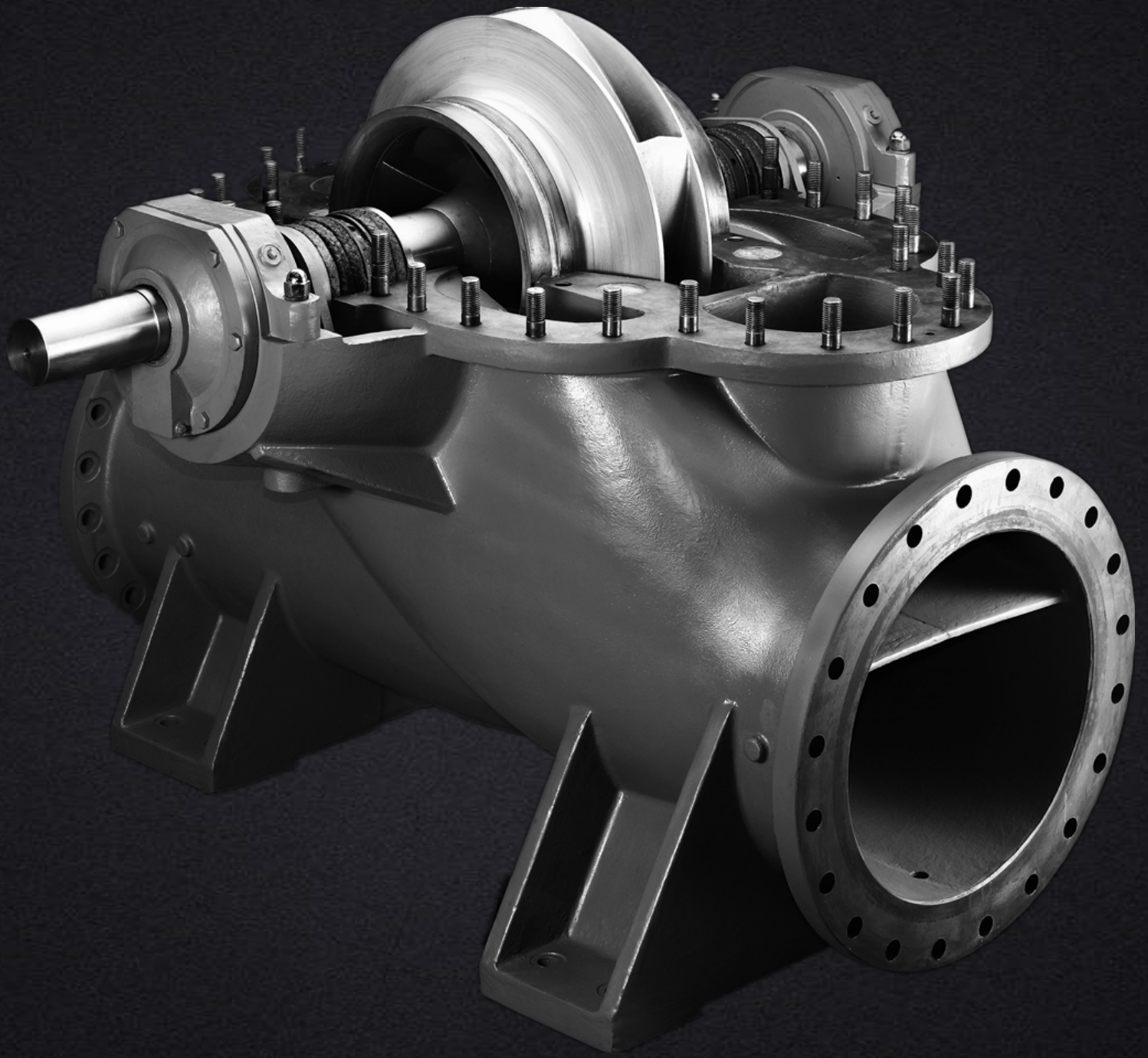


**hydroo®**

# HSC SERIES

Single Stage  
Double Suction  
Split Case pump





# PRESENTATION

**Hydroo Pump Industries SL is an enterprise specialised in the research, development and large-scale production of Stainless Steel centrifugal pumps. We have a vertical integration of the production processes, standing out stamping, welding and motor wiring in 6 value centers and production units. All of them with a high performance management on pump engineering and production quality.**

**HYDROO has set up a wide range of pumping solutions for many applications as building services, industry, irrigation and industrial process. Customers enjoy of the highest performance in booster sets and pressurization, fire-fighting sets, pumping of underground water, HVAC, drainage and sewage, utilities, desalination and OEM integrations. Versions in 50 Hz and 60 Hz are available, as well as any modification on materials, on request.**

**Global water challenges require excellence in pumping technologies**

**and close cooperation between pump designers, manufacturers and pump engineers. In order to better meet the customers' needs and requirements our company is facing an expansion of its operations worldwide, providing timely and effective services in more than 30 countries. With tight relationships in many regions, we're proud to introduce a new regional value center for Europe. We are based near Barcelona at the Girona industrial area. Hydroo is a trademark to forge excellent and successful business relationships with our value customers by means of an operative assembling unit and an application engineering unit. HYDROO trademark wants to symbolize the firm commitment for a high level service to our value partners.**

**At Hydroo we bet on a high level service to our value pump partners.**

# HSC

Single stage  
double suction  
split case pump

## Applications

Cooling water  
Water supply/distribution  
Fire protection  
Metal manufacturing  
Irrigation  
General industrial services  
Sea water

## Description

The casing is axially split, which permits removal of the complete rotor without moving either piping nor motor. Pumps generating high heads have double volutes to reduce radial forces. Replaceable wear ring protect the casing at the impeller running clearances. Flange drilled to ISO, DIN, BS or ANSI.

The closed double suction impeller gives practically zero axial forces. Each impeller is statically and dynamically balanced according to ISO1940.

Vertical or horizontal, soft packing or mechanical seal, grease or oil lubrication bearing on request.

## Performance range

Capacity: Q up to 24000 m<sup>3</sup>/h

Head: H up to 200 m

Temperature: T up to 105 °C

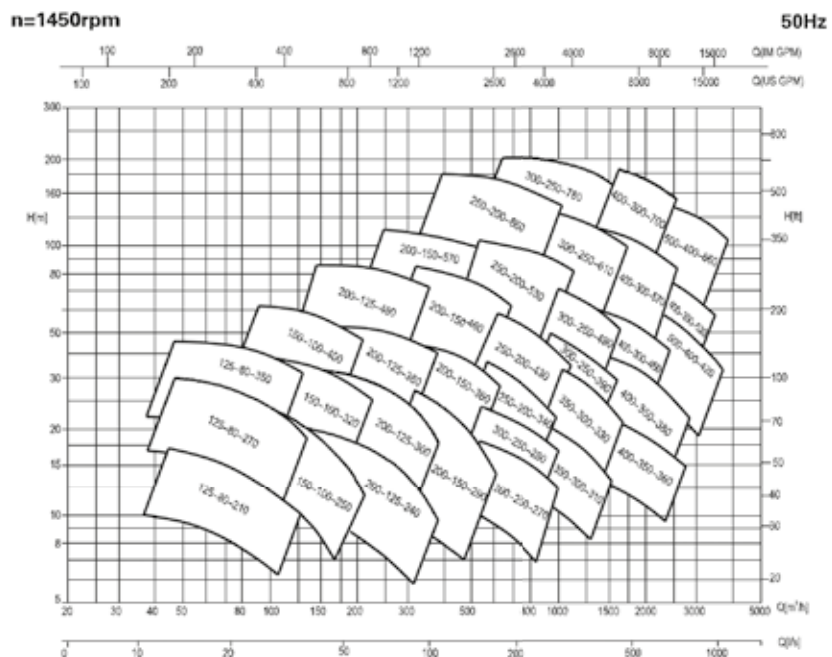
Speed: n 2900/1450/980/740/580 rpm  
3500/1750/1180/890/710 rpm

## Standard material

All pump parts can be made in any kind of materials on request: cast iron, bronze or special SS alloys.



## Performance scope



For other performance curves, please contact our Application Engineering Department.

# Brief Introduction

## Applications

- Clean water or medium similar to water in Physical and chemical properties
 

Water supply	Drainage	Irrigation	Power station
Hydropower station	Fire-fighting	Air-conditioning	Building Industry
Marine applications	All kinds of water for industrial processes		
- Abrasive medium
 

Sand water	Oxide scale water	Others
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- Corrosive medium
 

Desalination	Bittern	Sea water	Others
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- High temperature medium
 

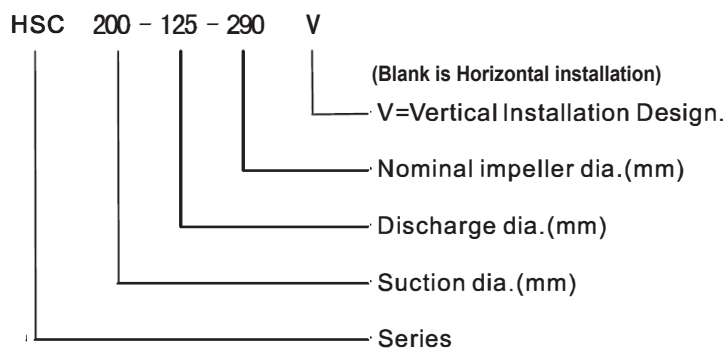
Heating network circulating water	All kinds of chemical liquid
-----------------------------------	------------------------------
- Petroleum and chemical liquids (according to API610 BB1 )
 

Crude oil and refined oil	Oil loading and unloading of oil terminal	All kinds of chemical liquid
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## Specification

Capacity	Q :50~20000m <sup>3</sup> /h
Head	H 10~230m
Suction Dia	DN: 100~1400mm
Discharge Dia	DN: 80~1200mm
Operating Pressure	P :≤5MPa
Operating Temperature	:-15°C~+ 200°C(Standard max.80°C, Optional for higher temperature)
Abrasive medium concentration:	≤4%

## Designation



## Structure Design

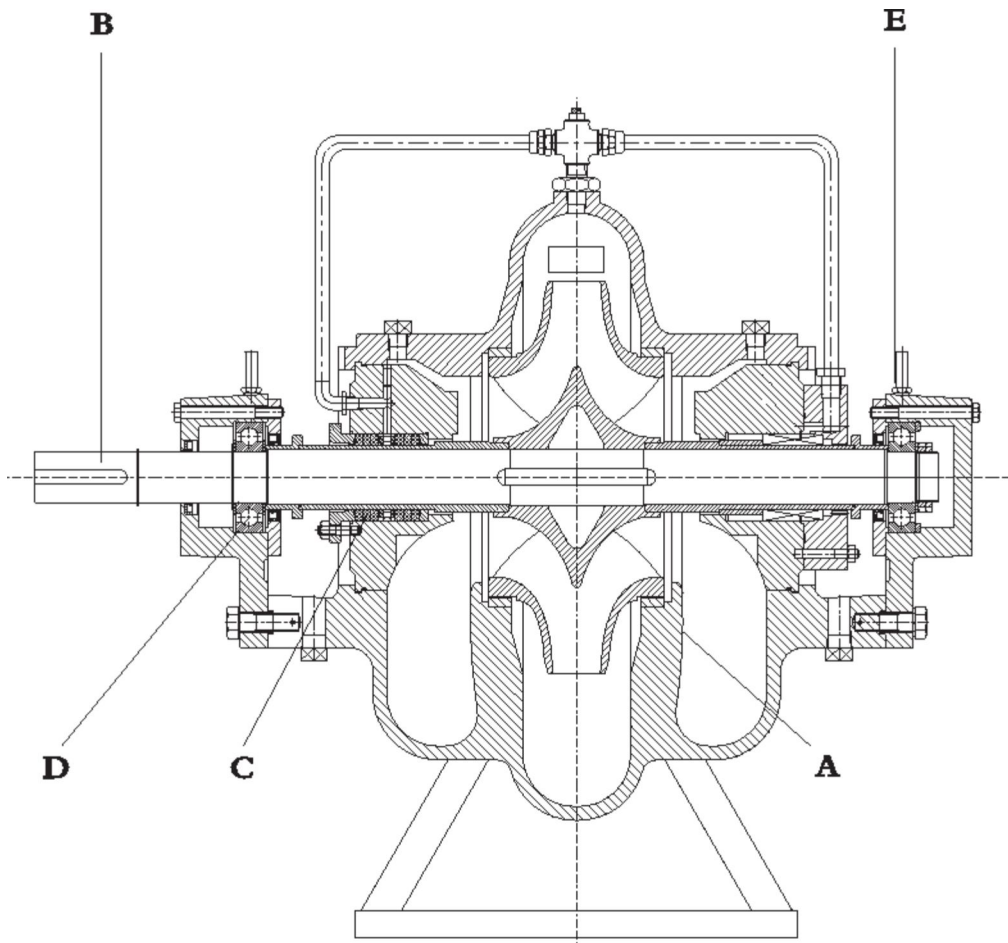
HSC is Single stage, axially split volute casing pump with double suction impeller, for horizontal and vertical installation. Drive shaft end of the horizontal pump optionally on the left or right side. Flanges drilled to GB, ISO, DIN, BS or ANSI.

## Bearing

Horizontal: Grease lubricated ball bearings on both side, oil lubrication is optional. For the big size pump, sliding bearing is available.

Vertical: Grease lubricated ball bearings

# 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. Rotor parts

- 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

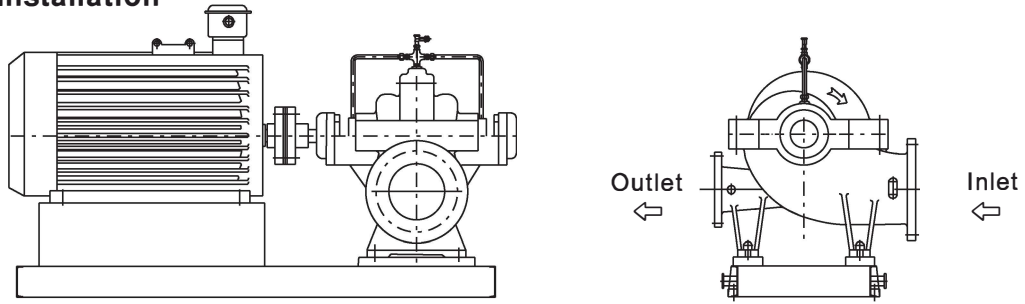
- a. SKF covered, sealed for life grease lubricated antifriction bearings for long service life
- b. Open gland, enough space for service activities
- c. Optional: oil lubrication with constant level oiler

## E. Controlling & protection

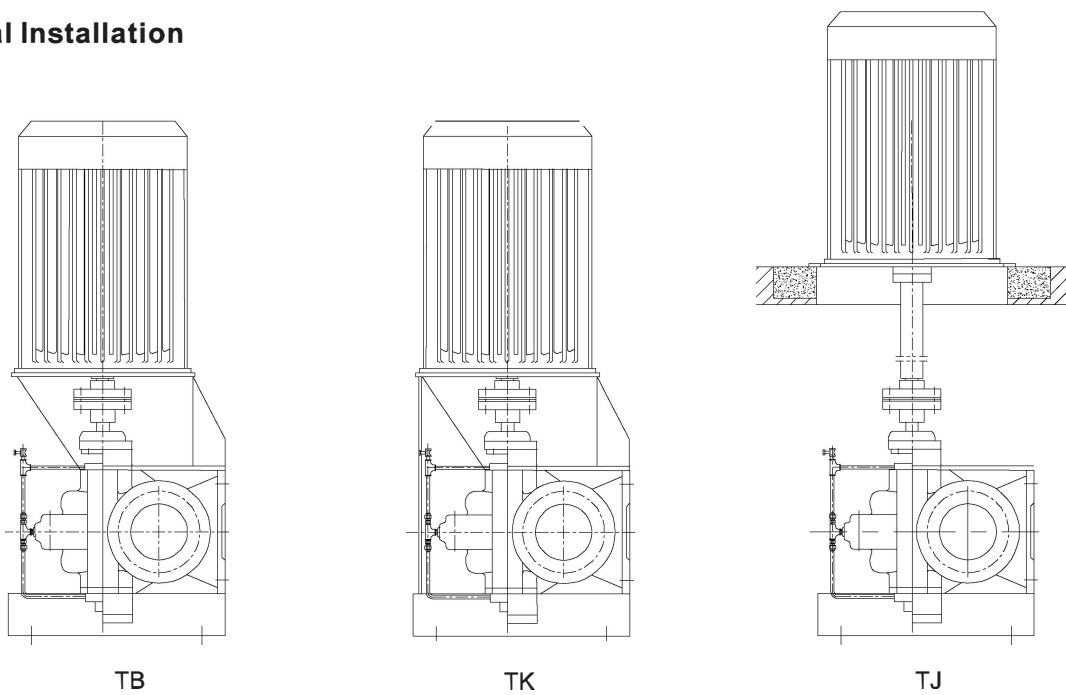
- a. Heavy duty shaft completely sealed and dry for zero corrosion
- b. Short and rigid with negligible vibrations
- c. Replaceable shaft protecting sleeves
- d. No threads exposed to pumped medium, long operating life and no corrosion
- e. Adjustment-free assembly
- f. Quick and easy assembly/dismantling 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 Installation

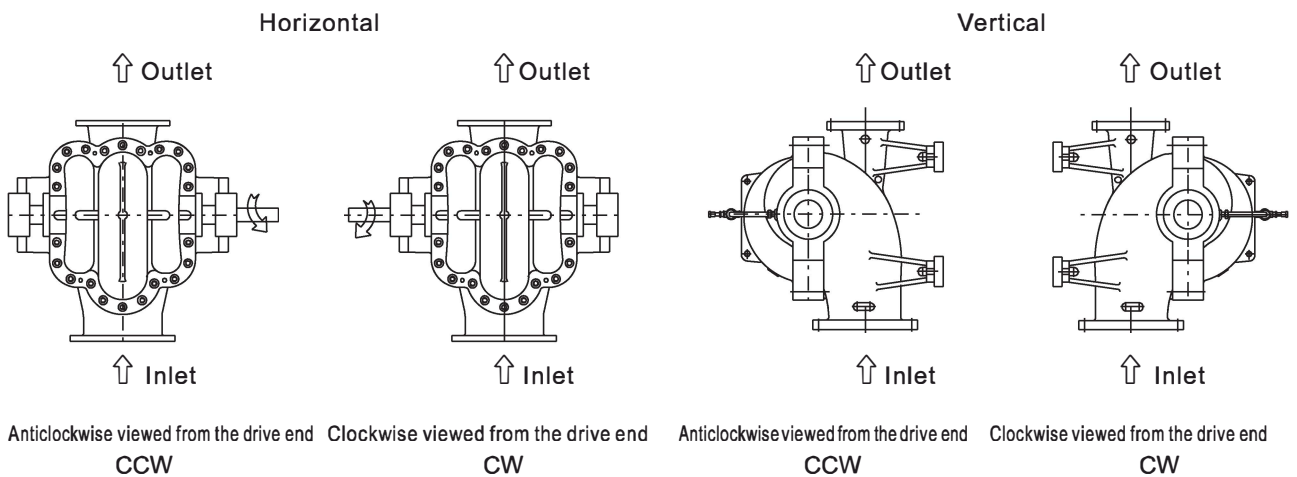


## Vertical Installation



Note: HYDROO chooses the TB or TK according to the motor size.

## 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 / AISI 420 - Stainless steel	Duplex stainless steel	AISI 420/ Stainless steel	
Bearing housing	Cast Iron	Cast Iron	Cast Iron	Cast Iron	
Shaft	AISI 420	AISI 420	Duplex stainless steel	AISI 420/ Stainless steel	
Wear ring	Cast Iron	Ductile CI/SS420	Bronze / Duplex stainless steel with hardening treatment	Ductile CI /Cast steel	
Shaft sleeve	AISI 420	AISI 420	Duplex stainless steel	AISI 420	
Shaft seal	Packing/ Mechanical seal	Packing/ Mechanical seal	Mechanical seal	Mechanical seal	
Flushing Pipeline	ASTM A36	ASTM A36	AISI 316L	ASTM A36/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
HSC125-80-210	35	50	75	72	6307 SKF	M74N/50-G92-Q2BVGG (Mechanical Seal Type B)	Horizontal Installation Type C
HSC125-80-270							
HSC125-80-350							
HSC150-100-250							
HSC150-100-320							
HSC150-100-400							
HSC150-100-400G	40	55	75	72	NU6308 /6308 SKF	H75N/55-G92-Q2BVGG (Mechanical Seal Type B)	Horizontal Installation Type C
HSC200-125-240	45	60	85	82	6309 SKF	M74N/60-G92-Q2BVGG (Mechanical Seal Type B)	Horizontal Installation Type C
HSC200-125-300							
HSC200-125-380							
HSC200-125-480							
HSC200-150-290							
HSC200-150-360	55	70	95	85	6311 SKF	M74N/70-G92-Q2BVGG (Mechanical Seal Type B)	Horizontal Installation Type C
HSC200-150-460							
HSC200-150-570							
HSC250-200-340							
HSC250-200-430							
HSC300-250-270	65	80	110	93	6313 FAG	M74N/80-G92-Q2BVGG (Mechanical Seal Type B)	Horizontal Installation Type C
HSC300-250-280							
HSC250-200-530							
HSC250-200-660							
HSC300-250-390							
HSC350-300-310	75	90	120	92	6315 SKF	M74N/90-G92-Q2BVGG (Mechanical Seal Type A)	Horizontal Installation Type C
HSC350-300-330							
HSC350-300-400							
HSC300-250-490							
HSC300-250-610							
HSC400-300-450							
HSC400-350-360							
HSC400-350-380							
HSC450-450-350							
HSC500-400-400							
HSC500-400-420							



Model	Shaft dia.	Normal dia. packing/mechanical seal	Sealed chamber D	Sealed chamber L	Bearing	Mechanical seal Model	Pump structure
HSC600-500-550 HSC600-500-580	80	115	160	170	6320 SKF	M74N/115-G92-Q2BVGG (Mechanical Seal Type A)	Horizontal Installation Type A
HSC300-250-780	85	110	150	130	NU318/6318 SKF	H75N/110-G92-Q2BVGG (Mechanical Seal Type A)	Horizontal Installation Type B
HSC400-300-570 HSC400-300-700 HSC400-350-520 HSC500-400-500 HSC500-400-590 HSC500-400-675 HSC700-700-500	85	110	150	130	6317 FAG	M74N/110-G92-Q2BVGG (Mechanical Seal Type A)	Horizontal Installation Type B
HSC600-500-470 HSC600-500-520	95	115	160	170	6320 FAG	M74N/120-G92-Q2BVGG (Mechanical Seal Type A)	Horizontal Installation Type A
HSC500-400-540 HSC500-400-660 HSC500-300-790 HSC600-400-740 HSC600-450-640 HSC700-500-670 HSC700-600-600 HSC700-600-680	100	135	180	150	NU321/6321 SKF	M74N/135-G92-Q2BVGG (Mechanical Seal Type A)	Horizontal Installation Type B
HSC500-300-780 HSC500-300-920 HSC600-400-850 HSC700-600-740	115	150	195	180	2XNU324/6324 SKF NU324/6324 SKF	H75N/150-G92-Q2BVGG (Mechanical Seal Type A) M74N/150-G92-Q2BVGG (Mechanical Seal Type A)	Horizontal Installation Type A
HSC800-700-750	120	160	205	170	NU326/6326 SKF	M74N/160-G92-Q2BVGG (Mechanical Seal Type A)	Horizontal Installation Type B
HSC700-500-940 HSC800-700-910 HSC1000-800-940	130	170	215	176	2XNU328/6328 NU328/2X6328 NU328/6328	M74N/170-G92-Q2BVGG (Mechanical Seal Type A)	Horizontal Installation Type A

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 HYDROO.

## Pressure Limits

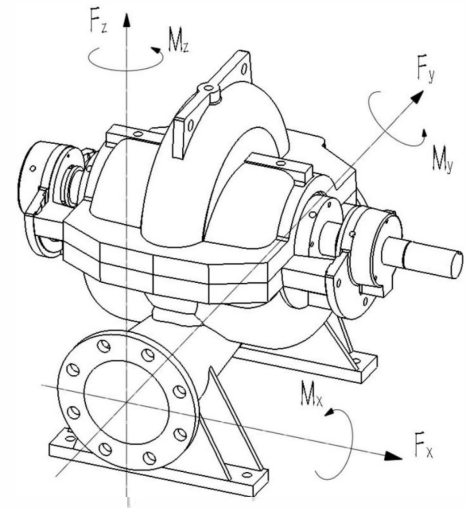
Model	Permissible operating pressure (Mpa)	Model	Permissible operating pressure (Mpa)
HSC125-80-210	1.6	HSC400-300-700	2.5
HSC125-80-270	1.6	HSC400-350-360	1.6
HSC125-80-350	1.6	HSC400-350-380	1.6
HSC150-100-250	1.6	HSC400-350-520	1.6
HSC150-100-320	1.6	HSC450-450-350	1.0
HSC150-100-400	1.6	HSC500-300-780	3.0
HSC150-100-400G	3.0	HSC500-300-920	2.5
HSC200-125-240	1.6	HSC500-400-400	1.6
HSC200-125-300	1.6	HSC500-400-420	1.6
HSC200-125-380	1.6	HSC500-400-500	1.6
HSC200-125-480	1.6	HSC500-400-540	1.6
HSC200-150-290	1.6	HSC500-400-590	1.6
HSC200-150-360	1.6	HSC500-400-660	2.5
HSC200-150-460	1.6	NSC500-400-675	1.6
HSC200-150-570	2.5	NSC600-400-740	1.6
HSC250-200-340	1.6	HSC600-400-850	1.6
HSC250-200-430	1.6	HSC600-450-640	1.6
HSC250-200-530	1.6	HSC600-500-470	1.6
HSC250-200-660	2.5	HSC600-500-520	1.0
HSC300-250-270	1.6	HSC600-500-550/580	1.0
HSC300-250-280	1.6	HSC700-500-670	1.6
HSC300-250-390	1.6	HSC700-500-940	2.5
HSC300-250-490	1.6	HSC700-600-600	1.6
HSC300-250-610	1.6	HSC700-600-680	1.6
HSC300-250-780	3.0	HSC700-600-740	1.6
HSC350-300-310	1.6	HSC700-700-500	1.6
HSC350-300-330	1.6	HSC800-700-750	1.6
HSC350-300-400	1.6	HSC800-700-910	1.6
HSC400-300-450	1.6	HSC1000-800-940	1.0
HSC400-300-570	1.6		

Remark:

- The max test pressure in above table is 1.6Mpa and pump casing material within this range apply to GG25; if the pressure is over 1.6 Mpa, should use ductile cast iron or the better materials.
- The max test pressure in above table pump is 2.5Mpa and above, if the max test pressure is within 2.0Mpa, casing material can be GG25, if the max test pressure is more than 2.0Mpa, casing material should be ductile cast iron or the other better materials.

# 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		
HSC125-80-210	30	216	800	500
HSC125-80-270	25	270		
HSC125-80-350	22	345		
HSC150-100-250	30	254	1000	700
HSC150-100-320	24	325		
HSC150-100-400	21	423		
HSC150-100-400G	21	423		
HSC200-125-240	48	250	1500	1000
HSC200-125-300	37	301		
HSC200-125-380	35	395	2000	1500
HSC200-125-480	29	491		
HSC200-150-290	52	290	2500	2000
HSC200-150-360	44	370		
HSC200-150-460	35	460		
HSC200-150-570	32	585	3000	2750
HSC250-200-340	57	338		
HSC250-200-430	52	426	4000	2750
HSC250-200-530	40	530		
HSC250-200-660	38	665		
HSC300-250-270	119	302		
HSC300-250-280	96	321		
HSC300-250-390	70	395		
HSC300-250-490	60	490		
HSC300-250-610	45	610		
HSC300-250-780	42	770		
HSC350-300-310	132	310		
HSC350-300-330	101	350		
HSC350-300-400	81.6	425		
HSC400-300-450	81	450		
HSC400-300-570	67	580		
HSC400-300-700	65	700		
HSC400-350-360	149	360		
HSC400-350-380	122	415		
HSC400-350-520	90	558		
HSC450-450-350	161	350	5600	3200
HSC500-300-780	81	780		
HSC500-300-920	85.4	920		
HSC500-400-400	180.6	412		
HSC500-400-420	180	425		
HSC500-400-500	166.1	498		
HSC500-400-540	105	545		
HSC500-400-590	105	545		
HSC500-400-660	84.9	666		
HSC500-400-675	84.9	666		
HSC600-400-740	99	740	6900	3800
HSC600-400-850	102	860		
HSC600-450-640	128	650		
HSC600-500-470	175	520	8800	4900
HSC600-500-520				
HSC600-500-550				
HSC600-500-580	243	580	10700	6300
HSC700-500-670				
HSC700-500-940				
HSC700-600-600	103.5	610	12600	7100
HSC700-600-680				
HSC700-600-740				
HSC700-700-500				
HSC800-700-750	315.9	750	12600	7100
HSC800-700-910				
HSC1000-800-940				



**Note:**

Values are valid for casing materials cast iron, for casing material ductile cast iron use 1.4-fold value and for cast steel use 1.7-fold value. If require for the dimension of pump which is not shown in the above table, pls contact HYDROO.

## Speeds

The Performance Range Chart shows the pump operating range, for higher speeds, pls consult HYDRO.

## 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.

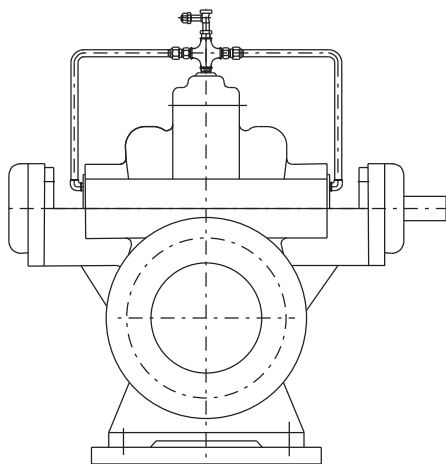
## Paint Specifications

	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: RAL 9005 (Black) Fire-Fighting Pump: RAL3000(Red)

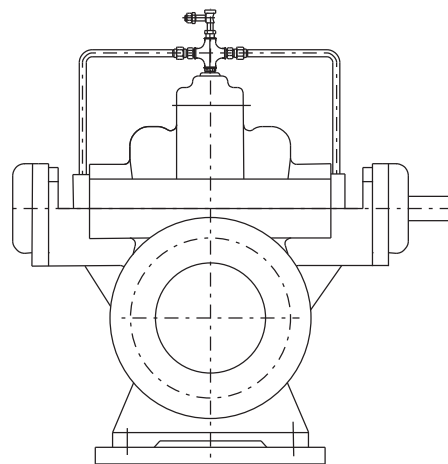
Note: Super light energy saving coating, wear-resistant coating, anti-corrosion coating and others are available according to the different medium, application, customer requirements and the coating is extra-charged.

## Arrangement

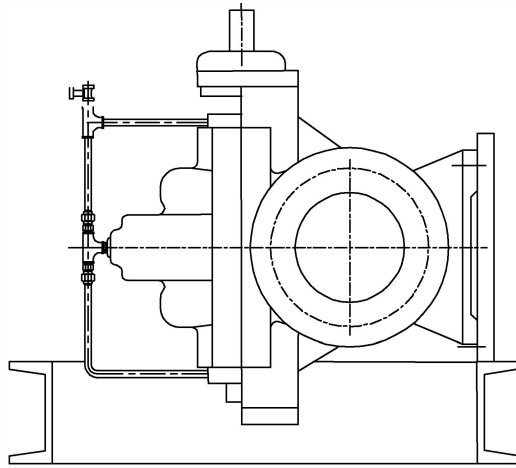
Sealing Water Pipes



▲01 Flushing water piping stuffing box

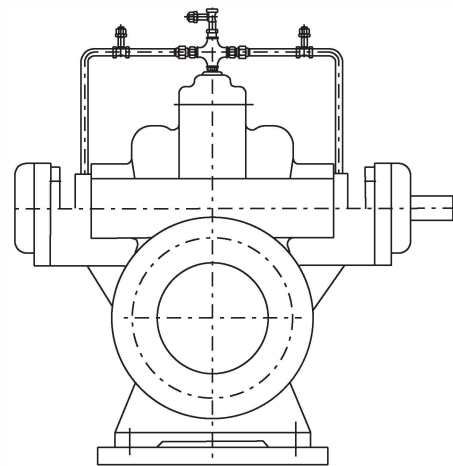
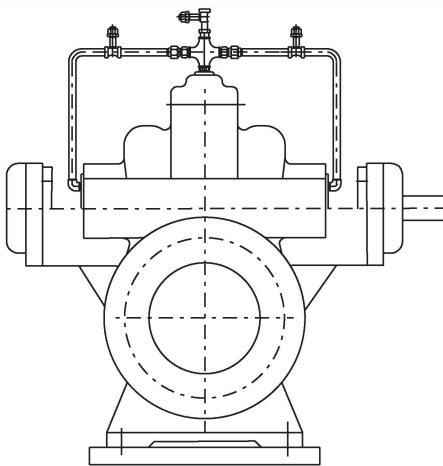


▲ 02 Flushing water piping mechanical seal



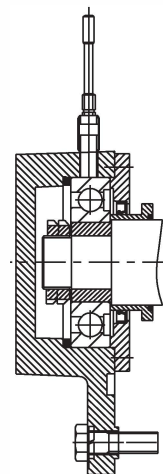
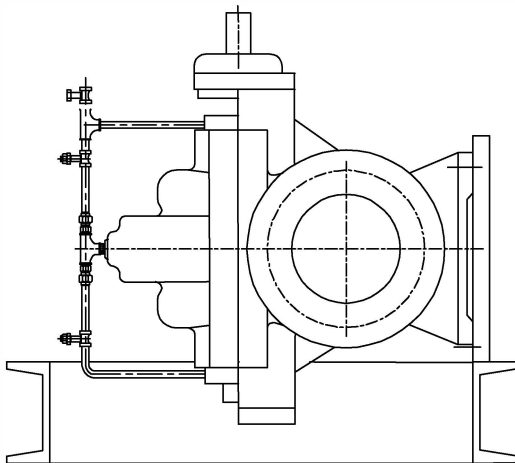
▲ 03 Mechanical seal and flushing water piping for lineshaft bearing

## 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

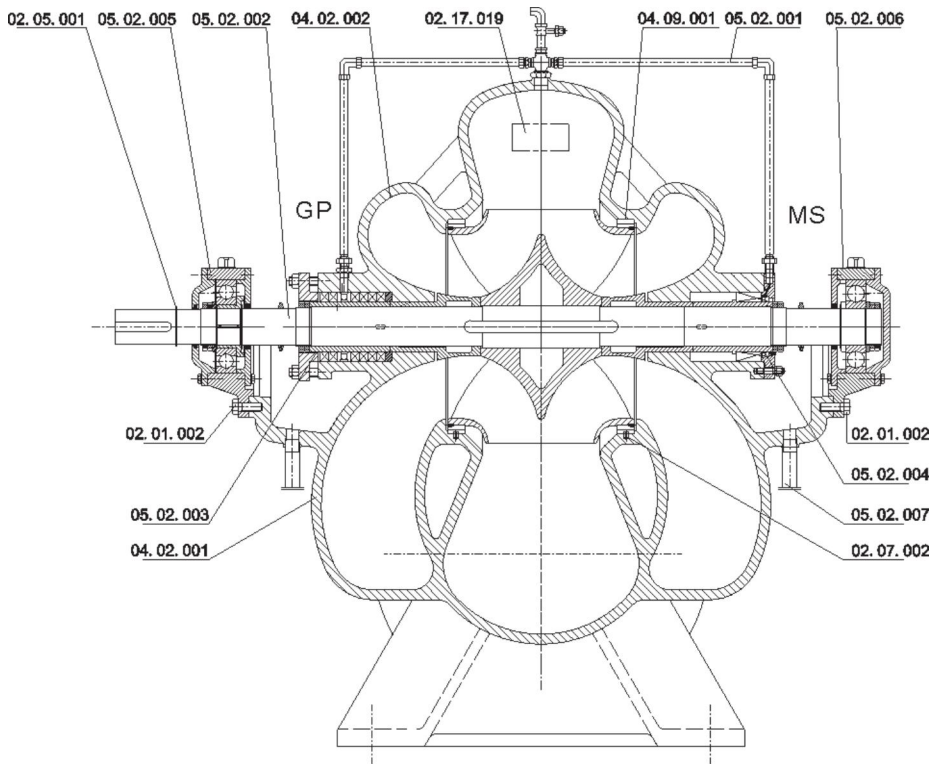


▲ 06 Flushing water piping and vent valve (Vertical installation)

▲ 07 Bearing temperature sensor (PT100)

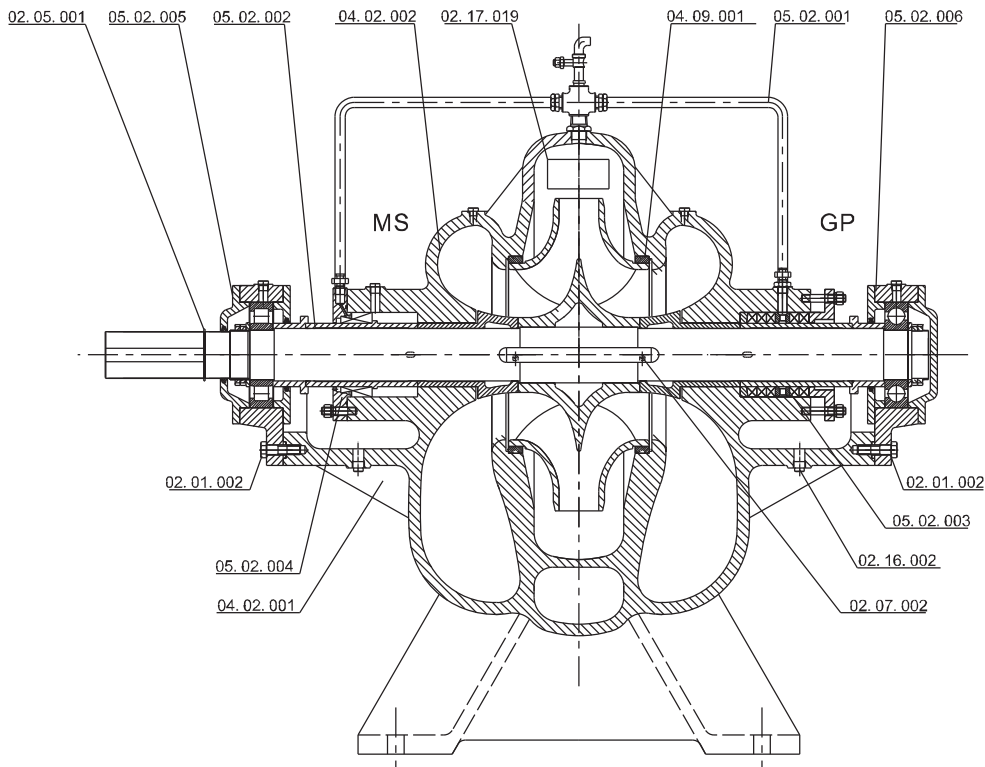
# Sectional View—HSC

## Horizontal Installation



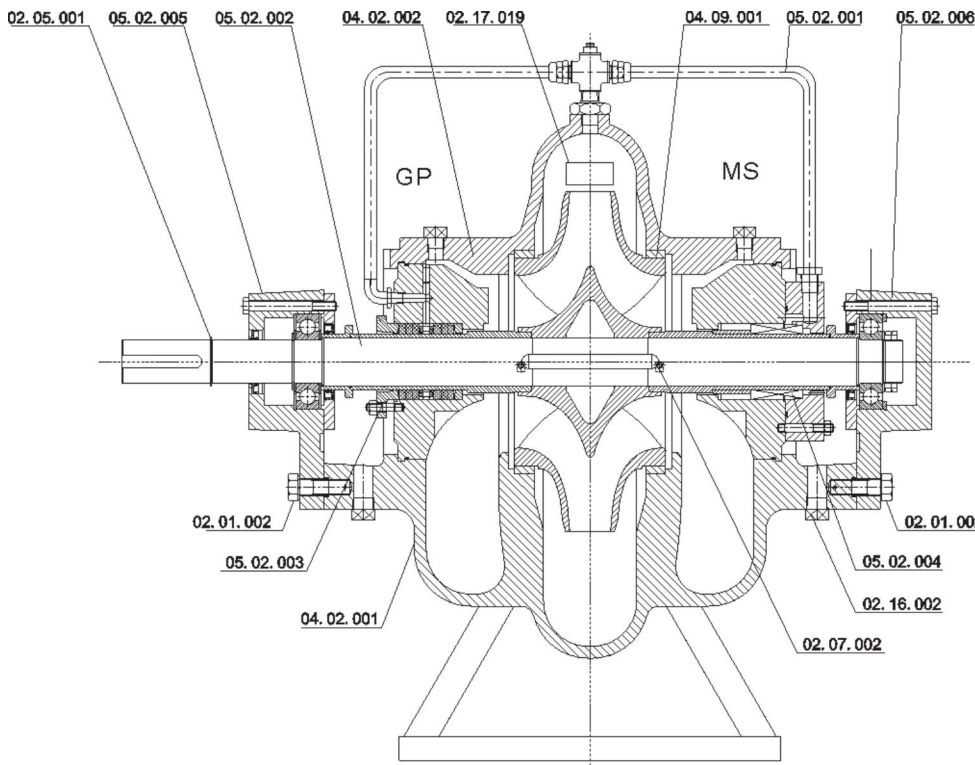
▲ Type A

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

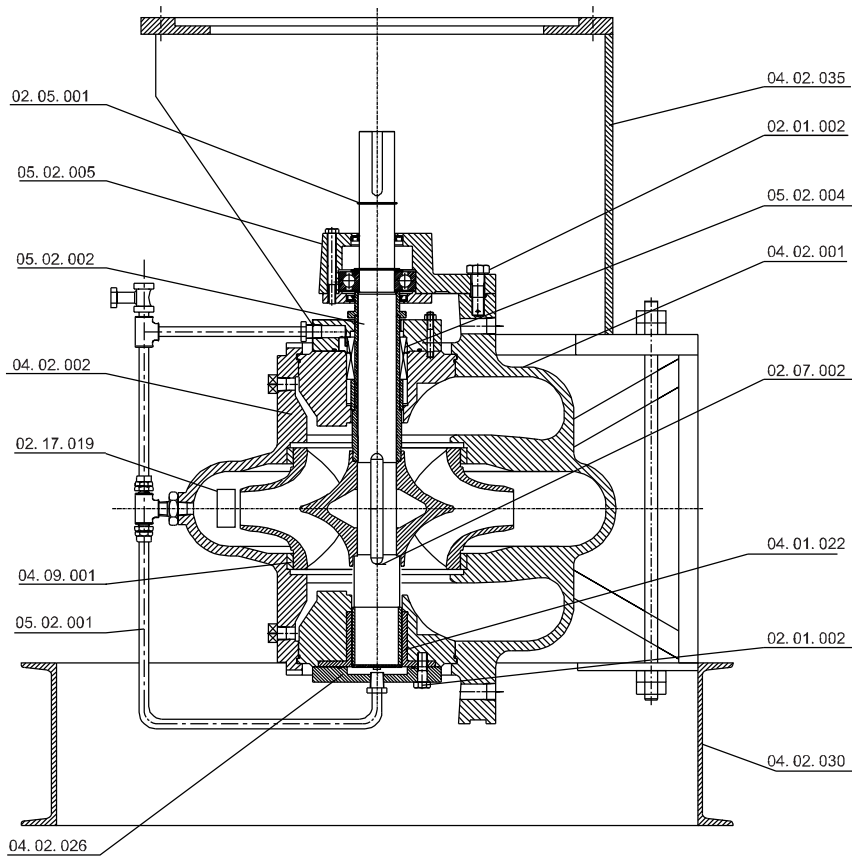
Part No.	Part Name
02.05.001	Shaft Circlip
05.02.005	Bearing assembly (DE)
05.02.002	Rotor assembly
04.02.002	Upper casing
02.17.019	Nameplate
04.09.001	Casing wear ring
05.02.001	Flushing water piping
05.02.006	Bearing assembly (NDE)
02.01.002	Bolt
05.02.004	Mechanical seal assembly
04.02.001	Lower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

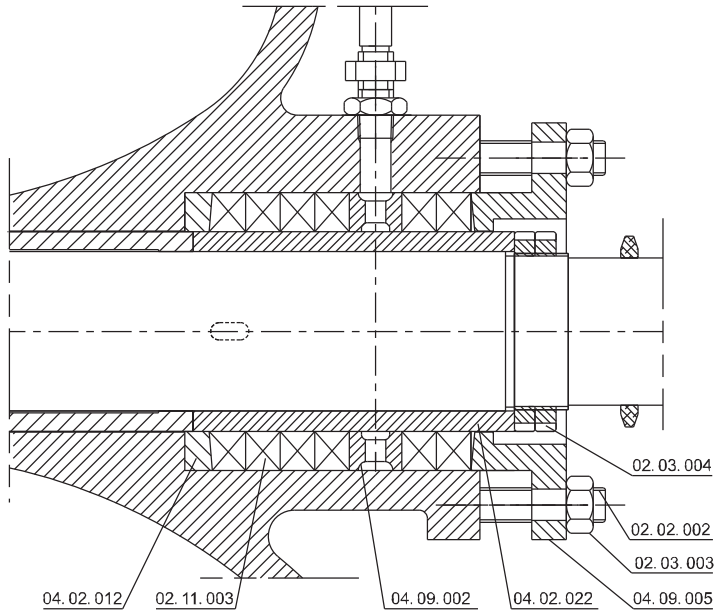
## Vertical Installation



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

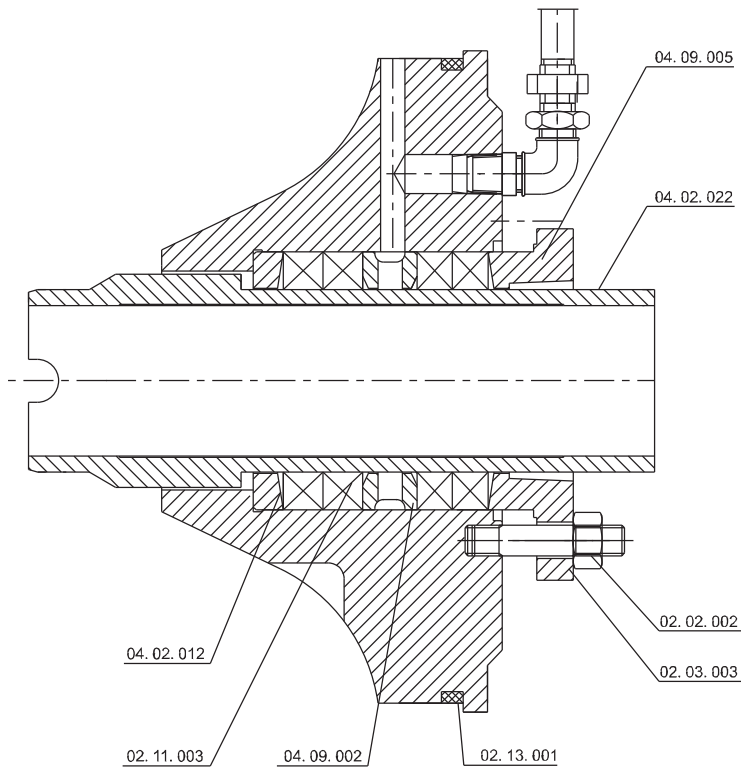
## Sectional View—Shaft Seal

### 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

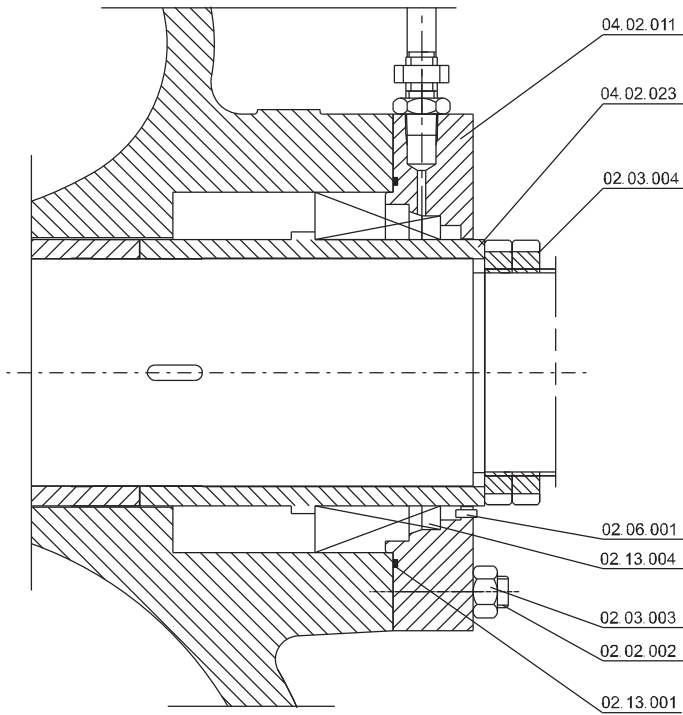
▲ Type A—Apply to horizontal installation type A and B



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

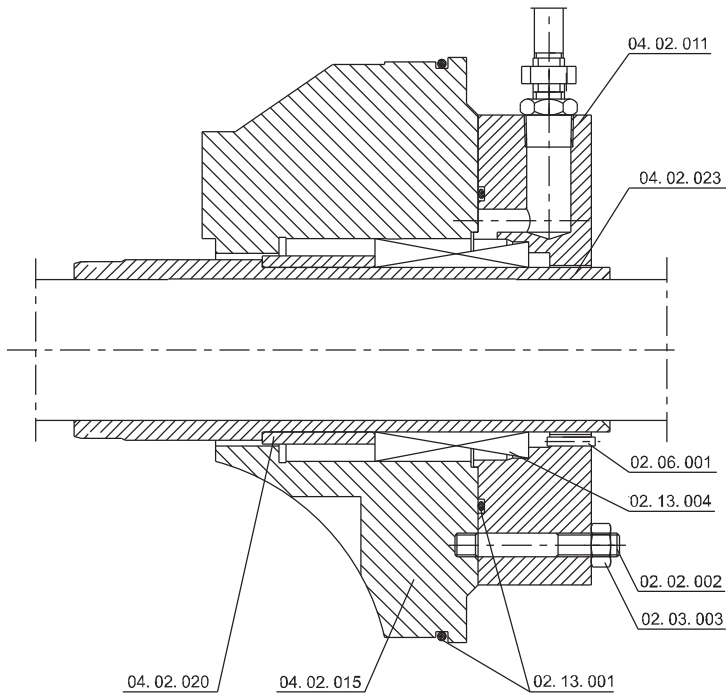
▲ Type B—Apply to horizontal installation type C

## 2. Mechanical Seal



▲ 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
02.03.004	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

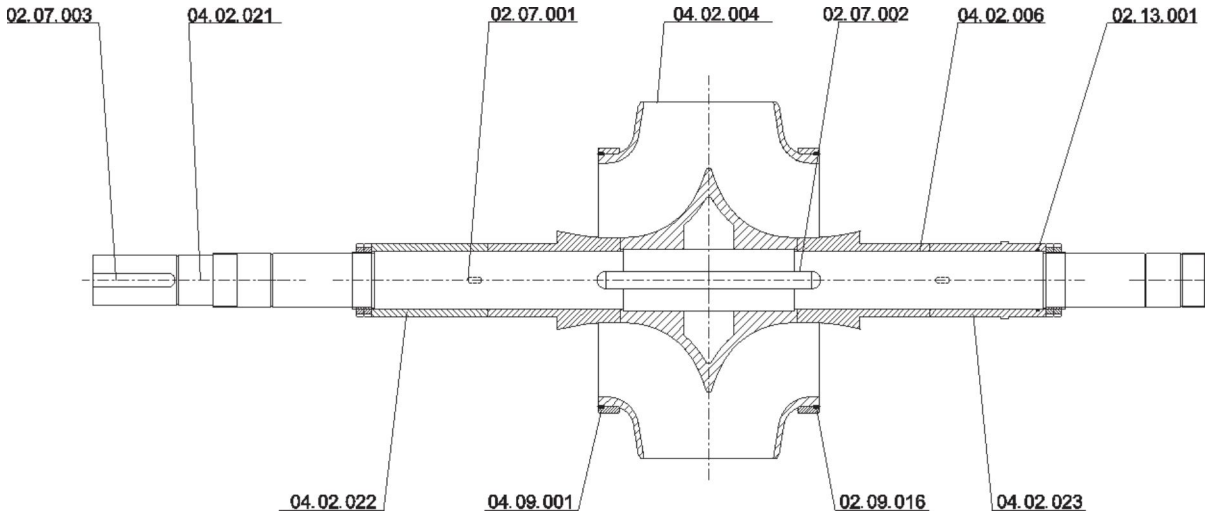


▲ Type B—Apply to horizontal installation type C

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

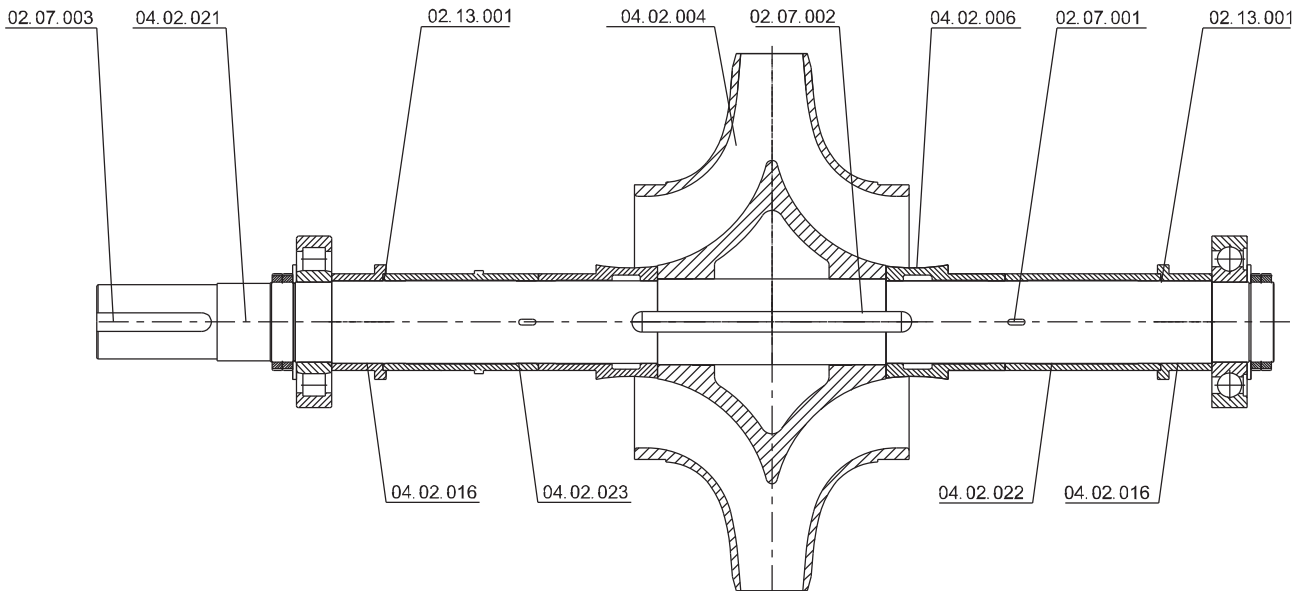


## Sectional View—Rotor



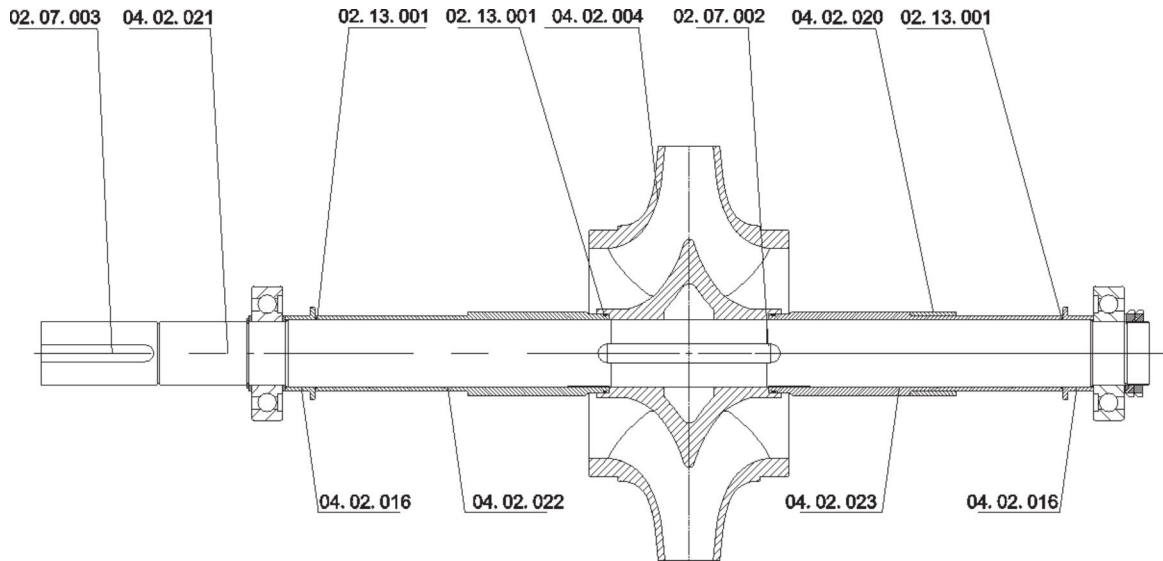
▲ Type A—Apply to horizontal installation type A

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

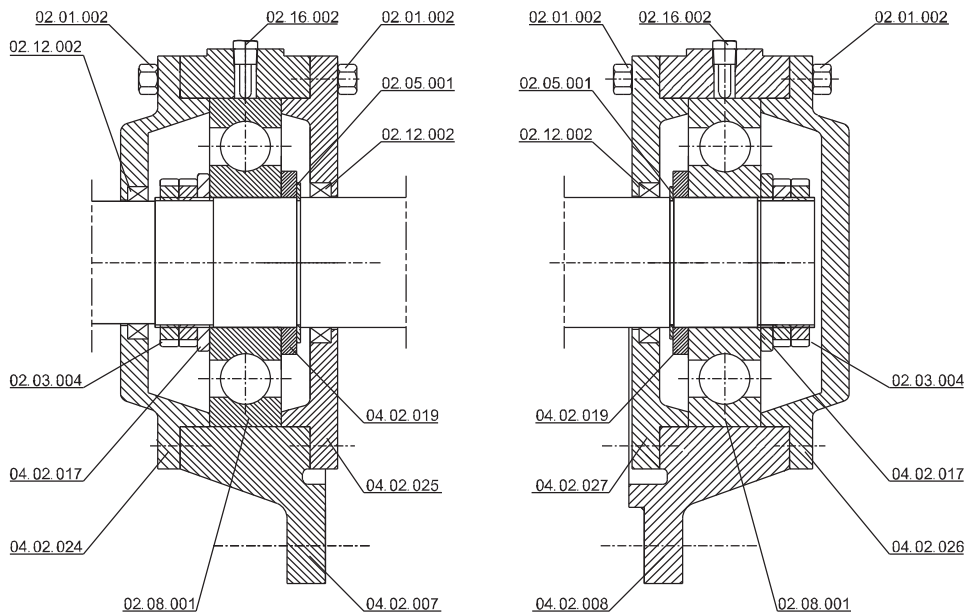
Part No.	Part Name	Part No.	Part Name	Part No.	Part Name
02.07.003	Key C	04.02.021	Shaft	02.13.001	O-Ring
04.02.004	Impeller	02.07.002	Key B	04.02.006	Shaft protecting sleeve
02.07.001	Key A	04.02.016	Water baffle sleeve	04.02.023	Shaft protecting sleeve(MS)
04.02.022	Shaft protecting sleeve(GP)				



▲ Type C—Apply to horizontal installation type C

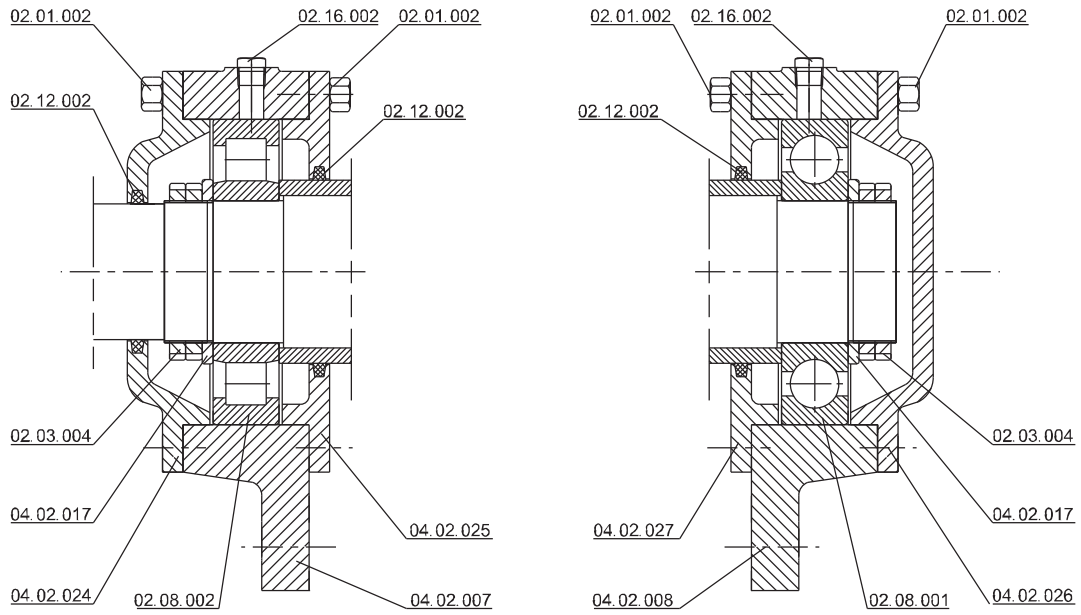
Part No.	Part Name	Part No.	Part Name	Part No.	Part Name
02.07.003	Key C	04.02.021	Shaft	02.13.001	O-Ring
04.02.004	Impeller	02.07.002	Key B	04.02.020	Spacer sleeve(MS)
04.02.023	Shaft protecting sleeve(MS)	04.02.016	Water baffle sleeve	04.02.022	Shaft protecting sleeve(GP)

### Sectional View—Bearing



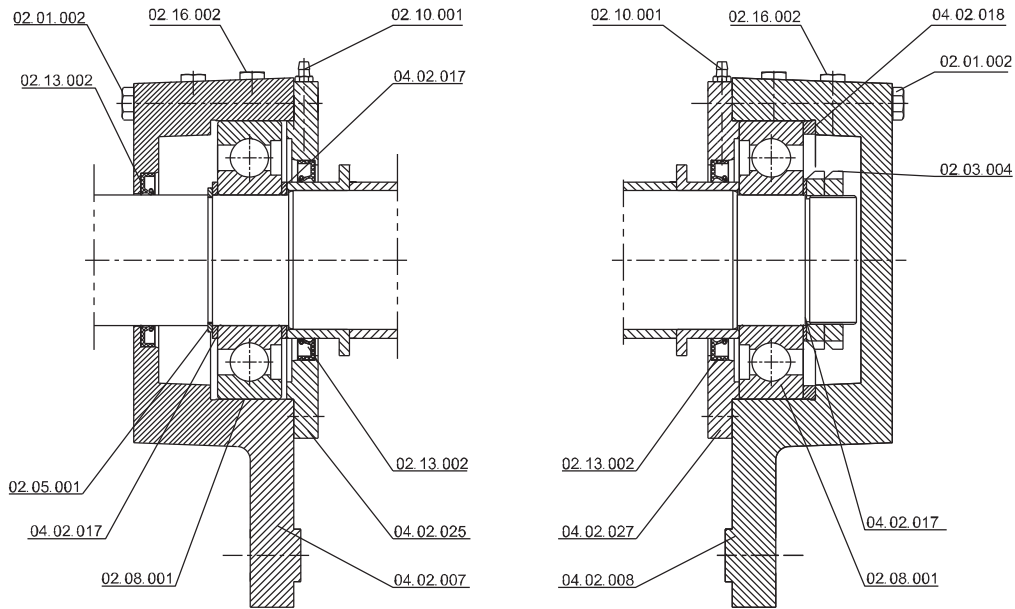
▲ Type A---Apply to horizontal installation type A

Part No.	Part Name	Part No.	Part Name	Part No.	Part Name	Part No.	Part Name
02.01.002	Hex bolts	02.12.002	Bearing retainer 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	Lip seal ring	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

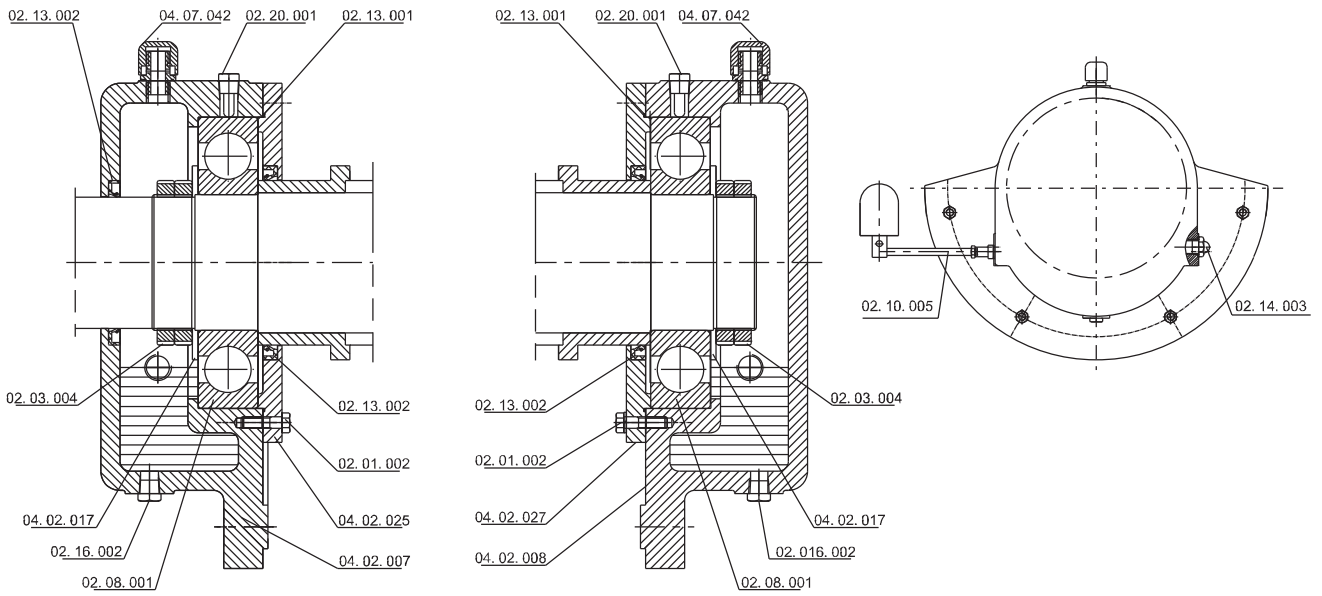
Part No.	Part Name	Part No.	Part Name	Part No.	Part Name	Part No.	Part Name
02.01.002	Hex bolts	02.12.002	Felt ring	02.03.004	Round nut	04.02.017	Bearing circlip
04.02.024	Bearing outer cover (DE)	02.08.002	Roller bearing	02.16.002	Plug	04.02.025	Bearing inner cover (DE)
04.02.007	Bearing housing (DE)	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

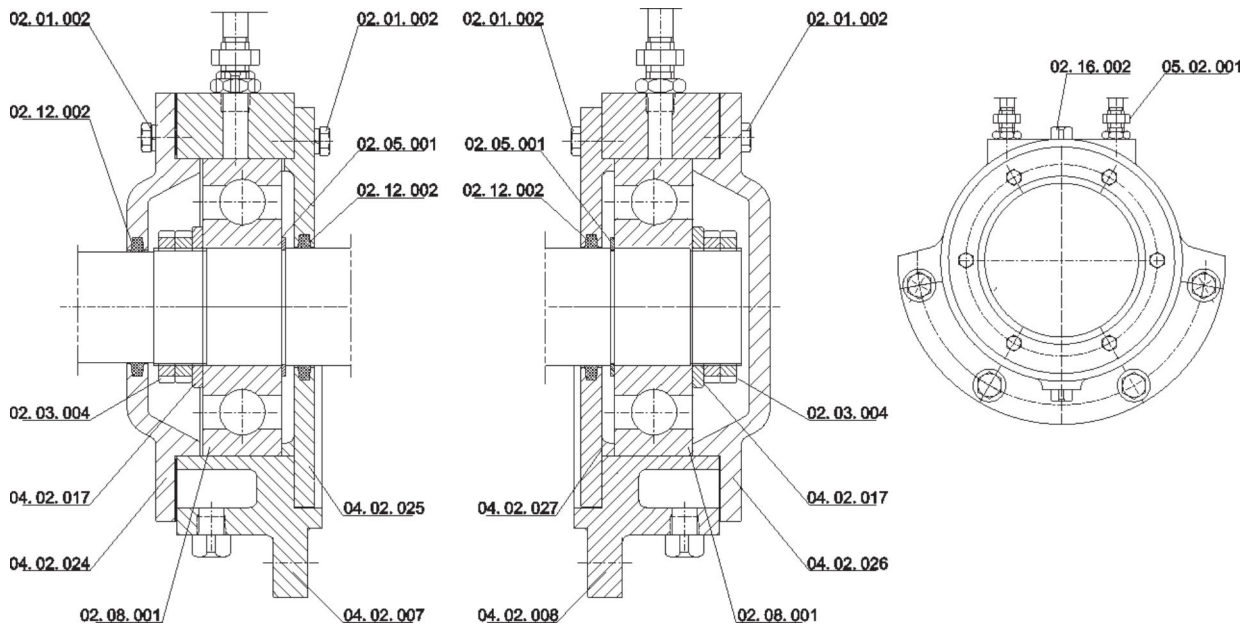
Part No.	Part Name	Part No.	Part Name	Part No.	Part Name	Part No.	Part Name
02.01.002	Hex bolts	02.13.002	Lip-type seal ring	02.05.001	Shaft Circlip	04.02.017	Bearing circlip
02.08.001	Deep groove ball bearing	02.16.002	Plug	02.10.001	Straight-through type oil cup	04.02.025	Bearing inner cover (DE)
04.02.007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

## Bearing with oil lubrication



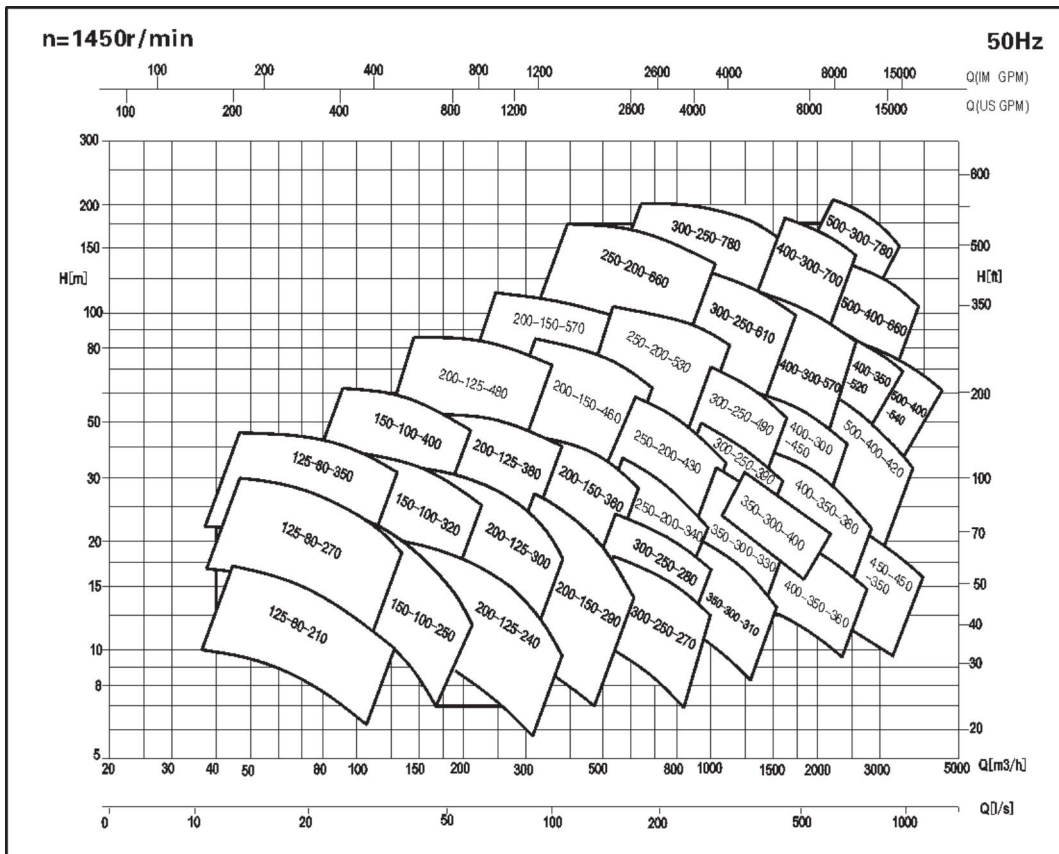
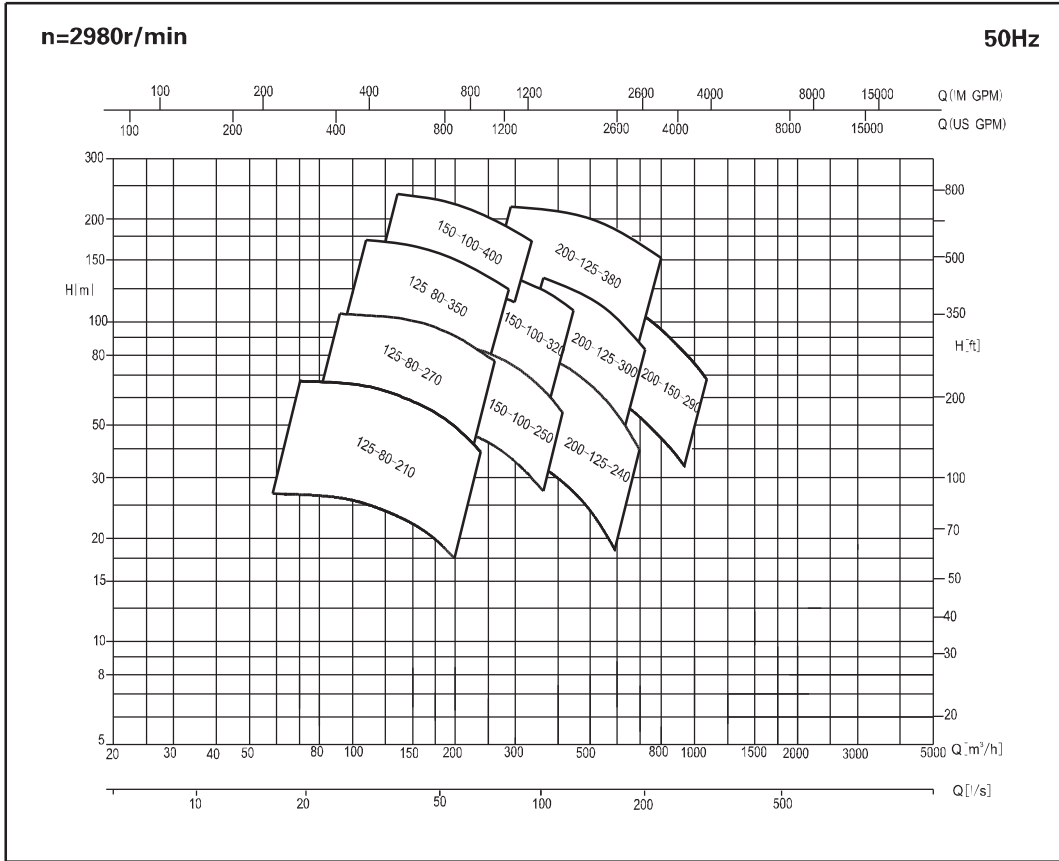
Part No.	Part Name	Part No.	Part Name	Part No.	Part Name	Part No.	Part Name
02.13.002	Lip-type seal ring	02.03.004	Round nut	04.02.017	Bearing circlip	02.16.002	Plug
02.08.001	Deep groove ball bearing	04.07.042	Breather cap	02.20.001	Temperature measuring device	02.13.001	O-Ring
02.01.002	Hex bolts	04.02.025	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		

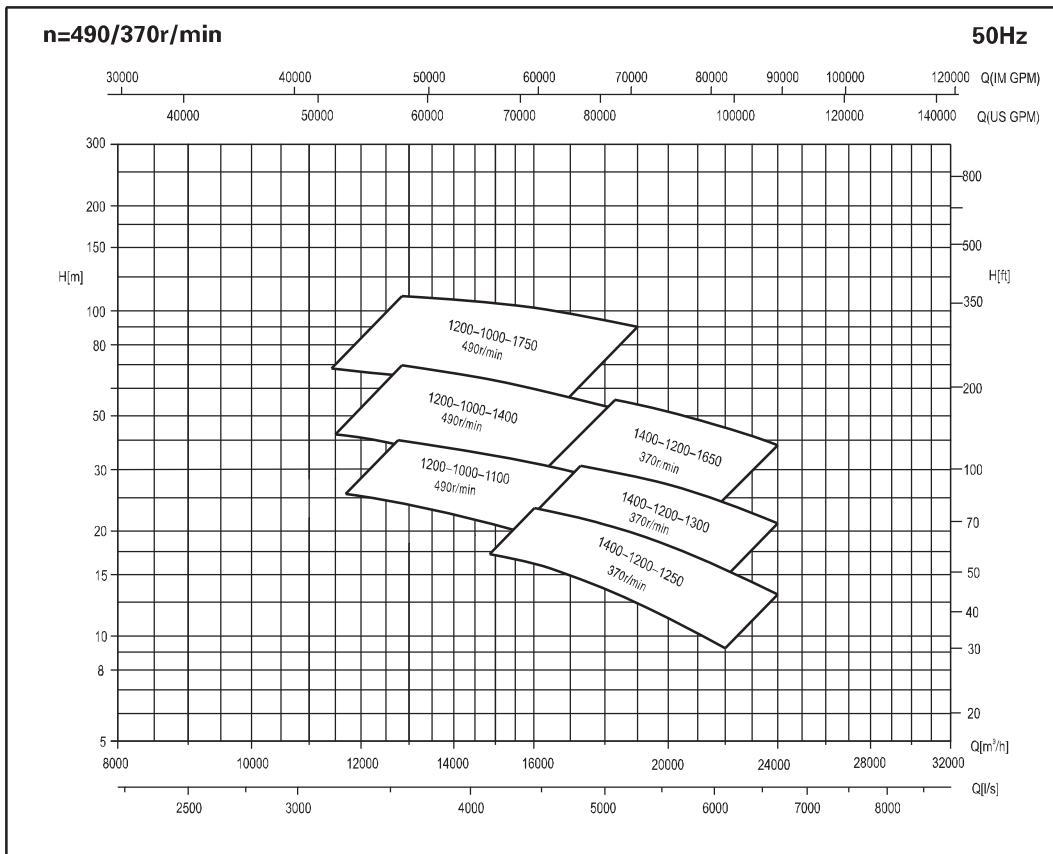
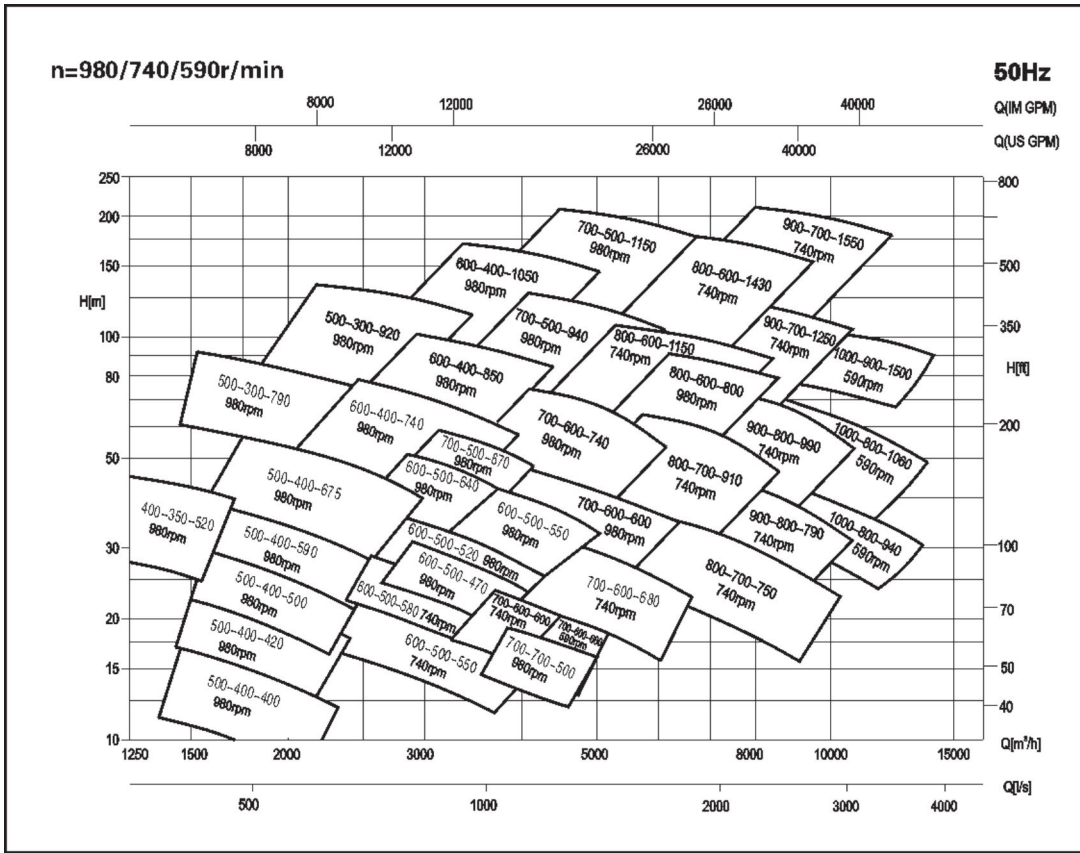
## Bearing with water cooling(Pumping higher temp. liquid)



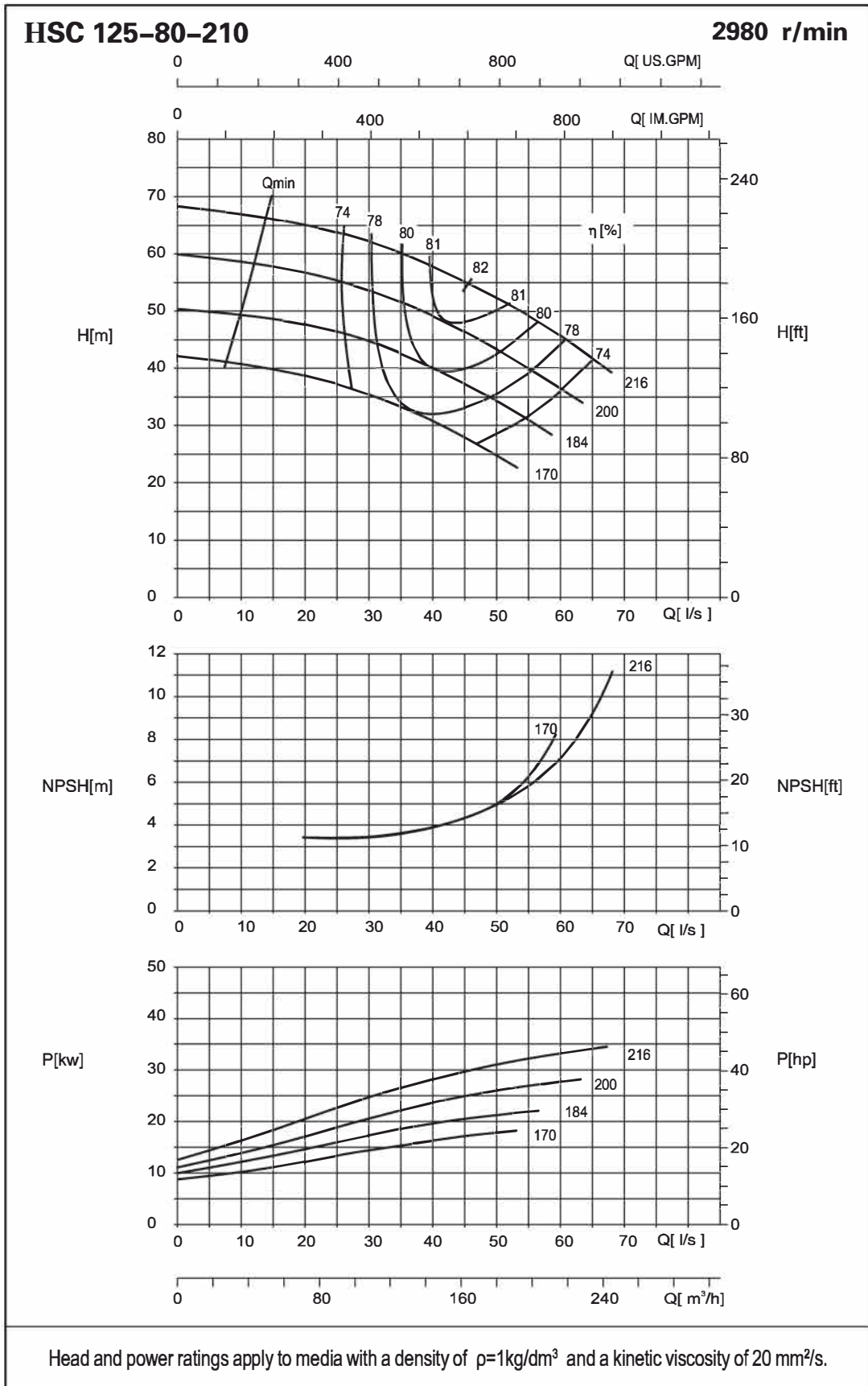
Part No.	Part Name	Part No.	Part Name	Part No.	Part Name	Part No.	Part Name
02.01.002	Hex bolts	02.12.002	Felt ring	02.03.004	Round nut	04.02.017	Bearing circlip
04.02.024	Bearing outer cover(DE)	02.08.001	Deep groove ball bearing	02.05.001	Shaft Circlip	04.02.008	Bearing housing (NDE)
04.02.025	Bearing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

# Performance Range



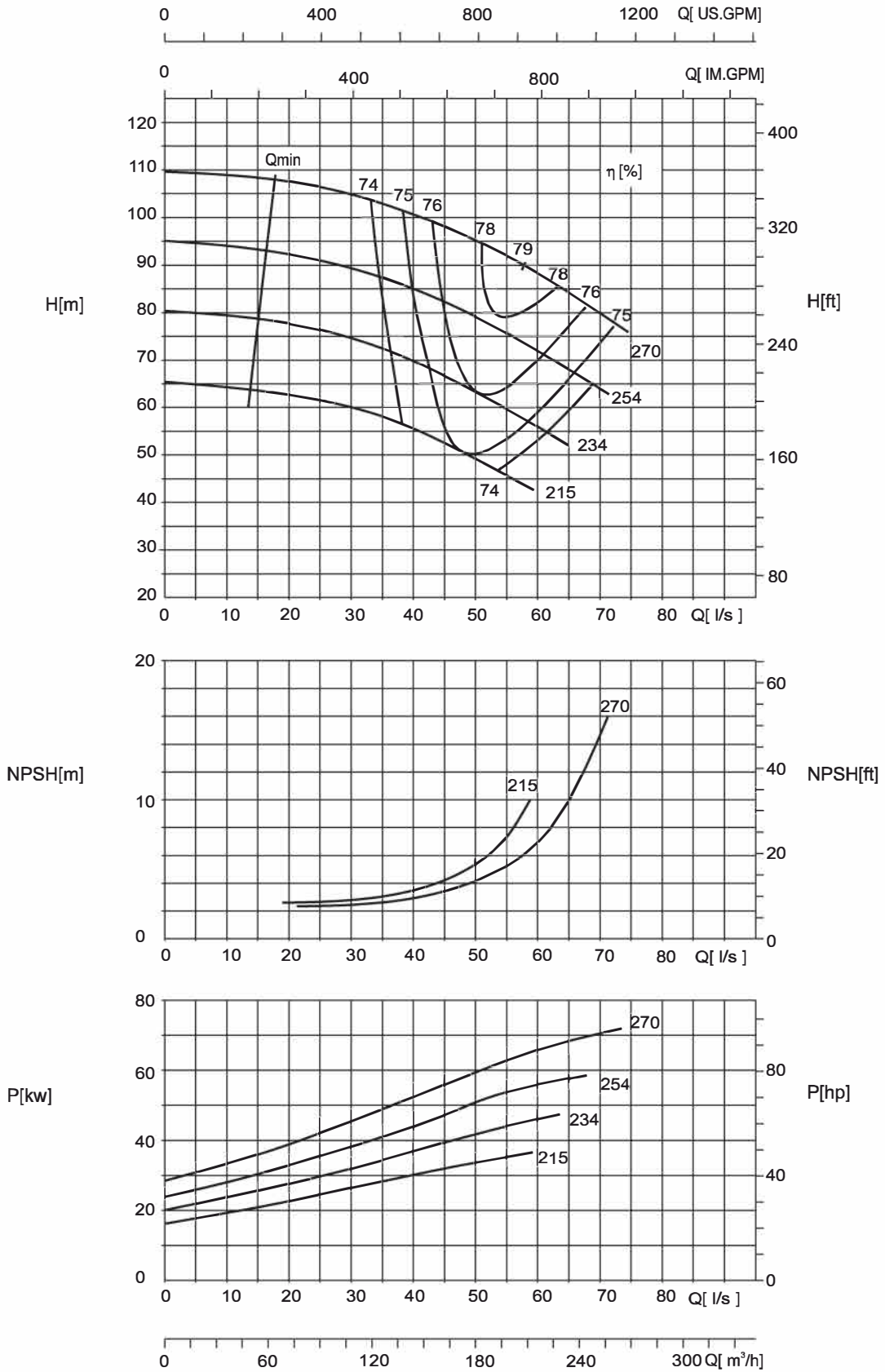


# Performance Curve



**HSC 125-80-270**

**2980 r/min**

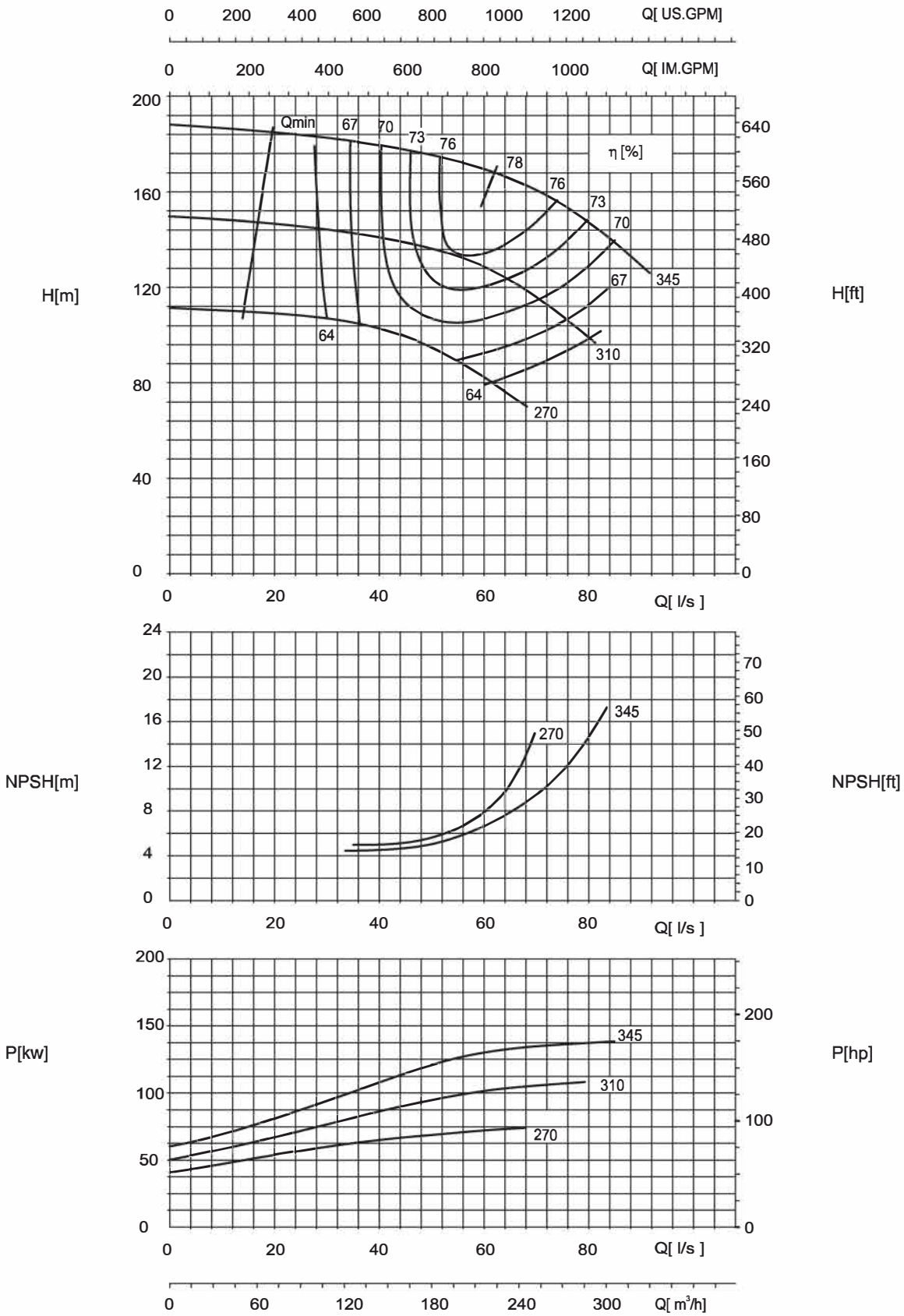


Head and power ratings apply to media with a density of  $\rho=1\text{kg/dm}^3$  and a kinetic viscosity of  $20\text{ mm}^2/\text{s}$ .



**HSC 125-80-350**

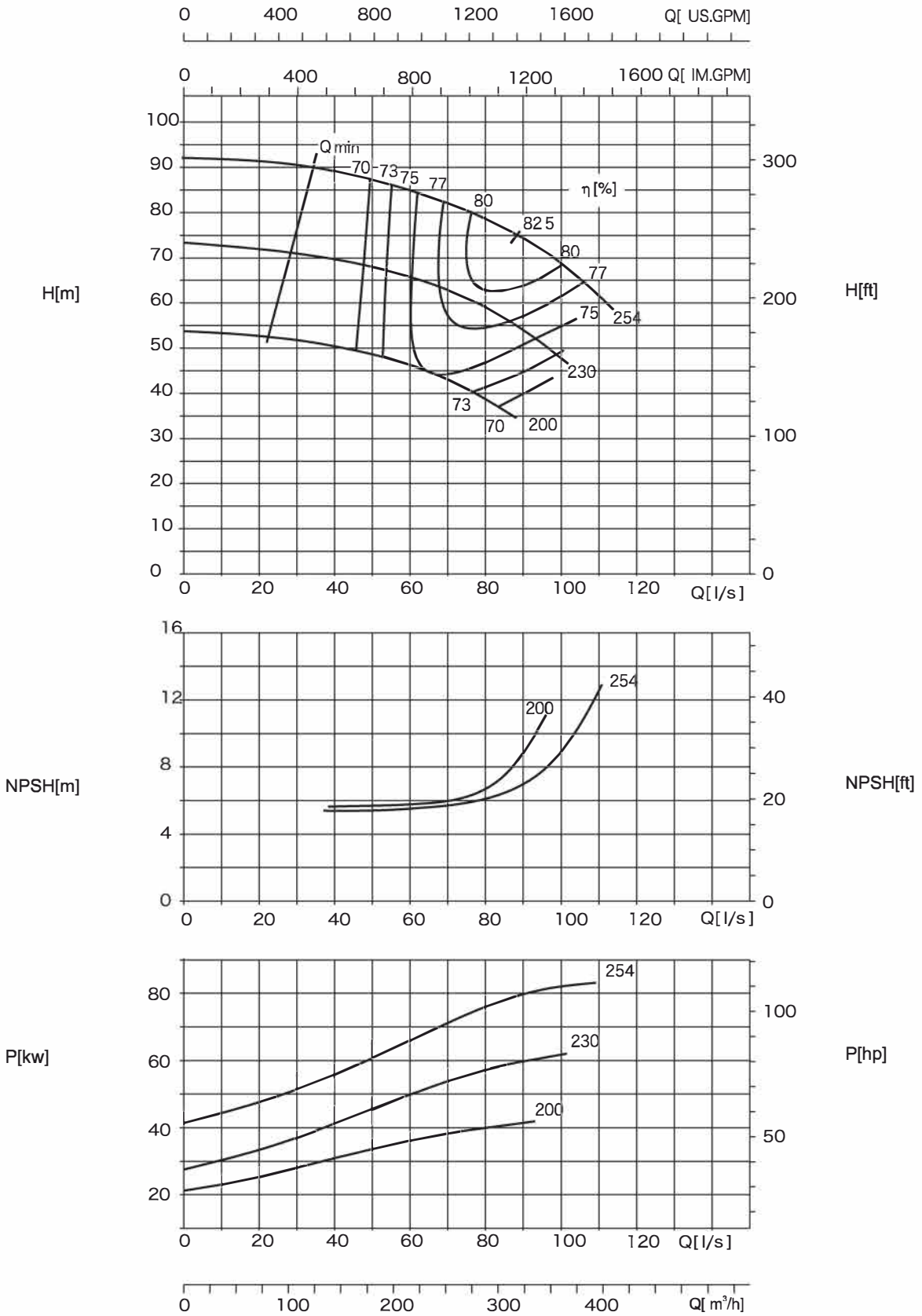
**2980 r/min**



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

**HSC 150-100-250**

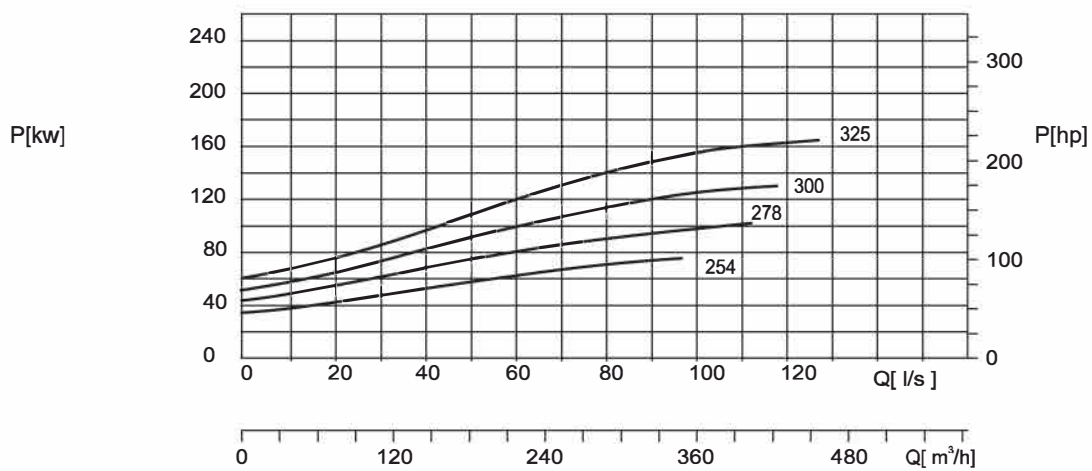
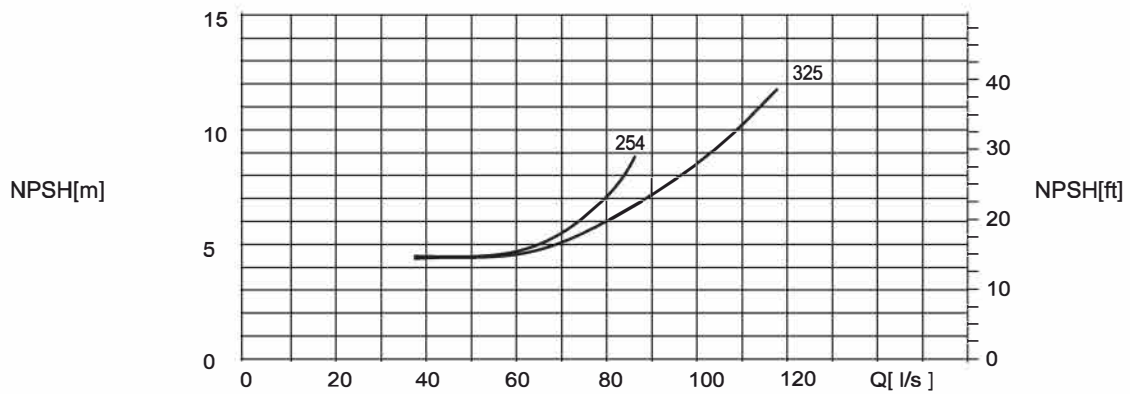
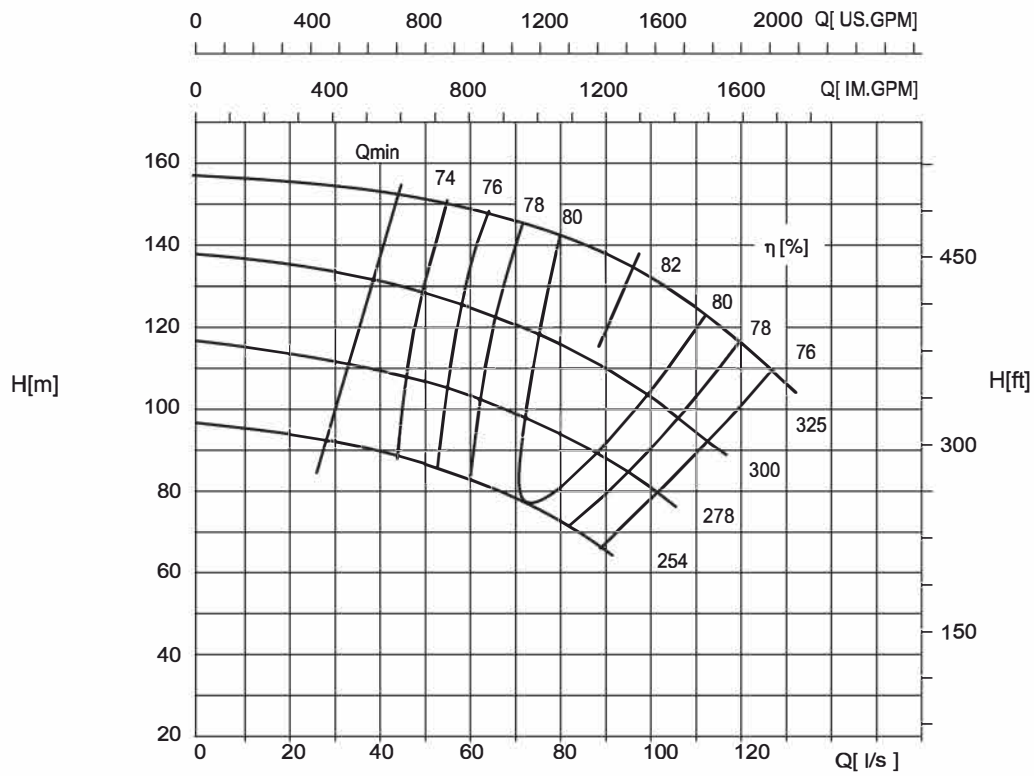
**2980 r/min**



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

# HSC 150-100-320

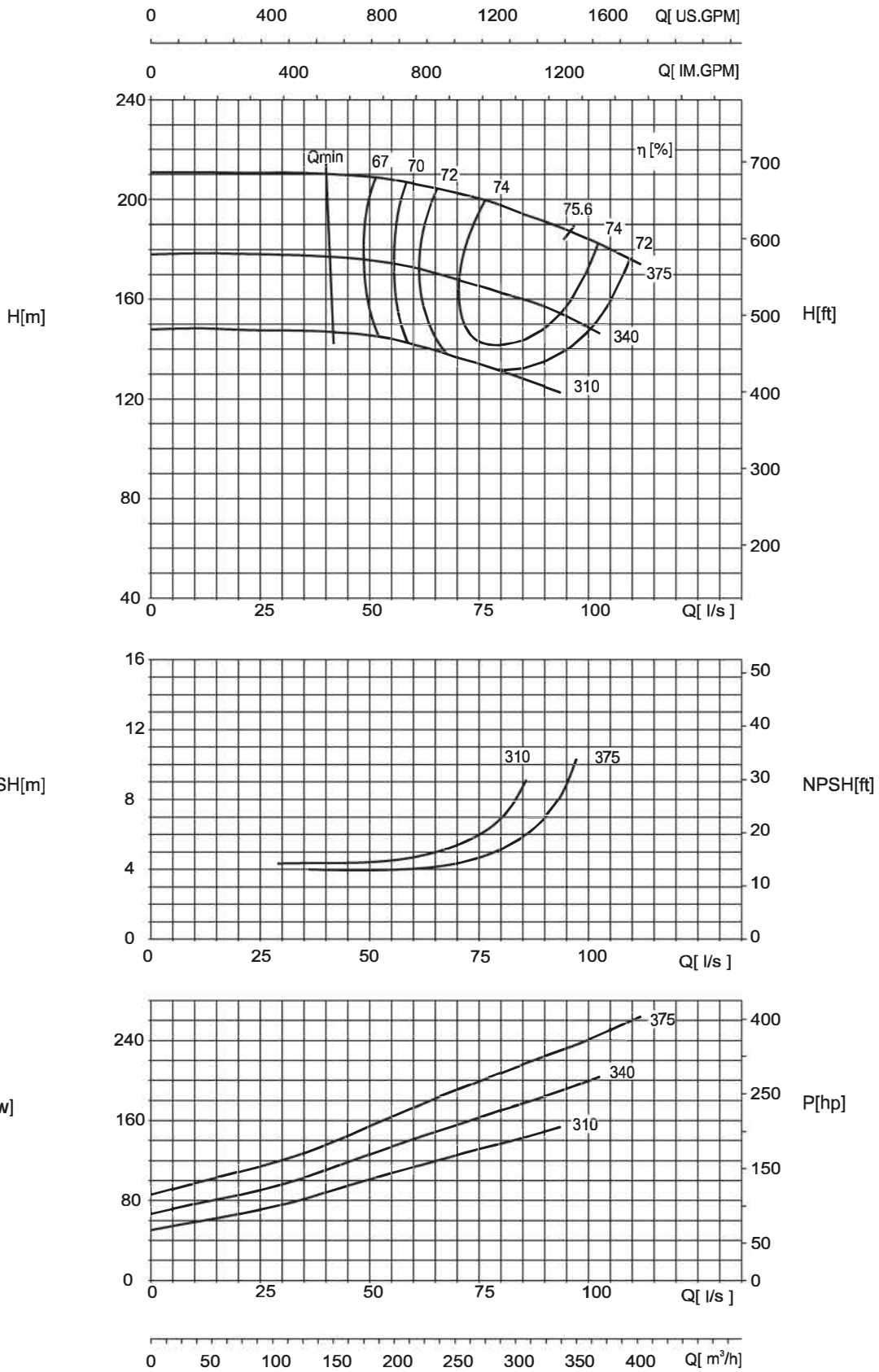
2980 r/min



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

# HSC 150-100-400G

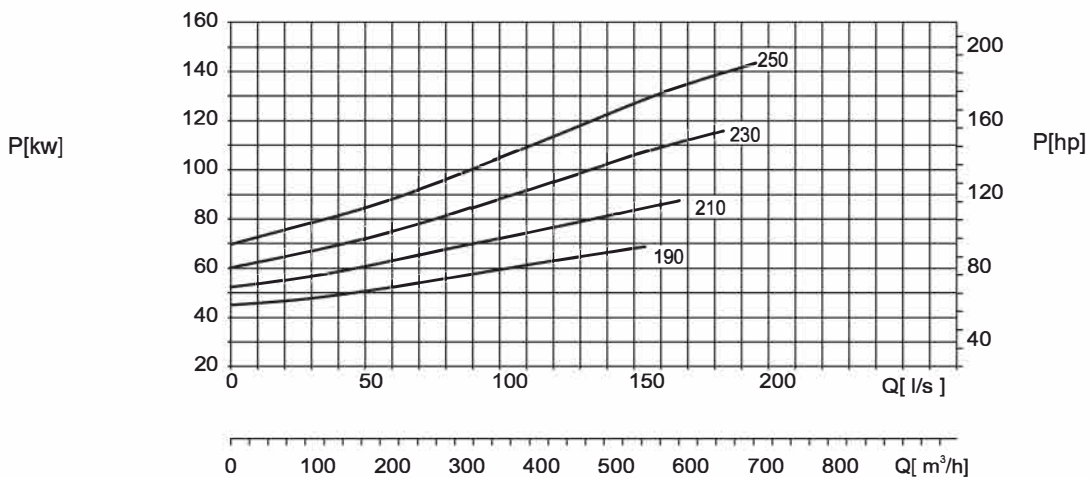
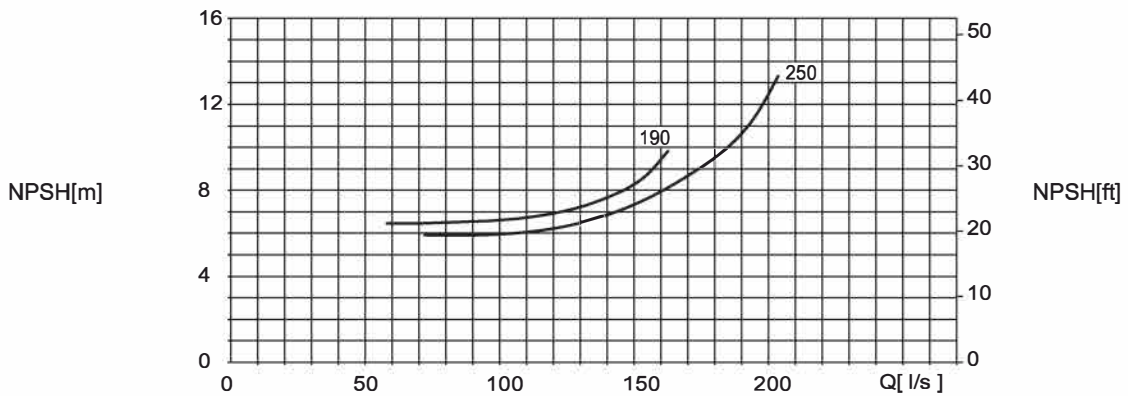
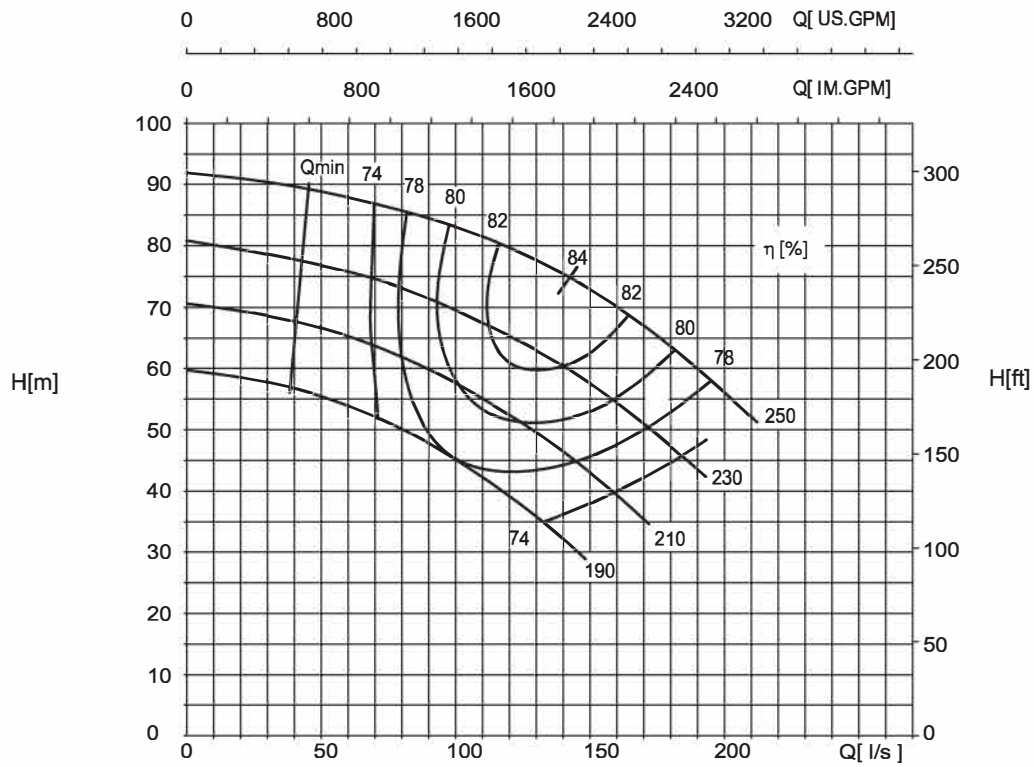
2980 r/min



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

# HSC 200-125-240

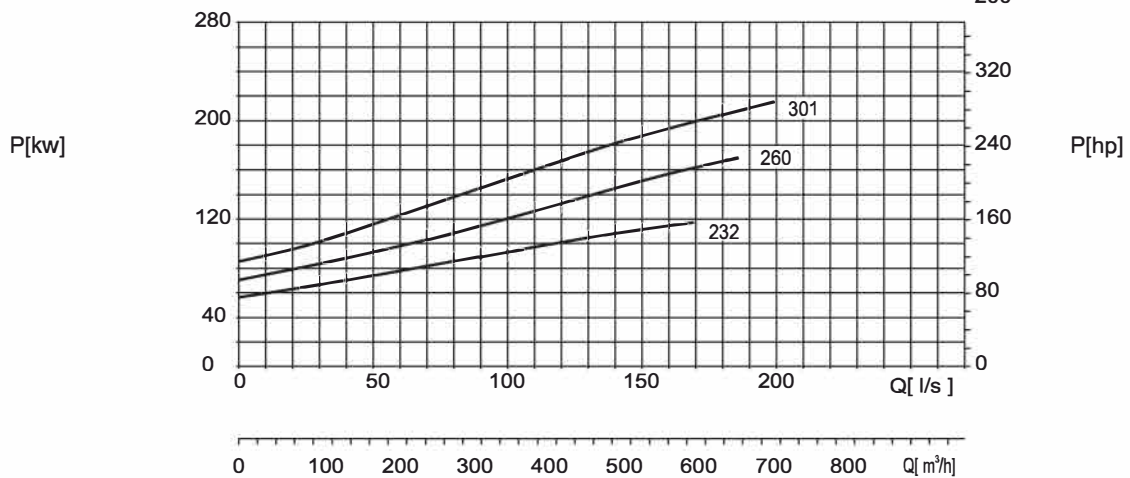
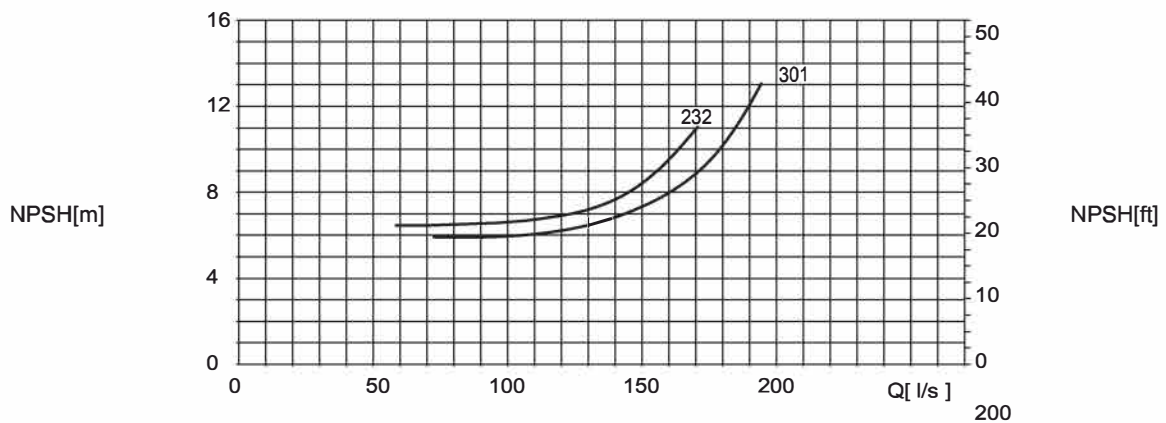
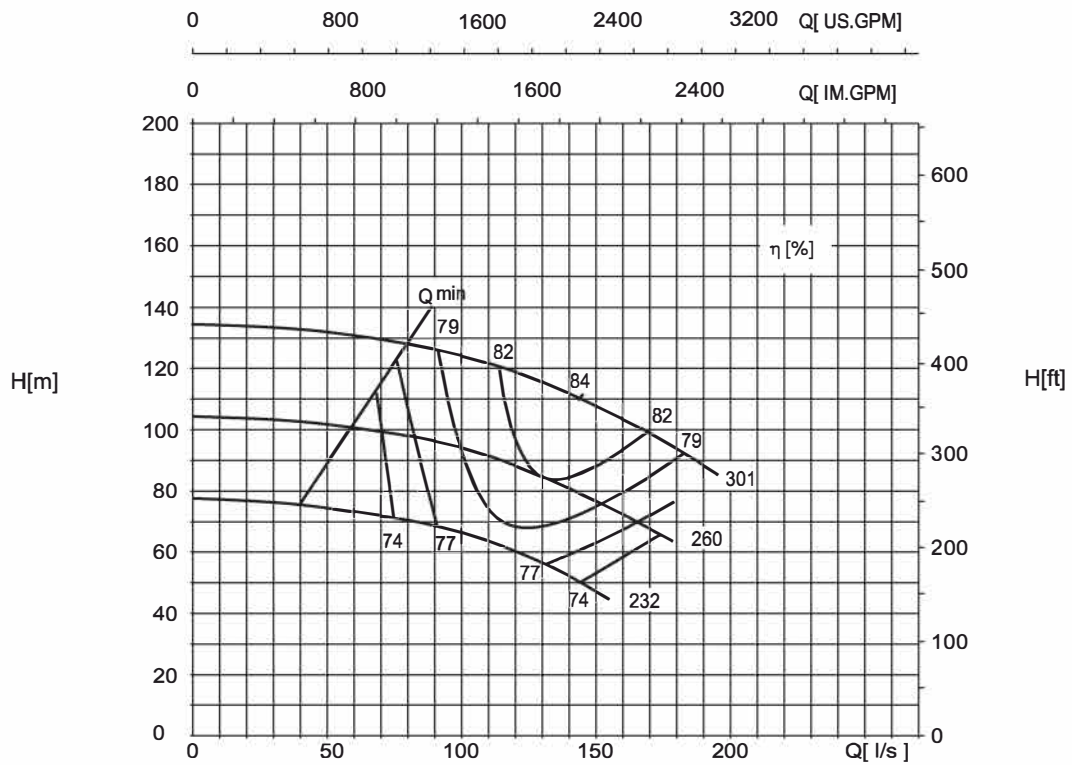
2980 r/min



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

# HSC 200-125-300

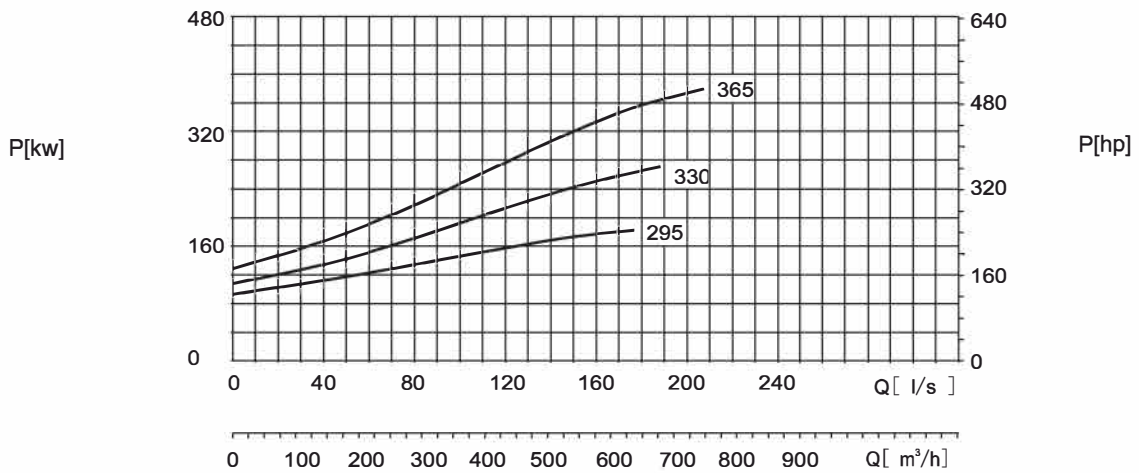
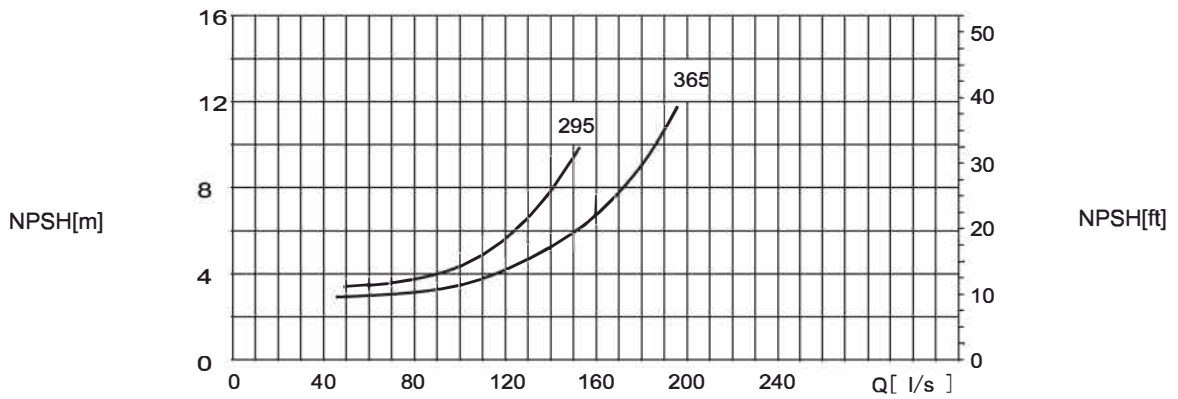
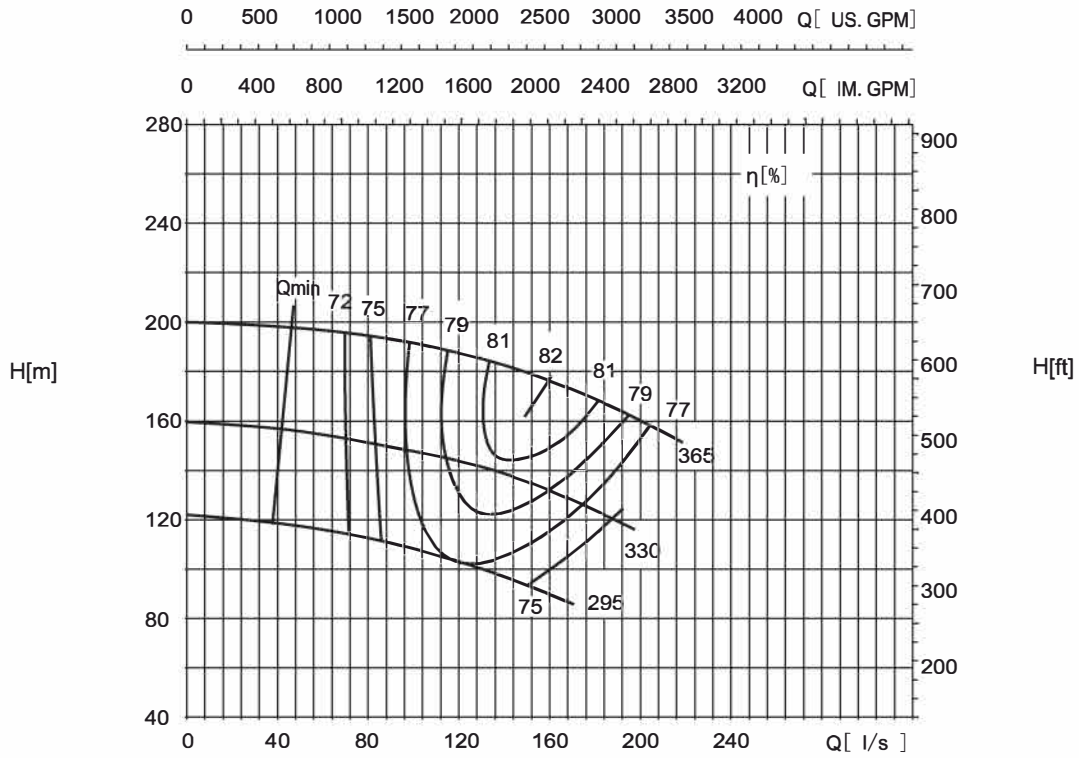
2980 r/min



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

**HSC 200-125-380**

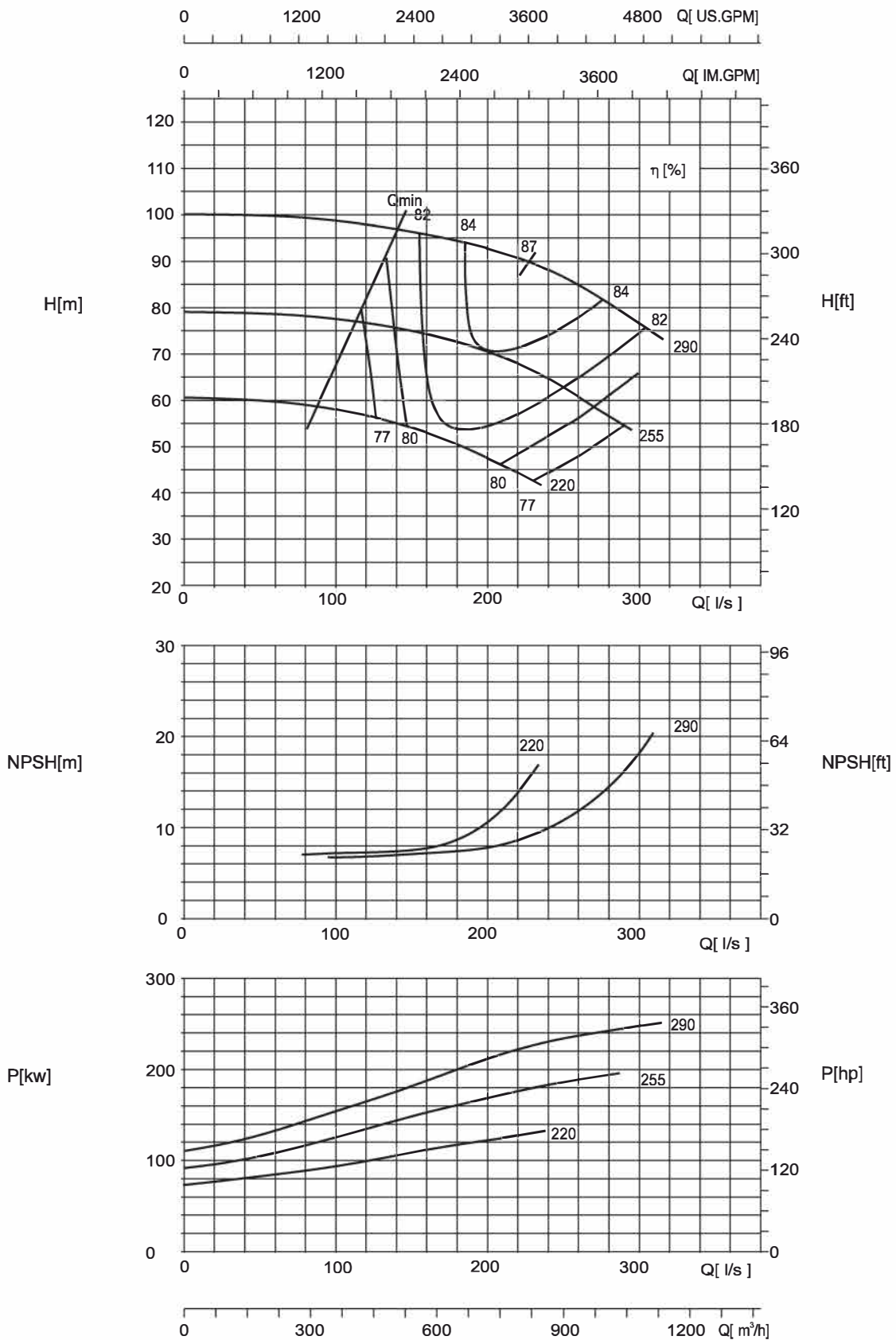
**2980 r/min**



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

# HSC 200-150-290

2980 r/min

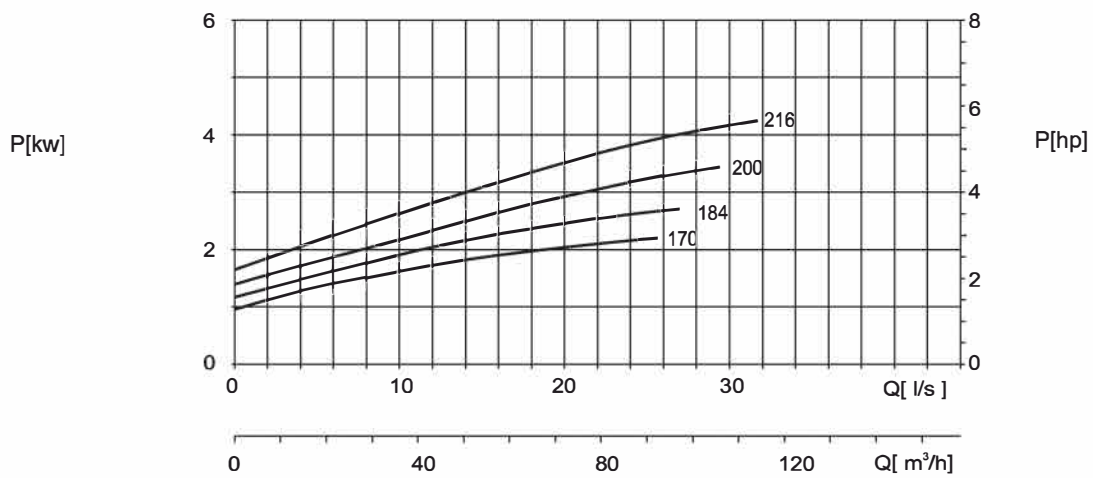
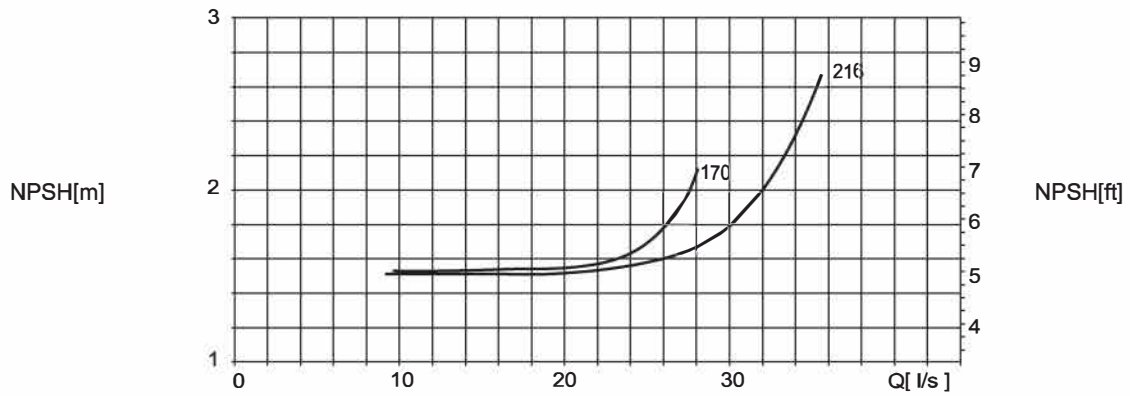
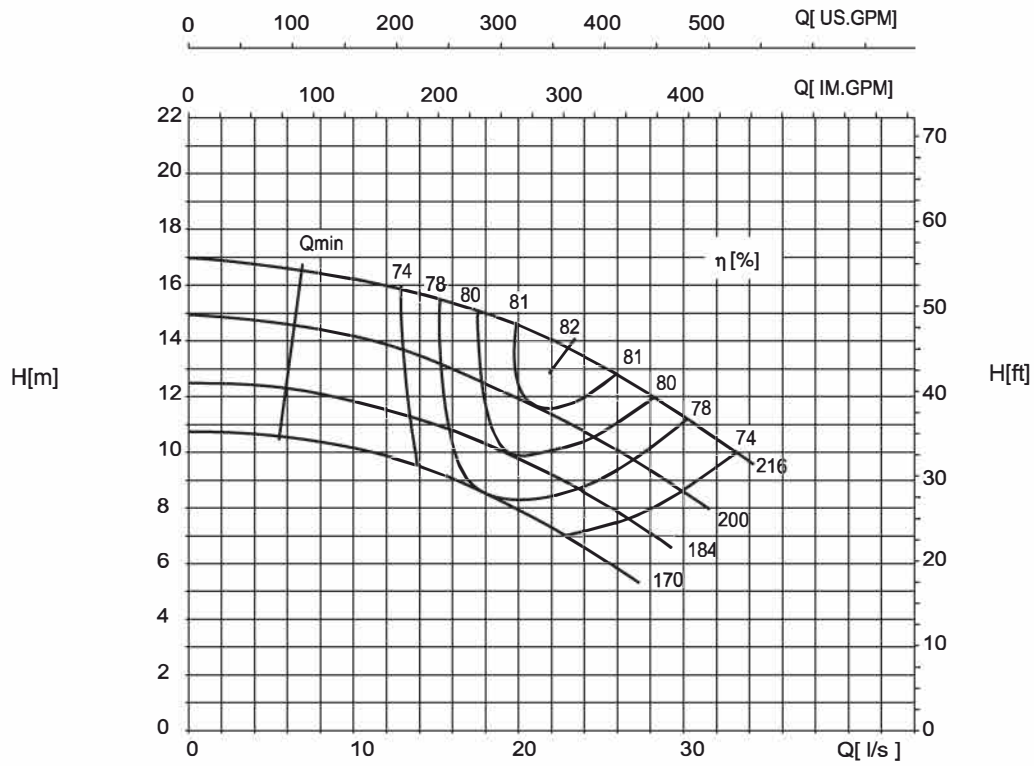


Head and power ratings apply to media with a density of  $\rho=1\text{kg/dm}^3$  and a kinetic viscosity of  $20\text{ mm}^2/\text{s}$ .



# HSC 125-80-210

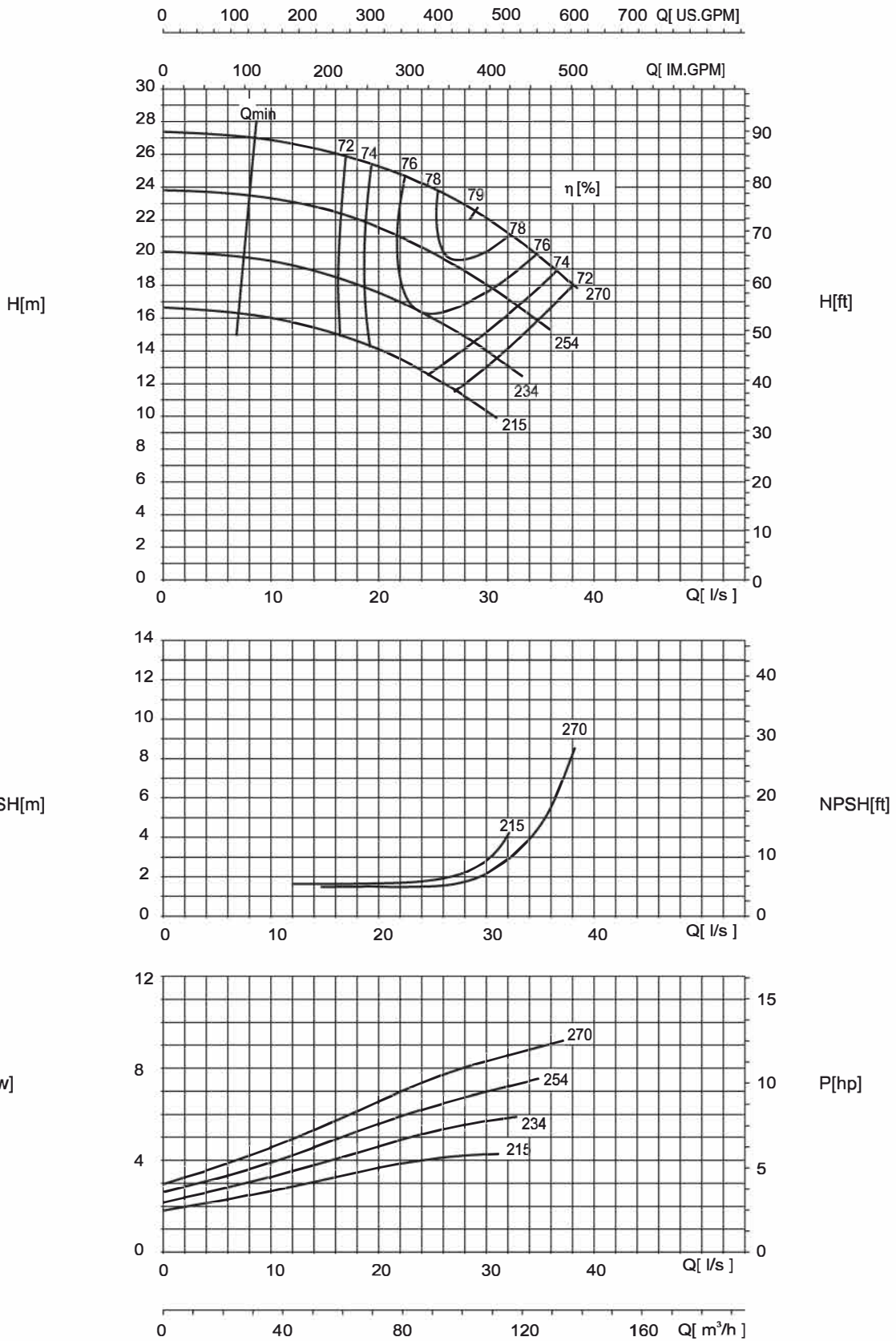
1470 r/min



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

# HSC 125-80-270

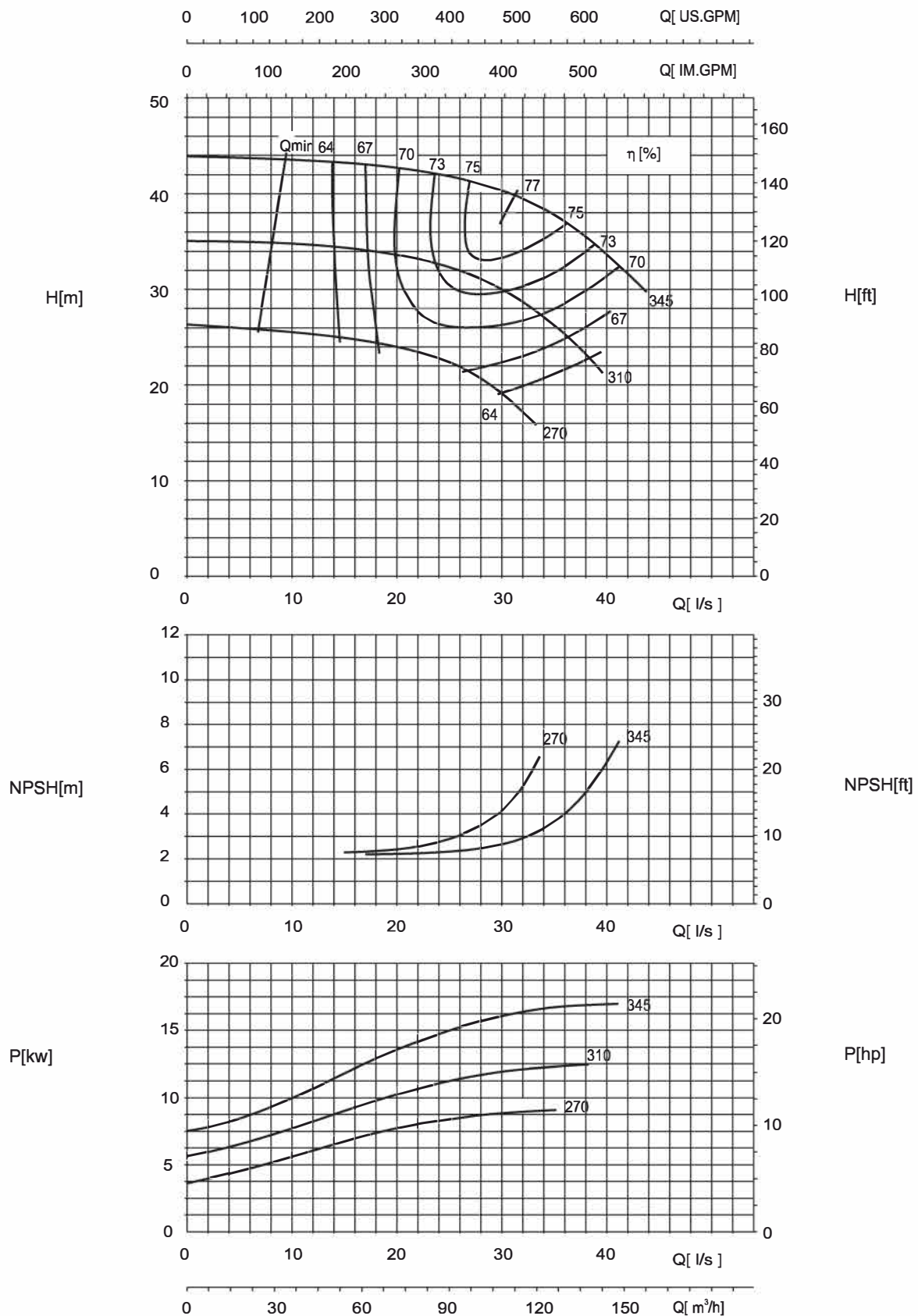
1470 r/min



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

# HSC 125-80-350

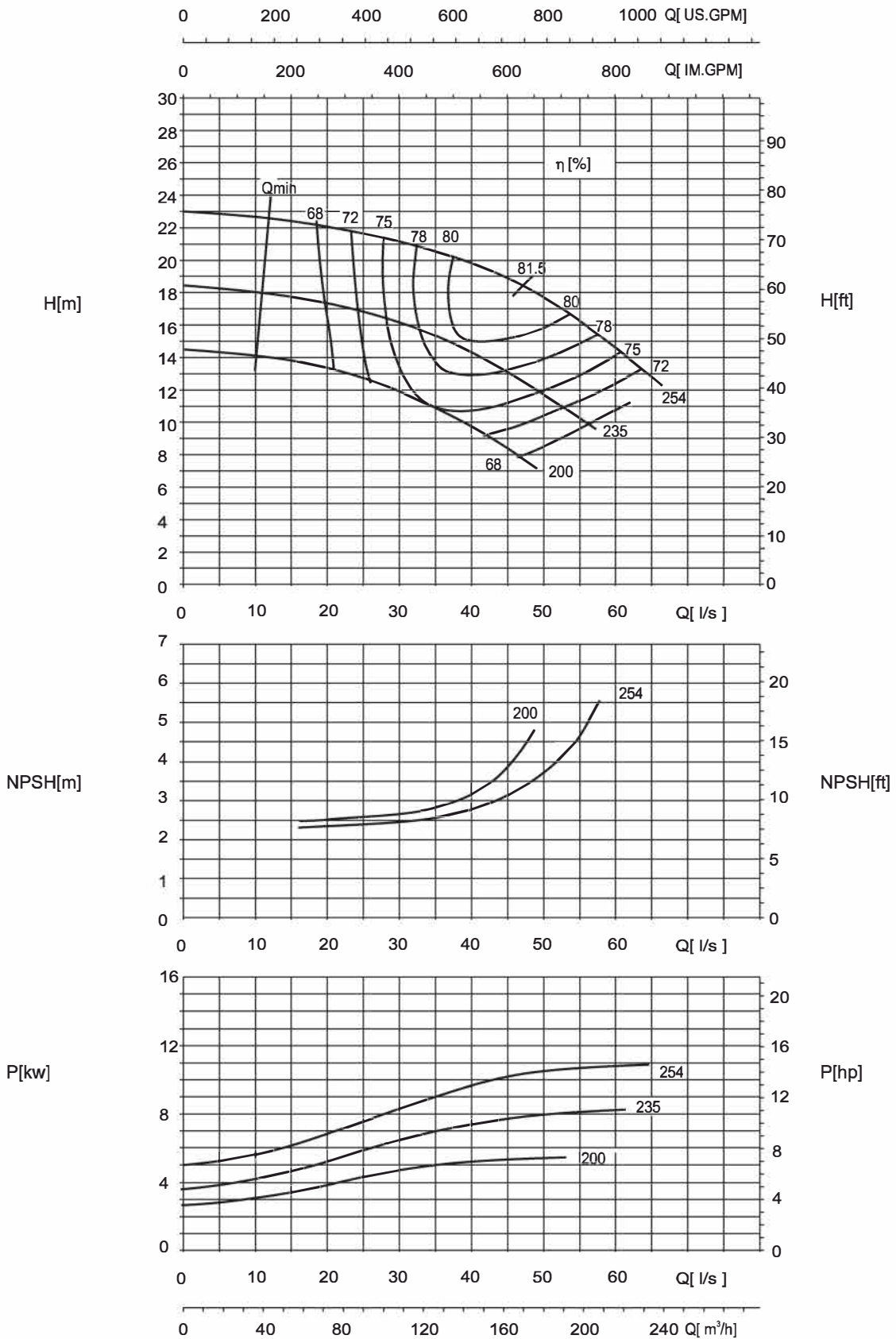
1470 r/min



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

# HSC 150-100-250

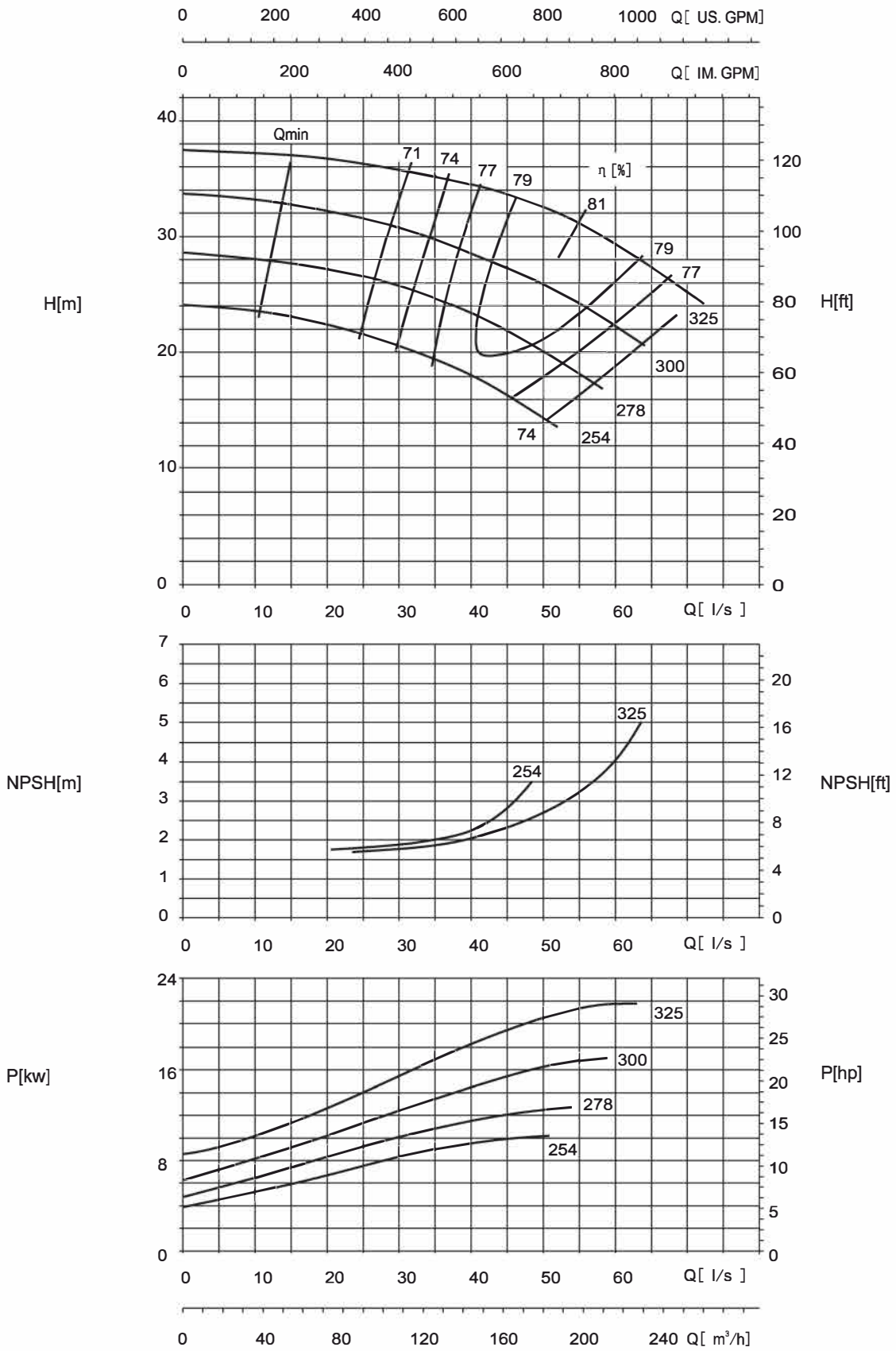
1470 r/min



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

# HSC 150-100-320

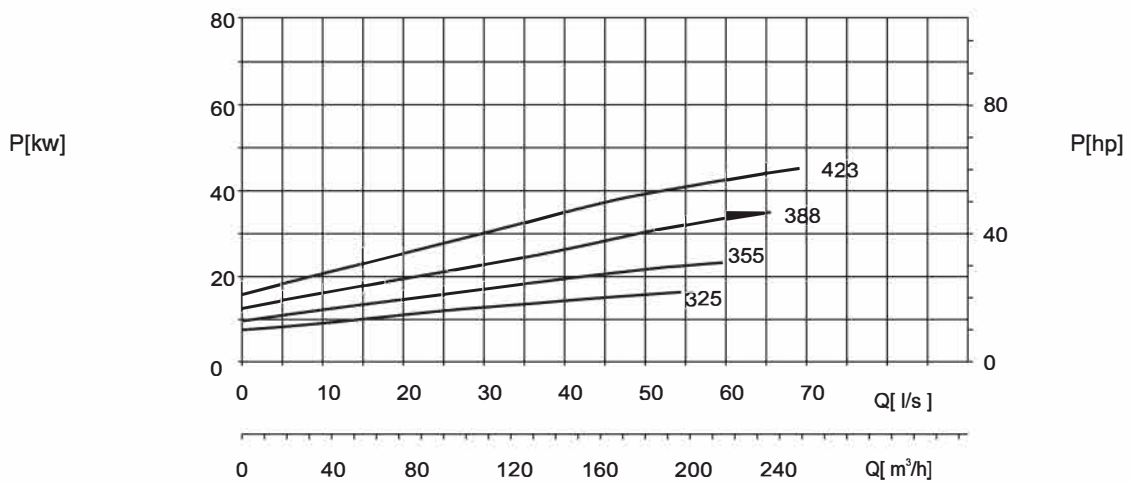
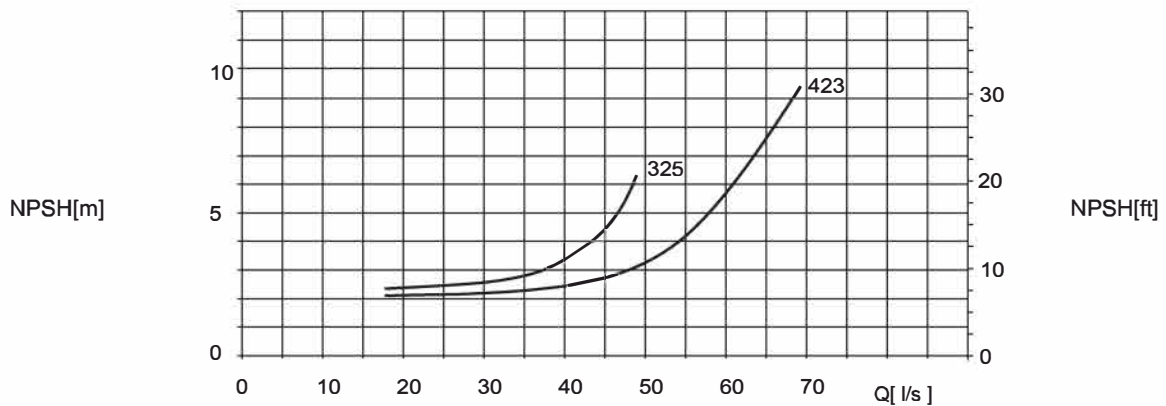
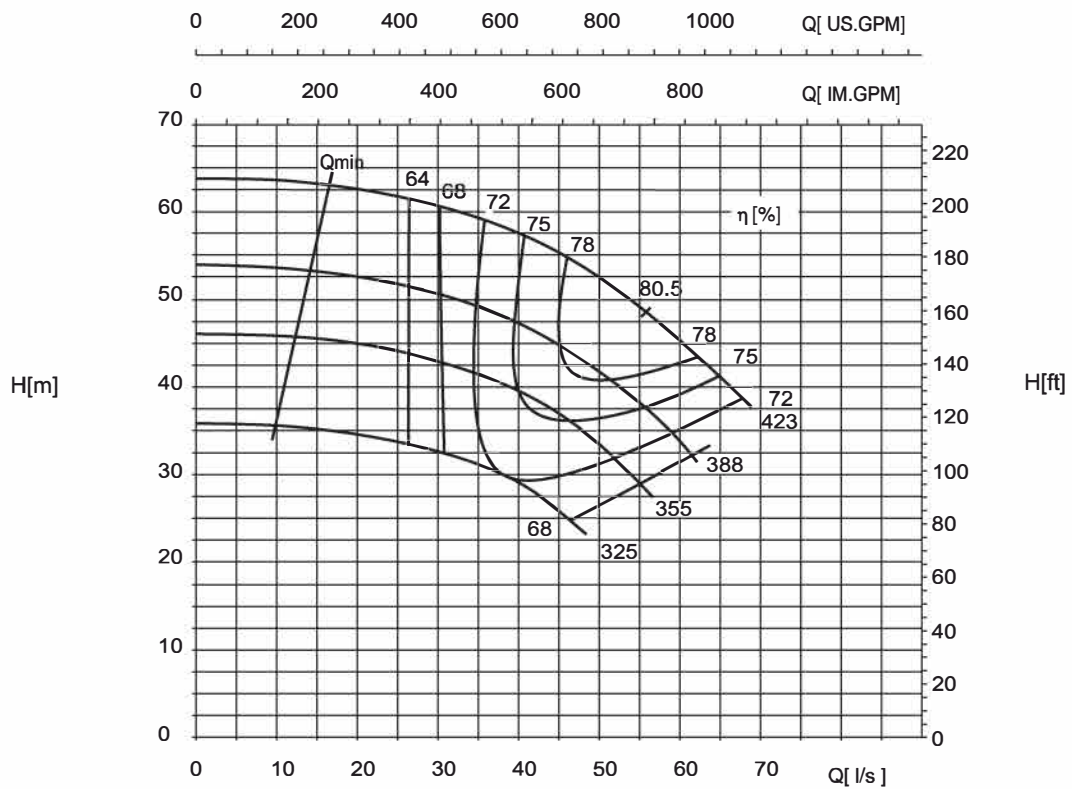
1470 r/min



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

# HSC 150-100-400

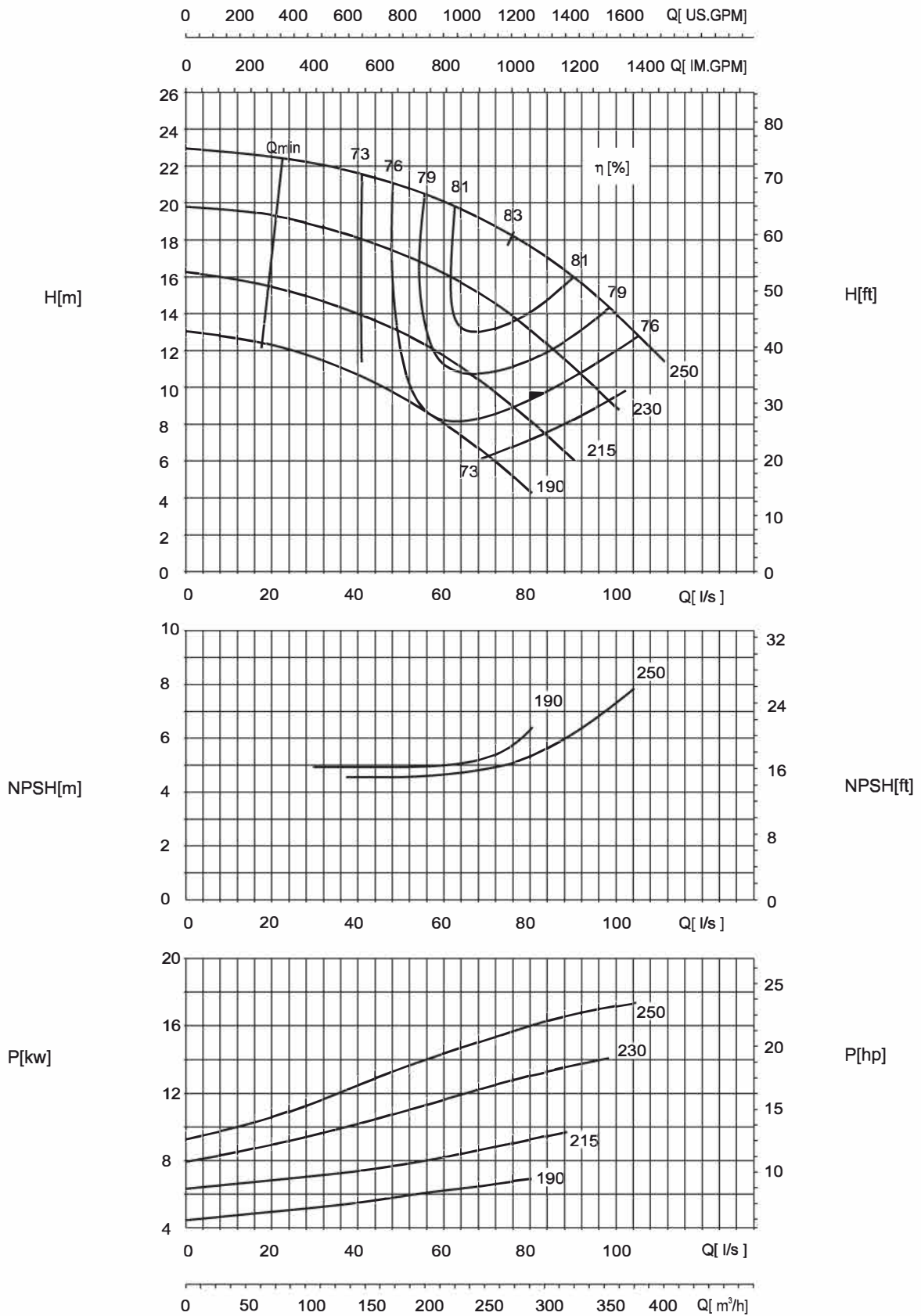
1480 r/min



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

# HSC 200-125-240

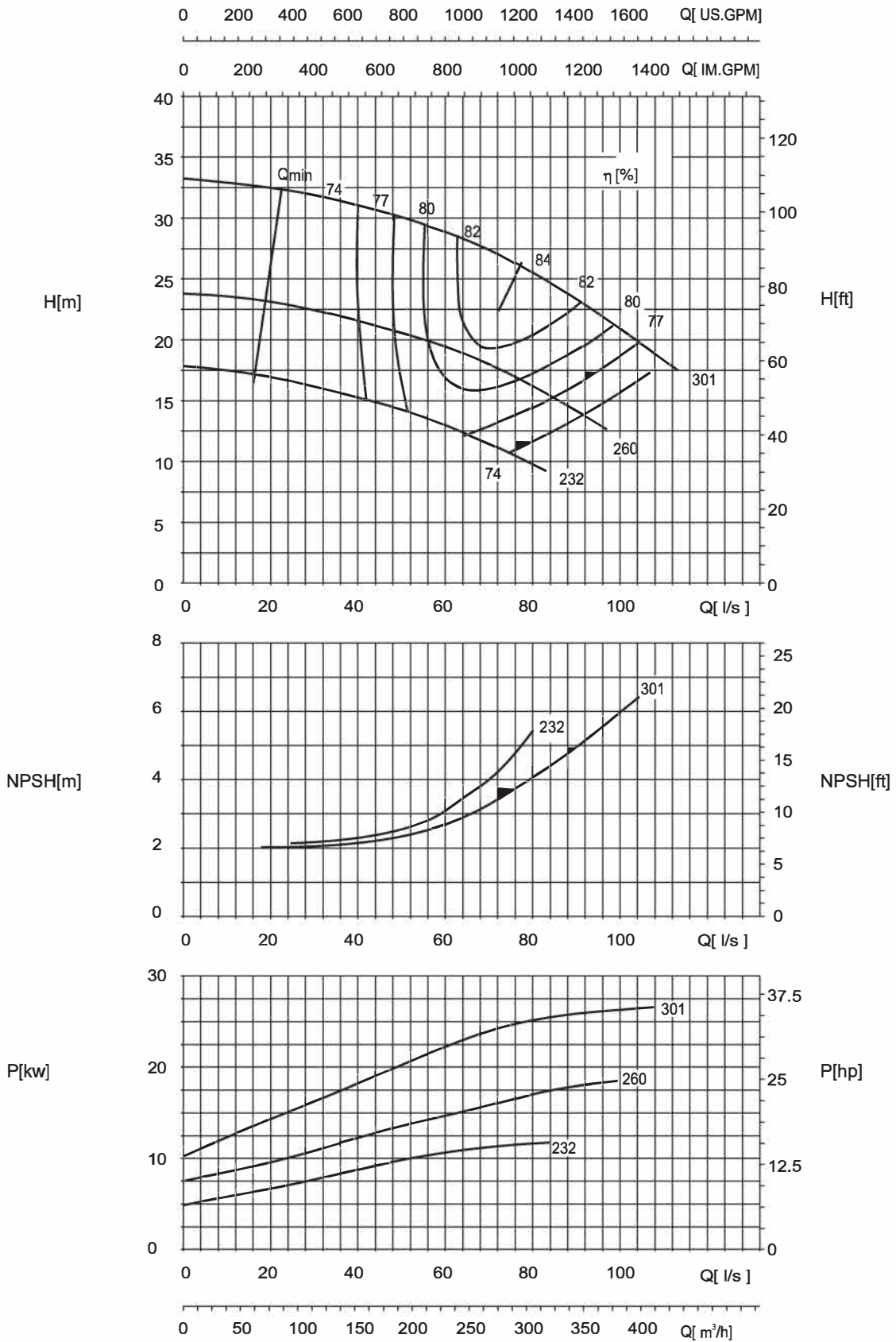
1470 r/min



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

# HSC 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  $20\text{ mm}^2/\text{s}$ .