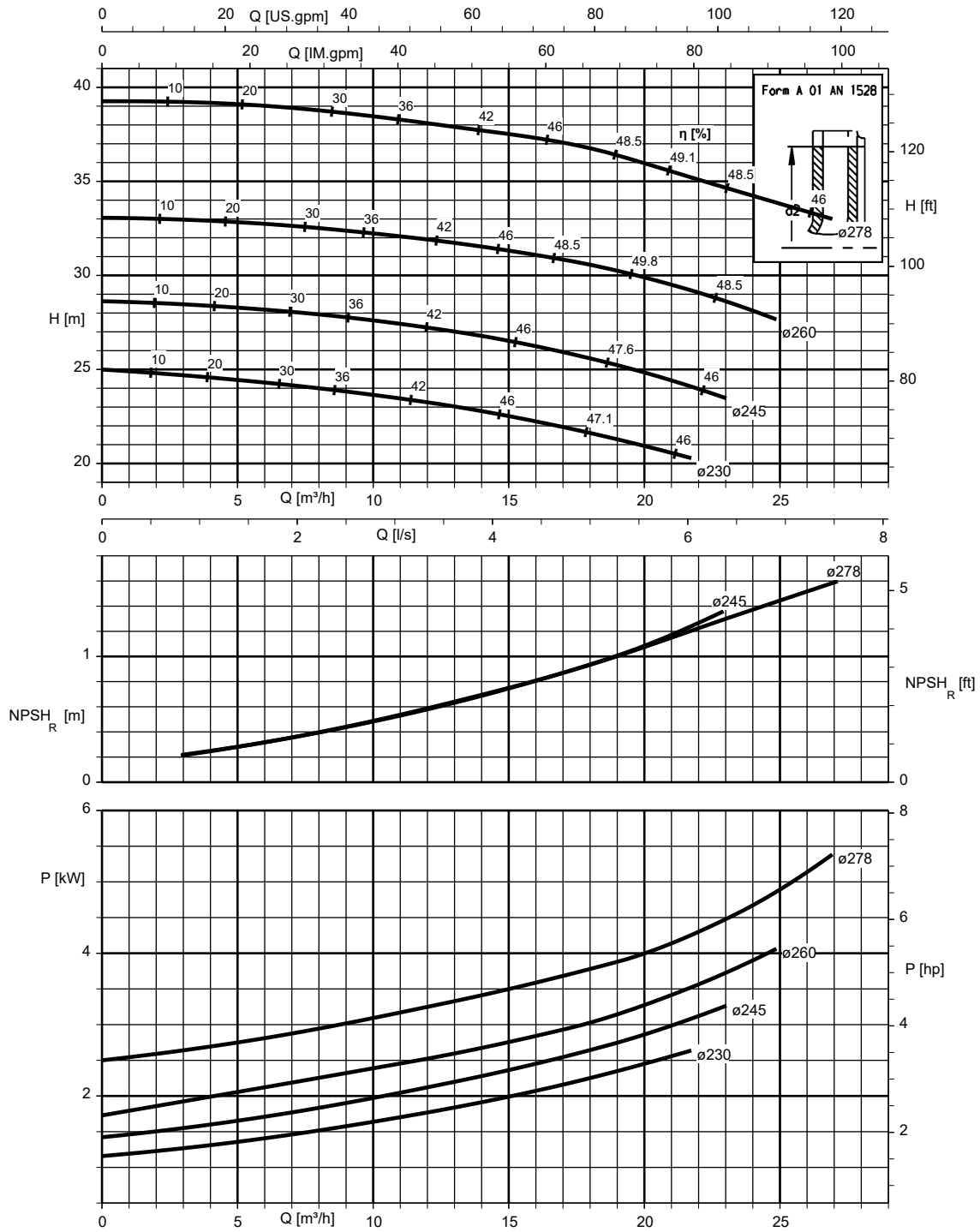


K1316.464/213/2

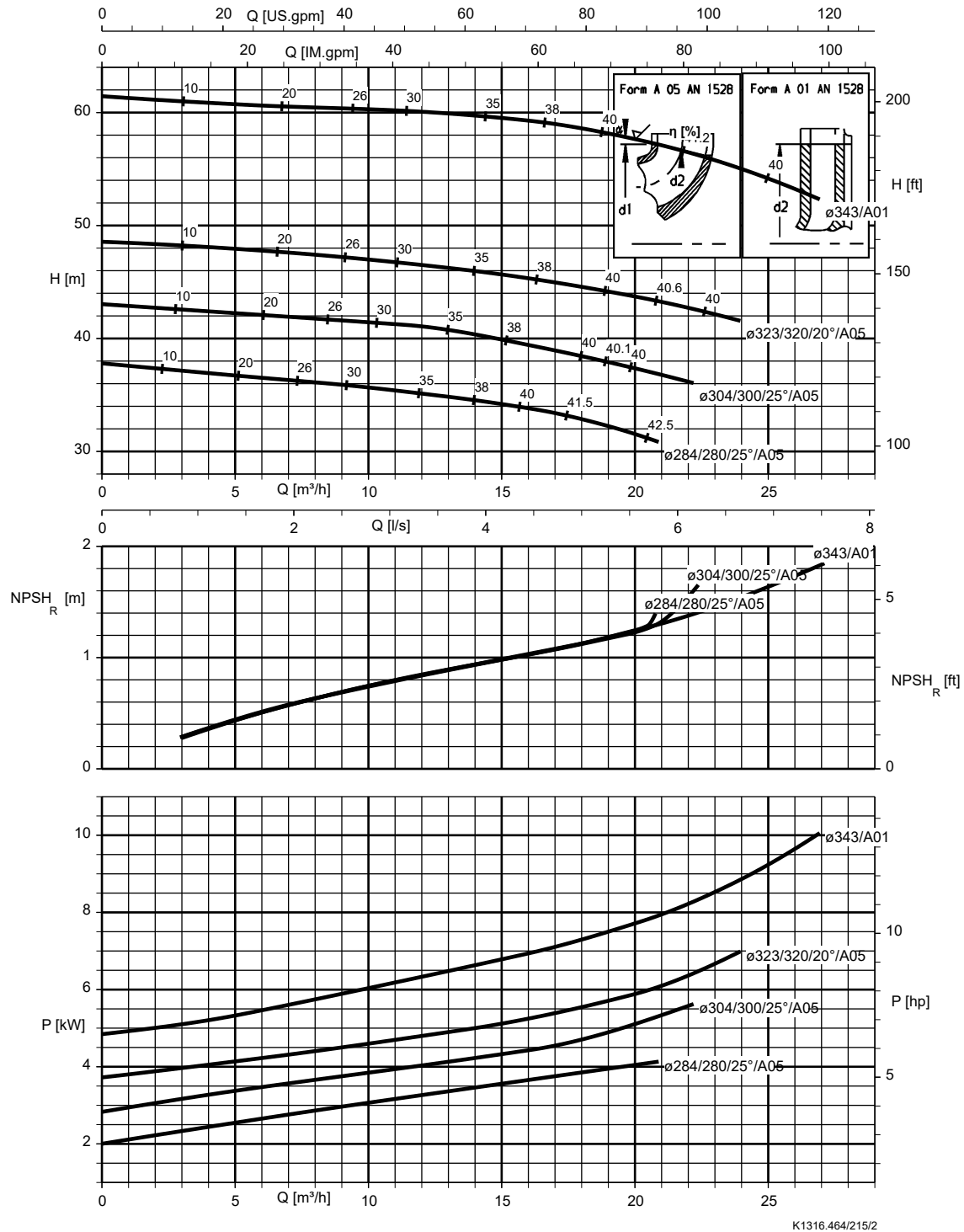
RPH-V 40-280, $n = 1750 \text{ min}^{-1}$



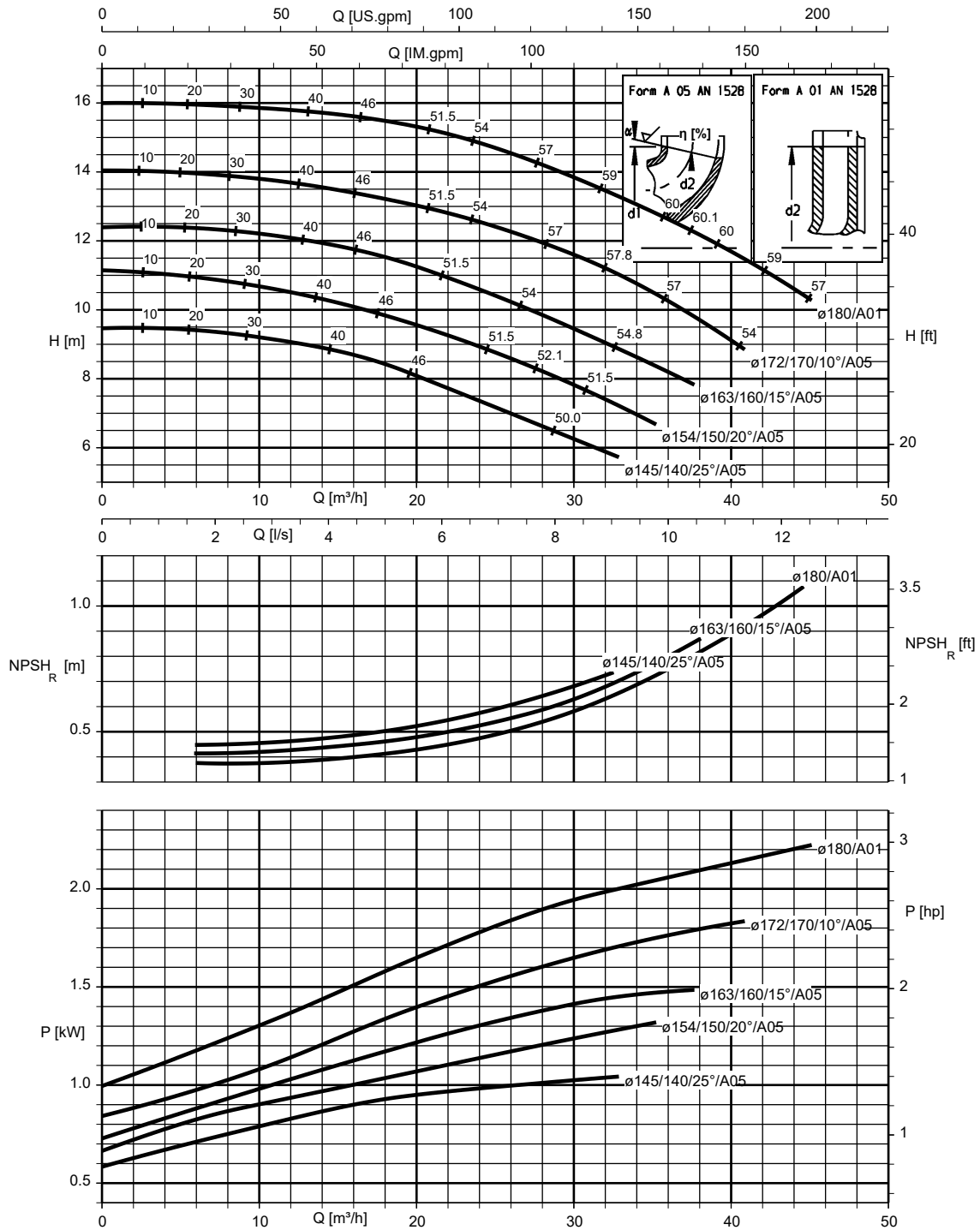
RPH-V 40-281, $n = 1750 \text{ min}^{-1}$



RPH-V 40-361, $n = 1750 \text{ min}^{-1}$

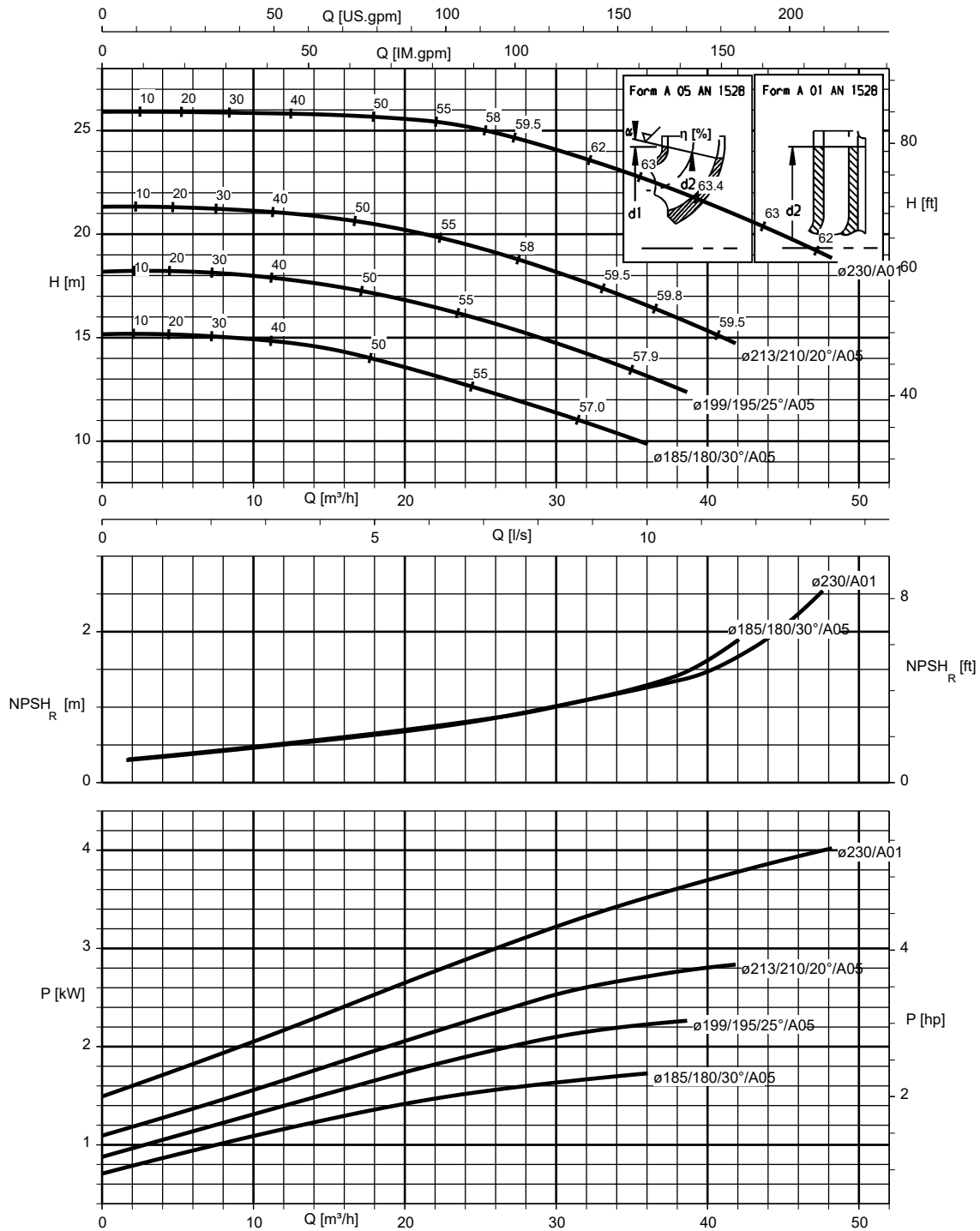


RPH-V 50-180, $n = 1750 \text{ min}^{-1}$



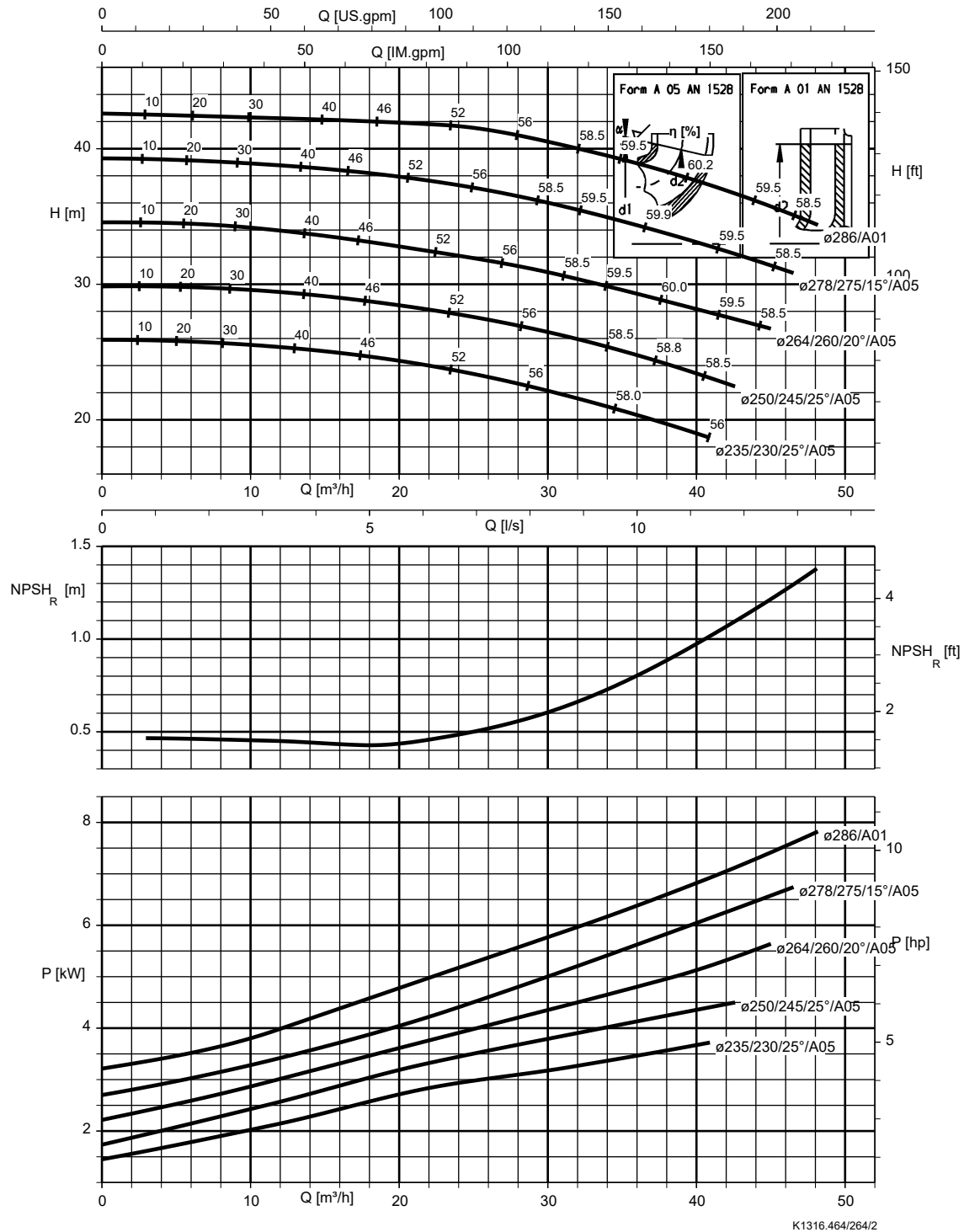
K1316.464/252/2

RPH-V 50-230, $n = 1750 \text{ min}^{-1}$

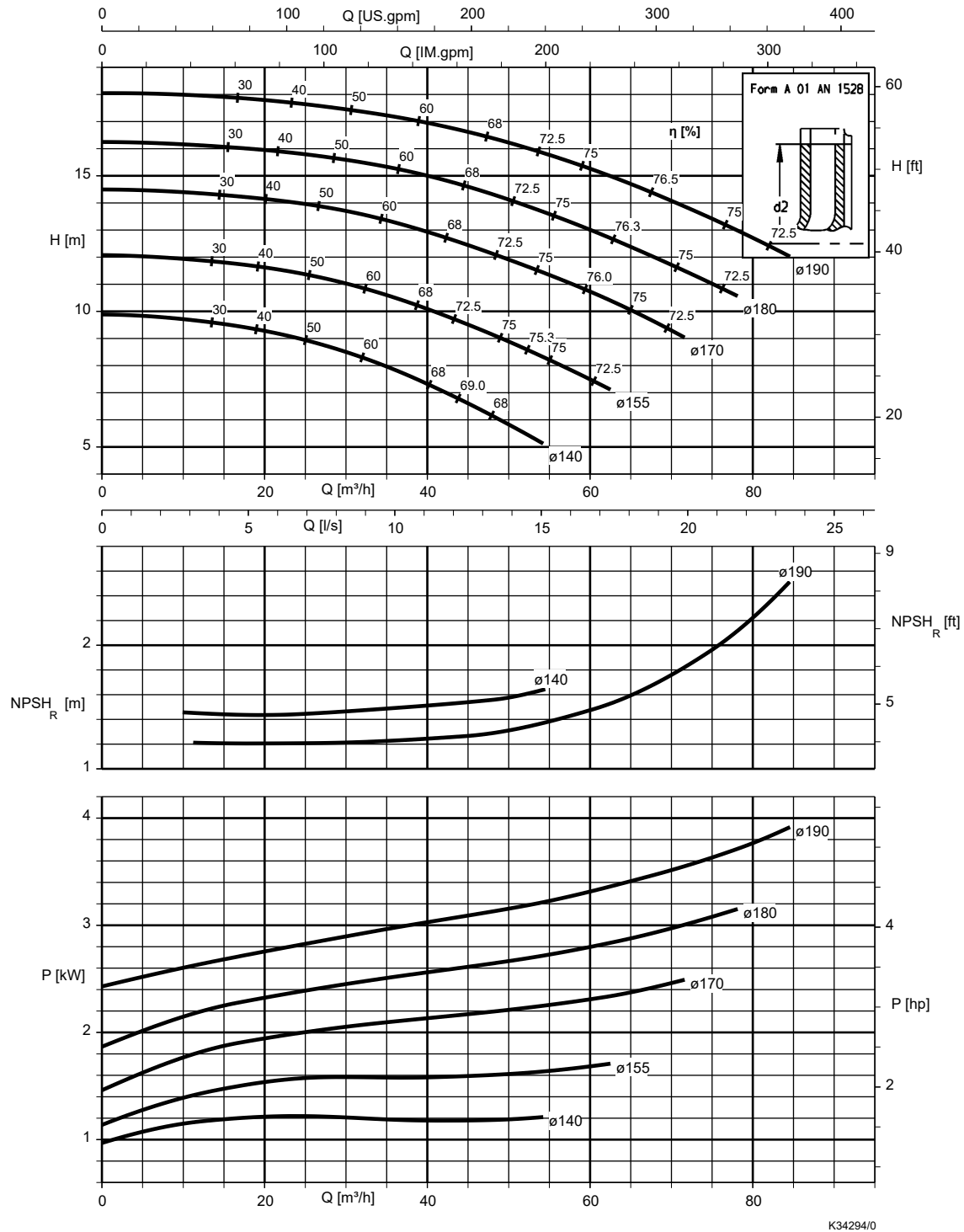


K1316.464/263/2

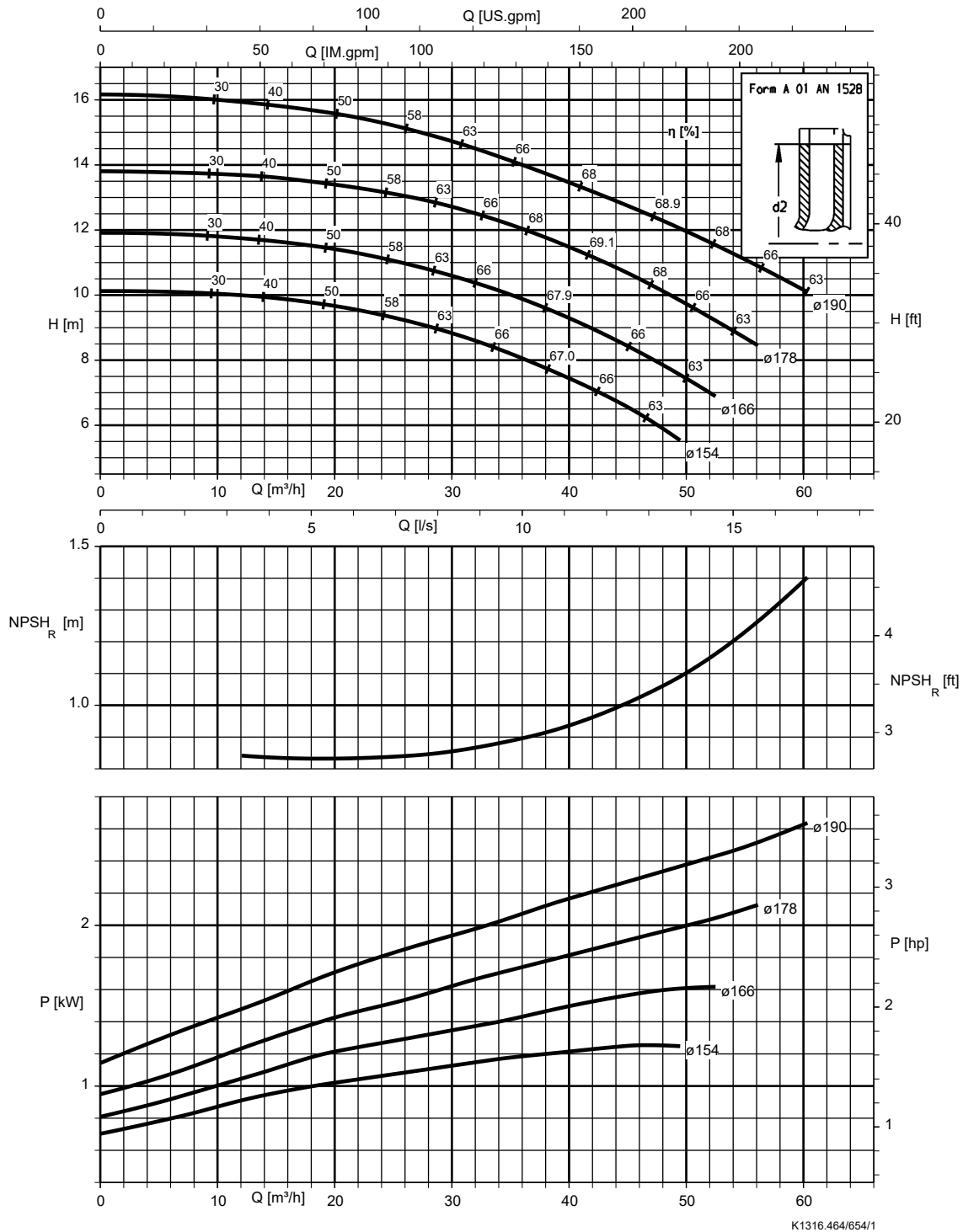
RPH-V 50-280, $n = 1750 \text{ min}^{-1}$



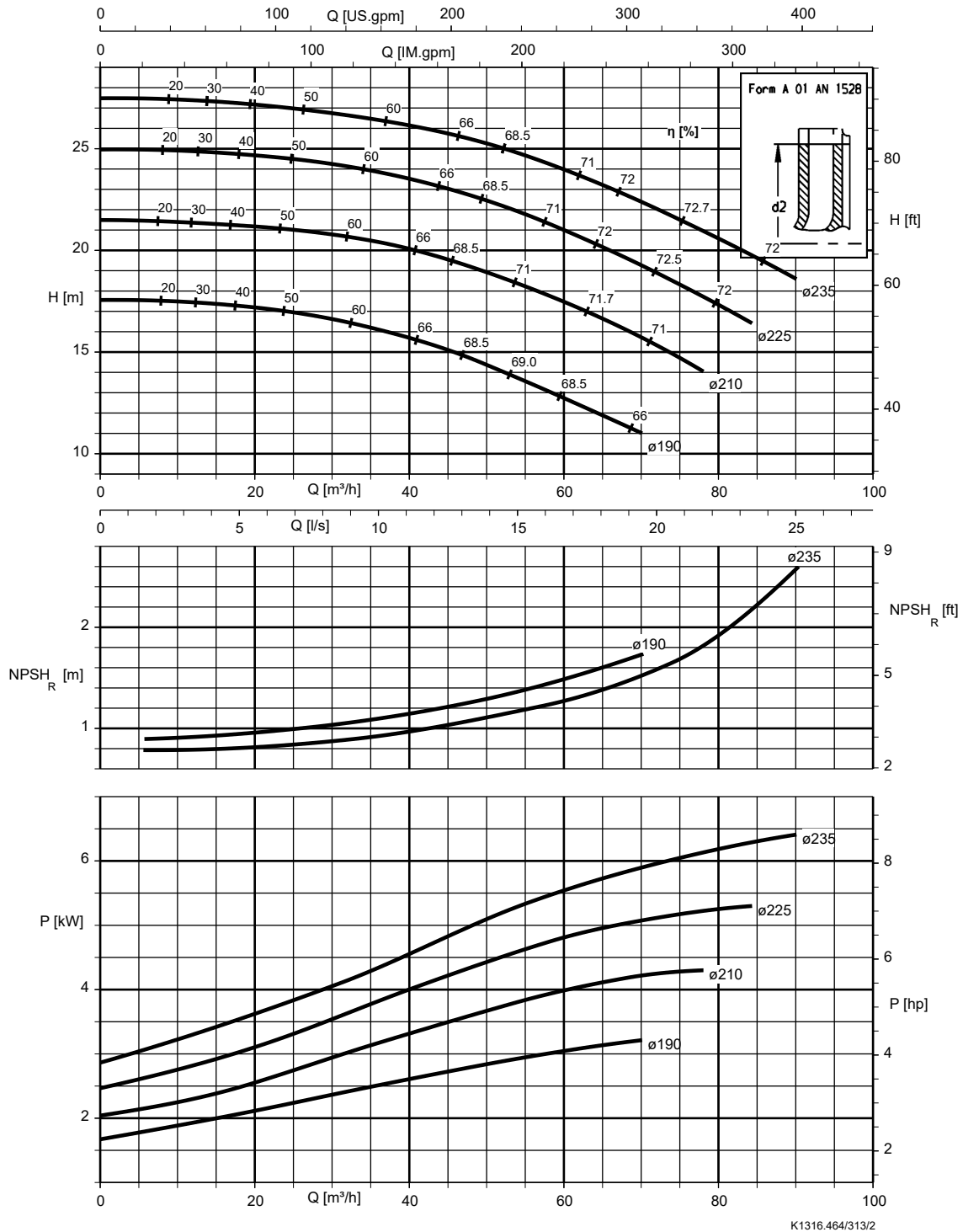
RPH-V 80-180, $n = 1750 \text{ min}^{-1}$



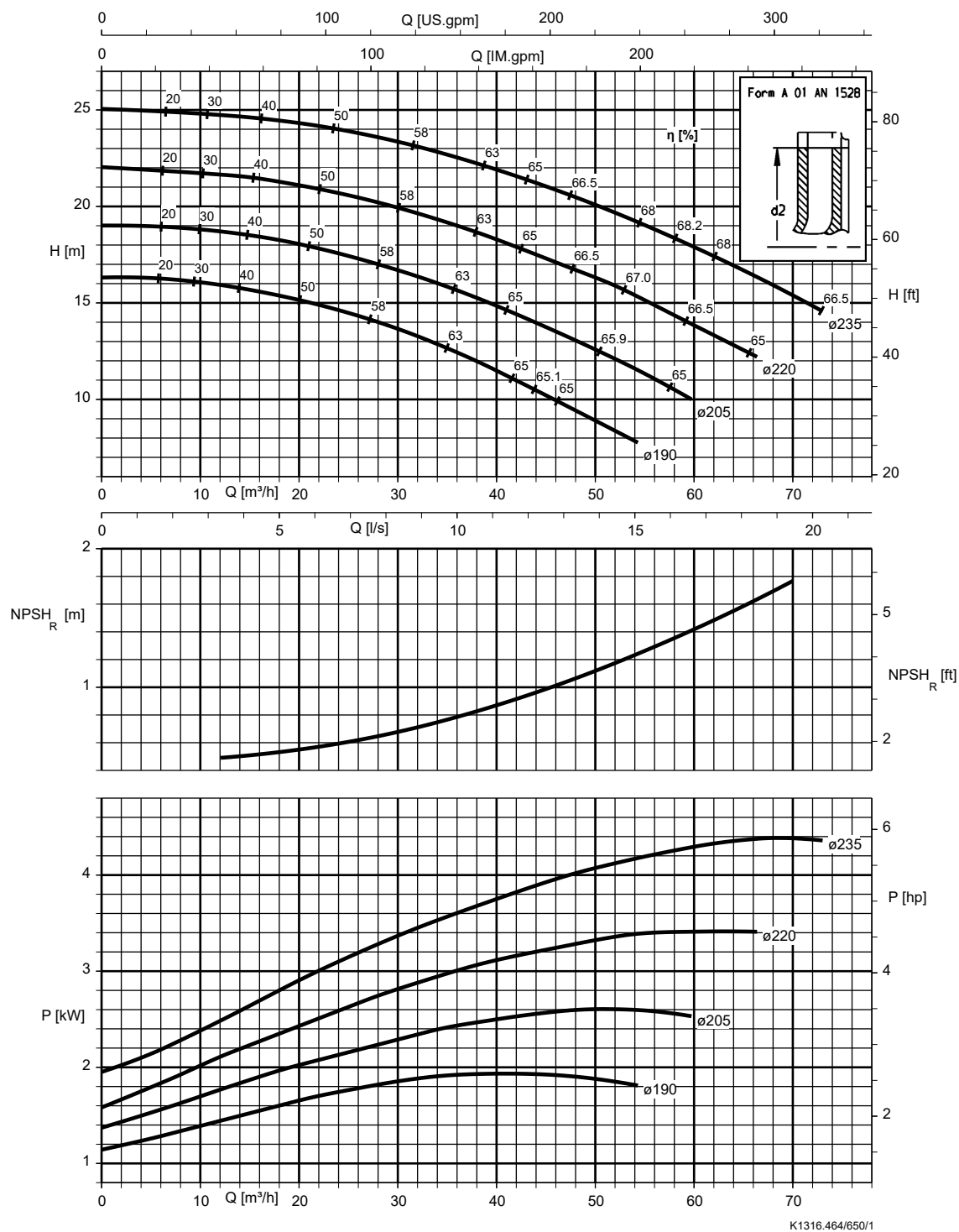
RPH-V 80-180B, $n = 1750 \text{ min}^{-1}$



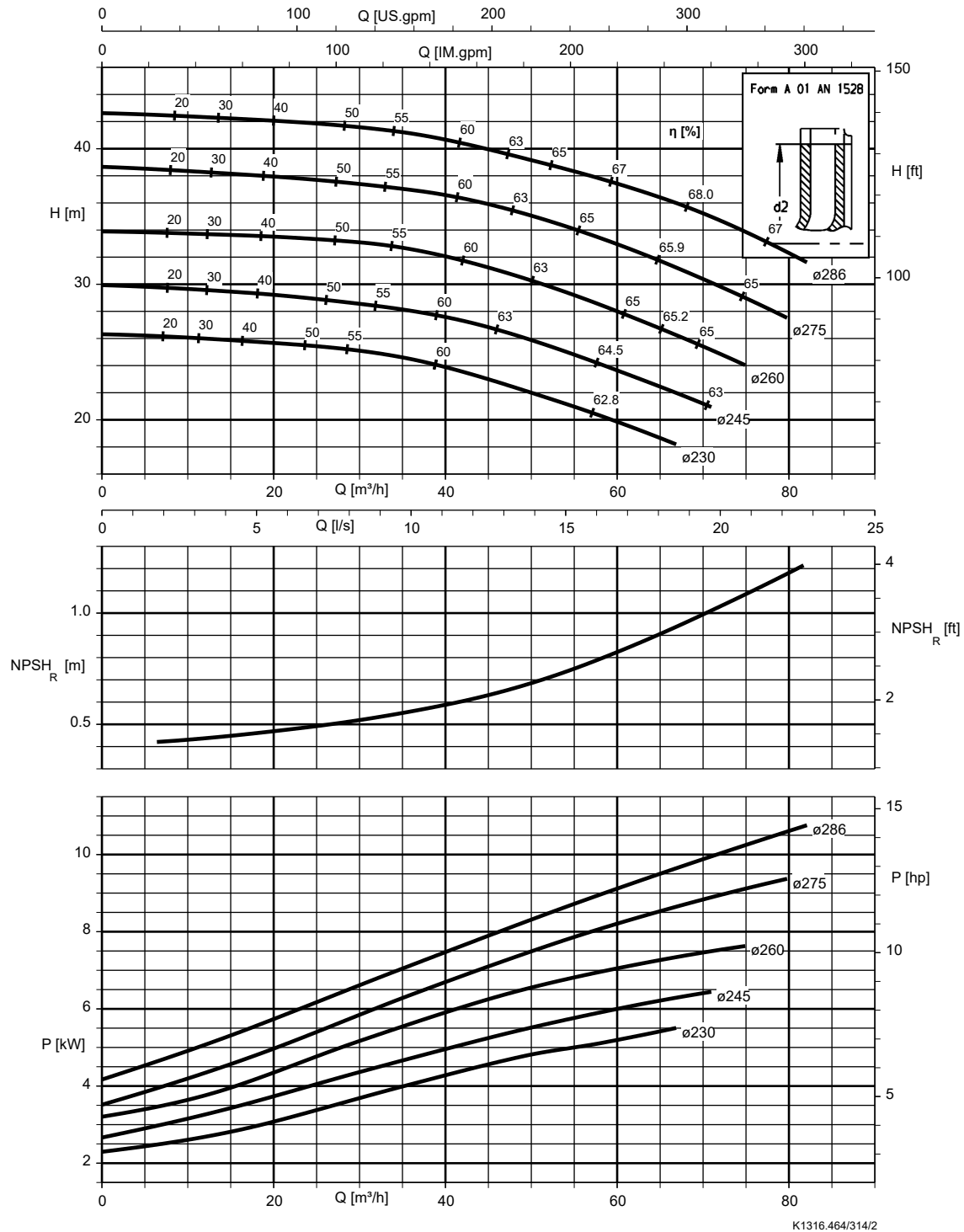
RPH-V 80-230, $n = 1750 \text{ min}^{-1}$



RPH-V 80-230B, $n = 1750 \text{ min}^{-1}$



RPH-V 80-280, $n = 1750 \text{ min}^{-1}$





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