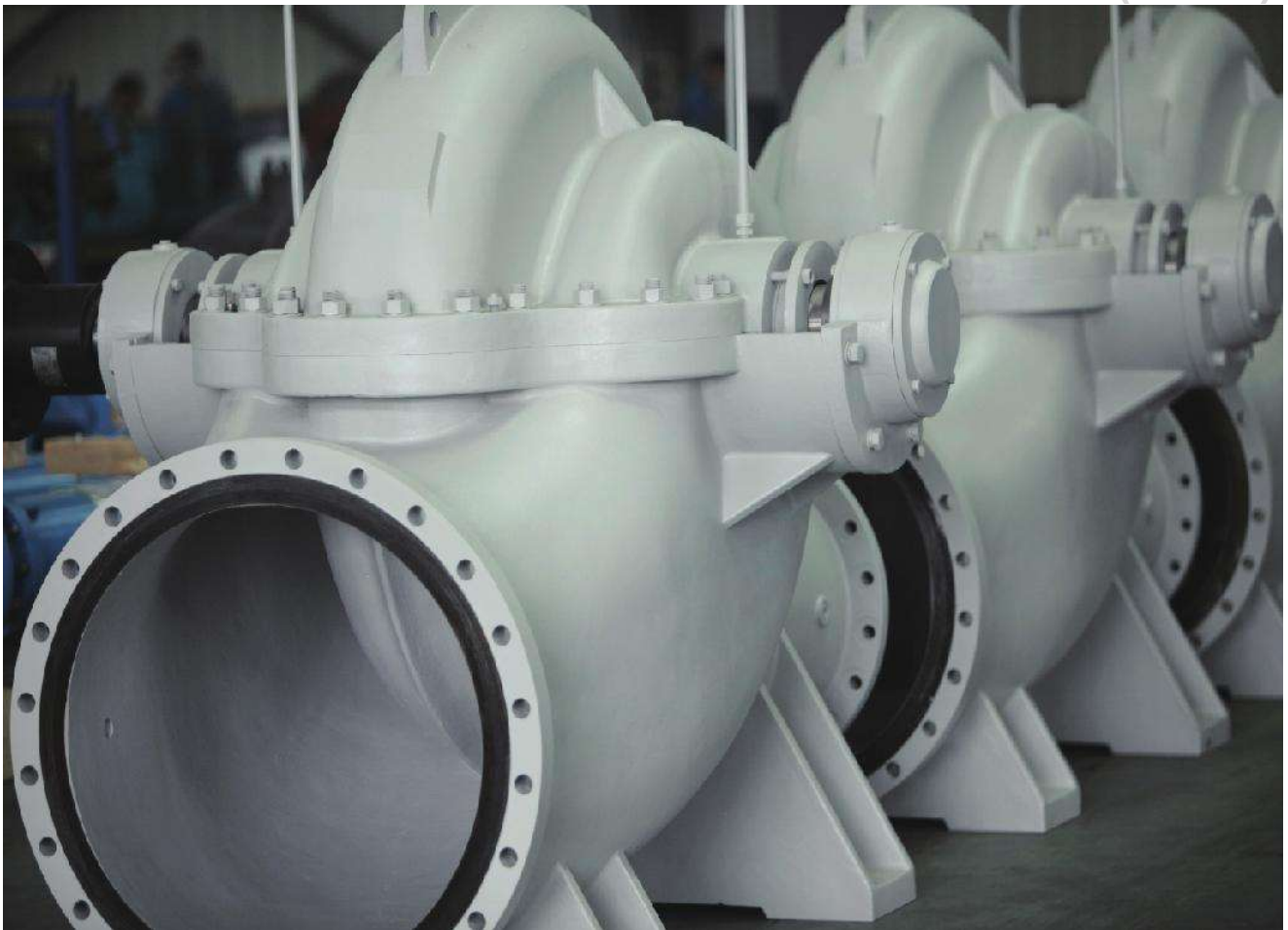


NSC Single Stage Double Suction Split Casing Centrifugal Pump

Technical Manual (50HZ)

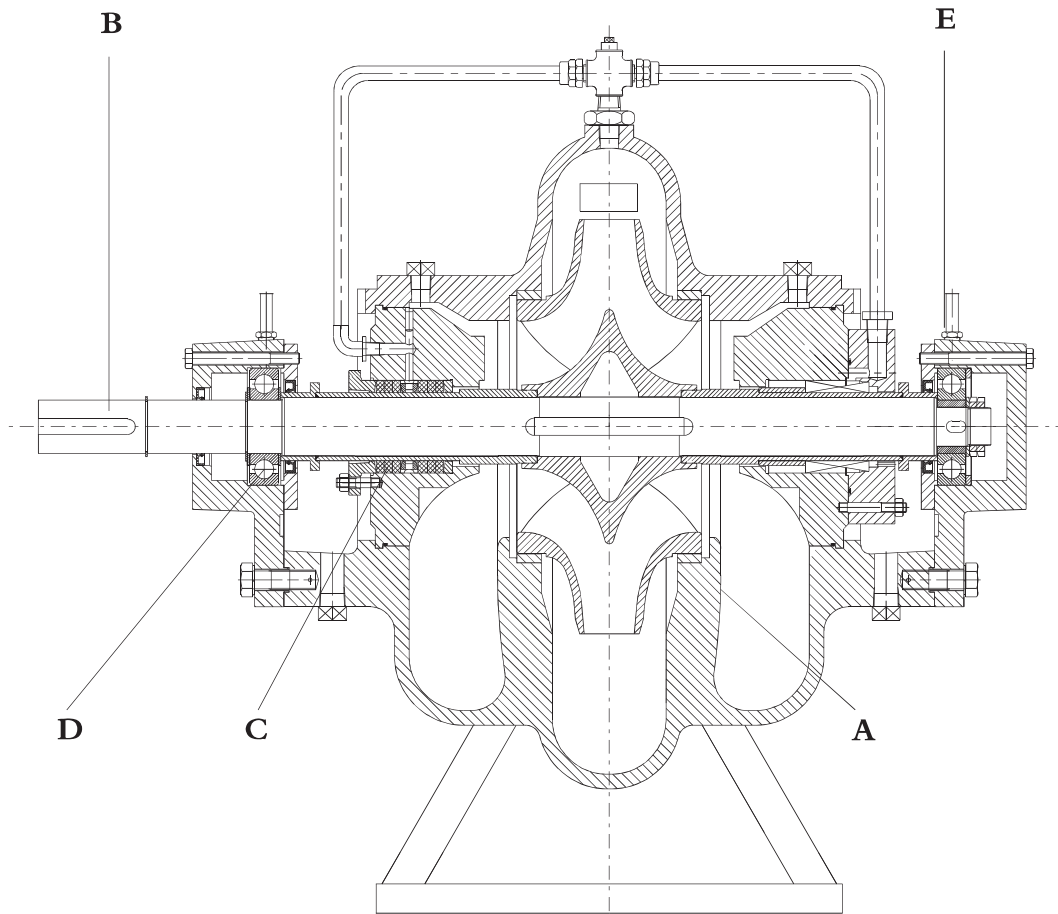


MOTOLOGY ELECTRIC PTE LTD

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Configuration Features



A. Casing

- a. In-line axially split design which permits removal of the complete rotor without moving the pipe and motor
- b. Short distance between bearings
- c. Leak-tight due to compact joint flange with long, prestressed bolts
- d. Counter-rotation possible with similar parts
- e. Double volute casing reduces radial forces on the impeller and consequently the bearing loads
- f. Easy mounting self-aligning upper casing
- g. Flange drilled to ISO, DIN, BS or ANSI
- h. Smooth surface inside and epoxy coating as required
- i. Replaceable wear rings protect the casing at the impeller running clearances
- j. Excellent efficiencies and outstanding NPSH improved by CFD
- k. Heavy duty casing design for high working pressure

B. Impeller

- a. Computer-optimized double entry impellers
- b. Minimal axial thrust due to double-entry impeller
- c. Impeller is statically and dynamically balanced according to ISO1940
- d. Optional impeller wear rings
- e. New vane passage with excellent hydraulic characteristics high-performance improved by CFD

C. Seal

- a. Asbestos-free, potable water quality softpacked stuffing boxes
- b. Unbalanced mechanical seal, according to DIN 24960
Balance mechanical seal for operating pressure >16 bar on required
- c. Cartridge-type mechanical seal on required

D. Bearing

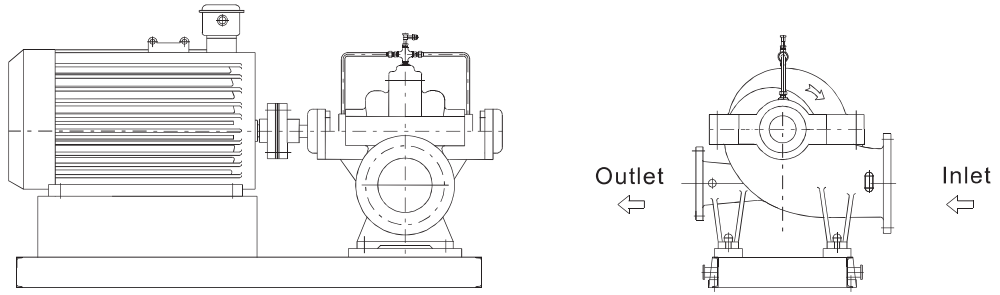
- a. SKF covered, sealed for life grease lubricated antifriction bearings for long service life
- b. Open gland, enough space for service activities
- c. Optional: oil lubrication with constant level oiler

E. Shaft

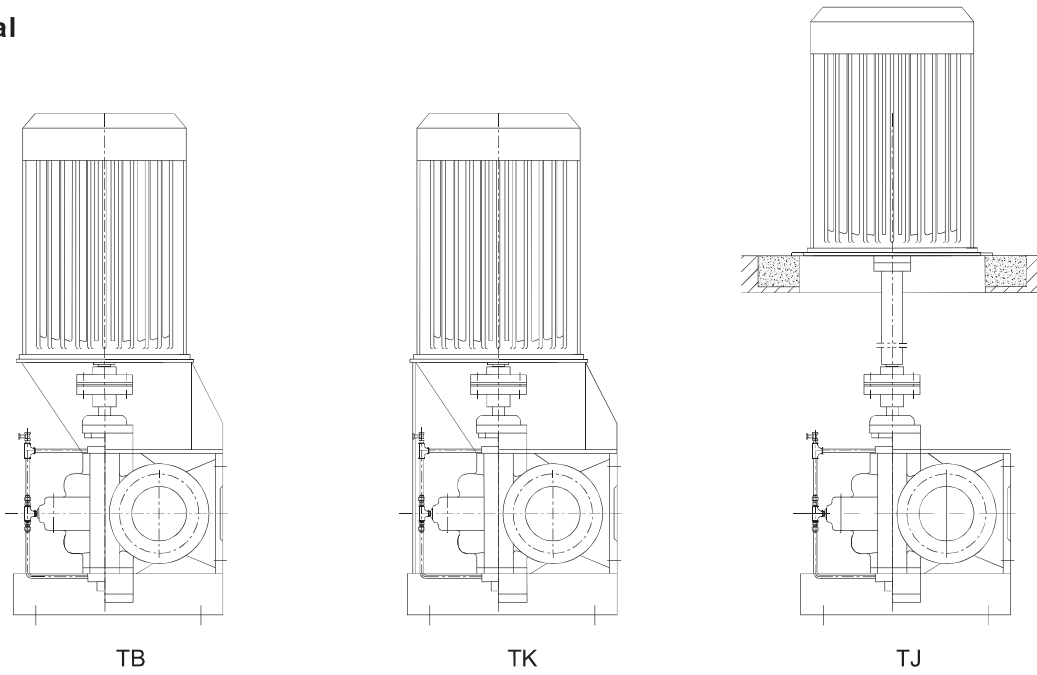
- a. Heavy duty shaft completely sealed and dry for zero corrosion
- b. Short and rigid with negligible vibrations
- c. Replaceable shaft protecting sleeves
- d. No threads exposed to pumped medium, long operating life and no corrosion
- e. Adjustment-free assembly
- f. Quick and easy assembly/dismantling of the rotor components due to elastically pre-stressed mountings
- g. Maximum interchangeability shafts design entire series for 2900rpm and 1450rpm model just six shafts and six bearings assemblies

Pump and Motor Arrangement

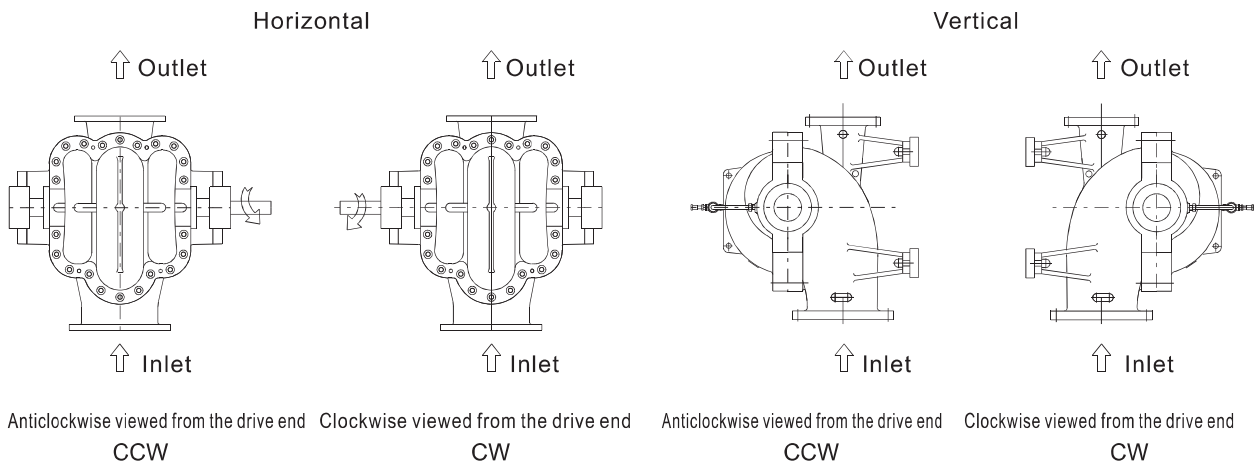
Horizontal



Vertical



Direction of Rotation and Flow Direction



Standard Materials

Medium Name	Clear water	Water with mud and sand/ Oxide scale water /Sewage/ Saline water	Sea water	Hot water	Petrochemical liquids
Casing	Cast Iron	Nickel chromium cast iron /Wear resistant cast iron /Cast steel + Wear-resistant coating	Duplex stainless steel	Ductile CI / Cast steel / Stainless steel	According to API610 I-1,I-2, S-5,S-8, C-6,A-7, A-8,D-1, D-2
Impeller	CI/Bronze/ Stainless steel	Ductile CI /SS420/ Stainless steel	Duplex stainless steel	SS420/ Stainless steel	
Bearing housing	Cast Iron	Cast Iron	Cast Iron	Cast Iron	
Shaft	SS420	SS420	Duplex stainless steel	SS420/ Stainless steel	
Wear ring	Cast Iron	Ductile CI/SS420	Bronze / Duplex stainless steel with hardening treatment	Ductile CI /Cast steel	
Shaft sleeve	SS420	SS420	Duplex stainless steel	SS420	
Shaft seal	Packing/ Mechanical seal	Packing/ Mechanical seal	Mechanical seal	Mechanical seal	
Flushing Pipeline	Q235-A	Q235-A	316L	Q235-A/stainless steel	

Note: The materials of pump parts are chosen according to the pressure rating, application, medium, operating temperature and customer requirements etc.

Technical Data

Shaft Diameter, Shaft Seal and Bearing

Unit: mm, unless other wise stated

Model	Shaft dia.	Nominal dia. Packing/ Mechanical d	Sealed chamber D	Sealed chamber L	Bearing	Mechanical seal	Pump structure
NSC125-80-210	35	50	75	72	6307 SKF	M74N/50-G92-Q2BVV (Mechanical Seal Type B)	Horizontal Installation Type C
NSC125-80-270							
NSC125-80-350							
NSC150-100-250							
NSC150-100-320							
NSC150-100-400	45	60	85	82	6309 SKF	M74N/60-G92-Q2BVV (Mechanical Seal Type B)	Horizontal Installation Type C
NSC200-125-240							
NSC200-125-300							
NSC200-125-380							
NSC200-125-480							
NSC200-150-290	55	70	95	85	6311 SKF	M74N/70-G92-Q2BVV (Mechanical Seal Type B)	Horizontal Installation Type C
NSC200-150-360							
NSC200-150-460							
NSC250-200-340							
NSC250-200-430							
NSC300-250-270	65	80	110	93	6313 FAG	M74N/80-G92-Q2BVV (Mechanical Seal Type B)	Horizontal Installation Type C
NSC300-250-280							
NSC250-200-530							
NSC250-200-660							
NSC300-250-390							
NSC350-300-310	75	90	120	92	6315 SKF	M74N/90-G92-Q2BVV (Mechanical Seal Type A)	Horizontal Installation Type A
NSC350-300-330							
NSC300-250-490							
NSC300-250-610							
NSC400-300-450							
NSC400-350-360							
NSC400-350-380							
NSC450-450-350							
NSC500-400-400							
NSC500-400-420							
NSC500-400-570							

Model	Shaft dia.	Norminal dia. packing/mechanical seal d	Sealed chamber D	Sealed chamber L	Bearing	Mechanical seal Model	Pump structure
NSC300-250-780	85	110	150	130	6318 SKF	H75N/110-G92-Q2BVV (Mechanical Seal Type A)	Horizontal Installation Type A
NSC400-300-570	85	110	150	130	6317 FAG	M74N/110-G92-Q2BVV (Mechanical Seal Type A)	Horizontal Installation Type A
NSC400-300-700							
NSC400-350-520							
NSC500-400-675							
NSC500-400-540	100	135	180	150	NU321/6321 SKF	M74N/135-G92-Q2BVV (Mechanical Seal Type A)	Horizontal Installation Type B
NSC500-400-660							
NSC500-300-790							
NSC600-400-740							
NSC600-450-640							
NSC700-500-670							
NSC700-600-600	115	150	195	180	NU324/6324 SKF	M74N/150-G92-Q2BVV (Mechanical Seal Type A)	Horizontal Installation Type A
NSC500-300-780							
NSC500-300-920							
NSC600-400-850							
NSC700-600-740	80	115	160	170	6317 FAG	M74N/115-G92-Q2BVV (Mechanical Seal Type A)	Horizontal Installation Type A
NSC600-500-520							
NSC600-500-550	80	115	160	170	6320 SKF	M74N/115-G92-Q2BVV (Mechanical Seal Type A)	Horizontal Installation Type A
NSC600-500-580	130	170	215	176	NU328/6328 SKF	M74N/170-G92-Q2BVV (Mechanical Seal Type A)	Horizontal Installation Type A
NSC700-500-940							
NSC800-700-750	120	160	205	170	NU326/6326 SKF	M74N/160-G92-Q2BVV (Mechanical Seal Type A)	Horizontal Installation Type B

Note: Above values are valid for the pumps under normal pressure and temperature, if the medium temp. is more than 80°C and the pressure exceeds the pressure limits in the below table, pls contact CNP.

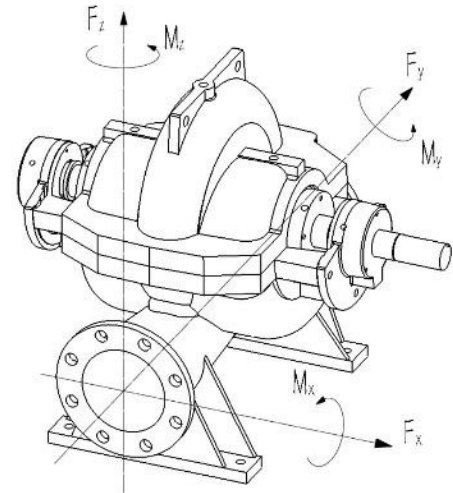
Pressure Limits

Standard test pressure: $1.5 \times H_{\text{Duty point}} + \text{Suction pressure}$

Model	Permissible operating pressures(MPa)	Model	Permissible operating pressures(MPa)
NSC125-80-210	1.6	NSC400-300-450	1.6
NSC125-80-270	1.6	NSC400-300-570	1.6
NSC125-80-350	1.6	NSC400-300-700	2.5
NSC150-100-250	1.6	NSC400-350-360	1.6
NSC150-100-320	1.6	NSC400-350-380	1.6
NSC150-100-400	1.6	NSC400-350-520	1.6
NSC200-125-240	1.6	NSC450-450-350	1.0
NSC200-125-300	1.6	NSC500-300-780	4.0
NSC200-125-380	1.6	NSC500-300-920	2.5
NSC200-125-480	1.6	NSC500-400-400	1.6
NSC200-150-290	1.6	NSC500-400-420	1.6
NSC200-150-360	1.6	NSC500-400-540	1.6
NSC200-150-460	1.6	NSC500-400-570	1.0
NSC200-150-570	2.5	NSC500-400-660	2.5
NSC250-200-340	1.6	NSC500-400-675	1.0
NSC250-200-430	1.6	NSC600-400-740	1.6
NSC250-200-530	1.6	NSC600-450-640	1.6
NSC250-200-660	2.5	NSC600-500-520	1.0
NSC300-250-270	1.6	NSC600-500-550/580	1.0
NSC300-250-280	1.6	NSC700-500-670	1.6
NSC300-250-390	1.6	NSC700-500-940	2.5
NSC300-250-490	1.6	NSC700-600-600	1.0
NSC300-250-610	2.5	NSC700-600-680	1.0
NSC300-250-780	3.0	NSC700-600-740	1.6
NSC350-300-310	1.6	NSC800-700-750	1.0
NSC350-300-330	1.6		

Impeller, Nozzle Forces and Nozzle Moments

Model	Impeller Dimensions(mm)		Permissible Nozzle forces Fx, Fy, Fz N	Permissible Nozzle moments Mx, My, Mz Nm
	Free passage +/-10%	Max.Diameter		
NSC125-80-210	30	216	800	500
NSC125-80-270	25	270		
NSC125-80-350	22	345		
NSC150-100-250	30	254	1000	700
NSC150-100-320	24	325		
NSC150-100-400	21	423		
NSC200-125-240	48	250	1500	1000
NSC200-125-300	37	301		
NSC200-125-380	35	395		
NSC120-125-480	29	491	2000	1500
NSC200-150-290	52	290		
NSC200-150-360	44	370	2500	2000
NSC200-150-460	35	460		
NSC200-150-570	32	585	3000	2750
NSC250-200-340	57	338		
NSC250-200-430	52	426		
NSC250-200-530	40	530		
NSC250-200-660	38	665		
NSC300-250-270	119	302		
NSC300-250-280	96	321		
NSC300-250-390	70	395		
NSC300-250-490	60	490		
NSC300-250-610	45	610		
NSC300-250-780	42	770		
NSC350-300-310	132	310		
NSC350-300-330	101	350		
NSC400-300-450	81	450		
NSC400-300-570	67	580		
NSC400-300-700	65	700		
NSC400-350-360	149	360		
NSC400-350-380	122	415		
NSC400-350-520	90	558		
NSC450-450-350	161	350		
NSC500-300-780	81	780		
NSC500-300-920	85.4	920		
NSC500-400-400	180.6	412		
NSC500-400-420	180	425		
NSC500-400-540	105	545		
NSC500-400-570	105	545		
NSC500-400-660	84.9	666		
NSC500-400-675	84.9	666		
NSC600-400-740	99	740		
NSC600-450-640	128	650		
NSC600-500-520	175	520		
NSC600-500-550	243	580		
NSC600-500-580				
NSC700-500-670	130	672		
NSC700-500-940	128.5	940		
NSC700-600-600	103.5	610		
NSC700-600-680	240	702		
NSC700-600-740	146	780		
NSC800-700-750	315.9	750		



Speeds

The Performance Range Chart shows the pump operating range, for higher speed

Vibrations

1. The normal operating range of pump is 0.4~1.25 times of rated capacity.
2. The vibration values of pump are according to ISO 2372-1974.

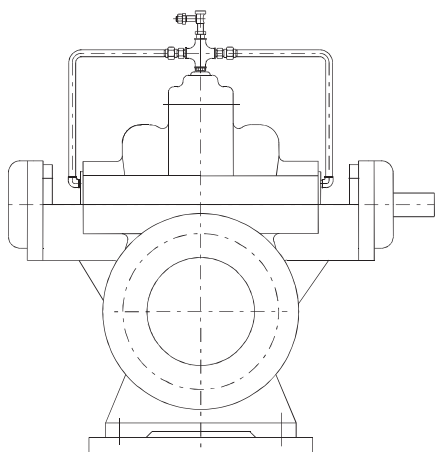
Paint Specifications

	Inside	Outside
Pre-treatment	Blasting (2 times)	
Primer coating	Epoxy zinc-rich primer	
Finish coating	Wet parts use the Interzone 954 or Epoxy zinc-rich primer	Acrylic Enamel Normal NSC: RAL5015(Blue) Fire-Fighting Pump: RAL3000(Red)

Note: Super light energy saving coating, wear-resistant coating, anti-corrosion coating and others are available according to the different medium, application, customer requirements and the coating is extra-charged.

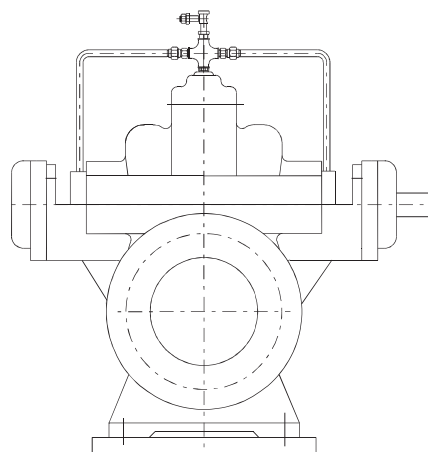
Arrangement

Sealing Water Pipes

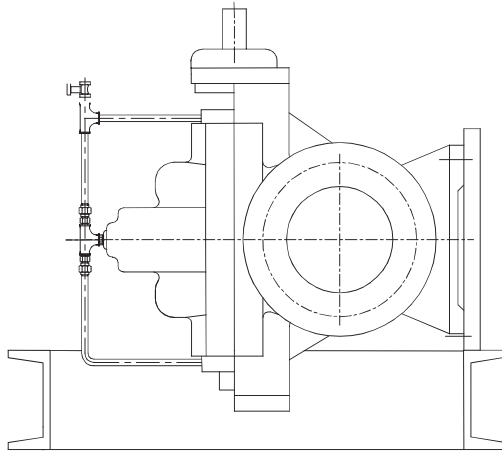


▲01 Flushing water piping stuffing box

Note: If $H > 80\text{m}$, flushing water piping will have control valve (See fig.04)

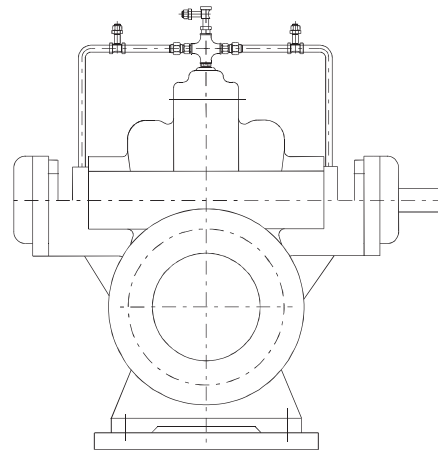
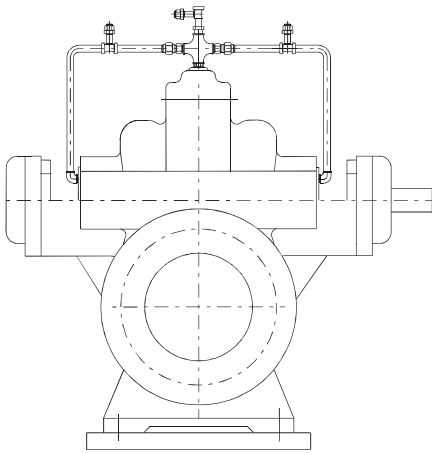


▲02 Flushing water piping mechanical seal

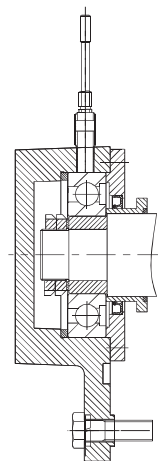
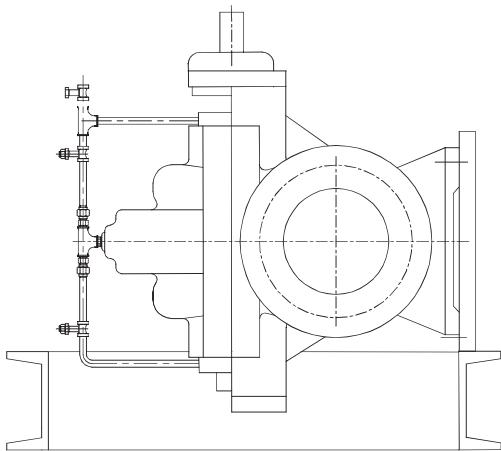


▲ 03 Mechanical seal and flushing water piping for lineshaft bearing

Venting Connections and Bearing Temperature Sensor (Vent valves are available as accessories)



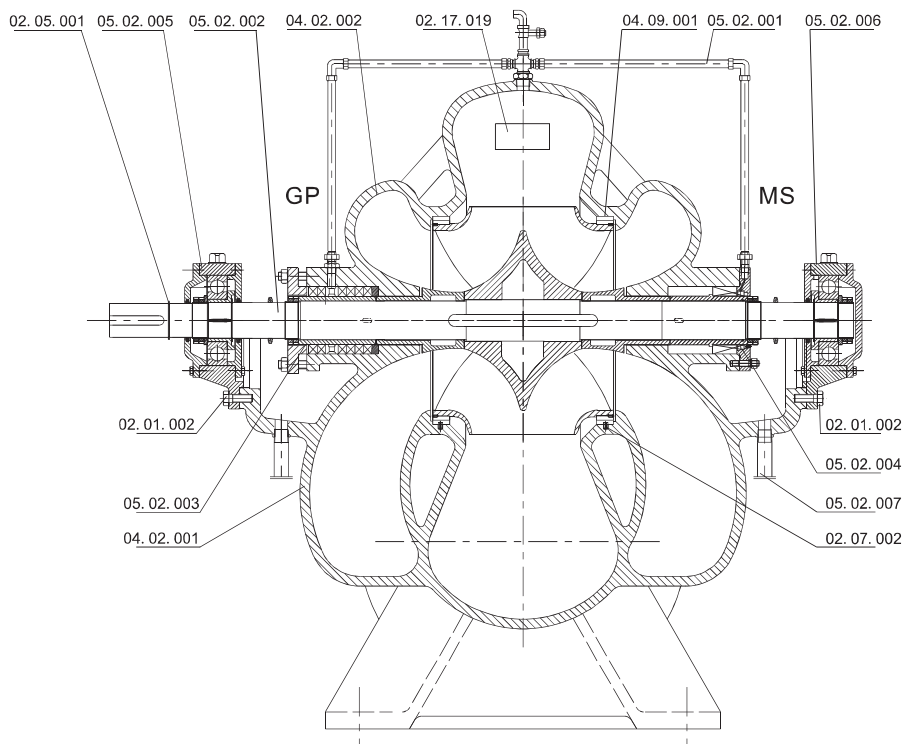
▲ 04 Flushing water piping stuffing box with vent valve ▲ 05 Flushing water piping mechanical seal with vent valve



▲ 06 Flushing water piping and vent valve (Vertical installation) ▲ 07 Bearing temperature sensor (PT100)

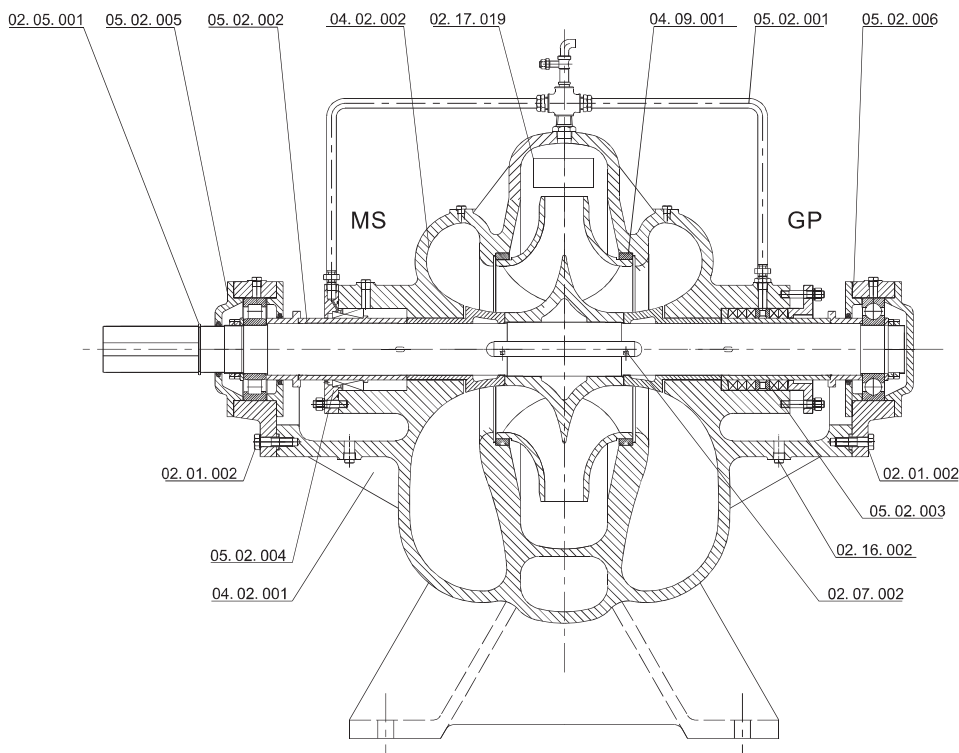
Sectional View—NSC

Horizontal Installation



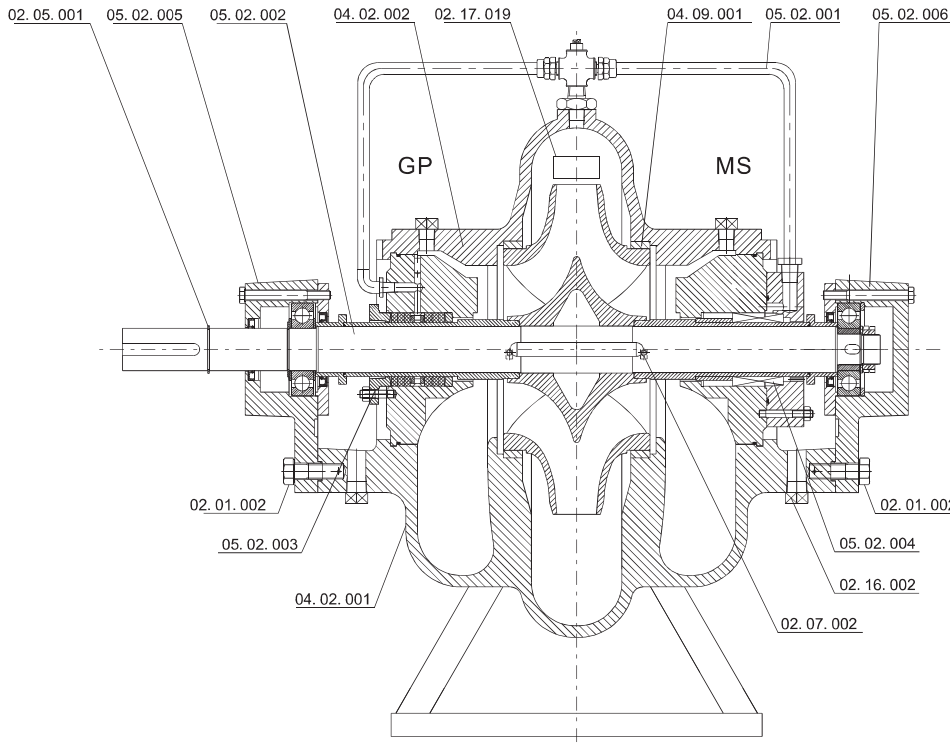
▲ Type A

Part No.	Part Name
02.05.001	Shaft Circlip
05.02.005	Bearing assembly (DE)
05.02.002	Rotor assembly
04.02.002	Upper casing
02.17.019	Nameplate
04.09.001	Casing wear ring
05.02.001	Flushing water piping
05.02.006	Bearing assembly (NDE)
02.01.002	Bolt
05.02.003	Packing seal assembly
04.02.001	Lower casing
05.02.004	Mechanical seal assembly
05.02.007	Drainage pipe
02.07.002	Wear ring dowel pin



▲ Type B

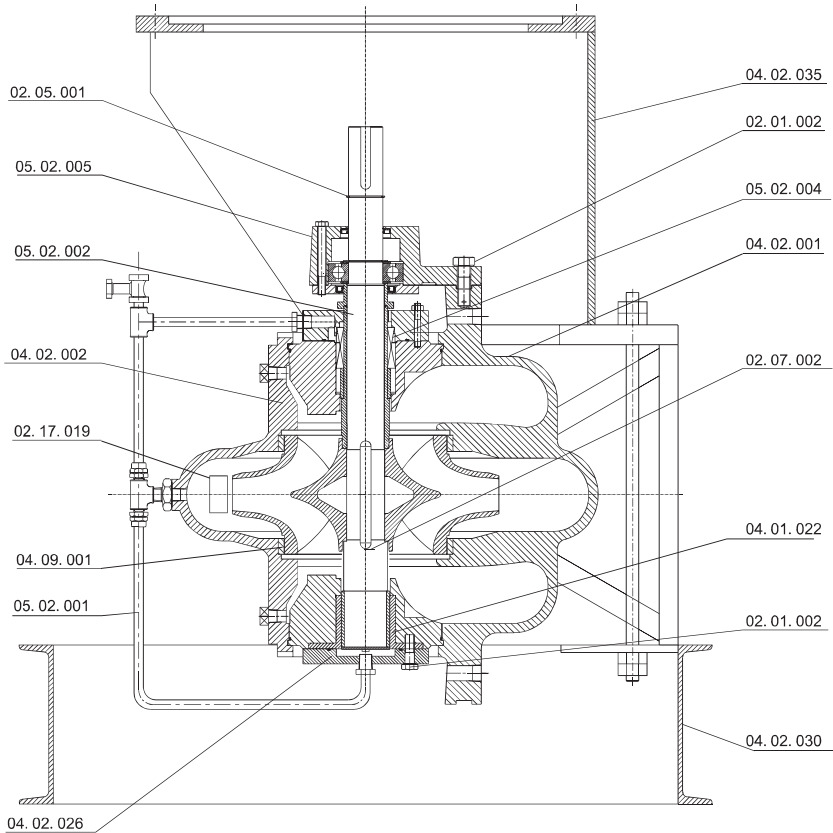
Part No.	Part Name
02.05.001	Shaft Circlip
05.02.005	Bearing assembly (DE)
05.02.002	Rotor assembly
04.02.002	Upper casing
02.17.019	Nameplate
04.09.001	Casing wear ring
05.02.001	Flushing water piping
05.02.006	Bearing assembly (NDE)
02.01.002	Bolt
05.02.004	Mechanical seal assembly
04.02.001	Lower casing
05.02.003	Packing seal assembly
02.16.002	Plug
02.07.002	Wear ring dowel pin



▲ Type C

Part No.	Part Name
02.05.001	Shaft Circlip
05.02.005	Bearing assembly (DE)
05.02.002	Rotor assembly
04.02.002	Upper casing
02.17.019	Nameplate
04.09.001	Casing wear ring
05.02.001	Flushing water piping
05.02.006	Bearing assembly (NDE)
02.01.002	Bolt
05.02.003	Packing seal assembly
04.02.001	Lower casing
05.02.004	Mechanical seal assembly
02.16.002	Plug
02.07.002	Wear ring dowel pin

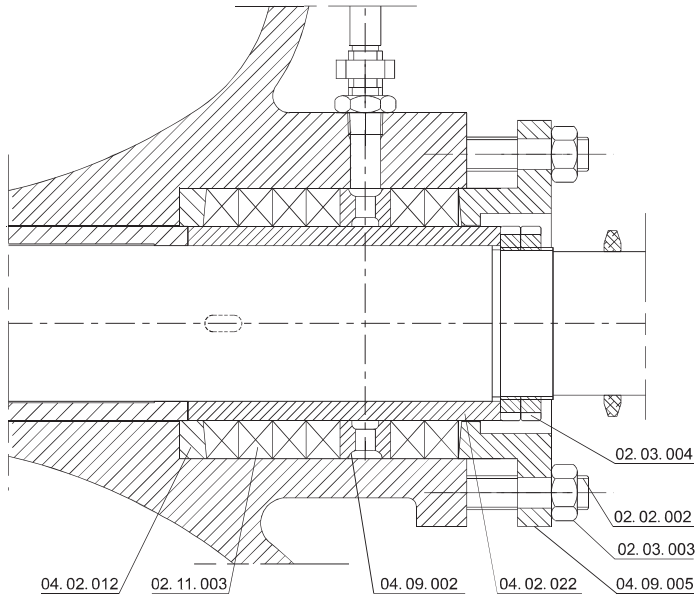
Vertical Installation



Part No.	Part Name
02.05.001	Shaft Circlip
05.02.005	Bearing assembly (DE)
05.02.002	Rotor assembly
04.02.002	Upper casing
02.17.019	Nameplate
04.09.001	Casing wear ring
05.02.001	Flushing water piping
04.02.026	Cap
04.02.035	Motor riser
02.01.002	Bolt
05.02.004	Mechanical seal assembly
04.02.001	Lower casing
02.07.002	Wear ring dowel pin
04.01.022	Bearing bush
04.02.030	Foot

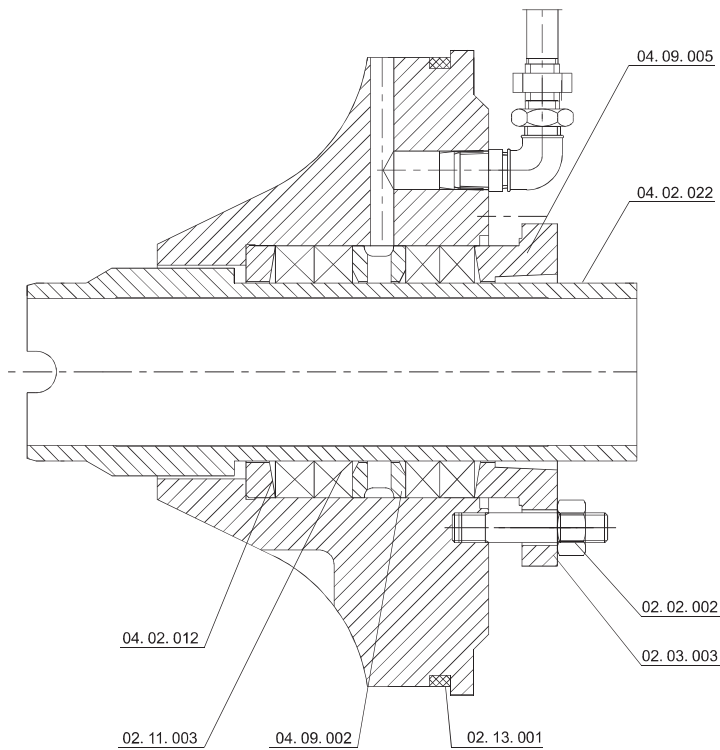
Sectional View—Shaft Seal

1. Soft Packed Stuffing Box



Part No.	Part Name
04.02.012	Set neck ring
02.11.003	Gland packing
04.09.002	Lantern ring
04.02.022	Shaft protecting sleeve
04.09.005	Gland
02.03.003	Nut
02.02.002	Bolt
02.03.004	Round nut

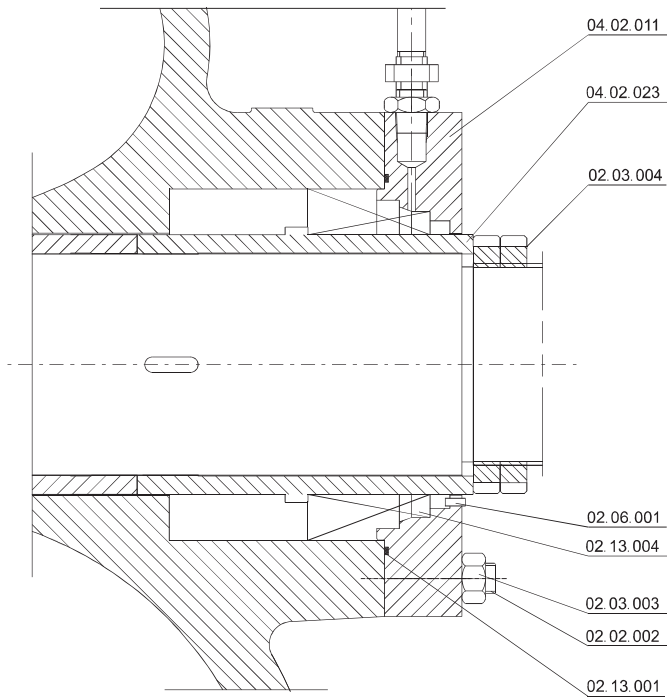
▲ Type A—Apply to horizontal installation type A and B



Part No.	Part Name
04.09.005	Gland
04.02.022	Shaft protecting sleeve
04.02.012	Set neck ring
02.11.003	Gland packing
04.09.002	Lantern ring
02.13.001	O-Ring
02.02.002	Bolt
02.03.003	Nut

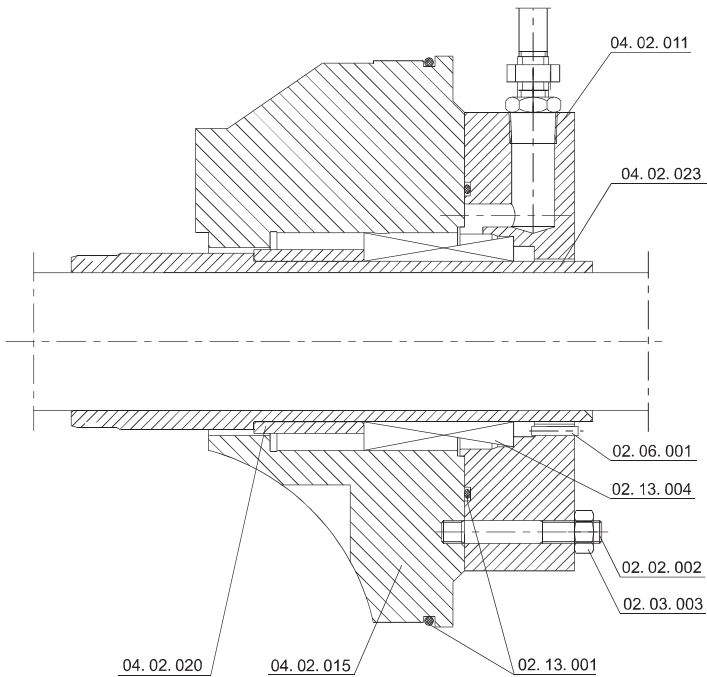
▲ Type B—Apply to horizontal installation type C

2.Mechanical Seal



Part No.	Part Name
04.02.011	Seal cover
04.02.023	Shaft protecting sleeve
02.03.004	Round nut
02.06.001	Round pin
02.13.004	Shaft seal unit
02.03.003	Nut
02.02.002	bolt
02.13.001	O-Ring

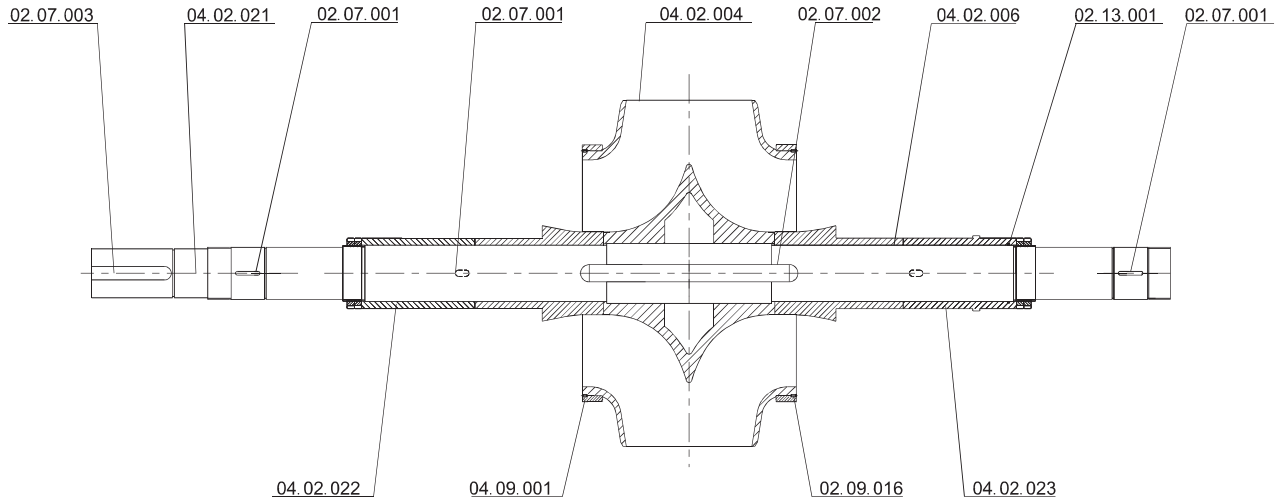
▲ Type A—Apply to horizontal installation type A and B



Part No.	Part Name
04.02.011	Seal cover
04.02.023	Shaft protecting sleeve
02.06.001	Round pin
02.13.004	Shaft seal unit
02.02.002	Bolt
02.03.003	Nut
02.13.001	O-Ring
04.02.015	Shaft seal housing
04.02.020	Spacer sleeve

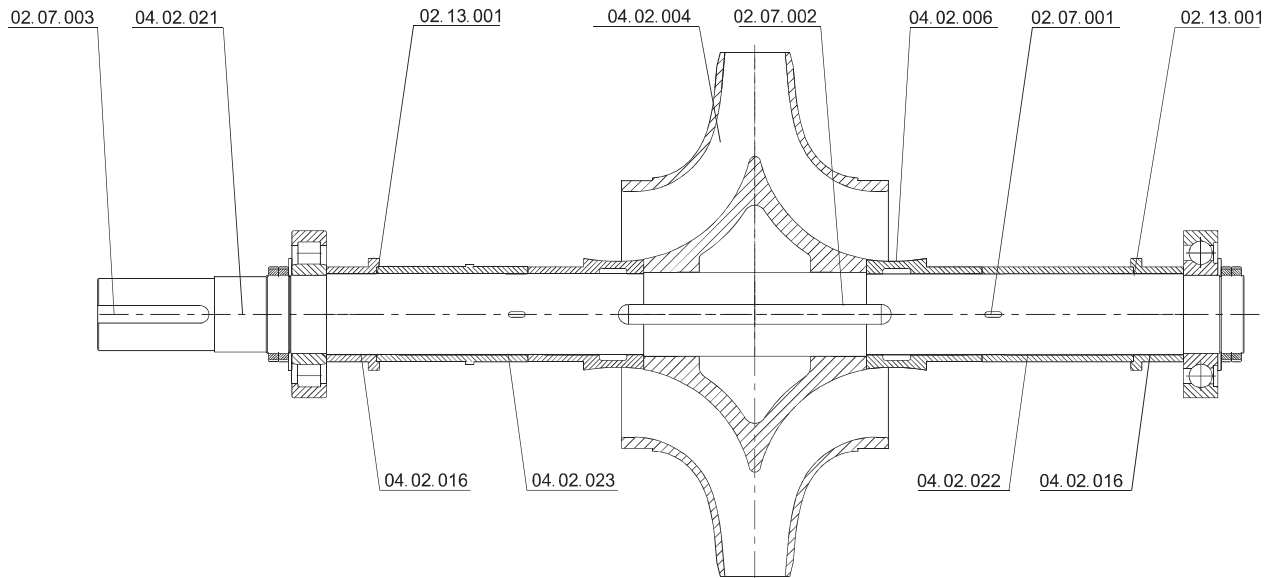
▲ Type B—Apply to horizontal installation type C

Sectional View—Rotor



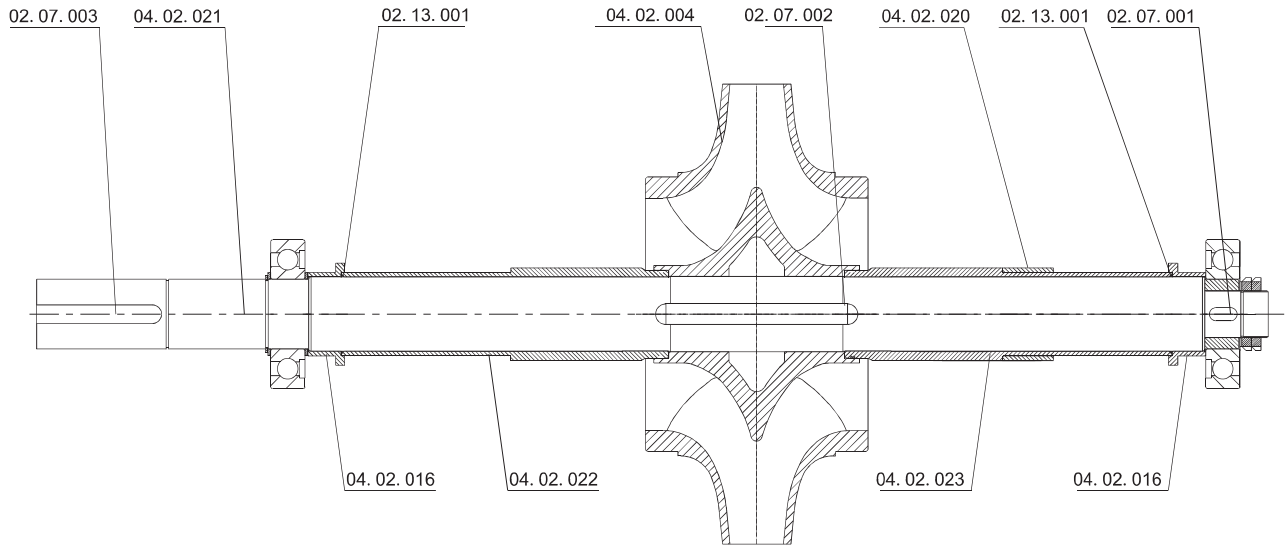
▲ Type A—Apply to horizontal installation type A

Part No.	Part Name	Part No.	Part Name	Part No.	Part Name
02.07.003	Key C	04.02.021	Shaft	02.07.001	Key A
04.02.004	Impeller	02.07.002	Key B	04.02.006	Shaft protecting sleeve
02.13.001	O-Ring	04.02.022	Shaft protecting sleeve(GP)	04.09.001	Impeller seal ring
02.09.016	Impeller locating screw	04.02.023	Shaft protecting sleeve(MS)		



▲ Type B—Apply to horizontal installation type B

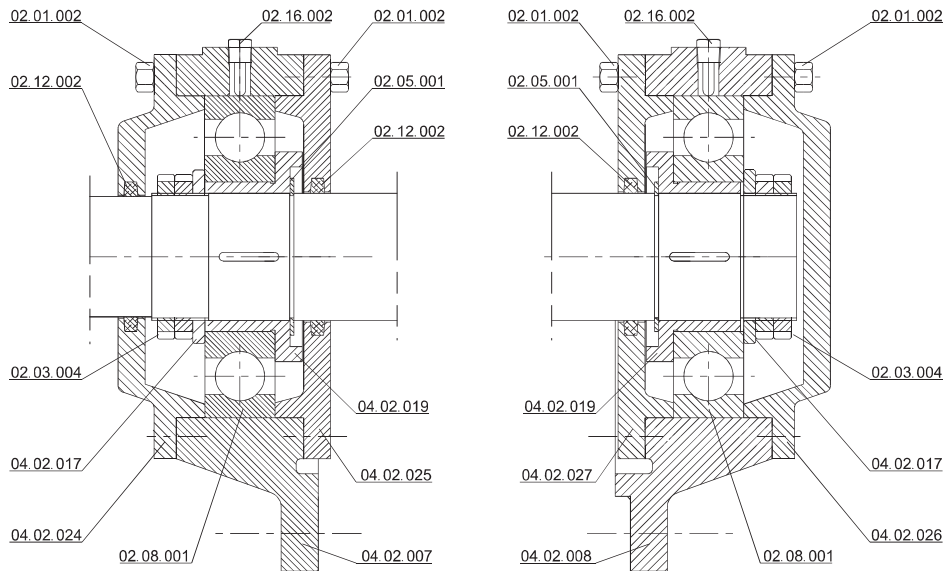
Part No.	Part Name	Part No.	Part Name	Part No.	Part Name
02.07.003	Key C	04.02.021	Shaft	02.13.001	O-Ring
04.02.004	Impeller	02.07.002	Key B	04.02.006	Shaft protecting sleeve
02.07.001	Key A	04.02.016	Water baffle sleeve	04.02.023	Shaft protecting sleeve(MS)
04.02.022	Shaft protecting sleeve(GP)				



▲ Type C—Apply to horizontal installation type C

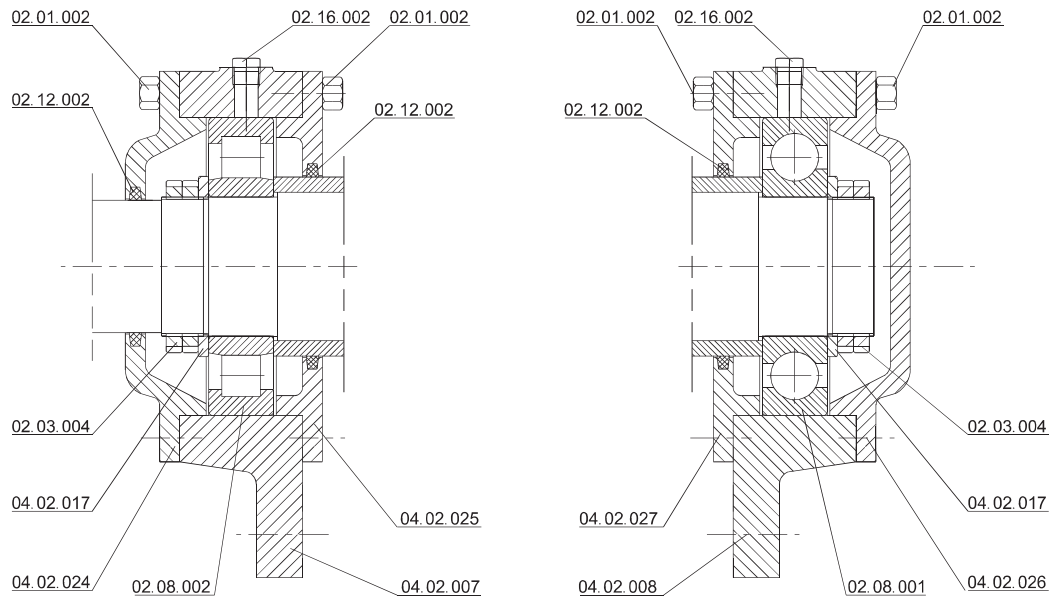
Part No.	Part Name	Part No.	Part Name	Part No.	Part Name
02.07.003	Key C	04.02.021	Shaft	02.13.001	O-Ring
04.02.004	Impeller	02.07.002	Key B	04.02.020	Spacer sleeve(MS)
02.07.001	Key A	04.02.016	Water baffle sleeve	04.02.022	Shaft protecting sleeve(GP)
04.02.023	Shaft protecting sleeve(MS)				

Sectional View—Bearing



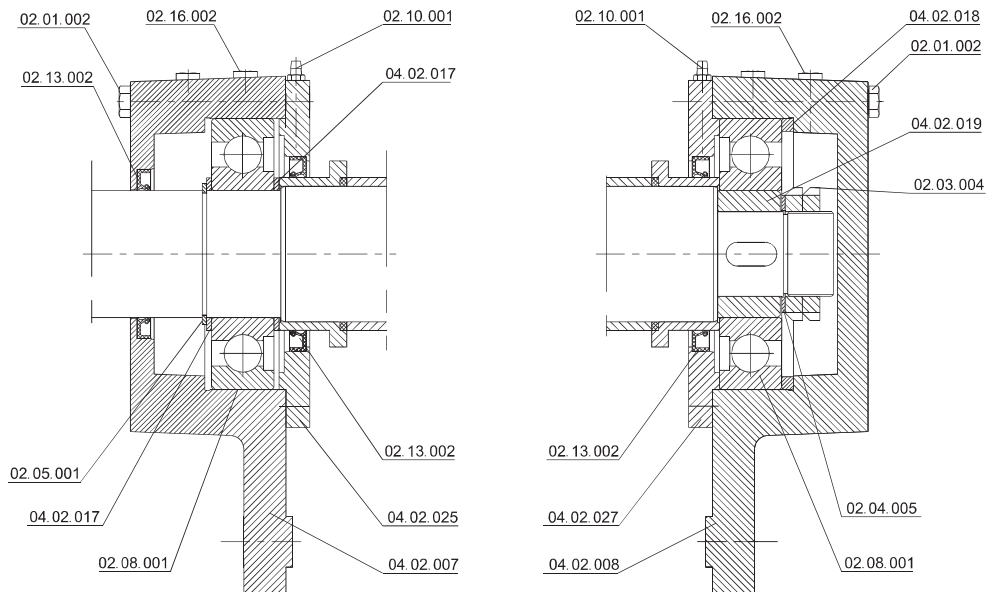
▲ Type A---Apply to horizontal installation type A

Part No.	Part Name	Part No.	Part Name	Part No.	Part Name	Part No.	Part Name
02.01.002	Hex bolts	02.12.002	Felt ring	02.03.004	Round nut	04.02.017	Bearing circlip
04.02.024	Bearing outer cover(DE)	02.08.001	Deep groove ball bearing	02.16.002	Plug	02.05.001	Shaft Circlip
04.02.019	Bearing sleeve	04.02.025	Bearing inner cover (DE)	04.02.007	Bearing housing (DE)	04.02.027	Bearing inner cover (NDE)
04.02.008	Bearing housing (NDE)	04.02.026	Bearing outer cover (NDE)				



▲ Type B—Apply to horizontal installation type B

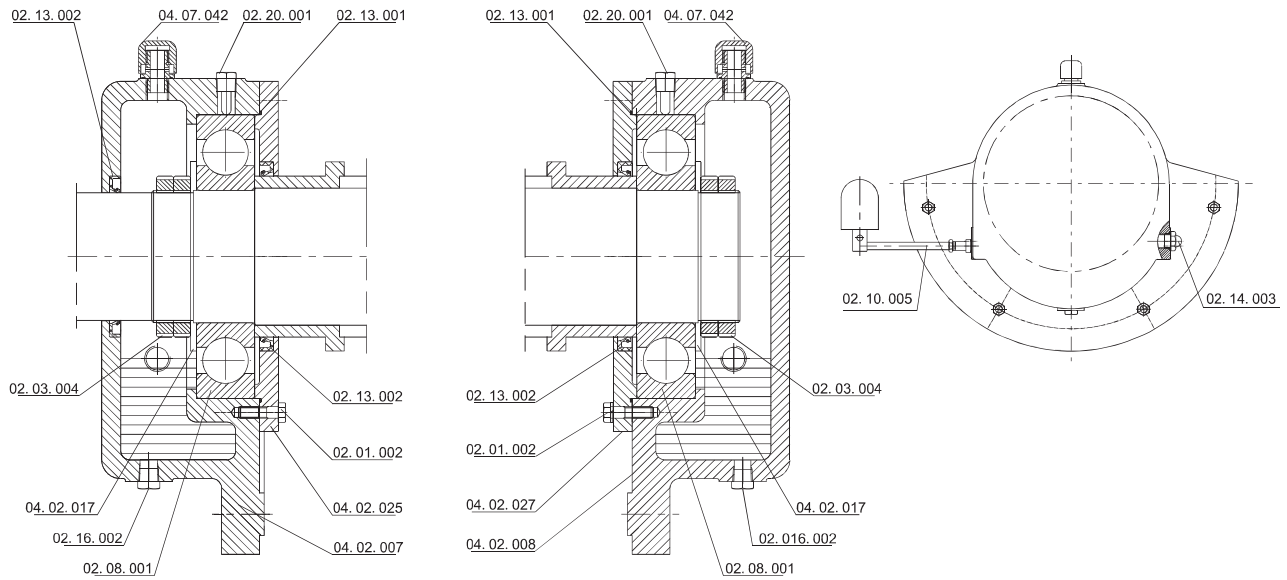
Part No.	Part Name	Part No.	Part Name	Part No.	Part Name	Part No.	Part Name
02.01.002	Hex bolts	02.12.002	Felt ring	02.03.004	Round nut	04.02.017	Bearing circlip
04.02.024	Bearing outer cover (DE)	02.08.002	Roller bearing	02.16.002	Plug	04.02.025	Bearing inner cover (DE)
04.02.007	Bearing housing (DE)	04.02.027	Bearing inner cover (NDE)	04.02.008	Bearing housing (NDE)	02.08.001	Deep groove ball bearing
04.02.026	Bearing outer cover (NDE)						



▲ Type C—Apply to horizontal installation type C

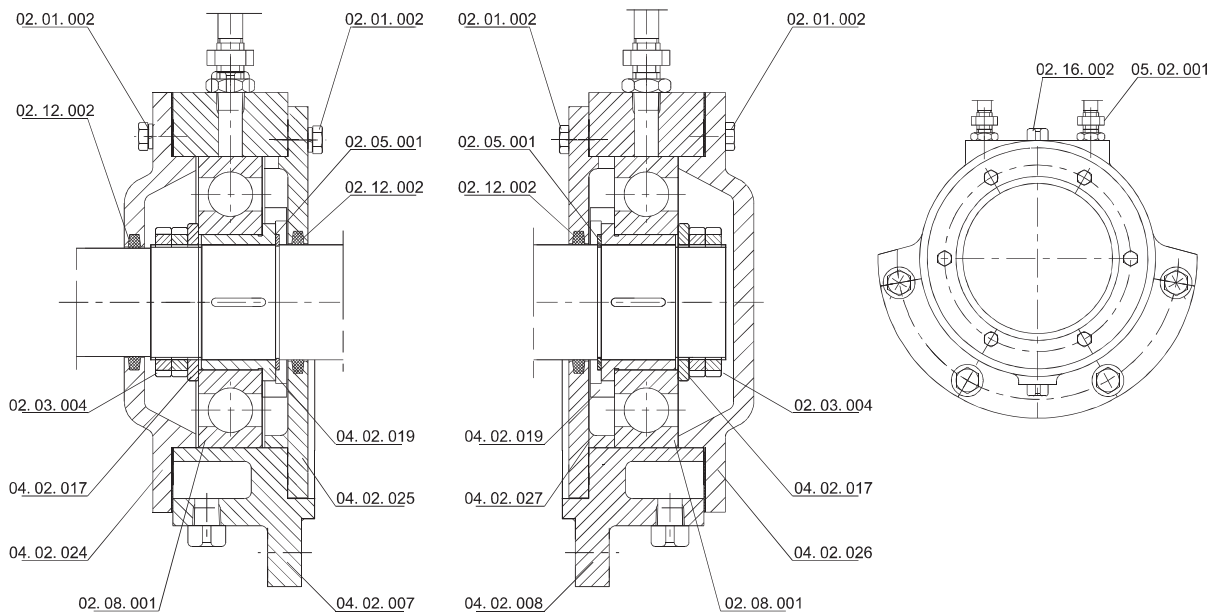
Part No.	Part Name	Part No.	Part Name	Part No.	Part Name	Part No.	Part Name
02.01.002	Hex bolts	02.13.002	Lip-type seal ring	02.05.001	Shaft Circlip	04.02.017	Bearing circlip
02.08.001	Deep groove ball bearing	02.16.002	Plug	02.10.001	Straight-through type oil cup	04.02.025	Bearing inner cover (DE)
04.02.007	Bearing housing (DE)	04.02.027	Bearing inner cover (NDE)	04.02.008	Bearing housing (NDE)	04.02.018	Bearing locating ring
04.02.019	Bearing sleeve	02.03.004	Round nut	02.04.005	Spring		

Bearing with oil lubrication



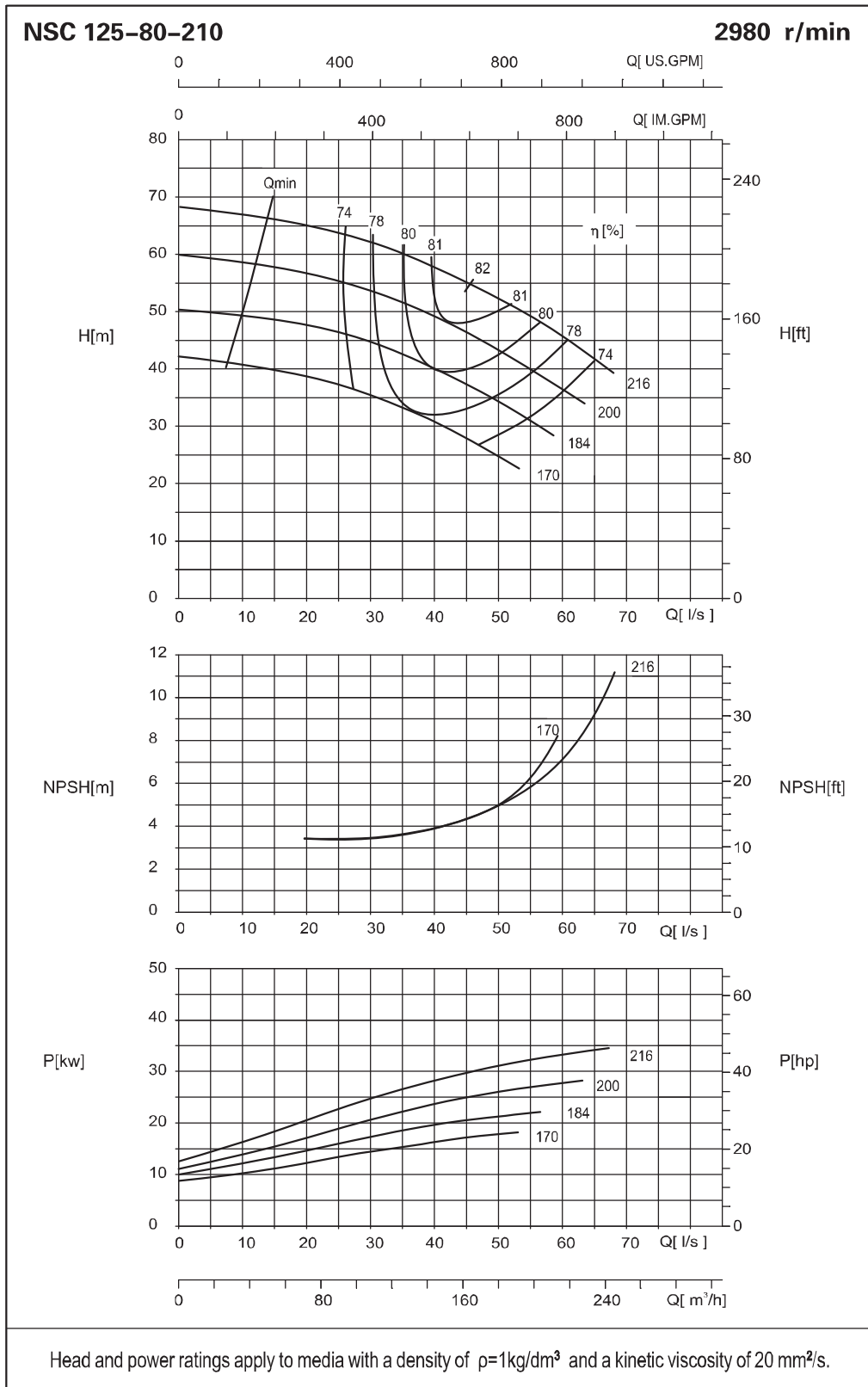
Part No.	Part Name	Part No.	Part Name	Part No.	Part Name	Part No.	Part Name
02.13.002	Lip-type seal ring	02.03.004	Round nut	04.02.017	Bearing circlip	02.16.002	Plug
02.08.001	Deep groove ball bearing	04.07.042	Breather cap	02.20.001	Temperature measuring device	02.13.001	O-Ring
02.01.002	Hex bolts	04.02.025	Bearing inner cover (DE)	04.02.007	Bearing housing (DE)	04.02.027	Bearing inner cover (NDE)
04.02.008	Bearing housing (NDE)	02.14.003	Oil sight gauge	02.10.005	Constant lever oiler		

Bearing with water cooling(Pumping higher temp. liquid)



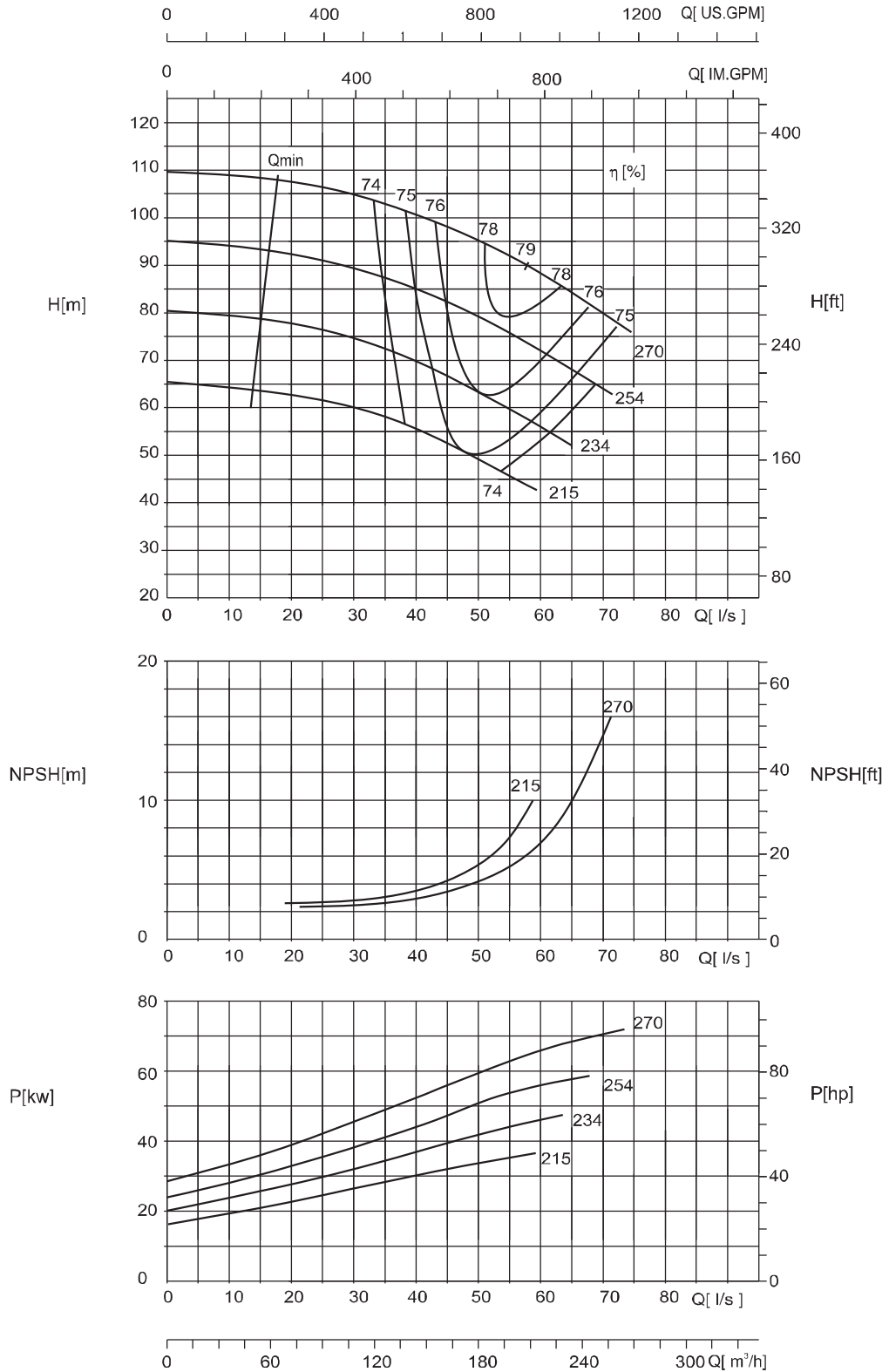
Part No.	Part Name	Part No.	Part Name	Part No.	Part Name	Part No.	Part Name
02.01.002	Hex bolts	02.12.002	Felt ring	02.03.004	Round nut	04.02.017	Bearing circlip
04.02.024	Bearing outer cover (DE)	02.08.001	Deep groove ball bearing	02.05.001	Shaft Circlip	04.02.019	Bearing sleeve
04.02.025	Bearing inner cover (DE)	04.02.007	Bearing housing (DE)	04.02.027	Bearing inner cover (NDE)	04.02.008	Bearing housing (NDE)
04.02.026	Bearing outer cover (NDE)	02.16.002	Plug	05.02.001	Cooling Piping		

Performance Curve



NSC 125-80-270

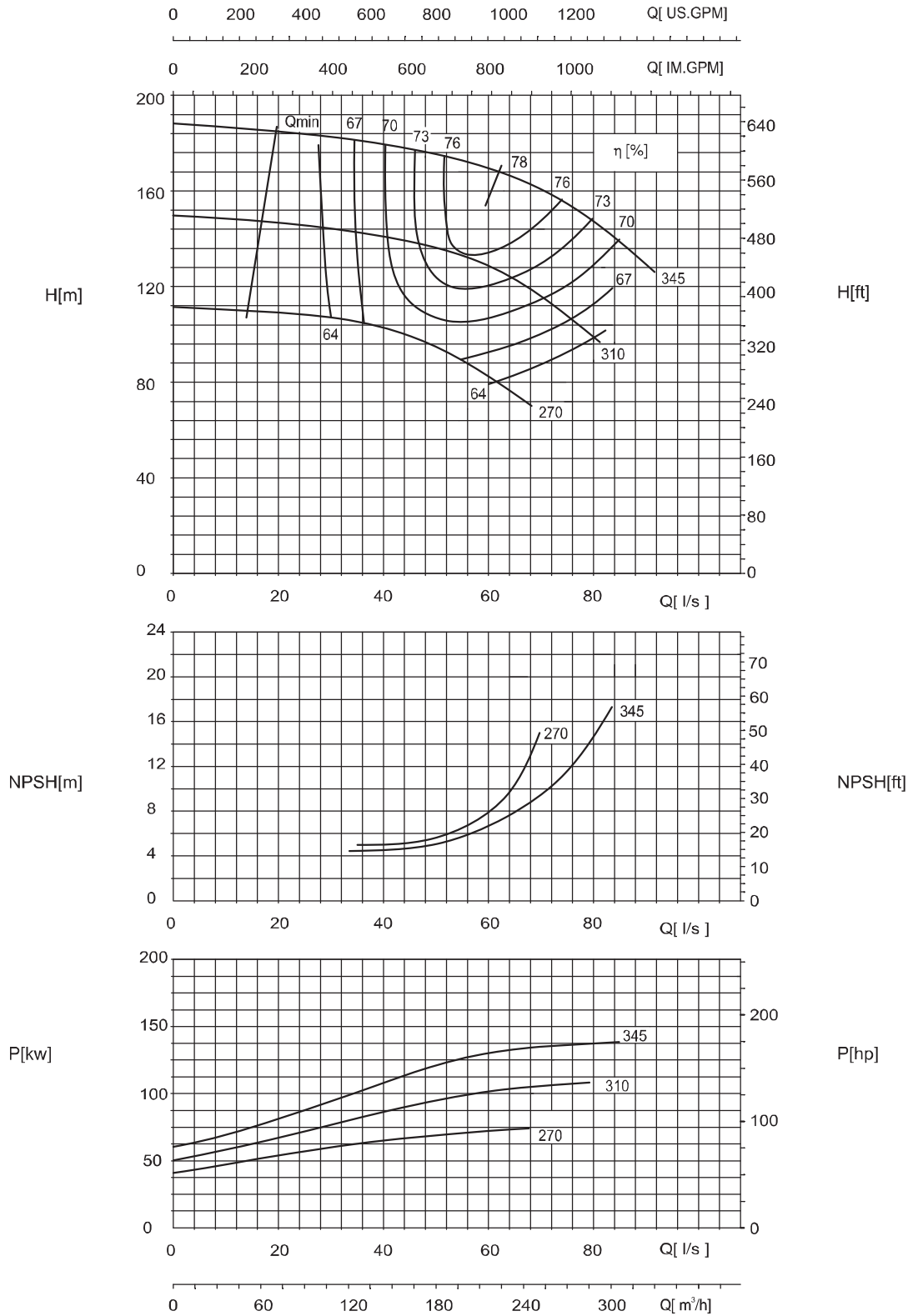
2980 r/min



Head and power ratings apply to media with a density of $\rho=1\text{kg/dm}^3$ and a kinetic viscosity of $20\text{ mm}^2/\text{s}$.

NSC 125-80-350

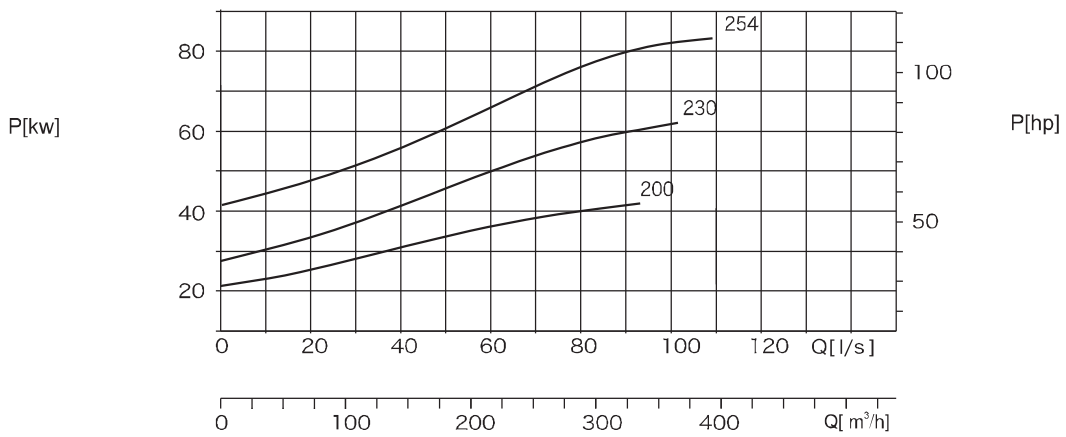
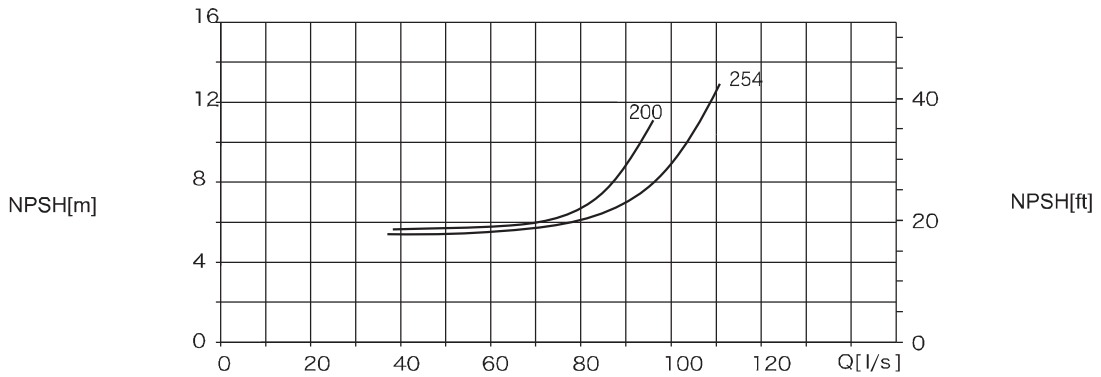
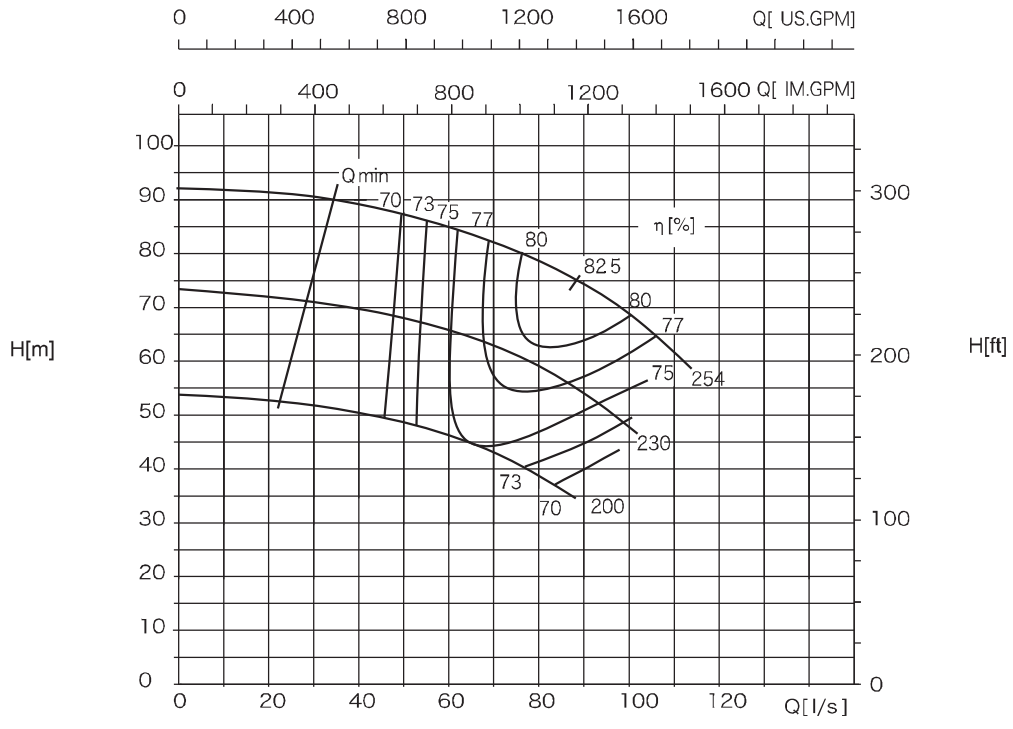
2980 r/min



Head and power ratings apply to media with a density of $\rho=1\text{kg/dm}^3$ and a kinetic viscosity of $20\text{ mm}^2/\text{s}$.

NSC 150-100-250

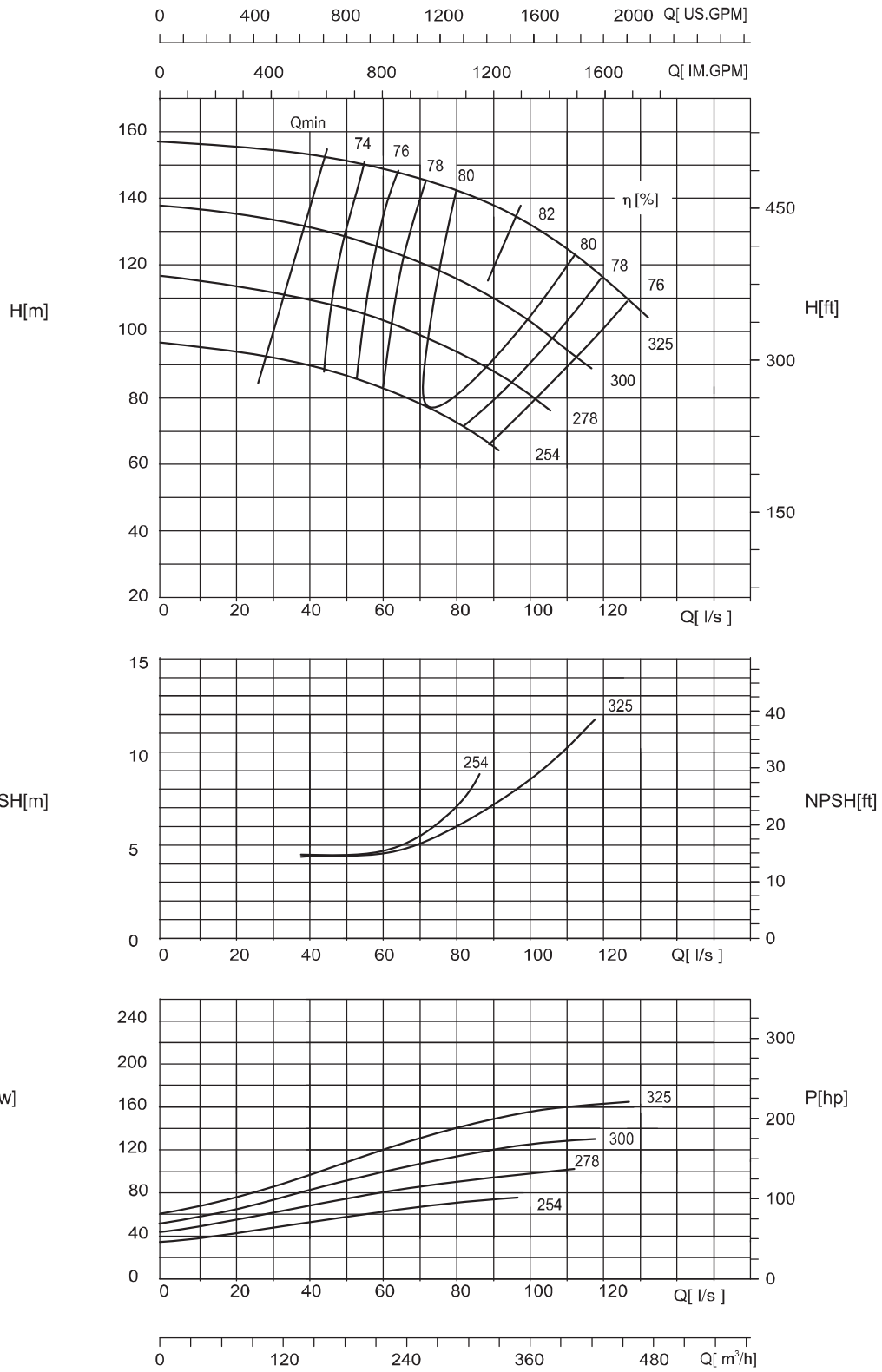
2980 r/min



Head and power ratings apply to media with a density of $\rho=1\text{kg/dm}^3$ and a kinetic viscosity of $20\text{ mm}^2/\text{s}$.

NSC 150-100-320

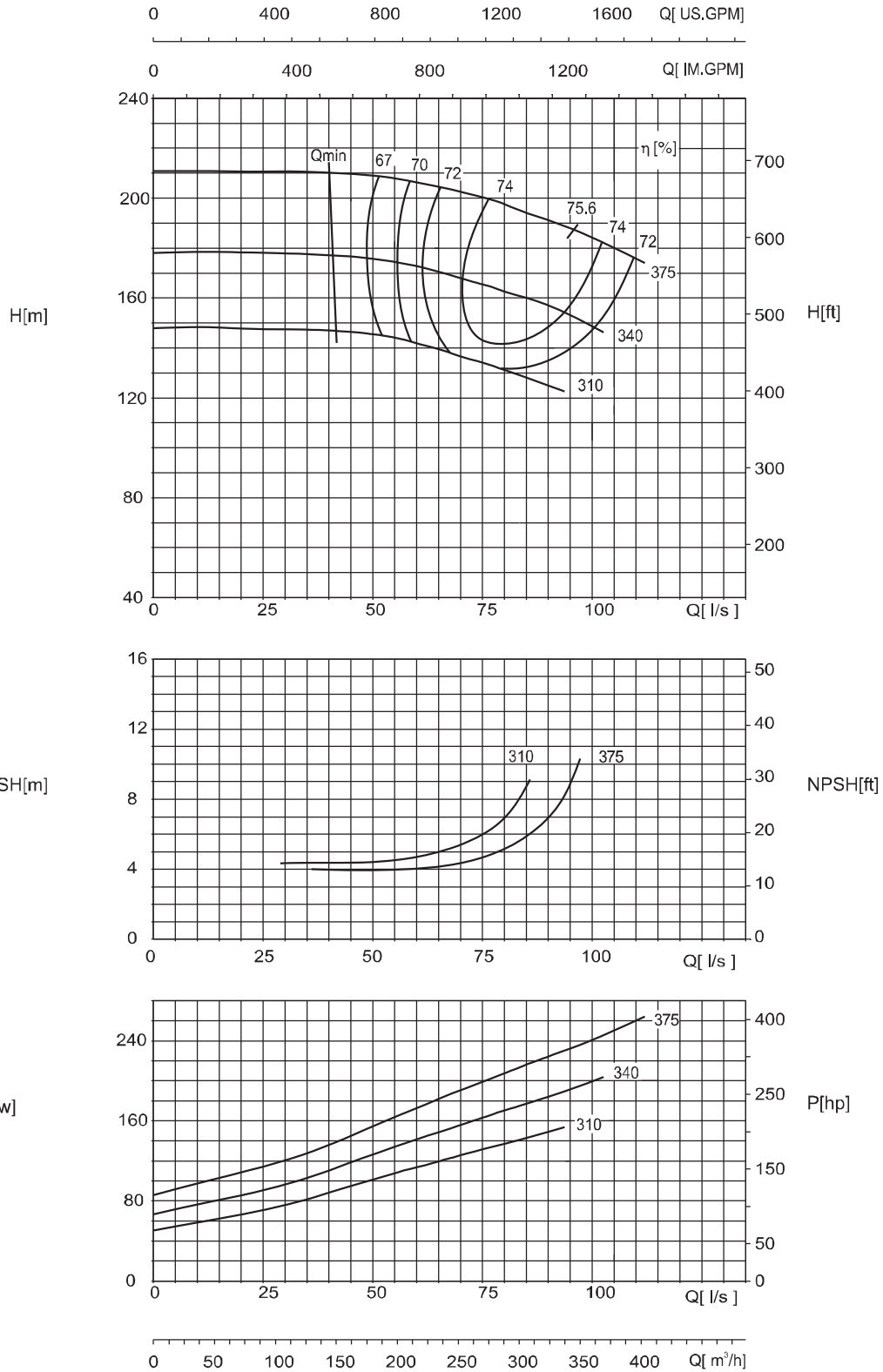
2980 r/min



Head and power ratings apply to media with a density of $\rho=1\text{kg/dm}^3$ and a kinetic viscosity of $20\text{ mm}^2/\text{s}$.

NSC 150-100-400G

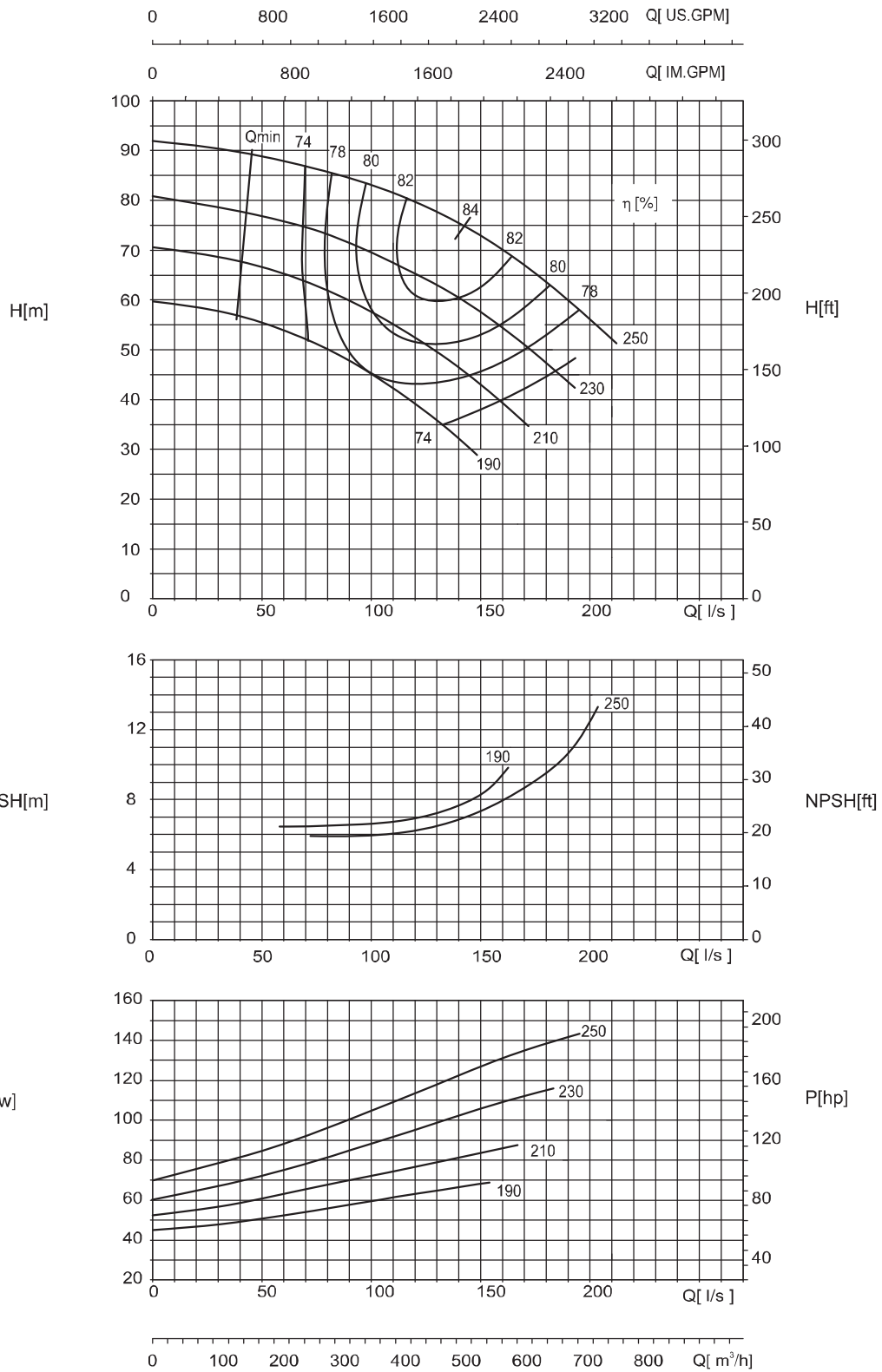
2980 r/min



Head and power ratings apply to media with a density of $\rho=1\text{kg/dm}^3$ and a kinetic viscosity of $20\text{ mm}^2/\text{s}$.

NSC 200-125-240

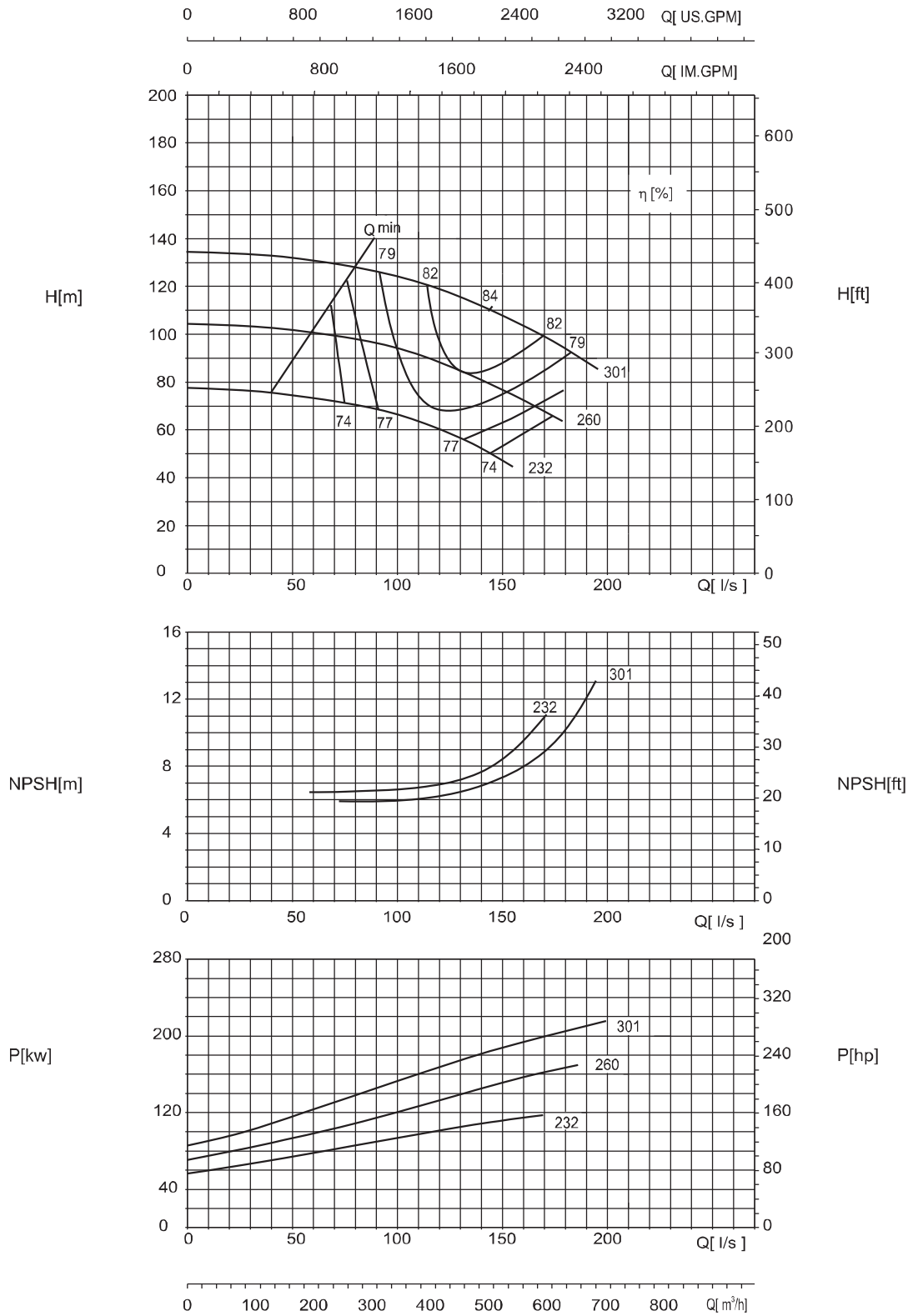
2980 r/min



Head and power ratings apply to media with a density of $\rho=1\text{kg/dm}^3$ and a kinetic viscosity of $20\text{ mm}^2/\text{s}$.

NSC 200-125-300

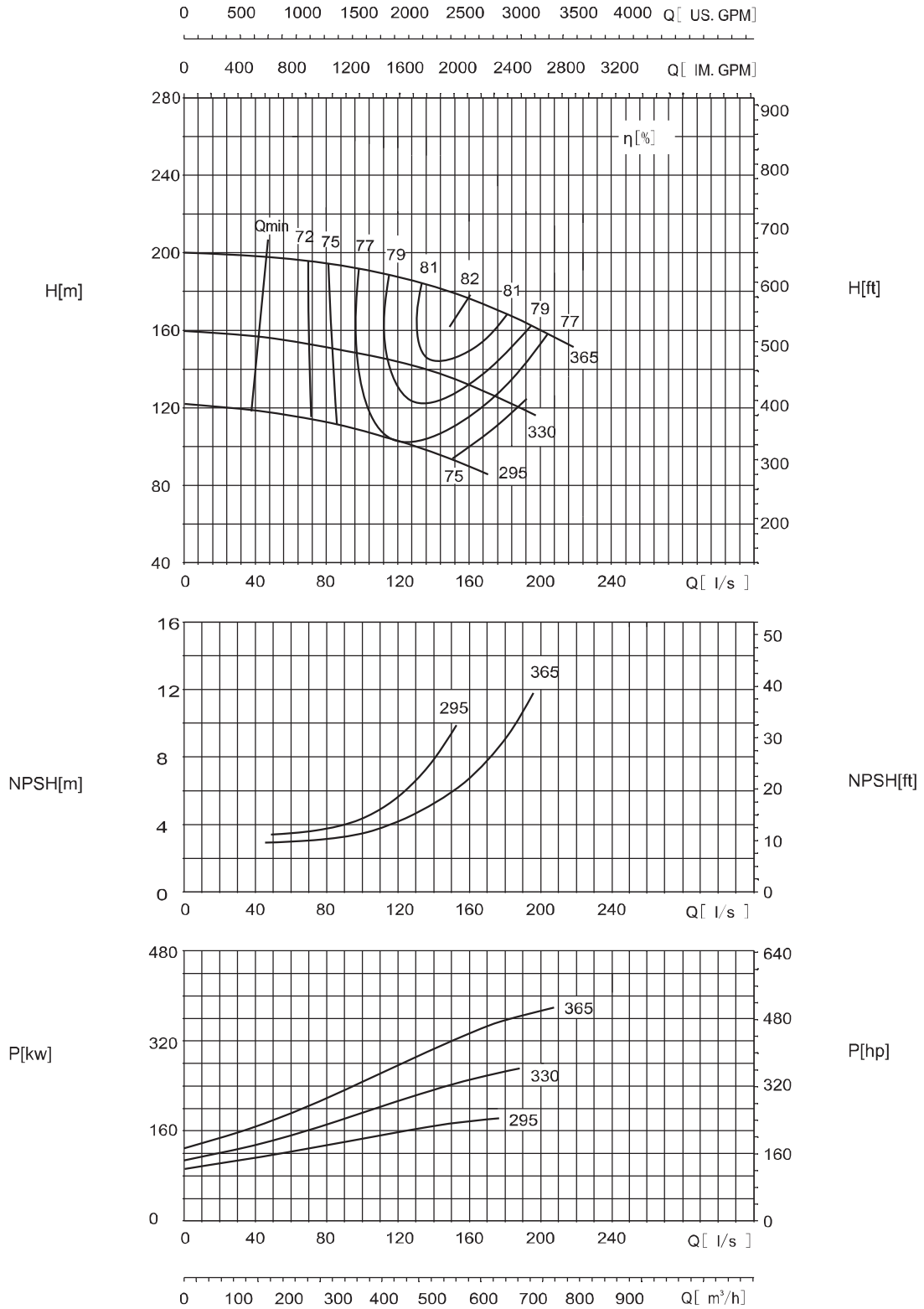
2980 r/min



Head and power ratings apply to media with a density of $\rho=1\text{kg/dm}^3$ and a kinetic viscosity of $20\text{ mm}^2/\text{s}$.

NSC 200-125-380

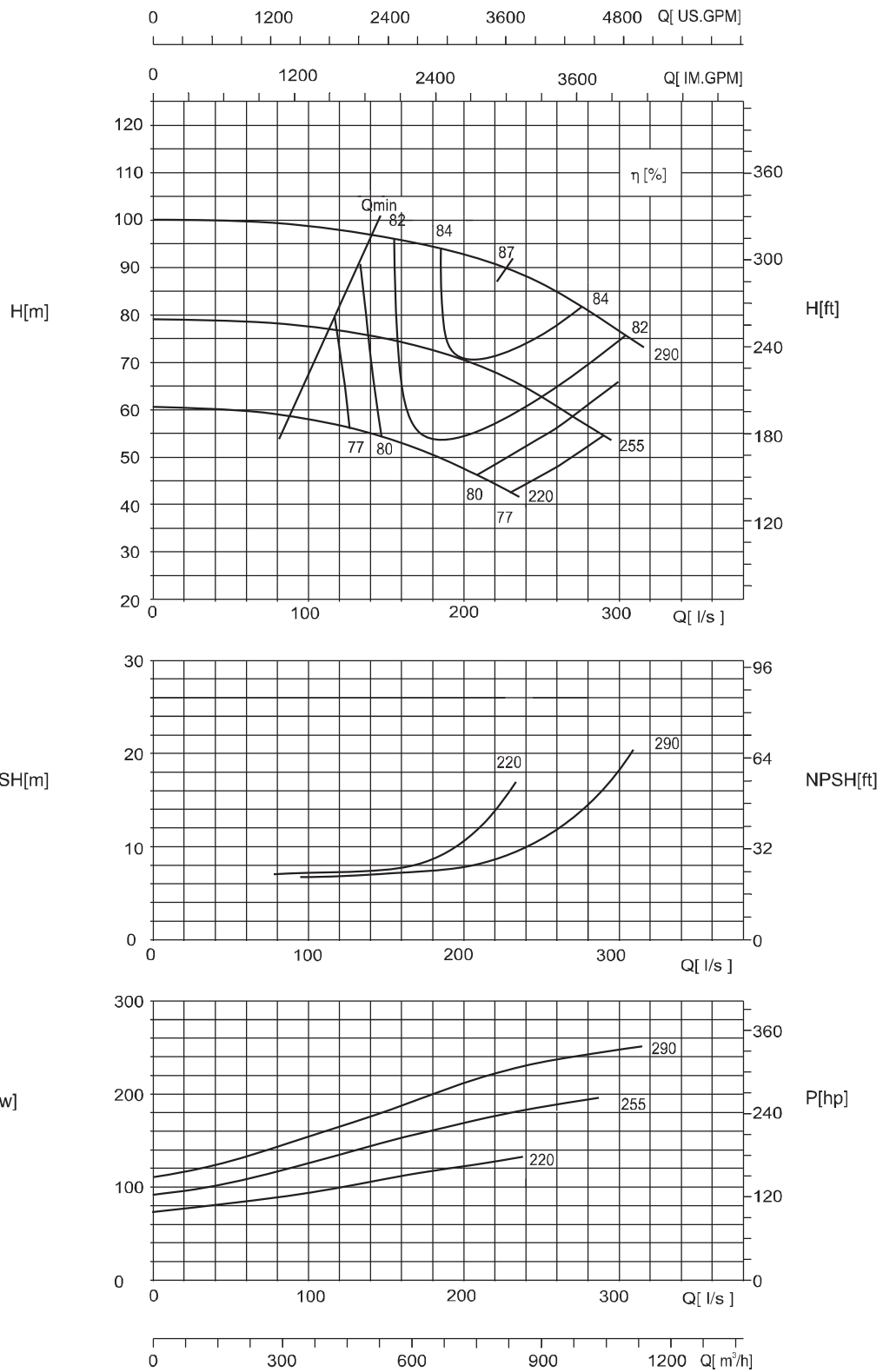
2980 r/min



Head and power ratings apply to media with a density of $\rho=1\text{kg/dm}^3$ and a kinetic viscosity of $20\text{ mm}^2/\text{s}$.

NSC 200-150-290

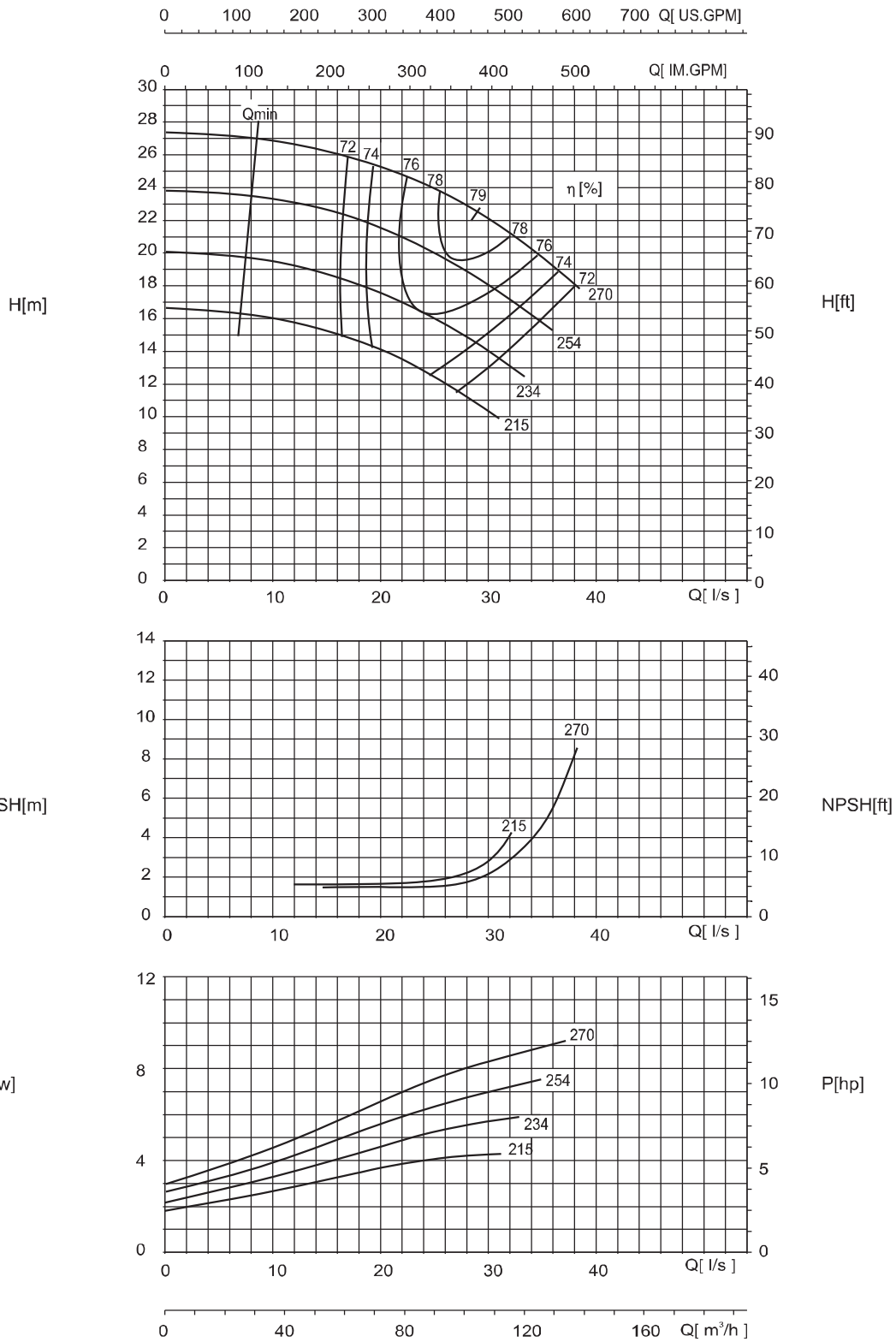
2980 r/min



Head and power ratings apply to media with a density of $\rho=1\text{kg/dm}^3$ and a kinetic viscosity of $20\text{ mm}^2/\text{s}$.

NSC 125-80-270

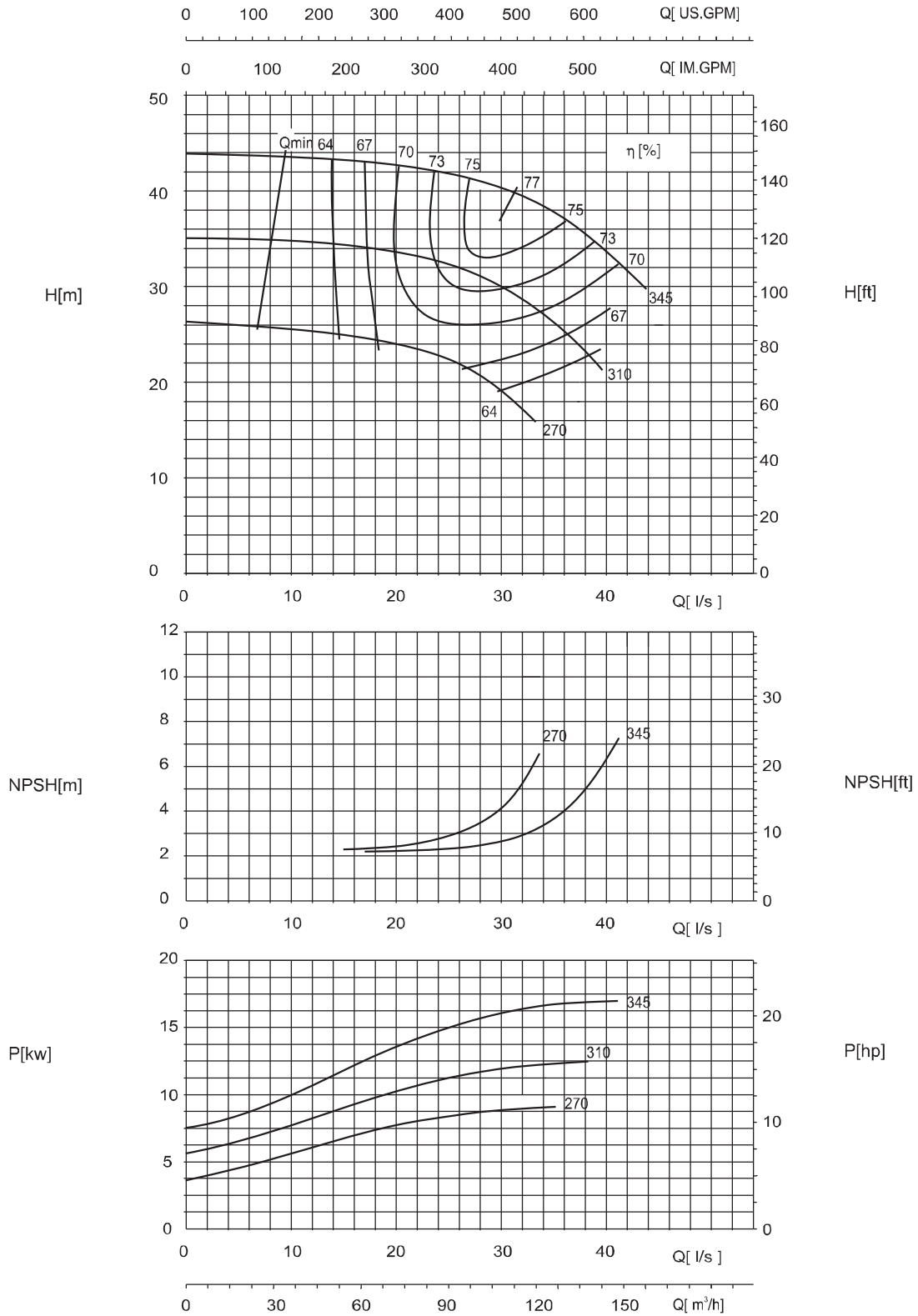
1470 r/min



Head and power ratings apply to media with a density of $\rho=1\text{kg/dm}^3$ and a kinetic viscosity of $20\text{ mm}^2/\text{s}$.

NSC 125-80-350

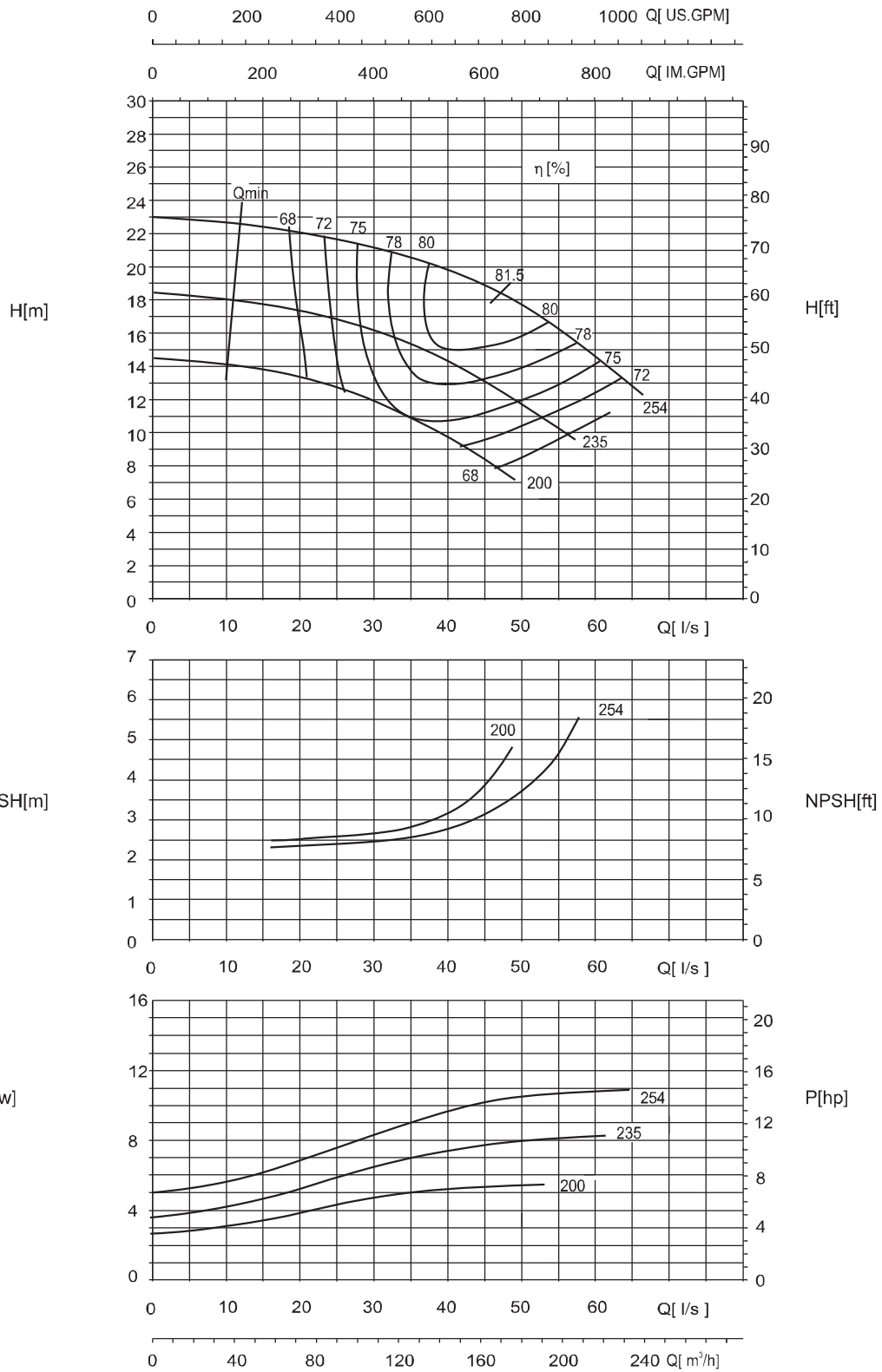
1470 r/min



Head and power ratings apply to media with a density of $\rho=1\text{kg/dm}^3$ and a kinetic viscosity of $20\text{ mm}^2/\text{s}$.

NSC 150-100-250

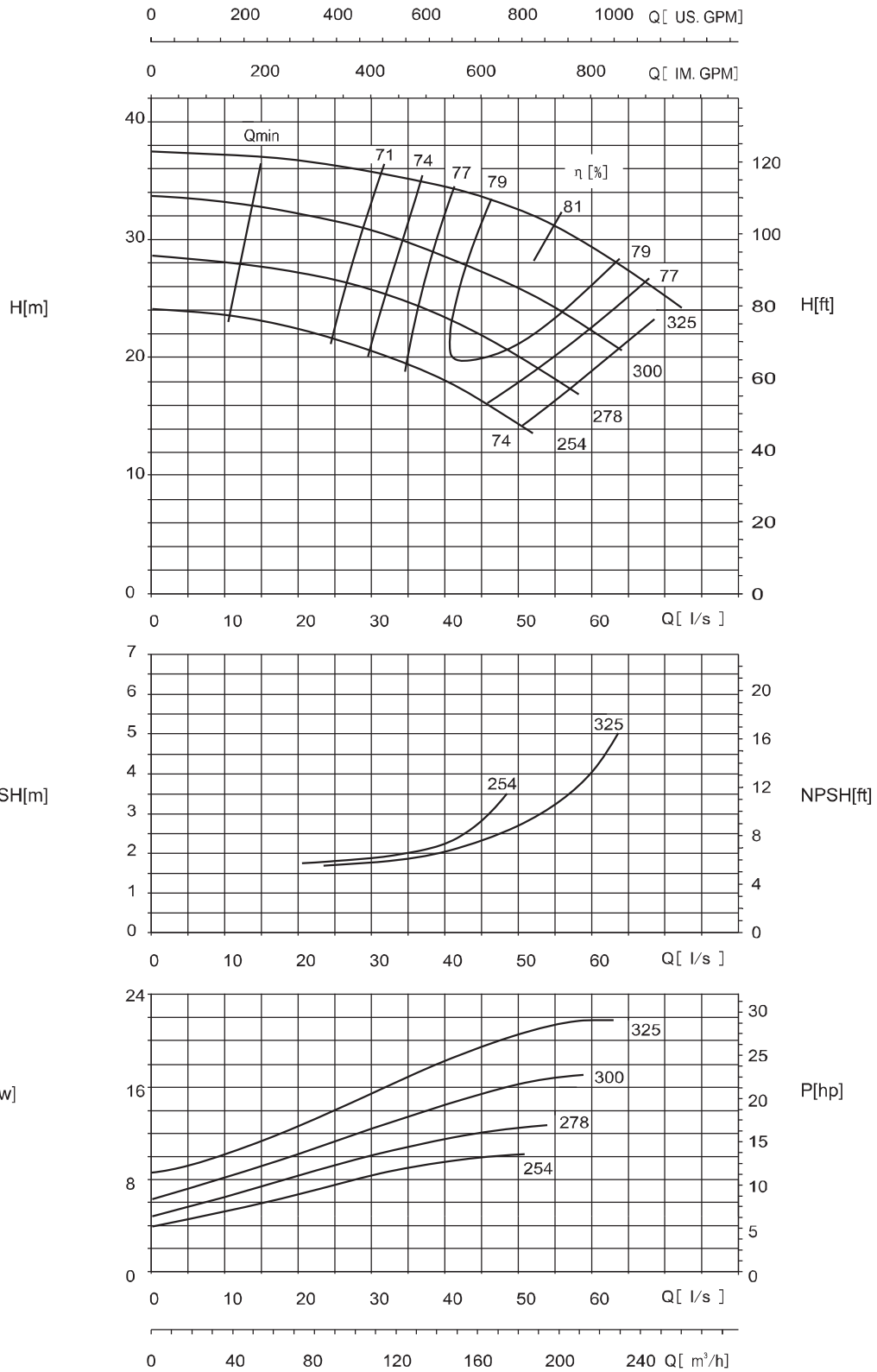
1470 r/min



Head and power ratings apply to media with a density of $\rho=1\text{kg/dm}^3$ and a kinetic viscosity of $20\text{ mm}^2/\text{s}$.

NSC 150-100-320

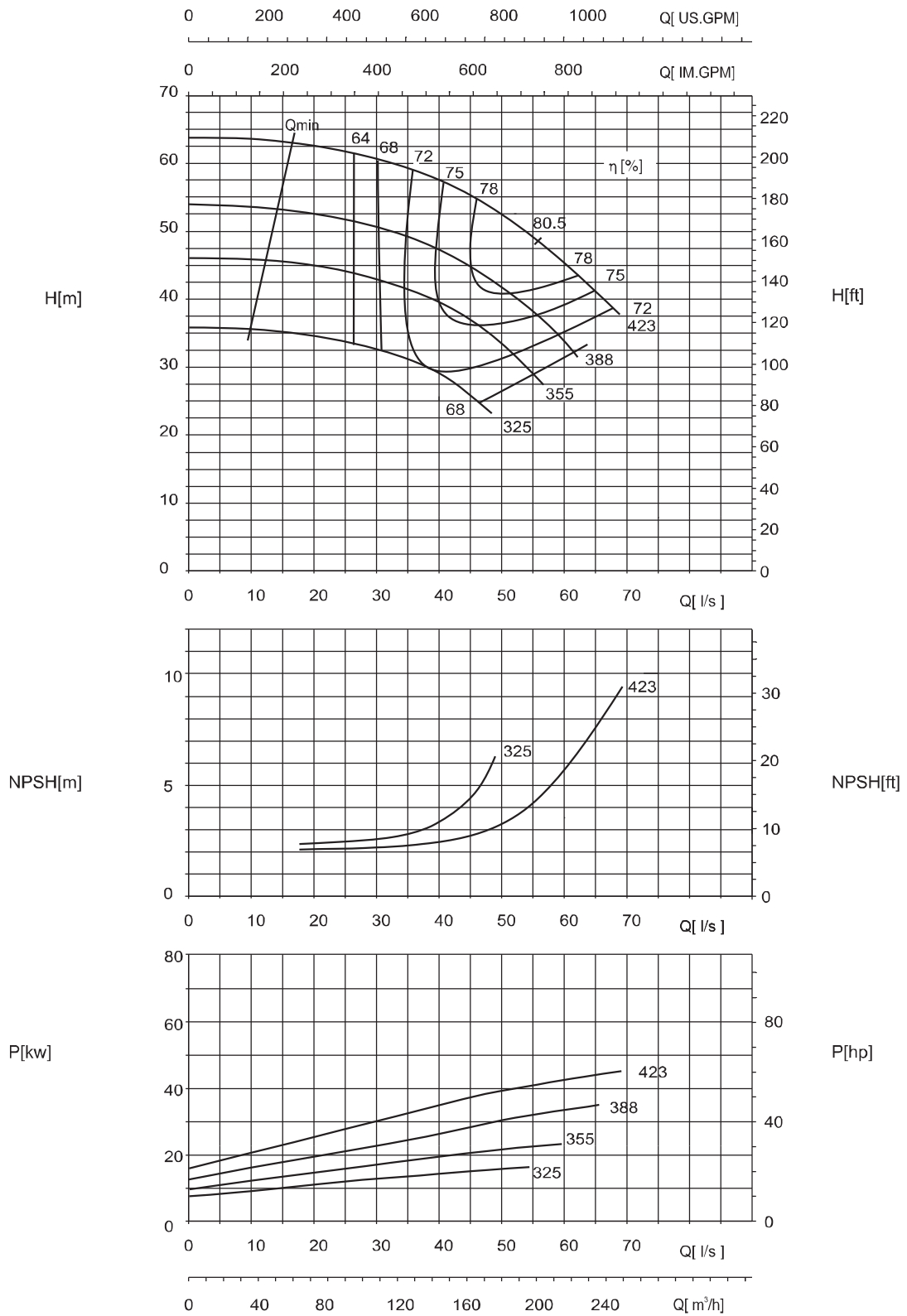
1470 r/min



Head and power ratings apply to media with a density of $\rho=1\text{kg/dm}^3$ and a kinetic viscosity of $20\text{ mm}^2/\text{s}$.

NSC 150-100-400

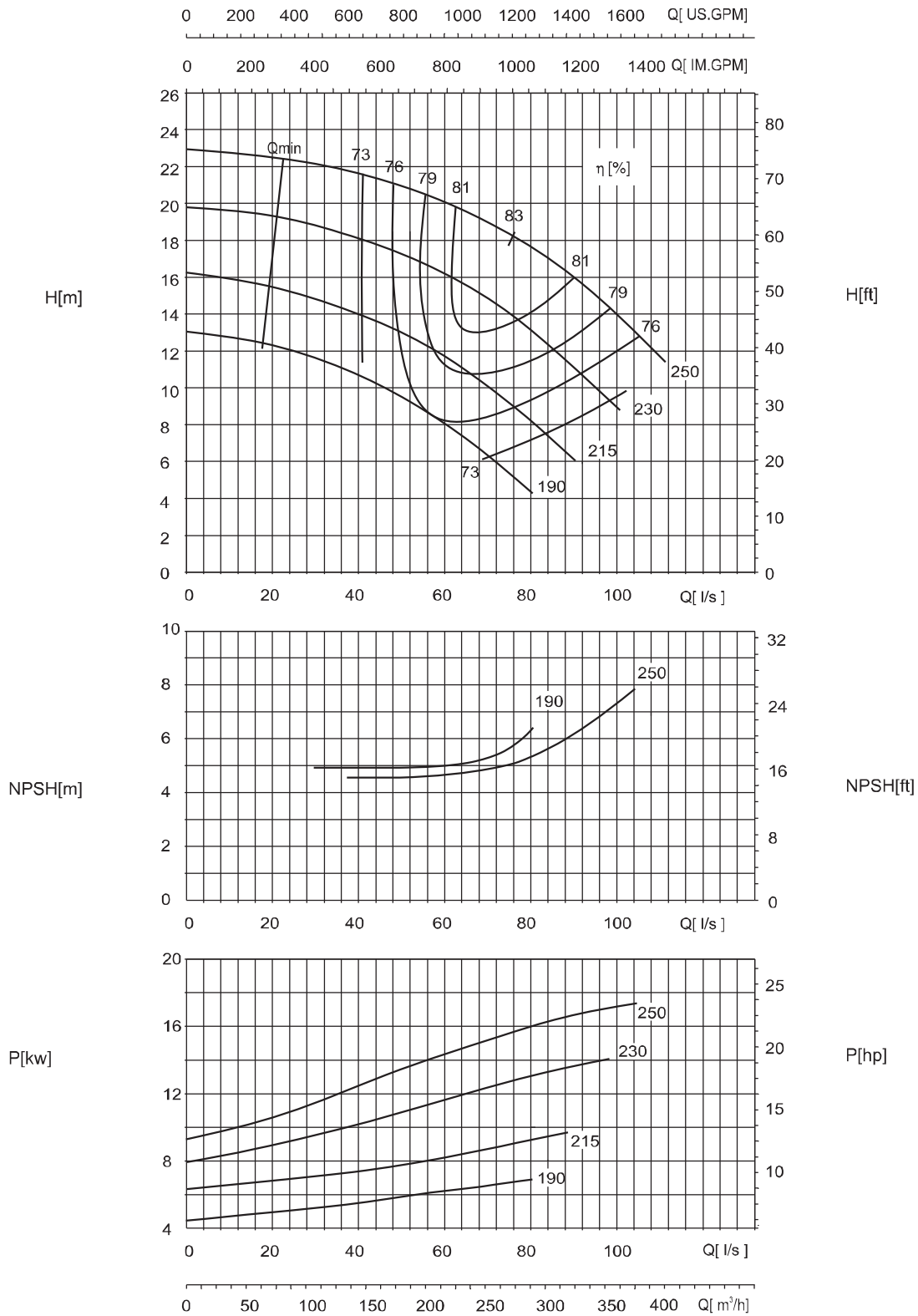
1480 r/min



Head and power ratings apply to media with a density of $\rho=1\text{kg/dm}^3$ and a kinetic viscosity of $20\text{ mm}^2/\text{s}$.

NSC 200-125-240

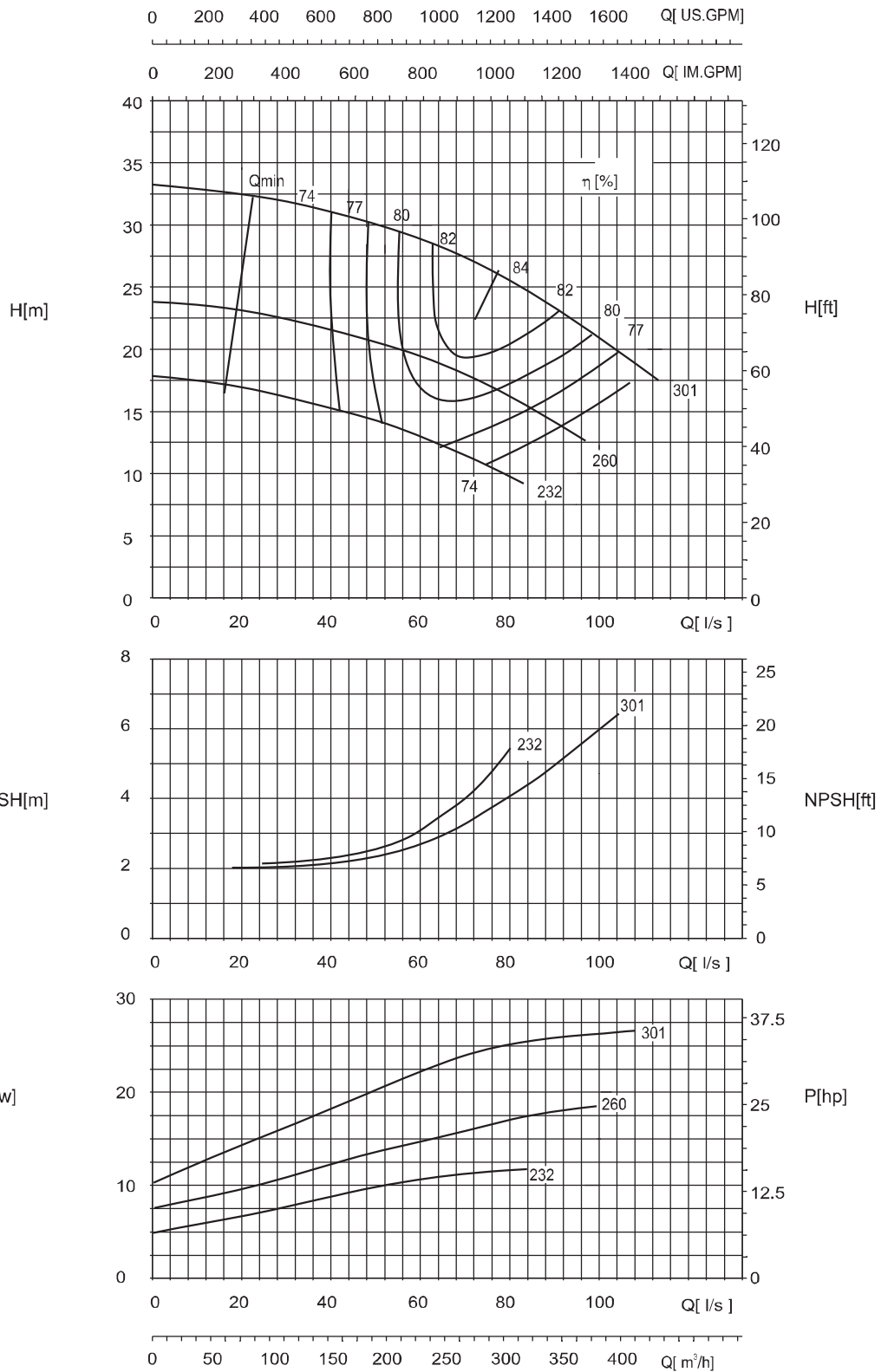
1470 r/min



Head and power ratings apply to media with a density of $\rho=1\text{kg/dm}^3$ and a kinetic viscosity of $20\text{ mm}^2/\text{s}$.

NSC 200-125-300

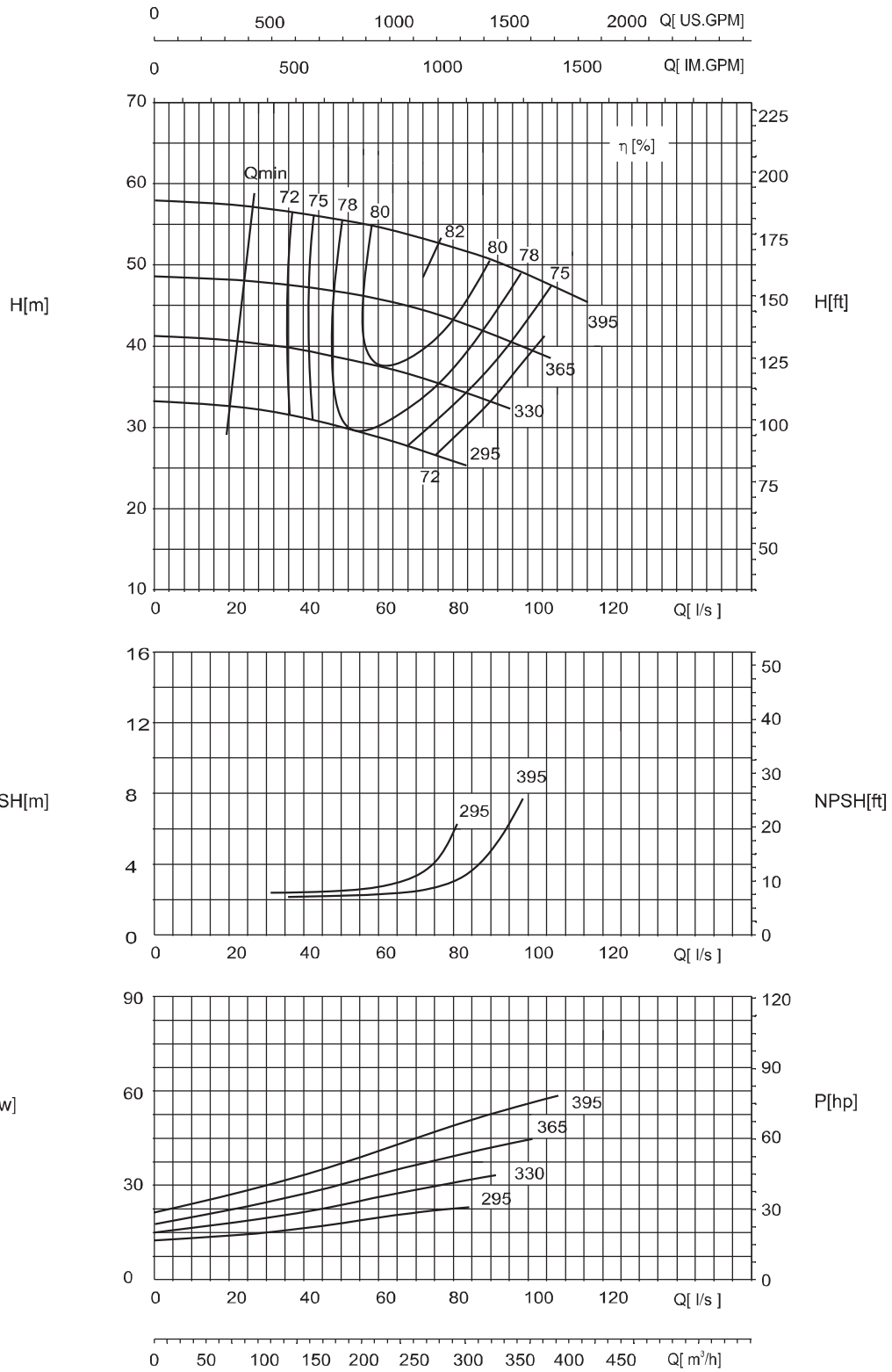
1470 r/min



Head and power ratings apply to media with a density of $\rho=1\text{kg/dm}^3$ and a kinetic viscosity of $20\text{ mm}^2/\text{s}$.

NSC 200-125-380

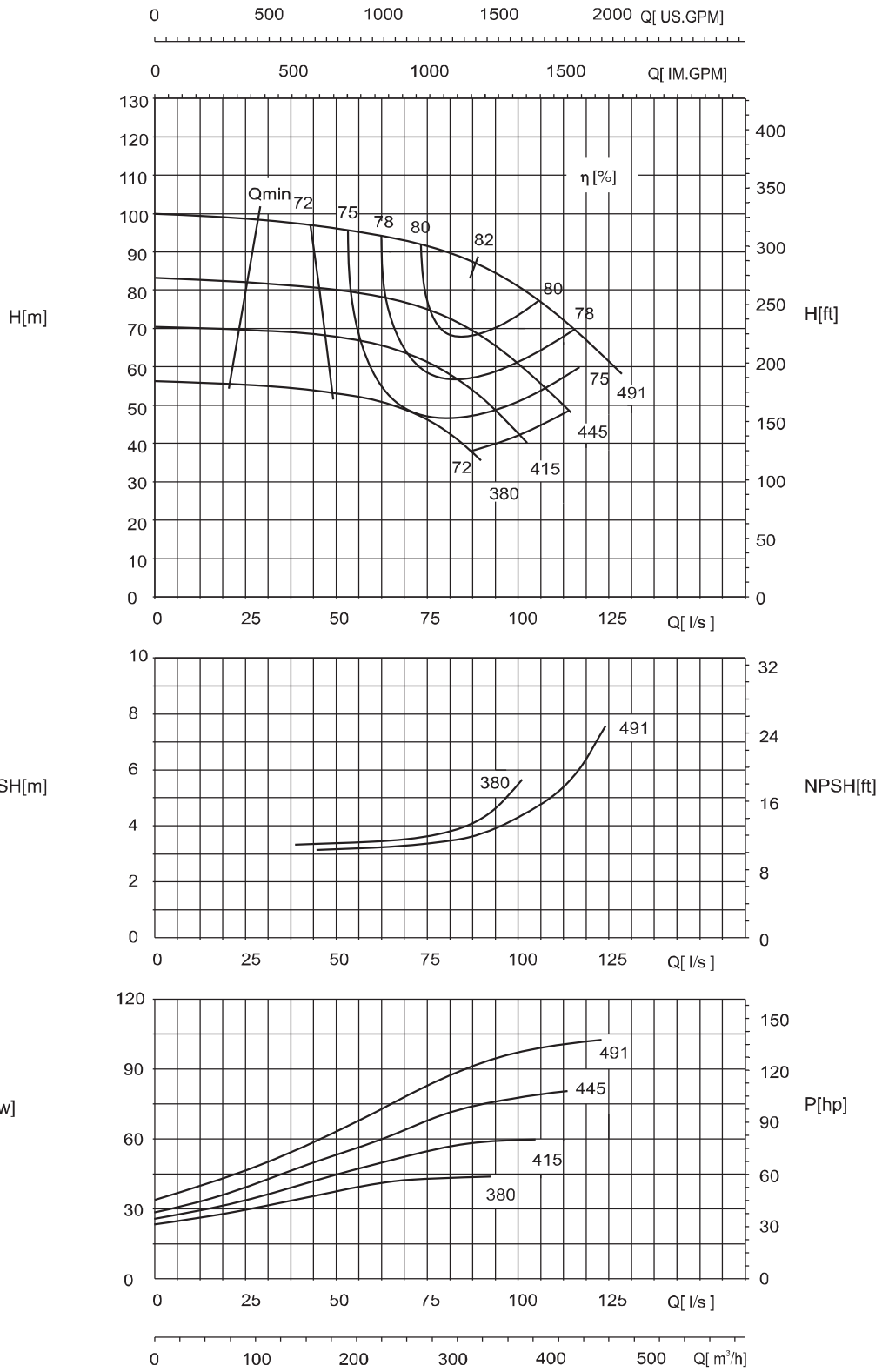
1480 r/min



Head and power ratings apply to media with a density of $\rho=1\text{kg/dm}^3$ and a kinetic viscosity of $20\text{ mm}^2/\text{s}$.

NSC 200-125-480

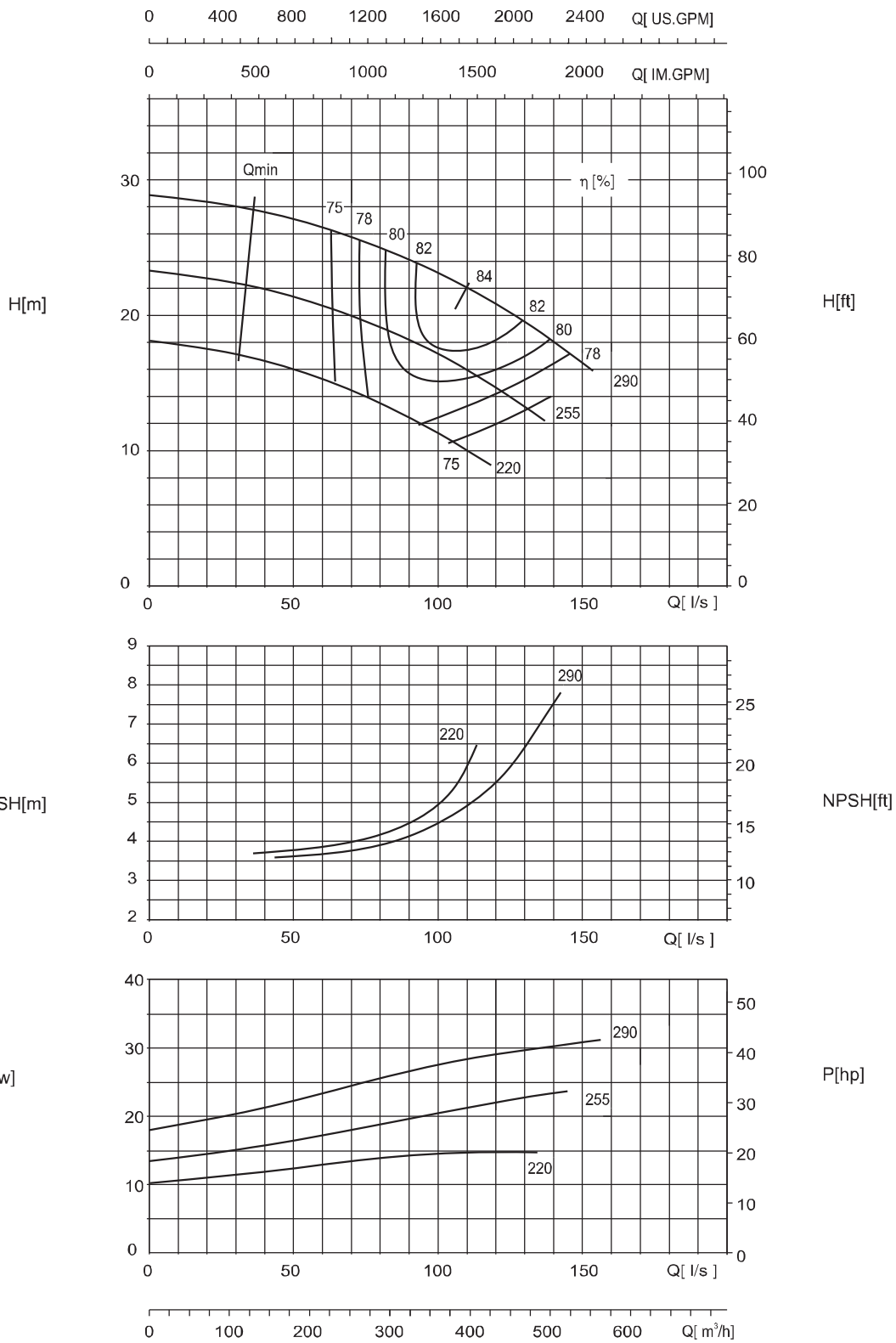
1480 r/min



Head and power ratings apply to media with a density of $\rho=1\text{kg/dm}^3$ and a kinetic viscosity of $20\text{ mm}^2/\text{s}$.

NSC 200-150-290

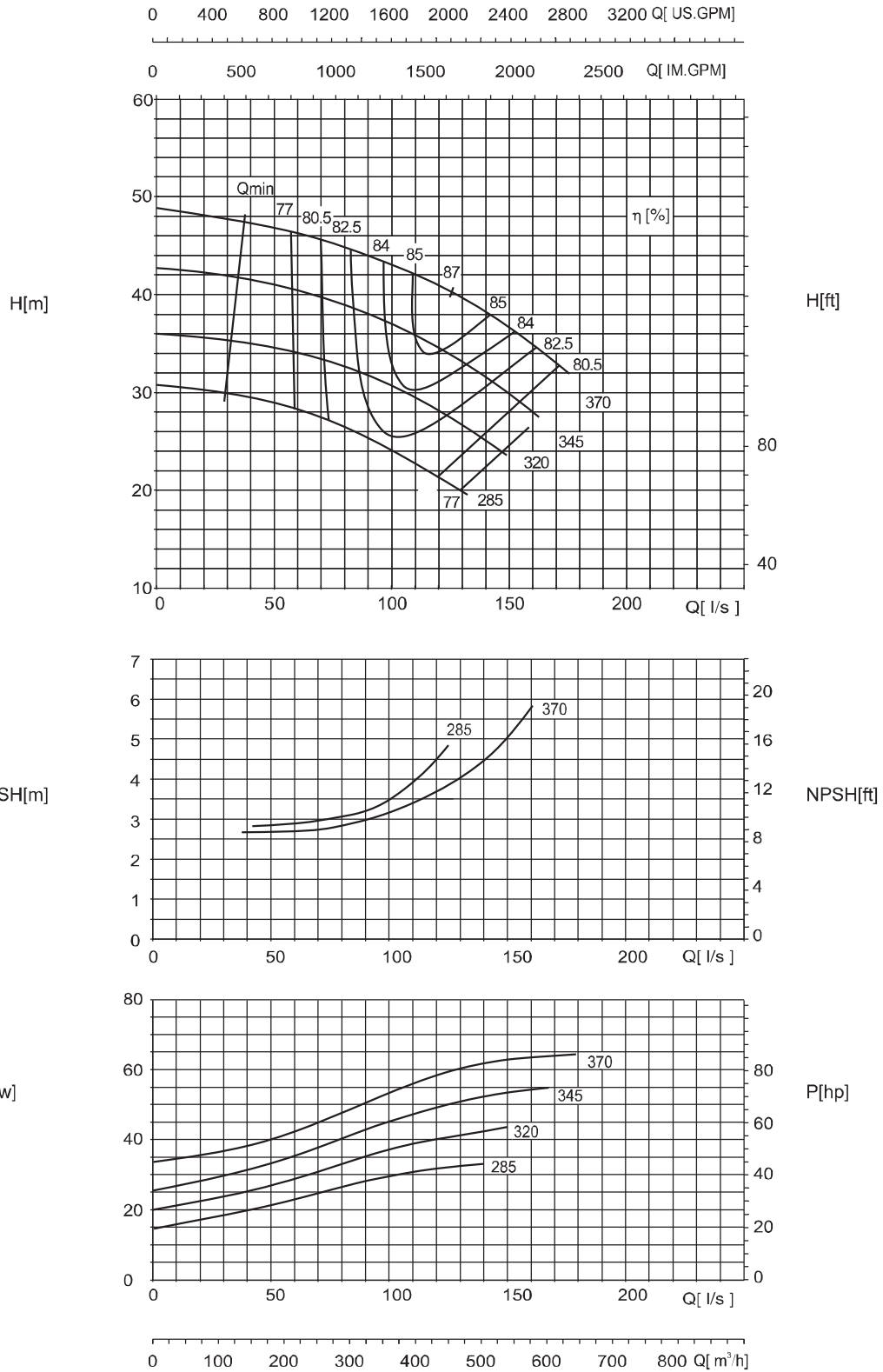
1470 r/min



Head and power ratings apply to media with a density of $\rho=1\text{kg/dm}^3$ and a kinetic viscosity of $20\text{ mm}^2/\text{s}$.

NSC 200-150-360

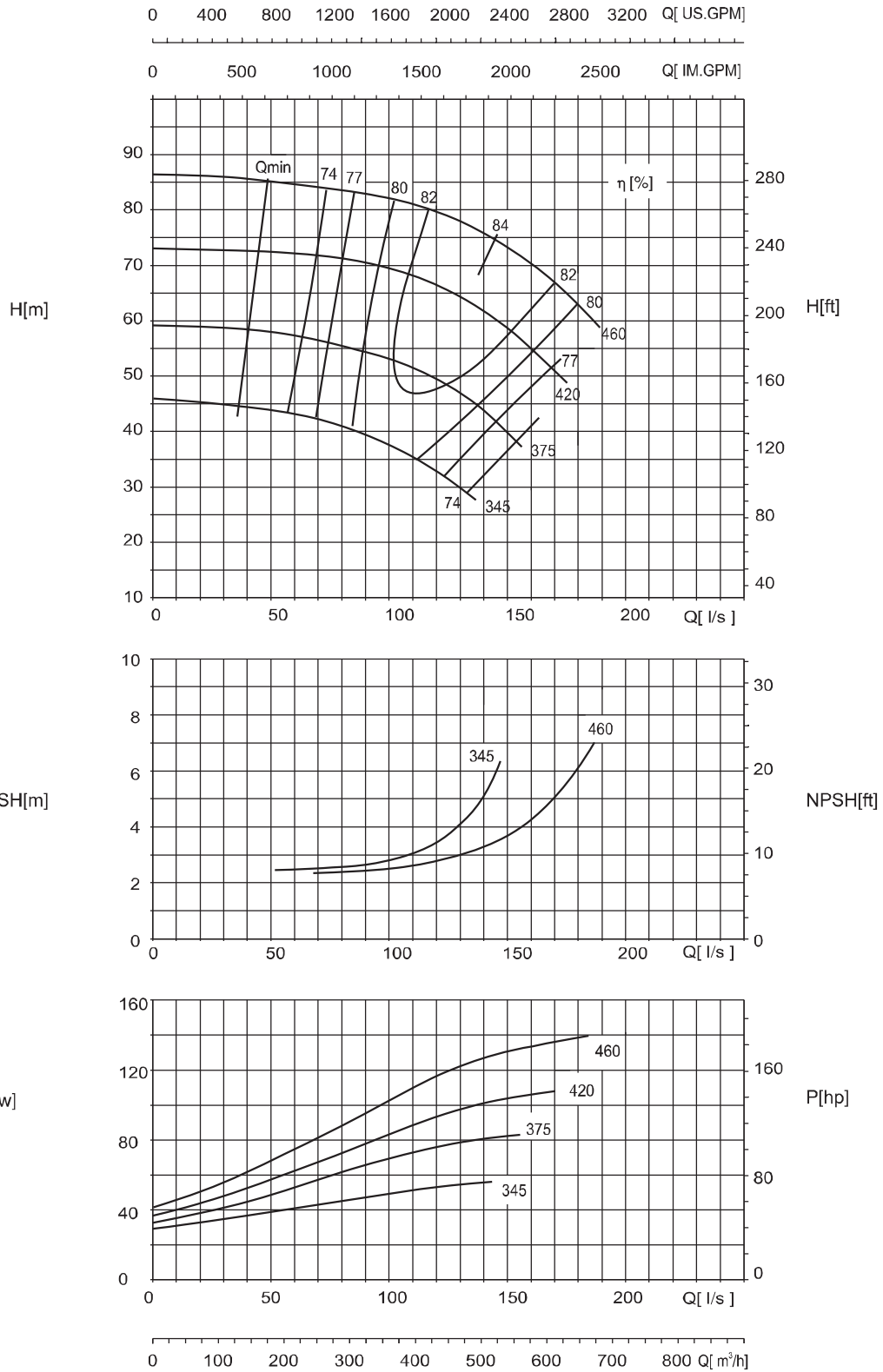
1480 r/min



Head and power ratings apply to media with a density of $\rho=1kg/dm^3$ and a kinetic viscosity of $20\text{ mm}^2/s$.

NSC 200-150-460

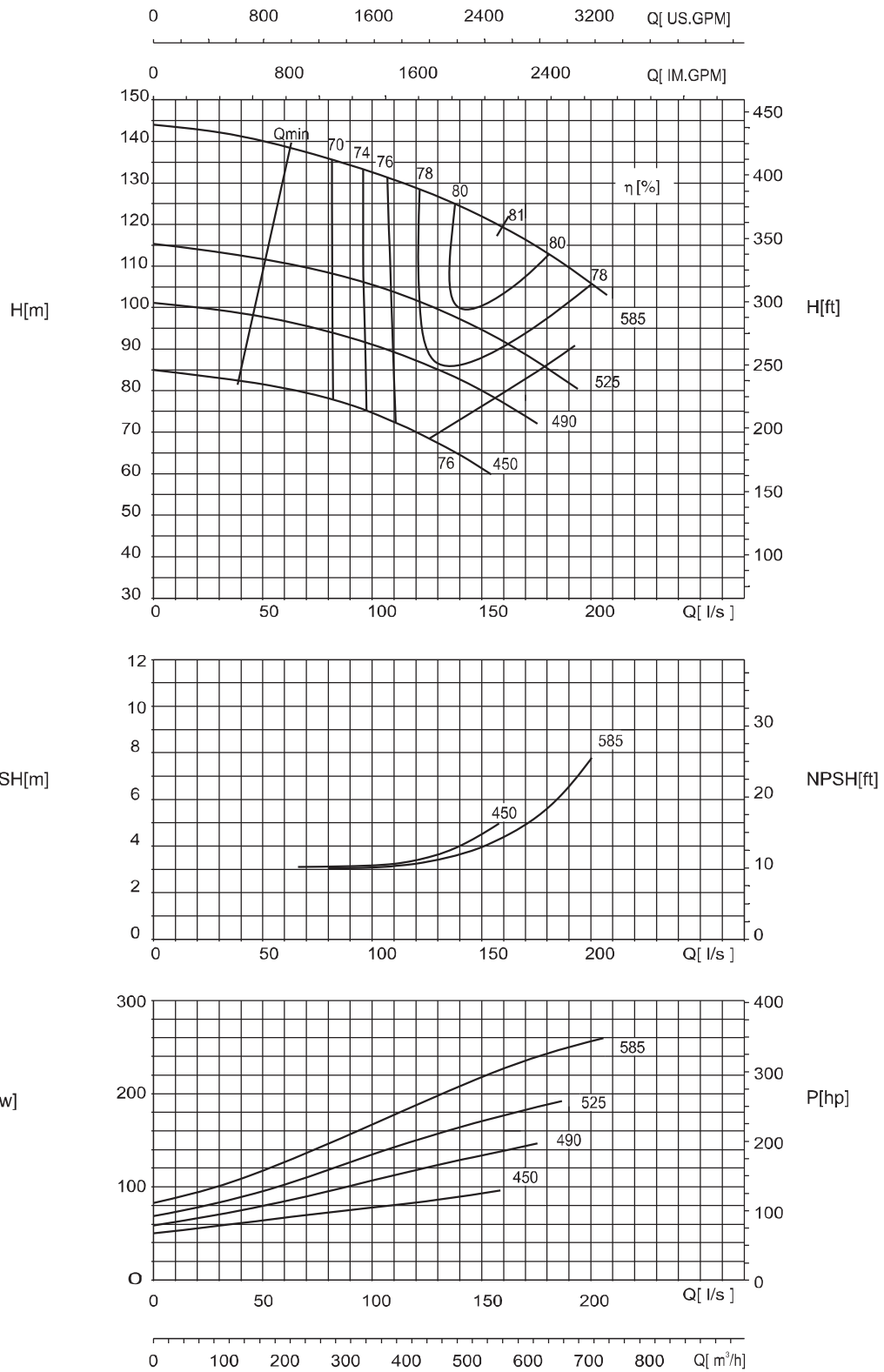
1480 r/min



Head and power ratings apply to media with a density of $\rho=1\text{kg/dm}^3$ and a kinetic viscosity of $20\text{ mm}^2/\text{s}$.

NSC 200-150-570

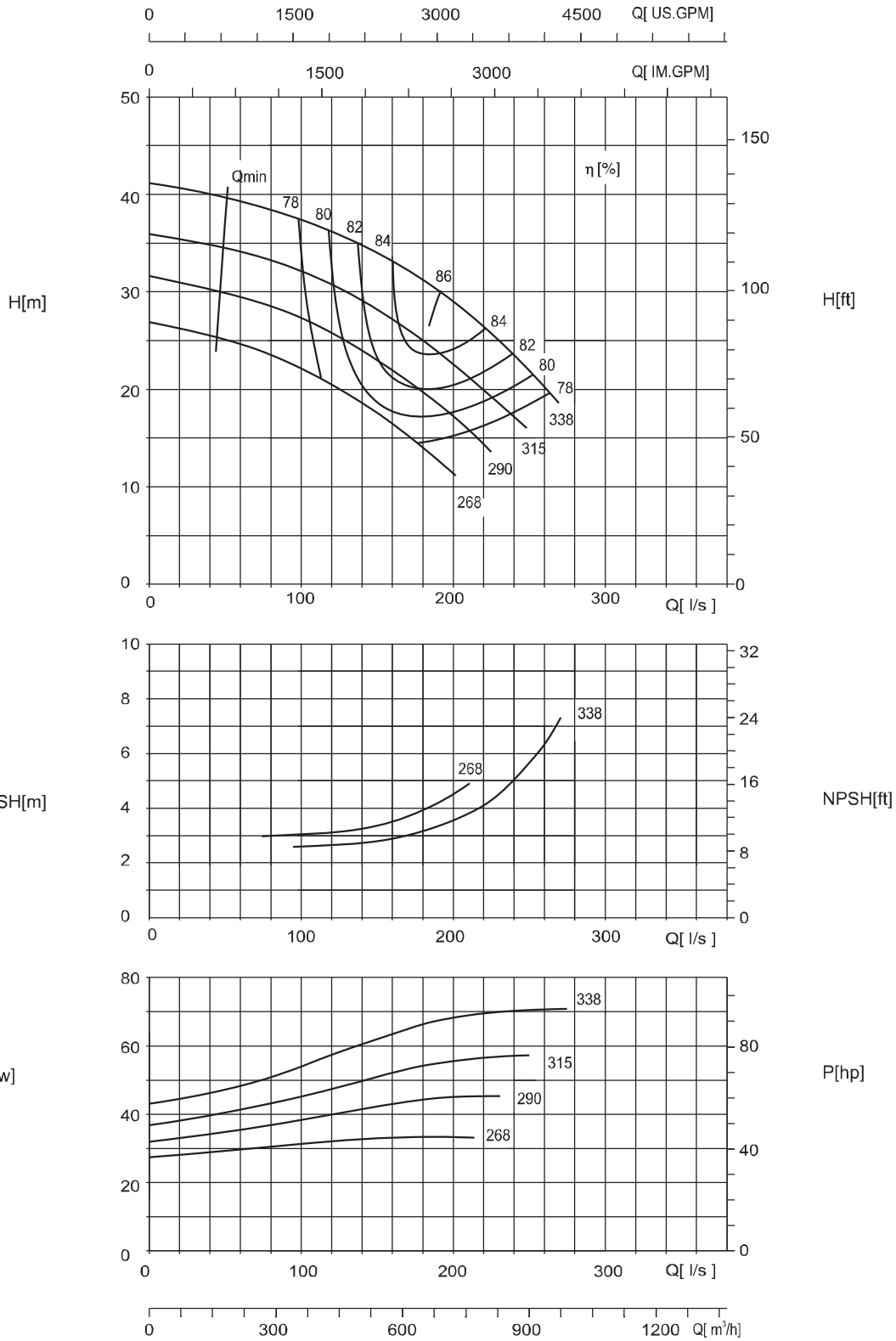
1480 r/min



Head and power ratings apply to media with a density of $\rho=1\text{kg/dm}^3$ and a kinetic viscosity of $20\text{ mm}^2/\text{s}$.

NSC250-200-340

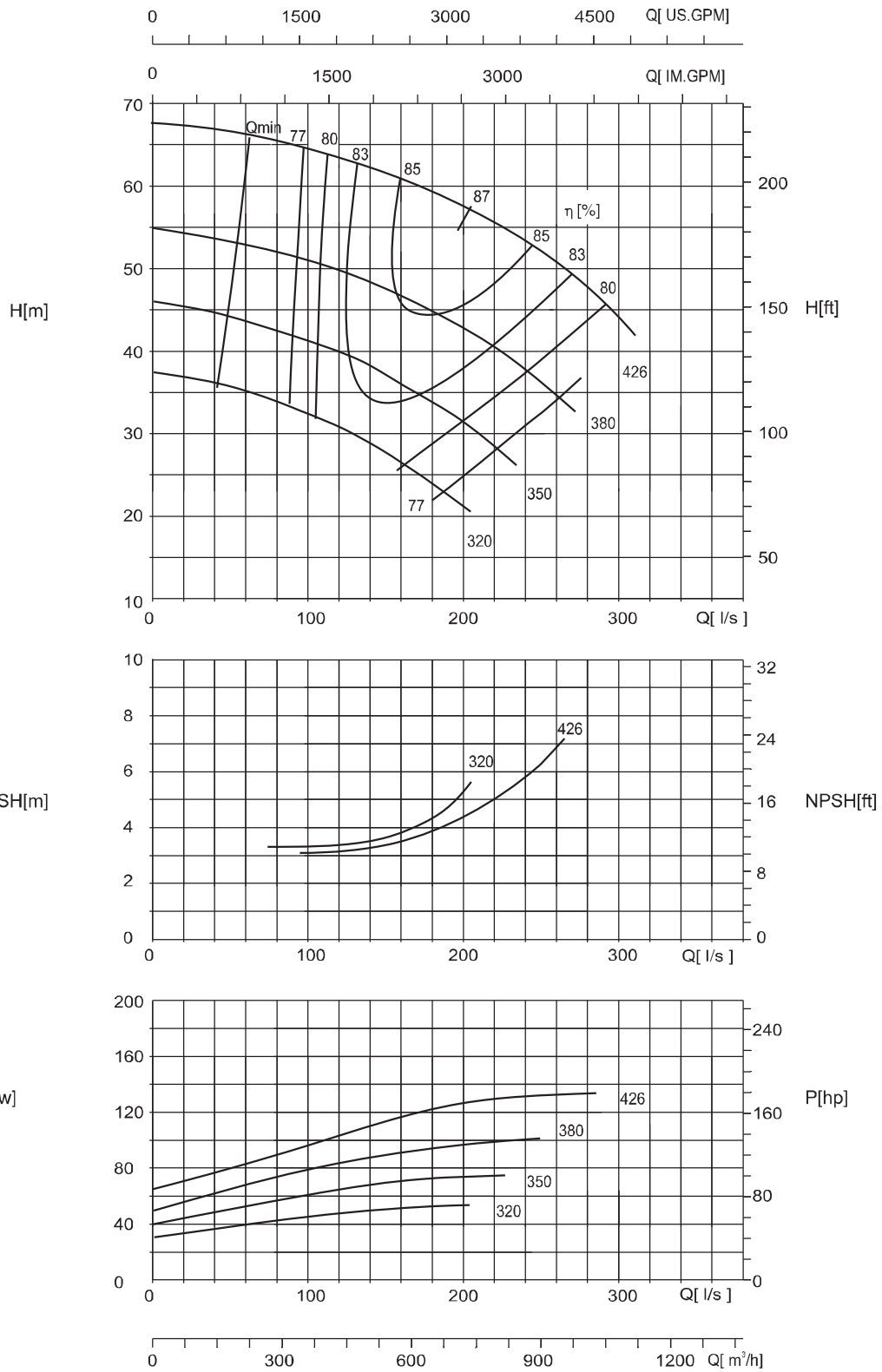
1480 r/min



Head and power ratings apply to media with a density of $\rho=1\text{kg/dm}^3$ and a kinetic viscosity of $20\text{ mm}^2/\text{s}$.

NSC 250-200-430

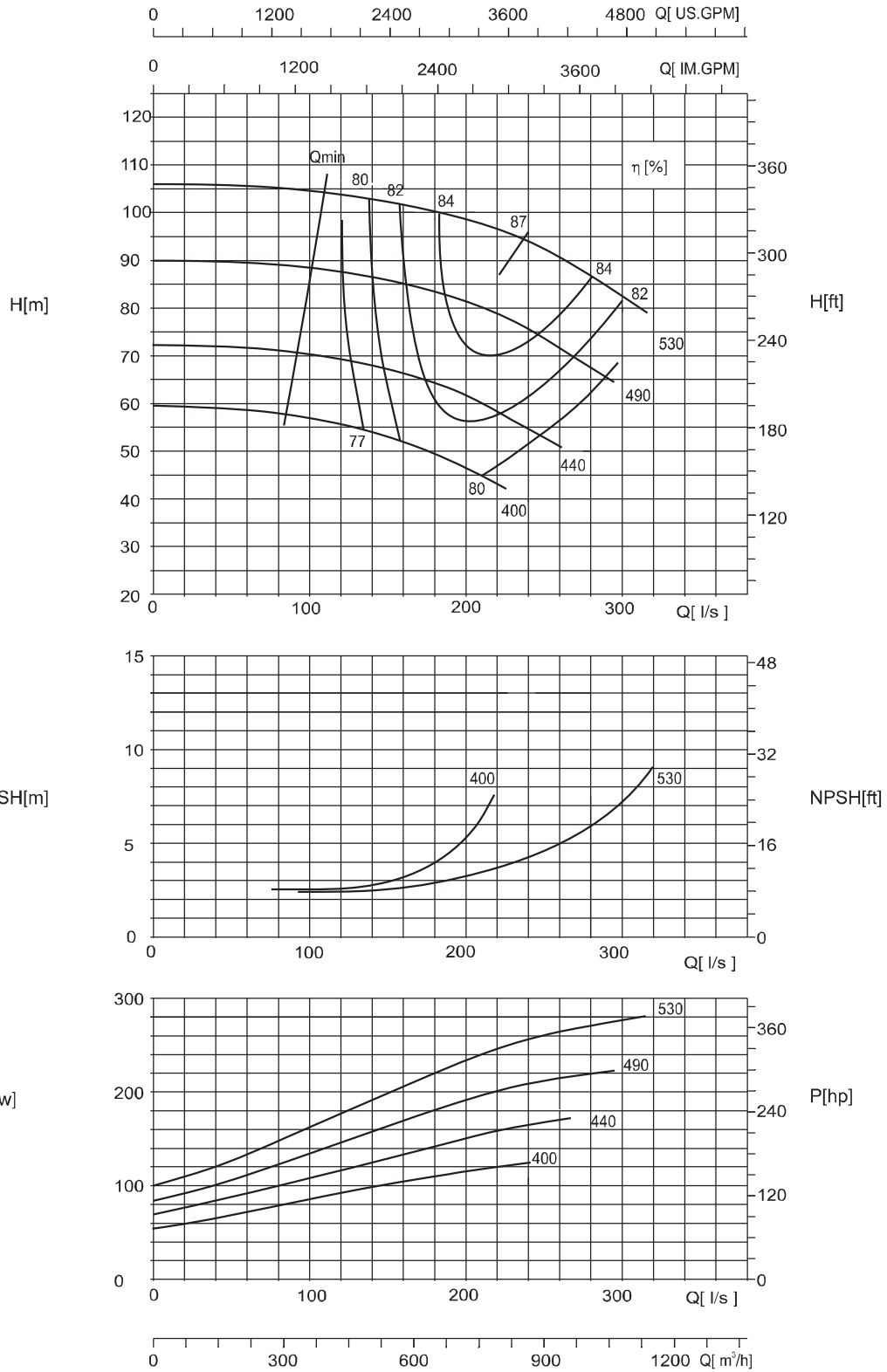
1480 r/min



Head and power ratings apply to media with a density of $\rho=1\text{kg/dm}^3$ and a kinetic viscosity of $20\text{ mm}^2/\text{s}$.

NSC 250-200-530

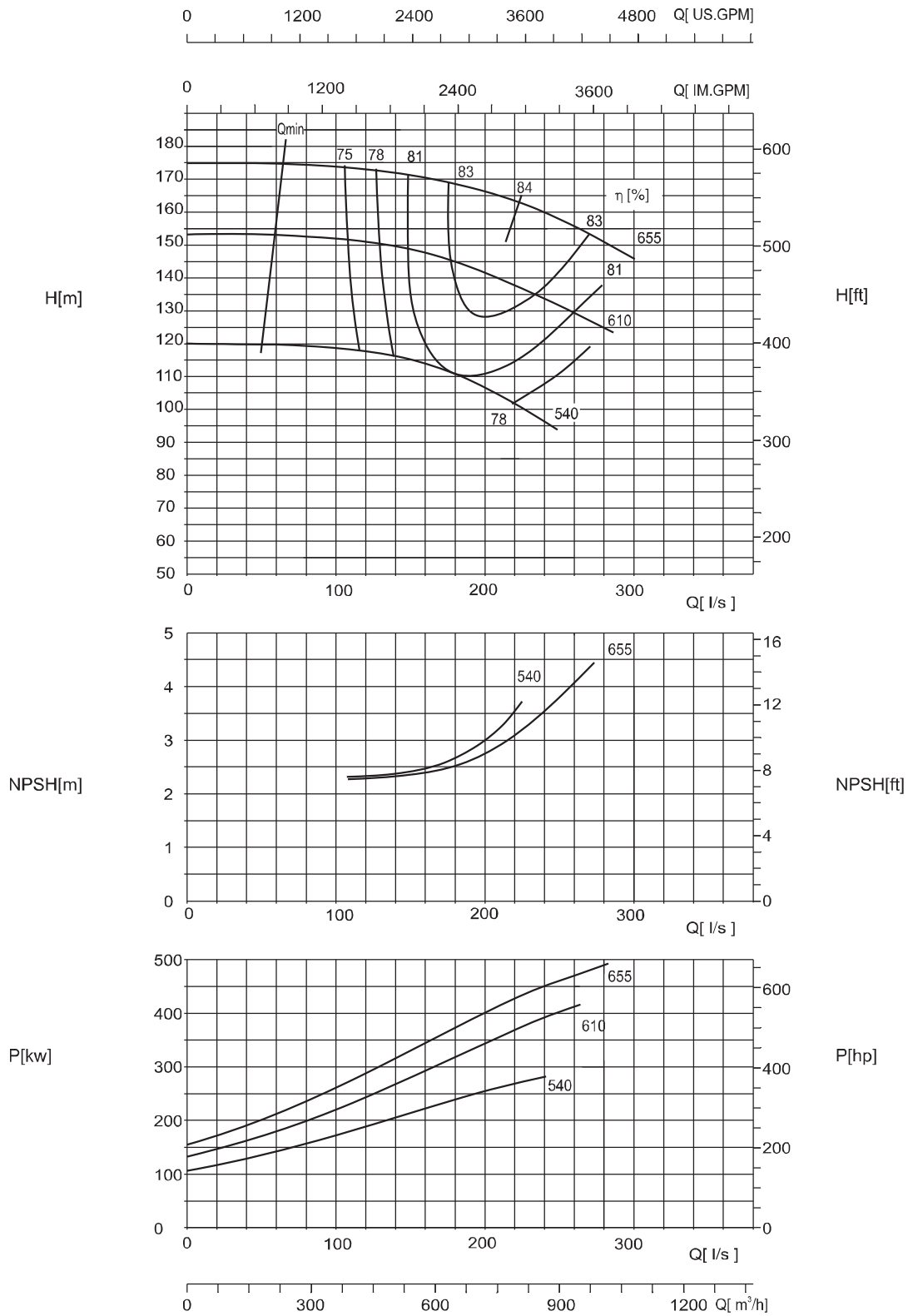
1480 r/min



Head and power ratings apply to media with a density of $\rho=1\text{kg/dm}^3$ and a kinetic viscosity of $20\text{ mm}^2/\text{s}$.

NSC 250-200-660

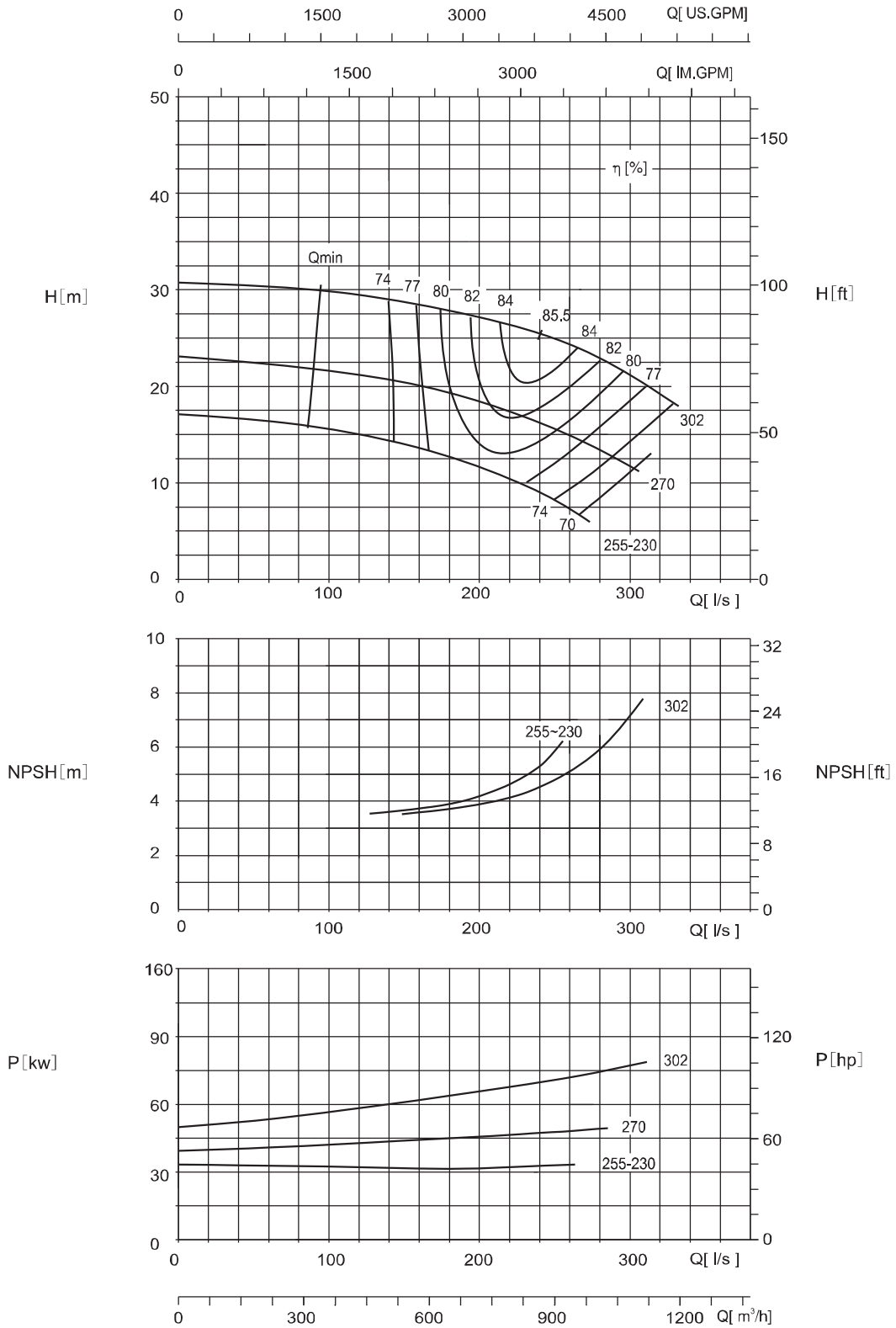
1480 r/min



Head and power ratings apply to media with a density of $\rho=1\text{kg/dm}^3$ and a kinetic viscosity of $20\text{ mm}^2/\text{s}$.

NSC 300-250-270

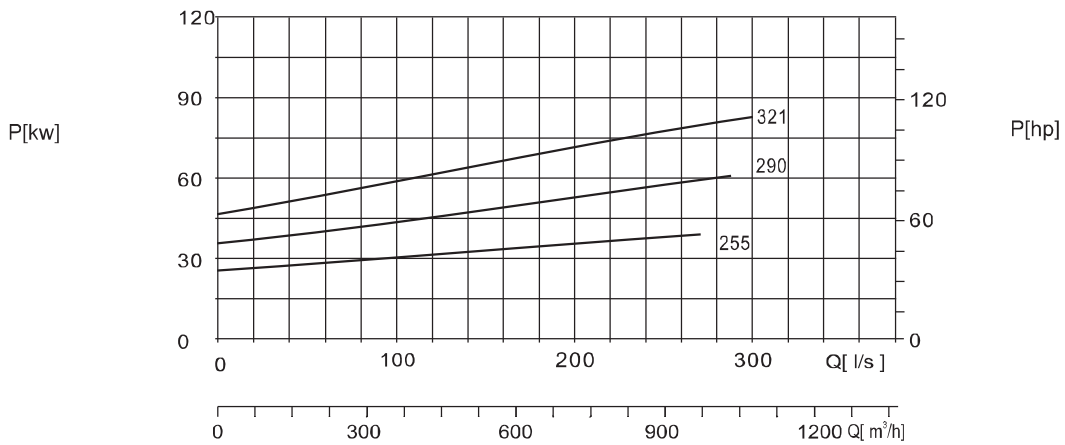
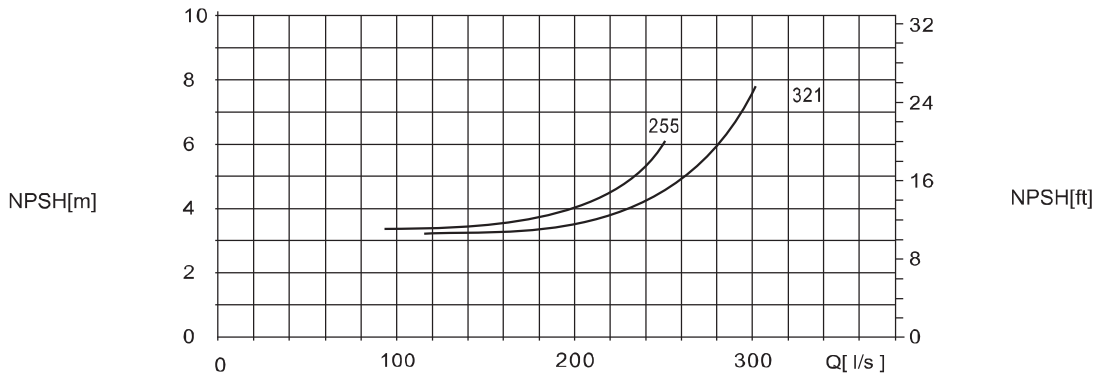
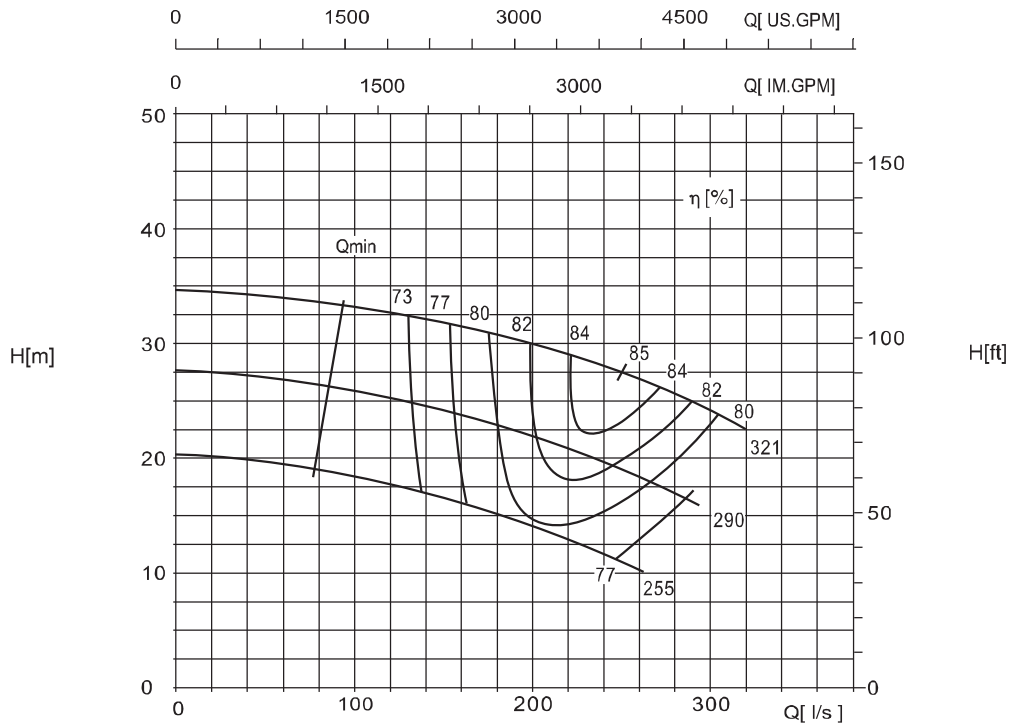
1480 r/min



Head and power ratings apply to media with a density of $\rho=1\text{kg/dm}^3$ and a kinetic viscosity of $20\text{ mm}^2/\text{s}$.

NSC 300-250-280

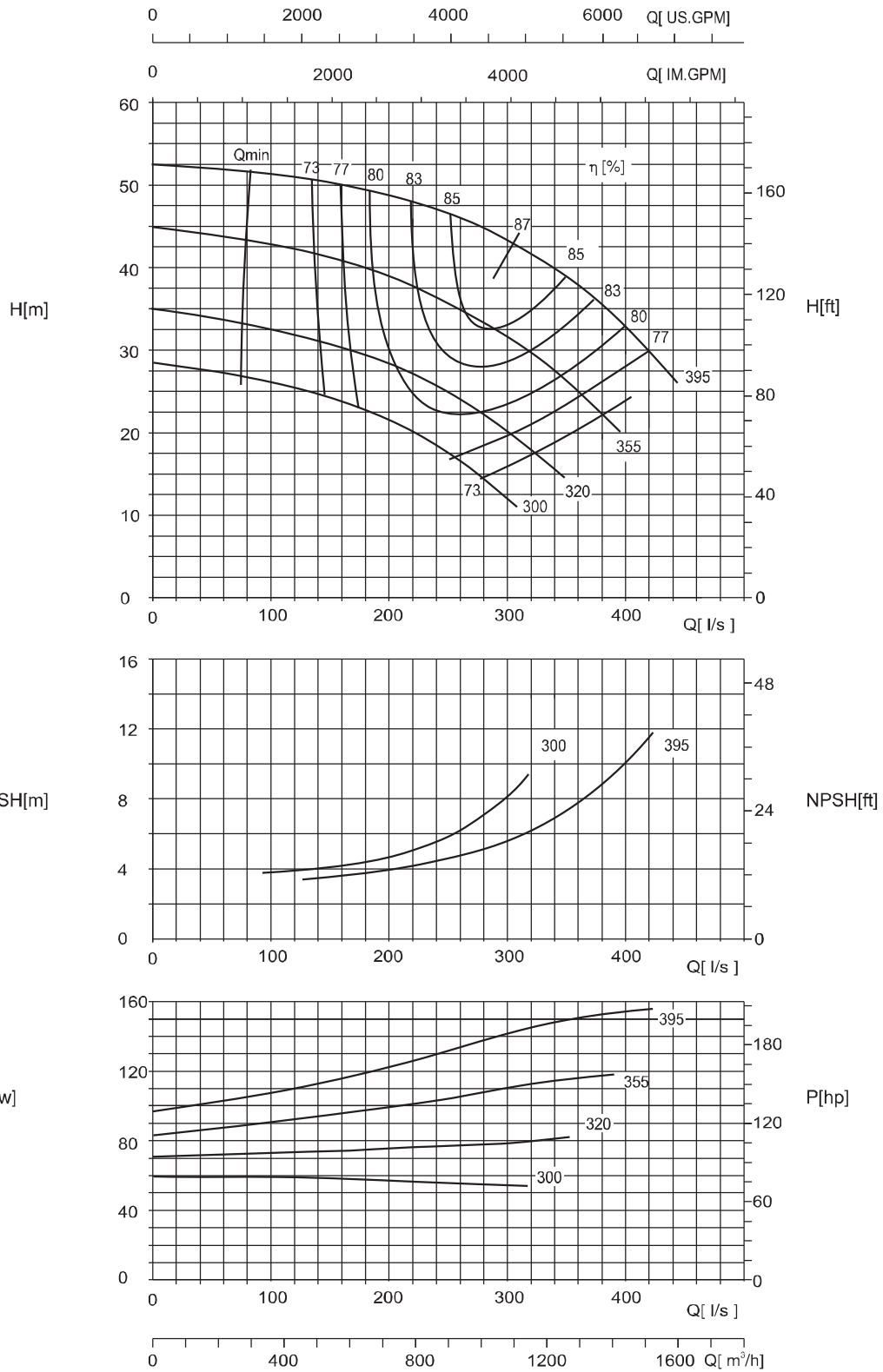
1480 r/min



Head and power ratings apply to media with a density of $\rho=1\text{kg/dm}^3$ and a kinetic viscosity of $20\text{ mm}^2/\text{s}$.

NSC300-250-390

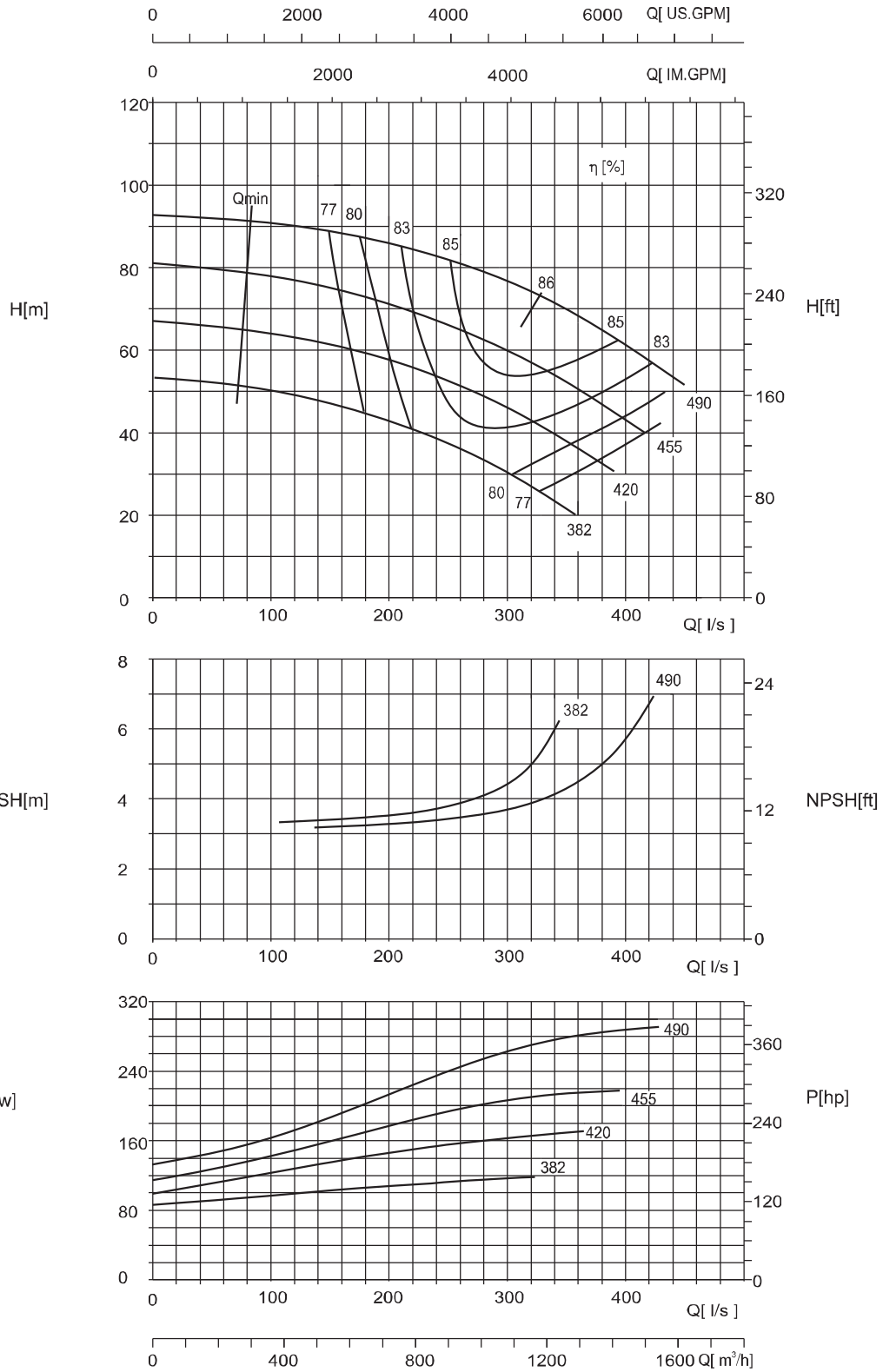
1480 r/min



Head and power ratings apply to media with a density of $\rho=1\text{kg/dm}^3$ and a kinetic viscosity of $20\text{ mm}^2/\text{s}$.

NSC 300-250-490

1480 r/min



Head and power ratings apply to media with a density of $\rho=1\text{kg/dm}^3$ and a kinetic viscosity of $20\text{ mm}^2/\text{s}$.