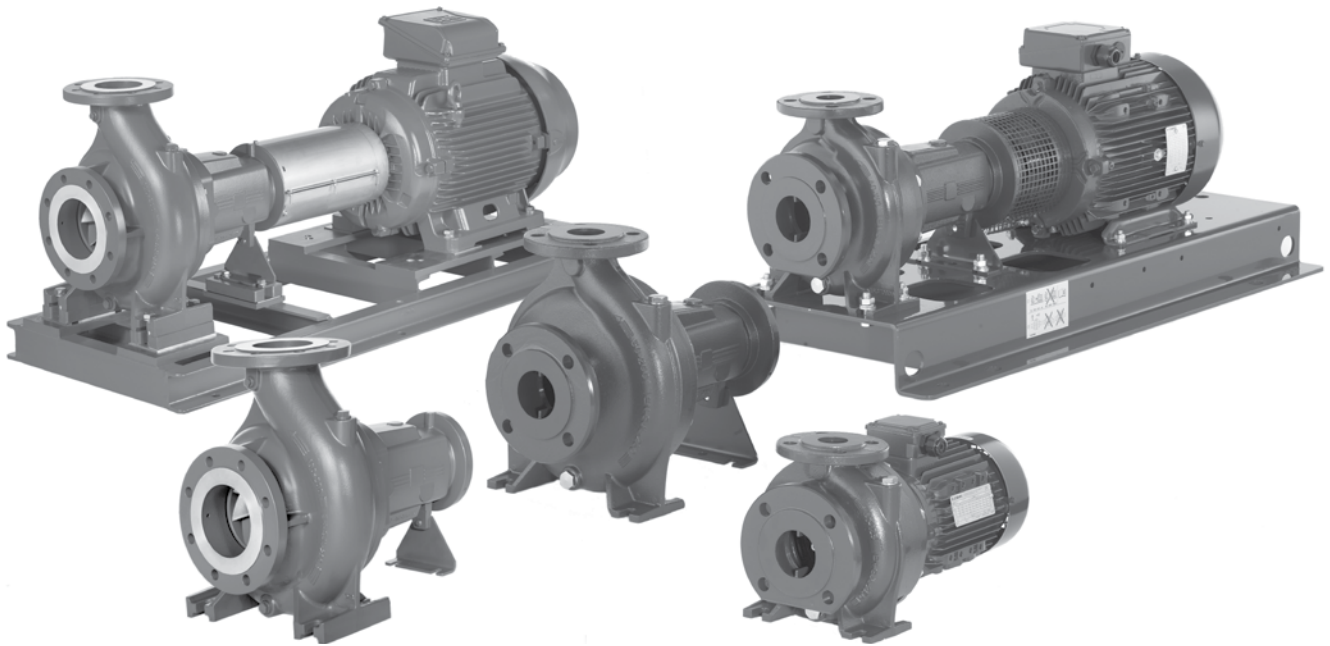


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**xylem**  
Let's Solve Water

**50 Hz**



# e-NSC Series

HORIZONTAL CENTRIFUGAL ELECTRIC PUMPS EQUIPPED WITH **IE3** MOTORS

**ErP 2009/125/CE**

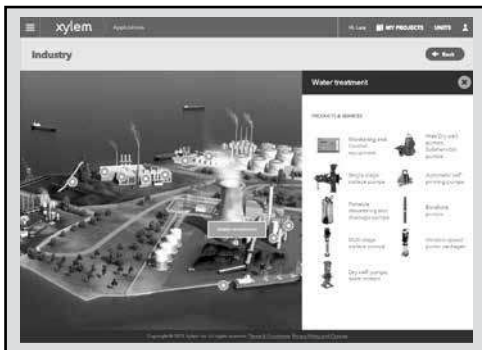
 **LOWARA**  
a xylem brand

## Xylect

Xylect is a pump selection software with an extensive online database of product information across the entire range of pumps and related products, with multiple search options and helpful project management facilities. The system holds up-to-date product information on thousands of products and accessories.

Xylect is available:

On the website – [www.xylect.com](http://www.xylect.com)



For more information, please, see page [207-208](#).

## Ecodesign Directive (ErP)

Over last decade the European Commission with the 'Energy Efficiency Plan' pushed the European Parliament and the Council to adopt specific measures to the purpose of reducing energy consumption and further negative environmental impacts.

Through the **Directives 2005/32/EC**, energy-using products (EuP), and 2009/125/EC, energy-related products (ErP) a framework for **ecodesign** requirements was established.

The Commission Regulations (EC) No 640/2009 and (EU) No 4/2014 have implemented two directives with regard to ecodesign requirements for **three-phase 50 Hz electric motors** placed on the market and put into service inside EU zone as self-alone units or integrated in other products.

This regulation states that motors must have **efficiency level IE3** (or IE2 + Variable Speed Drive) from **1 January 2015 for 7,5 to 375 kW** rated powers and from **1 January 2017 for 0,75 to 375 kW** ones.

The Commission Regulation (EU) No 547/2012 has implemented two directives with regard to ecodesign requirements for some types of **clean water pumps** placed on the market and put into service inside EU zone as self-alone units or integrated in other products.

This regulation states that water pumps shall have **index MEI 0.4** as minimum from **1 January 2015**. That index comes from a dedicated formula which considers hydraulic efficiency values at 'best efficiency point' (BEP), 75 % of the flow at BEP (Part load – PL) and 110 % of the flow at BEP (Over load – OL).

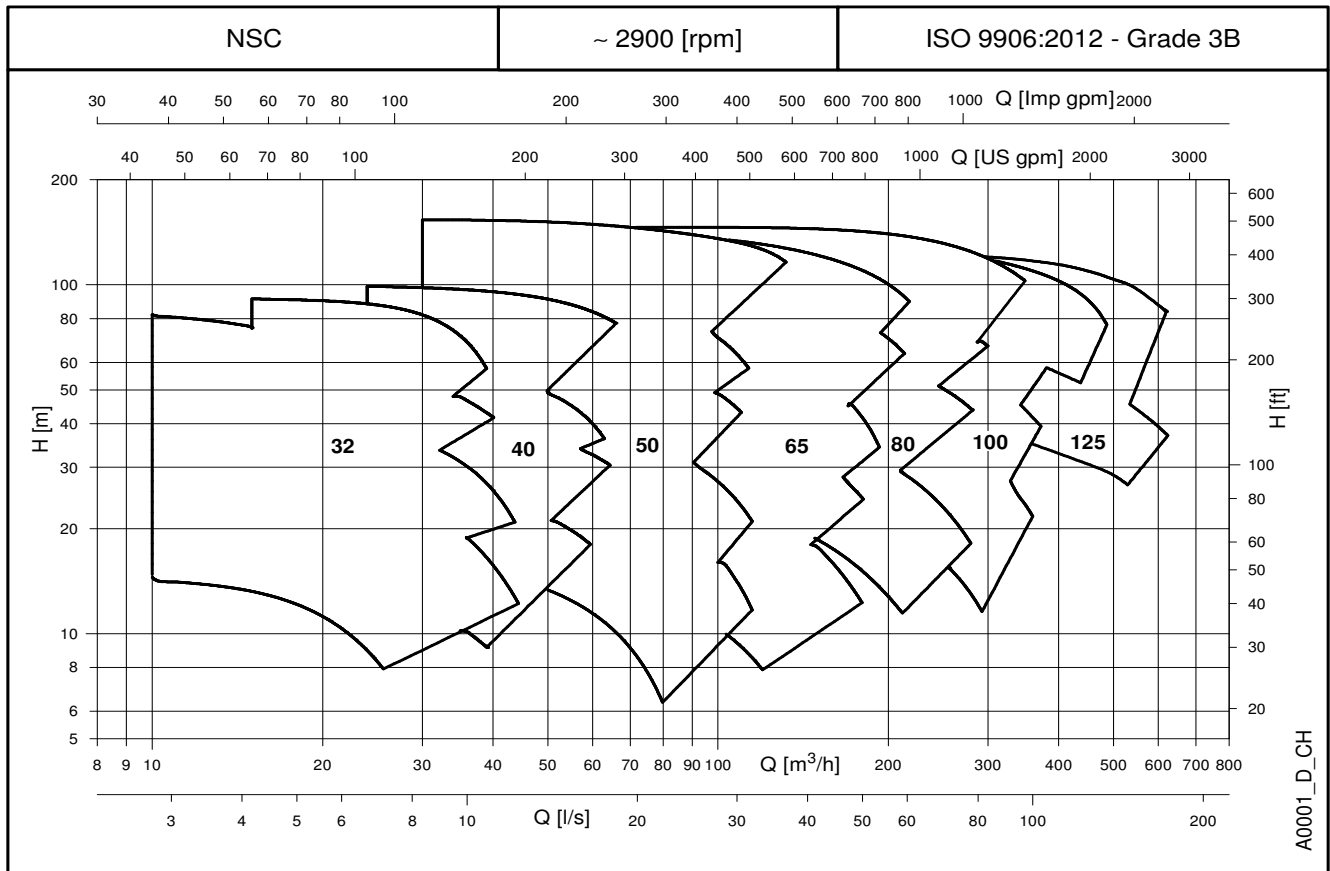
**The e-NSC series, for the models in the scope of the regulations above, is ErP compliant, having an index MEI equal or higher than 0,4 and IE3 motor efficiency.**

**SUMMARY**

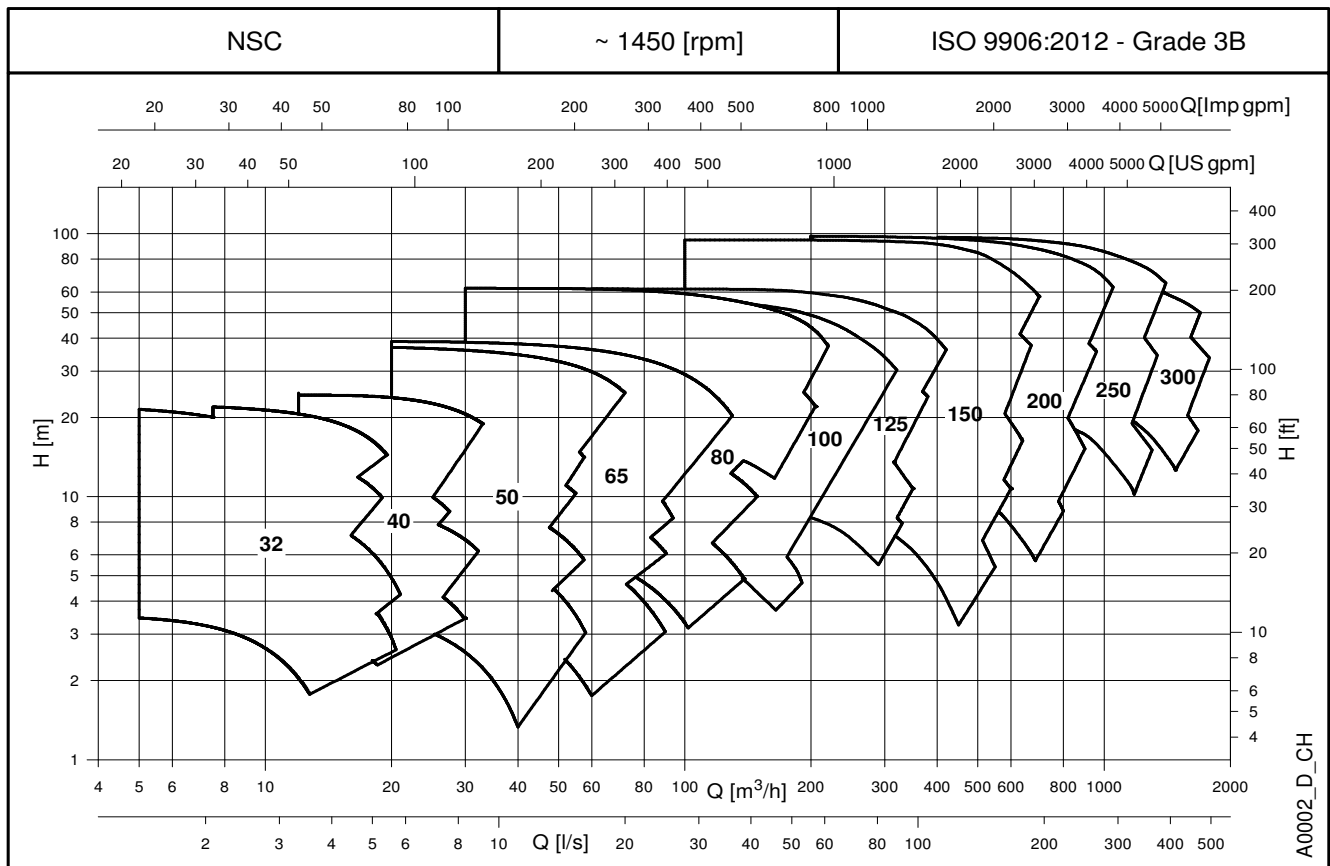
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**e-NSC SERIES**

**HYDRAULIC PERFORMANCE RANGE AT 50 Hz, 2 POLES**



**HYDRAULIC PERFORMANCE RANGE AT 50 Hz, 4 POLES**



## e-NSC SERIES GENERAL INTRODUCTION

The new **e-NSC** series is the result of the close collaboration between our customers and us; the new range has been redesigned and improved to meet the Commercial Building Services (CBS) requirements, in terms of performances and energy saving.

In addition the new **e-NSC** series can be customized to meet the needs of the Industry segment, keeping the quality in the production and the continuous reliability and robustness in the operation.

### Pump design

The new **e-NSC** series is a centrifugal end-suction electro-pump with single-stage (except the two-stage NSC2 models), axial flanged suction port, radial flanged discharge and horizontal shaft. The **e-NSC** pumps have cast iron casing and impeller as standard but are also available in a wide range of materials, from bronze to duplex stainless steel, to allow for various pumping needs.

The pumps are equipped with interchangeable mechanical seals, IE3 efficiency motors, and are designed with a back pull-out configuration (impeller, adapter, and motor can be extracted without disconnecting the pump body from the piping system).

The **e-NSC** series pumps are available in the following constructions:

#### Extended shaft

Close-coupled by means of an adaptor bracket with an impeller keyed directly to the special motor shaft extension.



#### Stub shaft

Rigid-coupled with a bracket, an adaptor and a rigid coupling keyed to the standard motor shaft extension.



#### Frame mounted

Flexible-coupled with bracket, support, flexing coupling (special version with spacer on demand), aligning and anchoring base.



#### Bare shaft pump

Version without driver suitable to be coupled with a standard electric motor.



### Hydraulic specifications

- Maximum delivery: up to **640** m<sup>3</sup>/h for 2 poles range.  
up to **1900** m<sup>3</sup>/h for 4 poles range.
- Maximum head: up to **154** m for 2 poles range.  
up to **100** m for 4 poles range.
- Hydraulic performance compliant with ISO 9906:2012 (Grade 3B).
- Fluid temperature range:
  - standard version (with mechanical seal BQ7EGG-WA and EPDM gasket) **-25 to +120 °C**.
  - versions on request (depending on mechanical seal and gasket) **-20\*** or **-25 to +120** or **+140 °C**.
- Maximum operating pressure:
  - standard version with mechanical seal BQ7EGG-WA and cast iron casing: **16 bar @ 90 °C** and **10 bar @ 120 °C**
  - version with other mechanical seal and casing of cast iron: **16 bar @ 120 °C** and **14,9 bar @ 140 °C**
  - cast ductile iron: **16 bar @ 120 °C** and **15,6 bar @ 140 °C**
  - stainless steel: **16 bar @ 50 °C** and **14,8 bar @ 140 °C**
  - duplex: **16 bar @ 140 °C**
  - NSC2 models with mechanical seal BQ7EGG-WA and cast iron casing: **12 bar @ 110 °C** and **10 bar @ 120 °C**
  - see pages 22 to 25 for more information.

\* Fluoro-elastomer: FPM (old ISO), FKM (ASTM & new ISO).

- Connection dimensions according to EN 733 for models 32-125/200, 40-125/250, 50-125/250, 65-125/315, 80-160/315, 100-200/400, 125-250/400, 150-315/400

### Motor specifications

- Squirrel cage in short circuit enclosed construction with external ventilation (TEFC).
- 2-pole and 4-pole ranges.
- **IP55** protection degree as motor (EN 60034-5), IPX5 as electro-pump (EN 60529).
- Performances according to EN 60034-1.
- **IE3** efficiency level (three-phase 0,75 to 375 kW).
- **155 (F)** insulation class.
- Standard voltage:
  - 1 x 220-240 V 50 Hz for power up to 2,2 kW
  - 3 x 220-240/380-415 V 50 Hz for power up to 3 kW
  - 3 x 380-415/660-690 V 50 Hz for power above 3 kW
- Maximum ambient temperature: 40 °C.

Note

- Anti-clockwise rotation when facing pump's suction port.
- Pump does not include counter-flanges.

### List of the Directives

- Machinery Directive MD 2006/42/EC
- Electromagnetic Compatibility Directive EMCD 2004/108/EC
- Ecodesign requirements for energy-related products ErP 2009/125/EC, Regulation (EC) No 640/2009, Regulation (EU) No 4/2014, Regulation (EU) No 547/2012

### and the main technical norms

- EN 809, EN 60204-1 (safety)
- EN 1092-2 (cast and ductile iron flanges)
- EN 1092-1 (stainless steel and duplex flanges)
- EN 61000-6-1, EN 61000-6-3
- EN 60034-30:2009, EN 60034-30-1:2014 (electric motors)

## **e-NSC SERIES for COMMERCIAL BUILDING SERVICES (CBS) APPLICATIONS & BENEFITS**

### **Applications**

The **e-NSC** series is suitable for many different applications demanding reliable and efficient products that require constant or variable duty points in cost saving operation.

The e-NSC Series can be used for the following CBS applications:

- **HVAC**
  - Liquid transfer in heating systems.
  - Liquid transfer in air-conditioning systems.
  - Liquid transfer in ventilation systems.
- **Water Supply**
  - Pressure boosting in commercial buildings.
  - Irrigation systems.
  - Water transfer for green houses.
- **Fire Fighting**



### **Benefits**

The e-NSC Series permit to achieve the following benefits.

- **Performances:** the e-NSC pumps are ErP 2015 compliant, equipped with IE3 motors and with the right hydraulic coverage for CBS applications. The standard full cast iron version with PN16 \*, 140 °C \* maximum fluid temperature and EPDM elastomer is exactly what the CBS Market needs.
- **Reliability:** the high quality in production, the robust construction and operation, the easily interchangeable mechanical seals, and wear rings guarantee a continuous operation without faults and a shorter down time for maintenance.
- **Versatility:** beside the standard offer, the e-NSC series is available in many different material configurations for casing, impeller, and elastomers as well as different construction methods to address a wide range of applications.
- **Total cost ownership:** the best hydraulic and electric efficiency, the HYDROVAR-equipped versions, the easy and quick maintenance, permit to reduce the operation and maintenance cost and to save energy when the pump is working.
- **Potable water use:** All pumps equipped with standard mechanical seal are certified for drinking water use (ACS and D.M.174/04).
- **Pre-post sales support:** we are continuously working close to our customers to help them in selecting the right pump for the specific application. An improved user-friendly selection software improved with many selection tools is available on the website, on DVD or on Apps for mobile phones. Experienced engineers are fully dedicated to big projects for Municipality.

### **Features**

- Discharge ports DN32 to DN300 \*.
- Wide performance range up to 154 m head and 1900 m<sup>3</sup>/h flow.
- Nominal pressure of 16 bar \*.
- Wide range of temperatures for pumped liquids: -25°C to +140°C \*.
- Wide range of materials for many different kinds of pumped liquid.
- Wide range of voltages.
- High performance IE3 motors.
- Variable speed by optional HYDROVAR drive.

\* NSC2 models: PN12, 120 °C, suction 2", discharge 1 1/4".

## **e-NSC SERIES for INDUSTRY APPLICATIONS & BENEFITS**

### **Applications**

The e-NSC series and the different available configurations and standard options have been designed to cover a wide range of applications in the Industry segment. The e-NSC series can be installed in machines where compactness and high performances are a must or within industrial processes where the user looks for a robust and reliable design for the handling of many different liquids.

The e-NSC series can be used for the following Industry applications:

- **Process**
  - Process cooling
  - Process heating
  - Heat recovery
- **Water Supply**
  - Water boosting
  - Water treatment
  - Washing and cleaning

### **Benefits**

The e-NSC Series permit to achieve the following benefits:

- **Efficiency:** new designed high efficiency hydraulics, IE3 motors, and the option with variable speed by the HYDROVAR drive sets the basis for very low operation costs.
- **Reliability:** various mechanical seal materials and options are available to meet the exact needs of your specific application. The e-NSC is also designed for easy maintenance and all service points are easily reachable to reduce downtime.
- **Know How:** the perfect configuration for an application can be made with the selection tool or with the support of our industrial experienced employees.
- **A global platform:** the e-NSC series are assembled in different factories across the world to make the e-NSC always "closer" to our customer. Beyond our commitment to reduce the carbon footprint of e-NSC, this global platform secures the availability of the same design with the same quality processes everywhere.

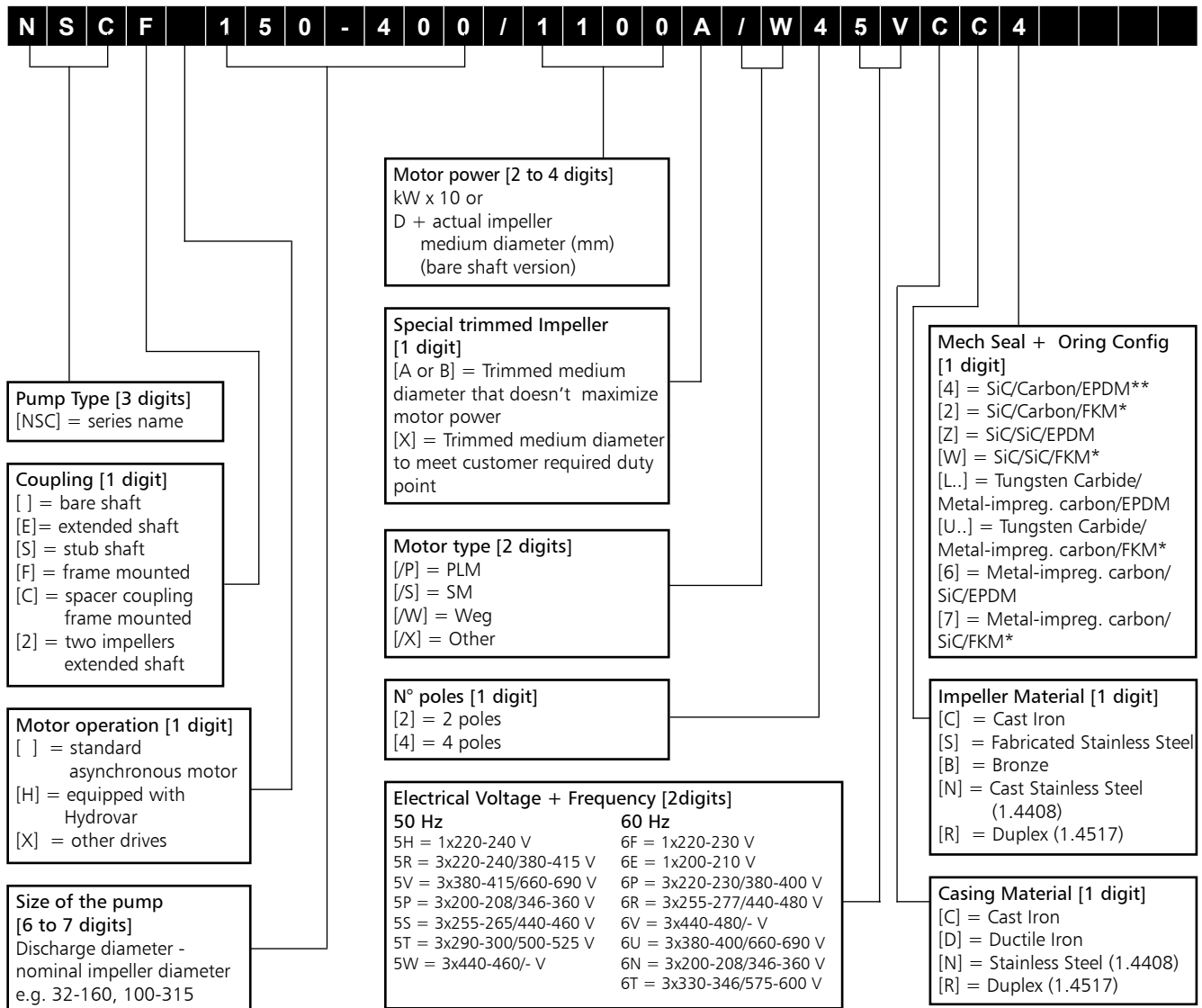


### **Features**

- Discharge ports DN32 to DN300 \*
- Wide performance range up to 154 m head and 1900 m<sup>3</sup>/h flow.
- Nominal pressure of 16 bar \*
- Wide range of temperatures for pumped liquids: -25°C to +140°C \*
- Wide range of materials for many different kinds of pumped liquid.
- Wide range of voltages.
- High performance IE3 motors.
- Variable speed by optional HYDROVAR drive.

\* NSC2 models: PN12, 120 °C, suction 2", discharge 1 1/4".

## e-NSC SERIES IDENTIFICATION CODE



\* = FPM (old ISO), FKM (ASTM & new ISO)

\*\* [4] = SiC/Metal-impreg. carbon/EPDM for RR version

### EXAMPLES

#### NSCS 100-250/900/W25RCC4

End-suction, electric pump with stub shaft coupling, DN 100 nominal discharge port, 250 mm nominal impeller diameter, 90 kW rated motor power, WEG IE3 model, 2-pole, 50 Hz 220-240/380-415 V, cast iron casing, cast iron impeller, Silicon carbide/Carbon/EPDM mechanical seal.

#### NSCF 150-400/1100A/W45VCC4



End-suction, electric pump with frame mounted coupling, DN 150 nominal discharge port, 400 mm nominal impeller diameter, 110 kW rated motor power, trimmed impeller, WEG IE3 model, 4-pole, 50 Hz 380-415/660-690 V, cast iron casing, cast iron impeller, Silicon carbide/Carbon/EPDM mechanical seal.



#### NSC 150-400/D423CCZ

End-suction, bare shaft pump, DN 150 nominal discharge port, 400 mm nominal impeller diameter, 423 mm actual impeller medium diameter, cast iron casing, cast iron impeller, Silicon carbide/ Silicon carbide/EPDM mechanical seal.



## e-NSC SERIES RATING PLATE

ELECTRIC PUMP	
 	
TYPE	No/Date
PN	kPa
t max °C	Code
t min °C	øF mm
Q m <sup>3</sup> /h	H m
n 1/min	P <sub>2</sub> kW
øF MEI ≥	øT ηp %
REGULATION (EU) No 547/2012	

PUMP ONLY (NSC)	
 	
No/Date REGULATION (EU) No 547/2012	
TYPE	Code
PN	kPa
t max °C	t min °C
øF mm	øT mm
Q m <sup>3</sup> /h	H m
n 1/min	P <sub>max</sub> kW
øF MEI ≥	øT ηp %
REGULATION (EU) No 547/2012	

### LEGEND

- 1 - Electric pump unit type
- 2 - Electric pump unit code
- 3 - Flow range
- 4 - Head range
- 5 - Nominal or maximum pump power
- 6 - Speed
- 7 - Serial number, or  
order number + order position number
- 9 - Full impeller diameter (only filled in for trimmed  
impellers)
- 10 - Trimmed impeller diameter (only filled in for  
trimmed impellers)
- 11 - Minimum operating liquid temperature
- 12 - Maximum operating liquid temperature
- 13 - Maximum operating pressure
- 14 - Hydraulic efficiency in best efficiency point (50 Hz)
- 15 - Minimum efficiency index MEI, as per Regulation  
(EU) No 547/2012 (50 Hz)
- 19 - Weight

### LEGEND

- 1 - Pump type
- 2 - Pump code
- 3 - Flow range
- 4 - Head range
- 5 - Maximum absorbed pump power
- 6 - Speed
- 7 - Serial number, or  
order number + order position number
- 9 - Full impeller diameter (only filled in for trimmed  
impellers)
- 10 - Trimmed impeller diameter (only filled in for  
trimmed impellers)
- 11 - Minimum operating liquid temperature
- 12 - Maximum operating liquid temperature
- 13 - Maximum operating pressure
- 14 - Hydraulic efficiency in best efficiency point (50 Hz)
- 15 - Minimum efficiency index MEI, as per Regulation  
(EU) No 547/2012 (50 Hz)
- 19 - Weight

Note for electric pump unit: refer to motor data plate for electrical data.

**e-NSC SERIES**  
**LIST OF MODELS AT 50 Hz, 2 POLES**

SIZE NSC..2	kW	VERSION				
		NSC2	NSCE	NSCS	NSCF	NSCC
32-125/11(*)	1,1	-	•	•	•	•
32-125/15(*)	1,5	-	•	•	•	•
32-125/22(*)	2,2	-	•	•	•	•
32-125/30	3	-	•	•	•	•
32-160/22(*)	2,2	-	•	•	•	•
32-160/30	3	-	•	•	•	•
32-160/40	4	-	•	•	•	•
32-160/55	5,5	-	•	•	•	•
32-200/30	3	-	•	•	•	•
32-200/40	4	-	•	•	•	•
32-200/55	5,5	-	•	•	•	•
32-200/75	7,5	-	•	•	•	•
32-250/55	5,5	•	-	-	-	-
32-250/75	7,5	•	-	-	-	-
32-250/75	7,5	-	•	•	•	•
32-250/92	9,2	-	•	-	-	-
32-250/110A	11	-	-	•	•	•
32-250/110	11	-	•	•	•	•
32-250/150	15	-	•	•	•	•
40-125/15(*)	1,5	-	•	•	•	•
40-125/22(*)	2,2	-	•	•	•	•
40-125/30	3	-	•	•	•	•
40-125/40	4	-	•	•	•	•
40-160/30	3	-	•	•	•	•
40-160/40	4	-	•	•	•	•
40-160/55	5,5	-	•	•	•	•
40-160/75	7,5	-	•	•	•	•
40-200/55	5,5	-	•	•	•	•
40-200/75	7,5	-	•	•	•	•
40-200/92	9,2	-	•	-	-	-
40-200/110A	11	-	-	•	•	•
40-200/110	11	-	•	•	•	•
40-250/92	9,2	-	•	-	-	-
40-250/110A	11	-	-	•	•	•
40-250/110	11	-	•	•	•	•
40-250/150	15	-	•	•	•	•
40-250/185	18,5	-	•	•	•	•
40-250/220	22	-	•	•	•	•
50-125/30	3	-	•	•	•	•
50-125/40	4	-	•	•	•	•
50-125/55	5,5	-	•	•	•	•
50-125/75	7,5	-	•	•	•	•
50-160/55	5,5	-	•	•	•	•
50-160/75	7,5	-	•	•	•	•
50-160/92	9,2	-	•	-	-	-
50-160/110A	11	-	-	•	•	•
50-160/110	11	-	•	•	•	•
50-200/92	9,2	-	•	-	-	-
50-200/110A	11	-	-	•	•	•
50-200/110	11	-	•	•	•	•
50-200/150	15	-	•	•	•	•
50-200/185	18,5	-	•	•	•	•

• = Available

Nsc1\_models-2p50-en\_c\_sc

SIZE NSC..2	kW	VERSION			
		NSCE	NSCS	NSCF	NSCC
50-250/150	15	•	•	•	•
50-250/185	18,5	•	•	•	•
50-250/220	22	•	•	•	•
50-250/300	30	-	•	•	•
50-315/370	37	-	•	•	•
50-315/450	45	-	•	•	•
50-315/550	55	-	•	•	•
50-315/750	75	-	•	•	•
65-125/40	4	•	•	•	•
65-125/55	5,5	•	•	•	•
65-125/75	7,5	•	•	•	•
65-125/92	9,2	•	-	-	-
65-125/110A	11	-	•	•	•
65-125/110	11	•	•	•	•
65-160/75	7,5	•	•	•	•
65-160/92	9,2	•	-	-	-
65-160/110A	11	-	•	•	•
65-160/110	11	•	•	•	•
65-160/150	15	•	•	•	•
65-160/185	18,5	•	•	•	•
65-200/110	11	•	•	•	•
65-200/150	15	•	•	•	•
65-200/185	18,5	•	•	•	•
65-200/220	22	•	•	•	•
65-200/300	30	-	•	•	•
65-250/220	22	-	•	•	•
65-250/300	30	-	•	•	•
65-250/370	37	-	•	•	•
65-250/450	45	-	•	•	•
65-250/550	55	-	•	•	•
65-315/550	55	-	•	•	•
65-315/750	75	-	•	•	•
65-315/900	90	-	•	•	•
80-160/110	11	•	•	•	•
80-160/150	15	•	•	•	•
80-160/185	18,5	•	•	•	•
80-160/220	22	•	•	•	•
80-200/220	22	-	•	•	•
80-200/300	30	-	•	•	•
80-200/370	37	-	•	•	•
80-200/450	45	-	•	•	•
80-250/370	37	-	•	•	•
80-250/450	45	-	•	•	•
80-250/550	55	-	•	•	•
80-250/750	75	-	•	•	•
80-316/900	90	-	-	•	•
80-316/1100	110	-	-	•	•
80-316/1320	132	-	-	•	•
80-316/1600	160	-	-	•	•

(\*) Models available also in single-phase version.

**NSC2** : Two impellers Extended shaft.

**NSCE** : Extended shaft.

**NSCS** : Stub shaft.

**NSCF** : Frame mounted.

**NSCC** : Frame mounted with spacer coupling.

**e-NSC SERIES**  
**LIST OF MODELS AT 50 Hz, 2 POLES**

SIZE NSC	kW	VERSION			
		NSCE	NSCS	NSCF	NSCC
100-160/150	15	-	•	•	•
100-160/185	18,5	-	•	•	•
100-160/220	22	-	•	•	•
100-160/300	30	-	•	•	•
100-200/300	30	-	•	•	•
100-200/370	37	-	•	•	•
100-200/450	45	-	•	•	•
100-200/550	55	-	•	•	•
100-250/450	45	-	-	•	•
100-250/550	55	-	-	•	•
100-250/750	75	-	•	•	•
100-250/900	90	-	•	•	•
100-316/1100	110	-	-	•	•
100-316/1320	132	-	-	•	•
100-316/1600	160	-	-	•	•
125-200/450	45	-	•	•	•
125-200/550	55	-	•	•	•
125-200/750	75	-	•	•	•
125-200/900	90	-	•	•	•
125-315/1100	110	-	-	•	•
125-315/1320	132	-	-	•	•
125-315/1600	160	-	-	•	•
125-315/2000	200	-	-	•	•

• = Available

Nsc2\_models-2p50-en\_b\_sc

## e-NSC SERIES LIST OF MODELS AT 50 Hz, 4 POLES

SIZE NSC..4	kW	VERSION				
		NSC2	NSCE	NSCS	NSCF	NSCC
32-125/02B	0.25	-	•	-	•	•
32-125/02A	0.25	-	•	-	•	•
32-125/02	0.25	-	•	-	•	•
32-125/03	0.37	-	•	-	•	•
32-160/02	0.25	-	•	-	•	•
32-160/03	0.37	-	•	-	•	•
32-160/05A	0.55	-	•	•	•	•
32-160/05	0.55	-	•	•	•	•
32-200/05A	0.55	-	•	•	•	•
32-200/05	0.55	-	•	•	•	•
32-200/07	0.75	-	•	•	•	•
32-200/11	1.1	-	•	•	•	•
32-250/11A	1,1	•	-	-	-	-
32-250/11	1,1	•	-	-	-	-
32-250/11A	1.1	-	-	•	•	•
32-250/15B	1.5	-	•	-	-	-
32-250/11	1.1	-	-	•	•	•
32-250/15A	1.5	-	•	-	-	-
32-250/15	1.5	-	•	•	•	•
32-250/22	2.2	-	•	•	•	•
40-125/02A	0.25	-	•	-	•	•
40-125/02	0.25	-	•	-	•	•
40-125/03	0.37	-	•	-	•	•
40-125/05	0.55	-	•	•	•	•
40-160/03	0.37	-	•	-	•	•
40-160/05	0.55	-	•	•	•	•
40-160/07	0.75	-	•	•	•	•
40-160/11	1.1	-	•	•	•	•
40-200/07	0.75	-	•	•	•	•
40-200/11	1.1	-	•	•	•	•
40-200/15A	1.5	-	•	•	•	•
40-200/15	1.5	-	•	•	•	•
40-250/11	1.1	-	-	•	•	•
40-250/15A	1.5	-	•	-	-	-
40-250/15	1.5	-	•	•	•	•
40-250/22A	2.2	-	•	•	•	•
40-250/22	2.2	-	•	•	•	•
40-250/30	3	-	•	•	•	•
50-125/03	0.37	-	•	-	•	•
50-125/05	0.55	-	•	•	•	•
50-125/07	0.75	-	•	•	•	•
50-125/11	1.1	-	•	•	•	•
50-160/07	0.75	-	•	•	•	•
50-160/11A	1.1	-	•	•	•	•
50-160/11	1.1	-	•	•	•	•
50-160/15	1.5	-	•	•	•	•
50-200/11	1.1	-	-	•	•	•
50-200/15A	1.5	-	•	-	-	-
50-200/15	1.5	-	•	•	•	•
50-200/22A	2.2	-	•	•	•	•
50-200/22	2.2	-	•	•	•	•
50-250/22A	2.2	-	•	•	•	•
50-250/22	2.2	-	•	•	•	•
50-250/30	3	-	•	•	•	•
50-250/40	4	-	•	•	•	•

• = Available

Nsc1\_models-4p50-en\_d\_sc

SIZE NSC..4	kW	VERSION			
		NSCE	NSCS	NSCF	NSCC
50-315/40	4	-	•	•	•
50-315/55	5.5	-	•	•	•
50-315/75	7.5	-	•	•	•
50-315/110	11	-	•	•	•
65-125/05	0.55	•	•	•	•
65-125/07	0.75	•	•	•	•
65-125/11	1.1	•	•	•	•
65-125/15	1.5	•	•	•	•
65-160/11A	1.1	-	•	•	•
65-160/15B	1.5	•	-	-	-
65-160/11	1.1	-	•	•	•
65-160/15A	1.5	•	-	-	-
65-160/15	1.5	•	•	•	•
65-160/22A	2.2	•	•	•	•
65-160/22	2.2	•	•	•	•
65-200/15	1.5	•	•	•	•
65-200/22A	2.2	•	•	•	•
65-200/22	2.2	•	•	•	•
65-200/30	3	•	•	•	•
65-200/40	4	•	•	•	•
65-250/30	3	-	•	•	•
65-250/40	4	-	•	•	•
65-250/55A	5.5	-	•	•	•
65-250/55	5.5	-	•	•	•
65-250/75	7.5	-	•	•	•
65-315/55	5.5	-	•	•	•
65-315/75	7.5	-	•	•	•
65-315/110	11	-	•	•	•
65-315/150	15	-	•	•	•
80-160/15	1.5	•	•	•	•
80-160/22A	2.2	•	•	•	•
80-160/22	2.2	•	•	•	•
80-160/30	3	•	•	•	•
80-200/30	3	-	•	•	•
80-200/40	4	-	•	•	•
80-200/55A	5.5	-	•	•	•
80-200/55	5.5	-	•	•	•
80-250/55A	5.5	-	•	•	•
80-250/55	5.5	-	•	•	•
80-250/75	7.5	-	•	•	•
80-250/110	11	-	•	•	•
80-315/110A	11	-	•	•	•
80-315/110	11	-	•	•	•
80-315/150	15	-	•	•	•
80-315/185	18.5	-	•	•	•
80-315/220	22	-	•	•	•
80-400/185	18.5	-	•	•	•
80-400/220	22	-	•	•	•
80-400/300	30	-	•	•	•
80-400/370	37	-	•	•	•

**e-NSC SERIES**  
**LIST OF MODELS AT 50 Hz, 4 POLES**

SIZE NSC..4	kW	VERSION			
		NSCE	NSCS	NSCF	NSCC
100-160/22A	2.2	-	•	•	•
100-160/22	2.2	-	•	•	•
100-160/30	3	-	•	•	•
100-160/40	4	-	•	•	•
100-200/40	4	-	•	•	•
100-200/55	5.5	-	•	•	•
100-200/75	7.5	-	•	•	•
100-250/55	5.5	-	-	•	•
100-250/75	7.5	-	•	•	•
100-250/110	11	-	•	•	•
100-315/110	11	-	•	•	•
100-315/150	15	-	•	•	•
100-315/185	18.5	-	•	•	•
100-315/220	22	-	•	•	•
100-315/300	30	-	•	•	•
100-400/300	30	-	•	•	•
100-400/370	37	-	•	•	•
100-400/450	45	-	•	•	•
125-200/55	5.5	-	•	•	•
125-200/75	7.5	-	•	•	•
125-200/110	11	-	•	•	•
125-250/75	7.5	-	•	•	•
125-250/110	11	-	•	•	•
125-250/150	15	-	•	•	•
125-315/185	18.5	-	•	•	•
125-315/220	22	-	•	•	•
125-315/300	30	-	•	•	•
125-315/370	37	-	•	•	•
125-400/370	37	-	•	•	•
125-400/450	45	-	•	•	•
125-400/550	55	-	•	•	•
125-400/750	75	-	•	•	•
150-200/110A	11	-	•	•	•
150-200/110	11	-	•	•	•
150-200/150A	15	-	•	•	•
150-200/150	15	-	•	•	•
150-250/150	15	-	•	•	•
150-250/185	18.5	-	•	•	•
150-250/220	22	-	•	•	•
150-250/300	30	-	•	•	•
150-315/300	30	-	•	•	•
150-315/370	37	-	•	•	•
150-315/450	45	-	•	•	•
150-400/450	45	-	•	•	•
150-400/550	55	-	•	•	•
150-400/750	75	-	•	•	•
150-400/900	90	-	•	•	•
150-400/1100	110	-	-	•	•
150-500/900	90	-	-	•	•
150-500/1100	110	-	-	•	•
150-500/1320	132	-	-	•	•
150-500/1600	160	-	-	•	•
150-500/2000	200	-	-	•	•

SIZE NSC..4	kW	VERSION			
		NSCE	NSCS	NSCF	NSCC
200-250/185	18.5	-	•	•	•
200-250/220	22	-	•	•	•
200-250/300A	30	-	•	•	•
200-250/300	30	-	•	•	•
200-315/300	30	-	-	•	•
200-315/370	37	-	•	•	•
200-315/450	45	-	•	•	•
200-315/550	55	-	•	•	•
200-315/750	75	-	•	•	•
200-400/750A	75	-	-	•	•
200-400/750	75	-	-	•	•
200-400/900	90	-	-	•	•
200-400/1100	110	-	-	•	•
200-400/1320	132	-	-	•	•
200-500/1320	132	-	-	•	•
200-500/1600	160	-	-	•	•
200-500/2000	200	-	-	•	•
200-500/2500	250	-	-	•	•
200-500/3150	315	-	-	•	•
250-315/370	37	-	•	•	•
250-315/450	45	-	•	•	•
250-315/550	55	-	•	•	•
250-315/750	75	-	•	•	•
250-400/750	75	-	-	•	•
250-400/900	90	-	-	•	•
250-400/1100	110	-	-	•	•
250-400/1320	132	-	-	•	•
250-400/1600	160	-	-	•	•
250-400/2000	200	-	-	•	•
250-500/1600	160	-	-	•	•
250-500/2000	200	-	-	•	•
250-500/2500	250	-	-	•	•
250-500/3150	315	-	-	•	•
250-500/3550	355	-	-	•	•
300-350/750A	75	-	-	•	•
300-350/750	75	-	-	•	•
300-350/900	90	-	-	•	•
300-350/1100	110	-	-	•	•
300-400/1100	110	-	-	•	•
300-400/1320	132	-	-	•	•
300-400/1600	160	-	-	•	•
300-400/2000	200	-	-	•	•
300-400/2500	250	-	-	•	•
300-450/1600	160	-	-	•	•
300-450/2000	200	-	-	•	•
300-450/2500	250	-	-	•	•
300-450/3150	315	-	-	•	•

• = Available

Nsc2\_models-4p50-en\_b\_sc

## SERIE e-NSC AVAILABLE MATERIALS

Various material configurations are available to fit the needs of different pumped mediums and applications requirements. Below are the specifics regarding the material configurations and their availability for the different pump sizes. The material identification codes are the same used in the pump description (see page 8).

### MATERIAL CONFIGURATION

COMPONENTS	CS	CC/DC	CB/DB	CN/DN	NN	RN	RR
Volute casing	Cast iron	Cast iron/Ductile iron			Stainless steel	Duplex	Duplex
Impeller	Stainless steel	Cast iron	Bronze	Stainless steel	Stainless steel		Duplex
Casing cover	Cast iron	Cast iron/Ductile iron			Stainless steel	Duplex	Duplex
Stub shaft	Stainless steel				Duplex		
Wear ring	Stainless steel				Duplex		
Impeller lock nut and washer	Stainless steel						Duplex
Impeller key	Stainless steel						Duplex
Fill and drain plugs	Stainless steel					Duplex	
Motor adapter	Cast iron						

Stub shaft and wear rings in Duplex are available as an option for all pump sizes.  
For further informations, see the pages [15-21](#).

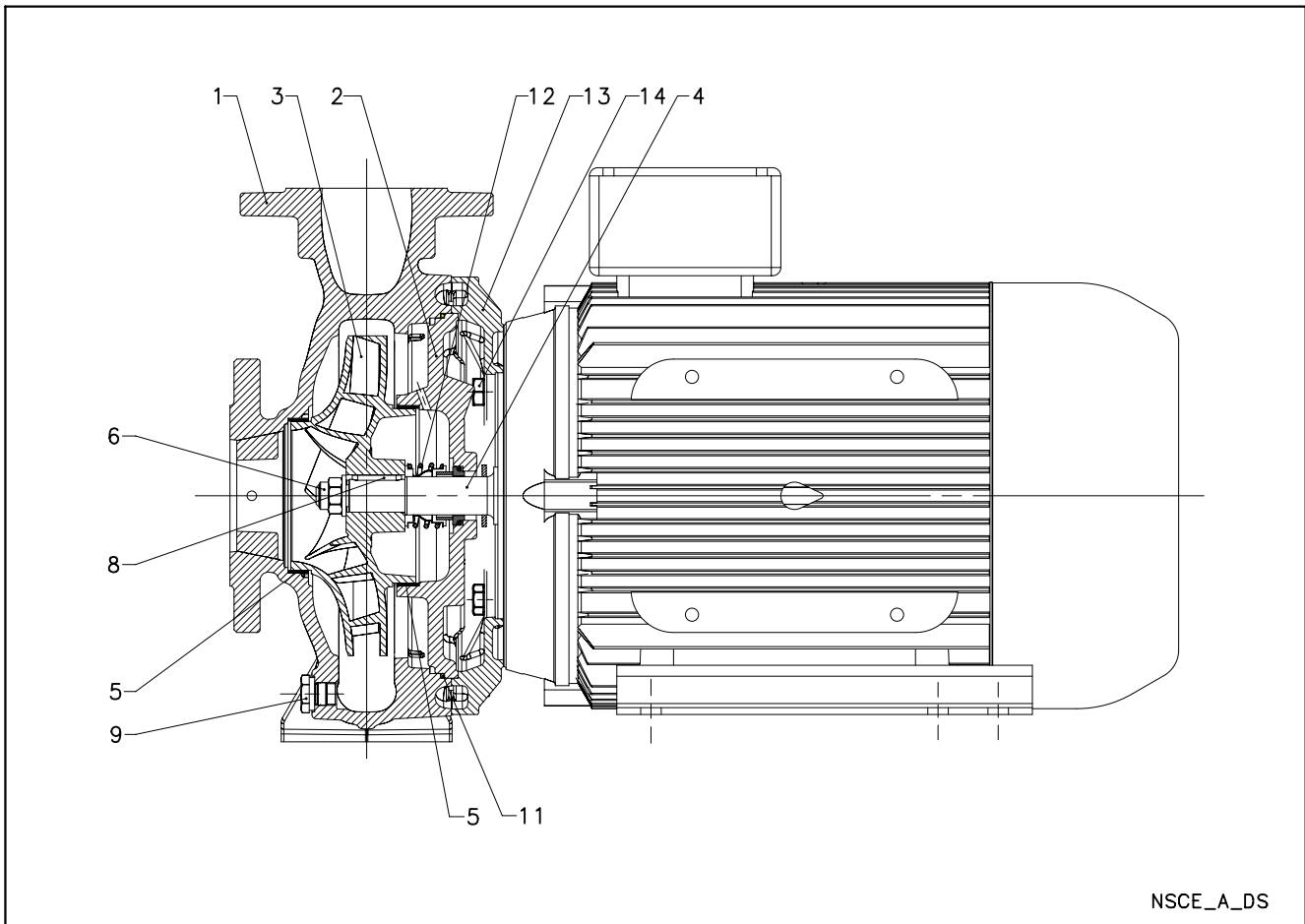
Nsc\_configs-en\_a\_tm

### AVAILABLE MATERIALS FOR CASING AND IMPELLER PER PUMP SIZE

DISCHARGE SIZE	IMPELLER SIZE						
	125	160	200	250	315 / 316	400	500
32	CS	CS	CS	CS			
40	CS	CS	CS	CS			
50	CS	CS	CS	CS	CC-CB-CN NN-RR		
65	CC-CB-CN NN-RR	CC-CB-CN NN-RR	CC-CB-CN NN-RR	CC-CB-CN NN-RR	CC-CB-CN NN-RR		
80		CC-CB-CN NN-RR	CC-CB-CN NN-RR	CC-CB-CN NN-RR	CC-CB-CN NN-RR	CC-CB-CN NN-RR	
100		CC-CB-CN NN-RR	CC-CB-CN NN-RR	CC-CB-CN NN-RR	CC-CB-CN NN-RR	CC-CB-CN NN-RR	
125			CC-CB-CN NN-RR	CC-CB-CN NN-RR	CC-CB-CN NN-RR	CC-CB-CN NN-RR	
150			CC-CB-CN NN-RR	CC-CB-CN NN-RR	CC-CB-CN NN-RR	CC-CB-CN NN-RR	DC-DB-DN RN-RR
200				DC-DB-DN RN-RR	DC-DB-DN RN-RR	DC-DB-DN RN-RR	DC-DB-DN RN-RR
250					DC-DB-DN RN-RR	DC-DB-DN RN-RR	DC-DB-DN RN-RR
300					DC-DB-DN RN-RR	DC-DB-DN RN-RR	DC-DB-DN RN-RR

Nsc\_models-en\_b\_tm

## NSCE SERIES ELECTRIC PUMP CROSS-SECTION AND MAIN COMPONENTS



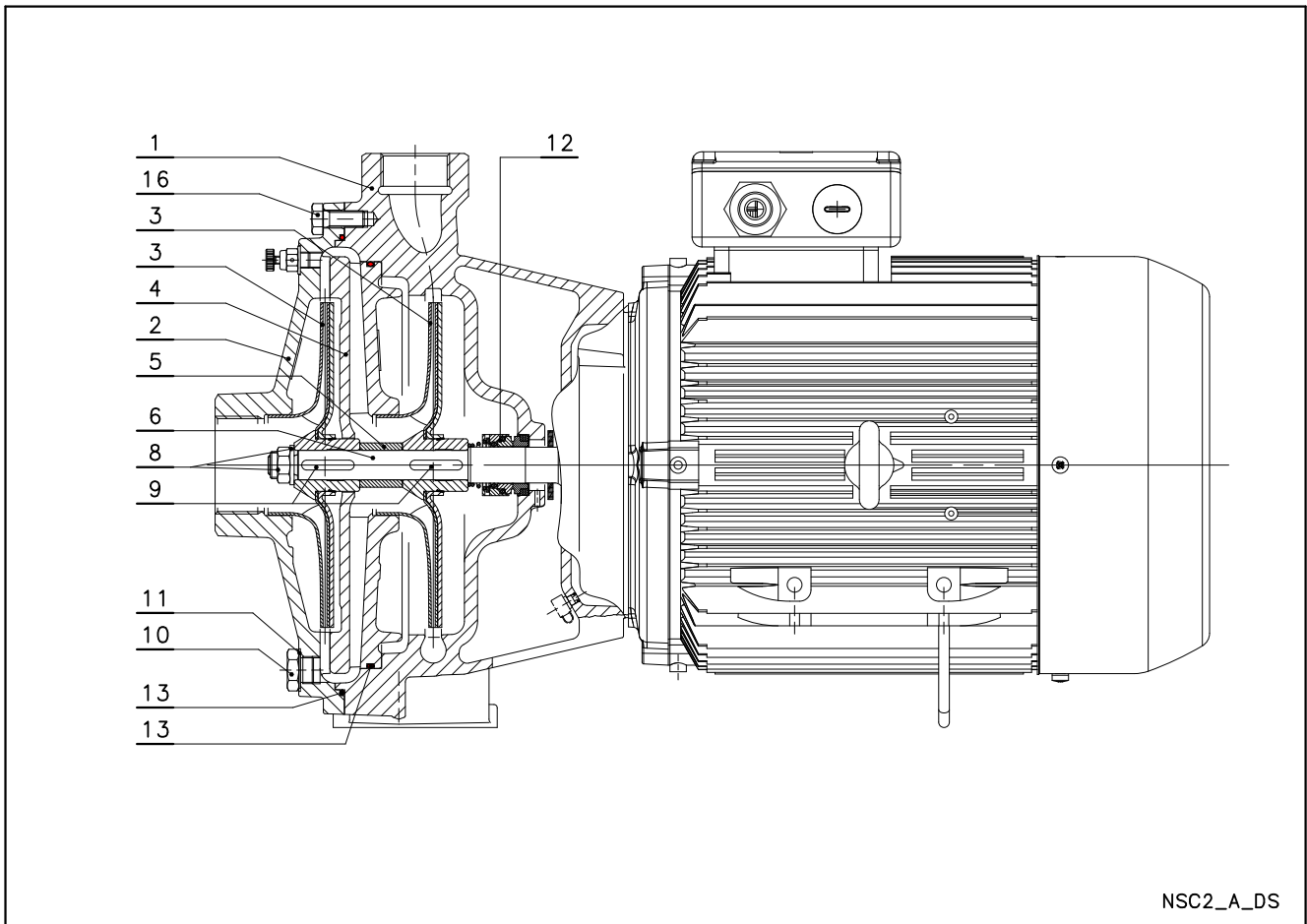
NSCE\_A\_DS

REF. N.	PART	MATERIAL	REFERENCE STANDARDS	
			EUROPE	USA
1	Volute casing	Cast iron	EN 1561 - GJL-250 (JL1040)	ASTM Class 35
2	Casing cover	Cast iron	EN 1561 - GJL-250 (JL1040)	ASTM Class 35
3	Impeller (32, 40, 50)	Stainless steel	EN 10088-1-X5CrNi18-10 (1.4301)	AISI 304
		Cast iron	EN 1561 - GJL-200 (JL1030)	ASTM Class 30
		Bronze	EN 1982 - CuSn10-C (CC480K)	UNS C90700
		Stainless steel	EN 10213-GX5CrNiMo-19-11-2 (1.4408)	ASTM A743 CF8M
3	Impeller (65, 80)	Duplex	EN 10213-GX2CrNiMoCuN25-6-3-3 (1.4517)	ASTM A743 CD4MCu
4	Shaft extension	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
5	Wear ring	Stainless steel	EN 10088-X5CrNi18-10 (1.4301)	AISI 304
6	Impeller lock nut and washer	Stainless steel	EN 10088-X5CrNi18-10 (1.4301)	AISI 304
8	Impeller key	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
9	Fill and drain plugs	Stainless steel	EN 10088-3-X8CrNiS18-9 (1.4305)	AISI 303
11	O-Ring	EPDM (standard version)		
12	Mechanical seal	Carbon / Silicon carbide / EPDM (standard version)		
13	Motor adapter *	Aluminium	EN 1706-AC-AISI11Cu2 (Fe) (AC46100)	-
	Motor adapter	Cast iron	EN 1561 - GJL-250 (JL1040)	ASTM Class 35
14	Volute casing fastening bolts and screws	Galvanized steel		

\* 2/4 pole: 32/40/50-125, 32/40-160

## NSC2 SERIES

### ELECTRIC PUMP CROSS-SECTION AND MAIN COMPONENTS



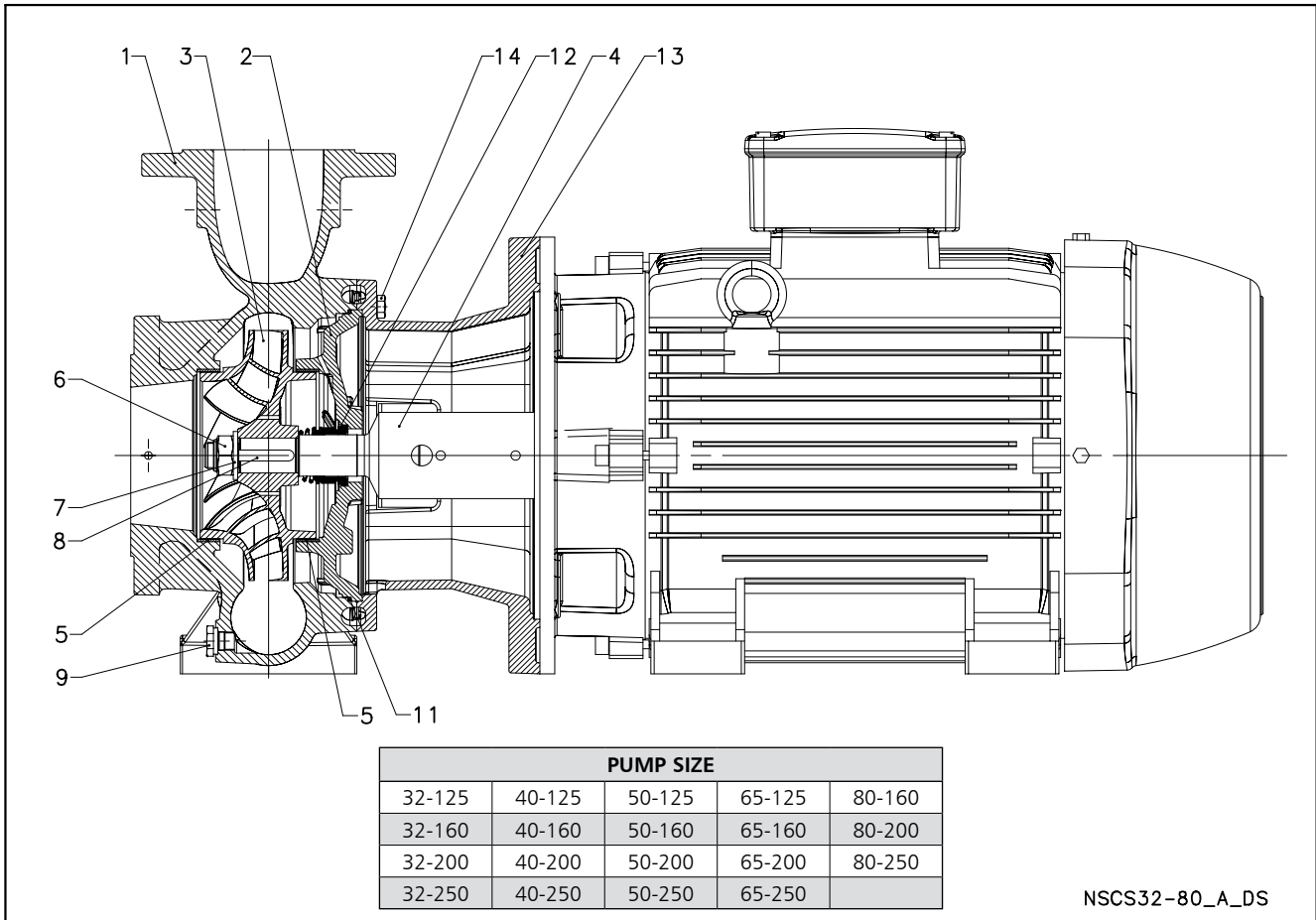
NSC2\_A\_DS

REF. N.	PART	MATERIAL	REFERENCE STANDARDS	
			EUROPE	USA
1	Pump body	Cast iron	EN 1561-GJL-200 (JL1030)	ASTM Class 25
2	Suction flange	Cast iron	EN 1561-GJL-200 (JL1030)	ASTM Class 25
3	Impeller	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
4	Diffuser	Cast iron	EN 1561-GJL-200 (JL1030)	ASTM Class 25
5	Impeller spacer	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
6	Shaft extension	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
8	Impeller lock nut and washer	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
9	Tab	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
10	Fill and drain plugs	Stainless steel	EN 10088-3-X8CrNiS18-9 (1.4305)	AISI 303
11	Fill and drain plugs seals	EPDM (standard version)		
12	Mechanical seal	Carbon / Silicon carbide / EPDM (standard version)		
13	O-Ring	EPDM (standard version)		
16	Pump body fastening bolts and screws	Galvanized steel		

Nsc2-en\_b\_tm



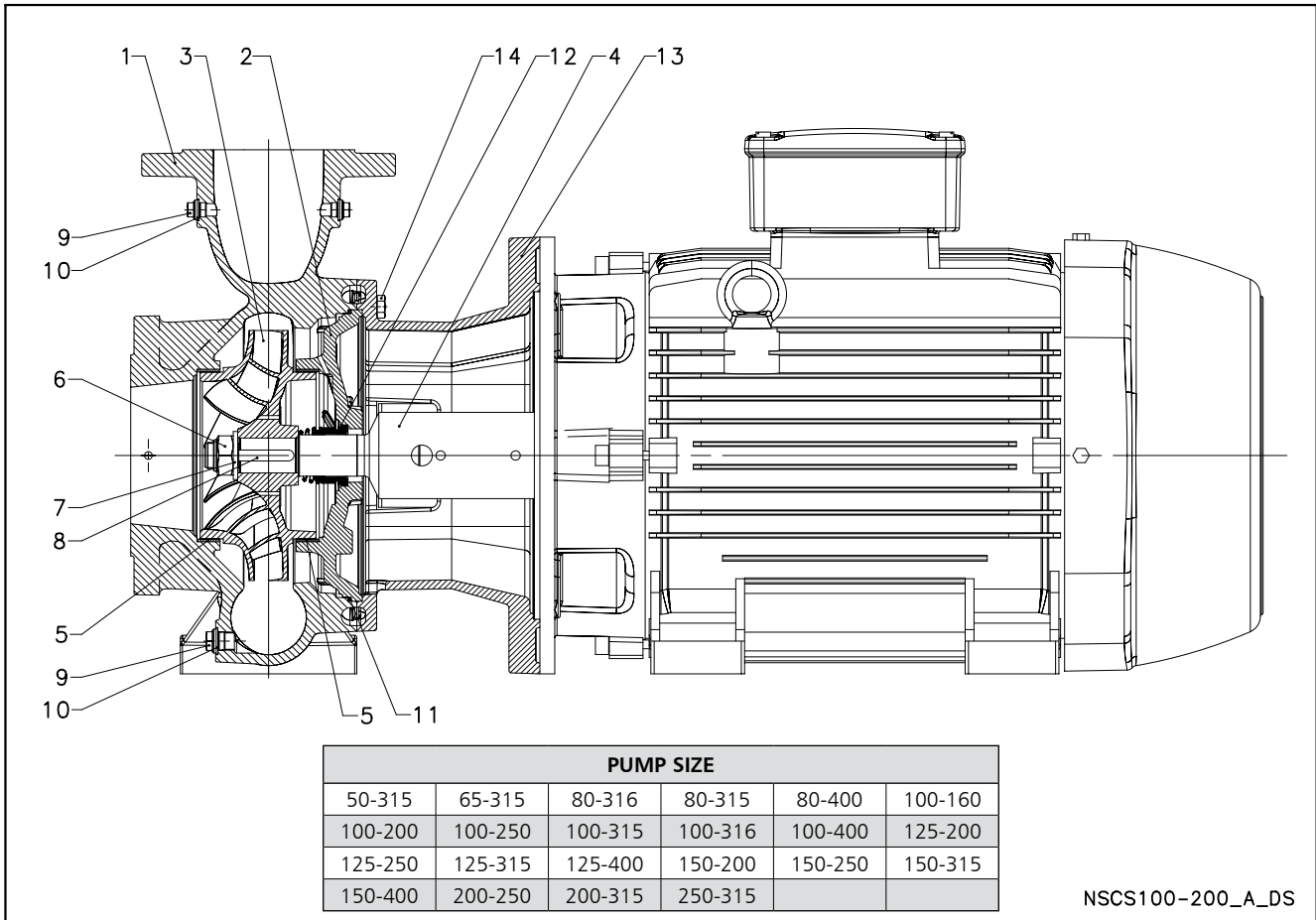
## NSCS SERIES ELECTRIC PUMP CROSS-SECTION AND MAIN COMPONENTS



REF. N.	PART	MATERIAL	REFERENCE STANDARDS	
			EUROPE	USA
1	Volute casing	Cast iron	EN 1561 - GJL-250 (JL1040)	ASTM Class 35
	Volute casing (65, 80)	Stainless steel	EN 10213-GX5CrNiMo-19-11-2 (1.4408)	ASTM A743 CF8M
2	Casing cover	Duplex	EN 10213-GX2CrNiMoCuN25-6-3-3 (1.4517)	ASTM A743 CD4MCu
	Casing cover (65, 80)	Cast iron	EN 1561 - GJL-250 (JL1040)	ASTM Class 35
		Stainless steel	EN 10213-GX5CrNiMo-19-11-2 (1.4408)	ASTM A743 CF8M
3	Impeller (32, 40, 50)	Duplex	EN 10213-GX2CrNiMoCuN25-6-3-3 (1.4517)	ASTM A743 CD4MCu
		Stainless steel	EN 10088-1-X5CrNi18-10 (1.4301)	AISI 304
	Impeller (65, 80)	Cast iron	EN 1561 - GJL-200 (JL1030)	ASTM Class 30
		Bronze	EN 1982 - CuSn10-C (CC480K)	UNS C90700
4	Stub shaft	Stainless steel	EN 10213-GX5CrNiMo-19-11-2 (1.4408)	ASTM A743 CF8M
		Duplex	EN 10213-GX2CrNiMoCuN25-6-3-3 (1.4517)	ASTM A743 CD4MCu
	Stub shaft (65, 80)	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
5	Stub shaft (65-250, 80-200, 80-250)	Stainless steel	EN 10088-1-X17CrNi16-2 (1.4057)	AISI 431
	Wear ring	Duplex	EN 10088-3-X2CrNiMoN22-5-3 (1.4462)	ASTM A182 F51
6	Wear ring (65, 80)	Stainless steel	EN 10088-1-X5CrNi18-10 (1.4301)	AISI 304
	Impeller lock nut and washer	Duplex	EN 10088-3-X2CrNiMoN22-5-3 (1.4462)	ASTM A182 F51
8	Impeller lock nut and washer (65, 80)	Stainless steel	EN 10088-1-X5CrNi18-10 (1.4301)	AISI 304
	Impeller key	Duplex	EN 10088-3-X2CrNiMoN22-5-3 (1.4462)	ASTM A182 F51
9	Impeller key (65, 80)	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
	Fill and drain plugs	Duplex	EN 10088-3-X2CrNiMoN22-5-3 (1.4462)	ASTM A182 F51
11	Fill and drain plugs (65, 80)	Stainless steel	EN 10088-3-X8CrNiS18-9 (1.4305)	AISI 303
	O-Ring	Duplex	EN 10088-3-X2CrNiMoN22-5-3 (1.4462)	ASTM A182 F51
12	Impeller key	EPDM (versione standard)		
13	Mechanical seal	Carbon / Silicon carbide / EPDM (standard version)		
13	Mechanical seal (65, 80)	Antimony impregnated carbon / Silicon carbide / EPDM (duplex version)		
13	Adapter *	Aluminium	EN 1706-AC-AISI11Cu2 (Fe) (AC46100)	-
	Adapter	Cast iron	EN 1561 - GJL-250 (JL1040)	ASTM Class 35
14	Motor adapter	Cast iron	EN 1561 - GJL-250 (JL1040)	ASTM Class 35
14	Volute casing fastening bolts and screws	Galvanized steel		
	Volute casing fastening bolts and screws	Stainless steel	A4 (~ 1.4401)	

\* 2/4 pole: 32/40/50-125, 32/40-160

## NSCS SERIES ELECTRIC PUMP CROSS-SECTION AND MAIN COMPONENTS

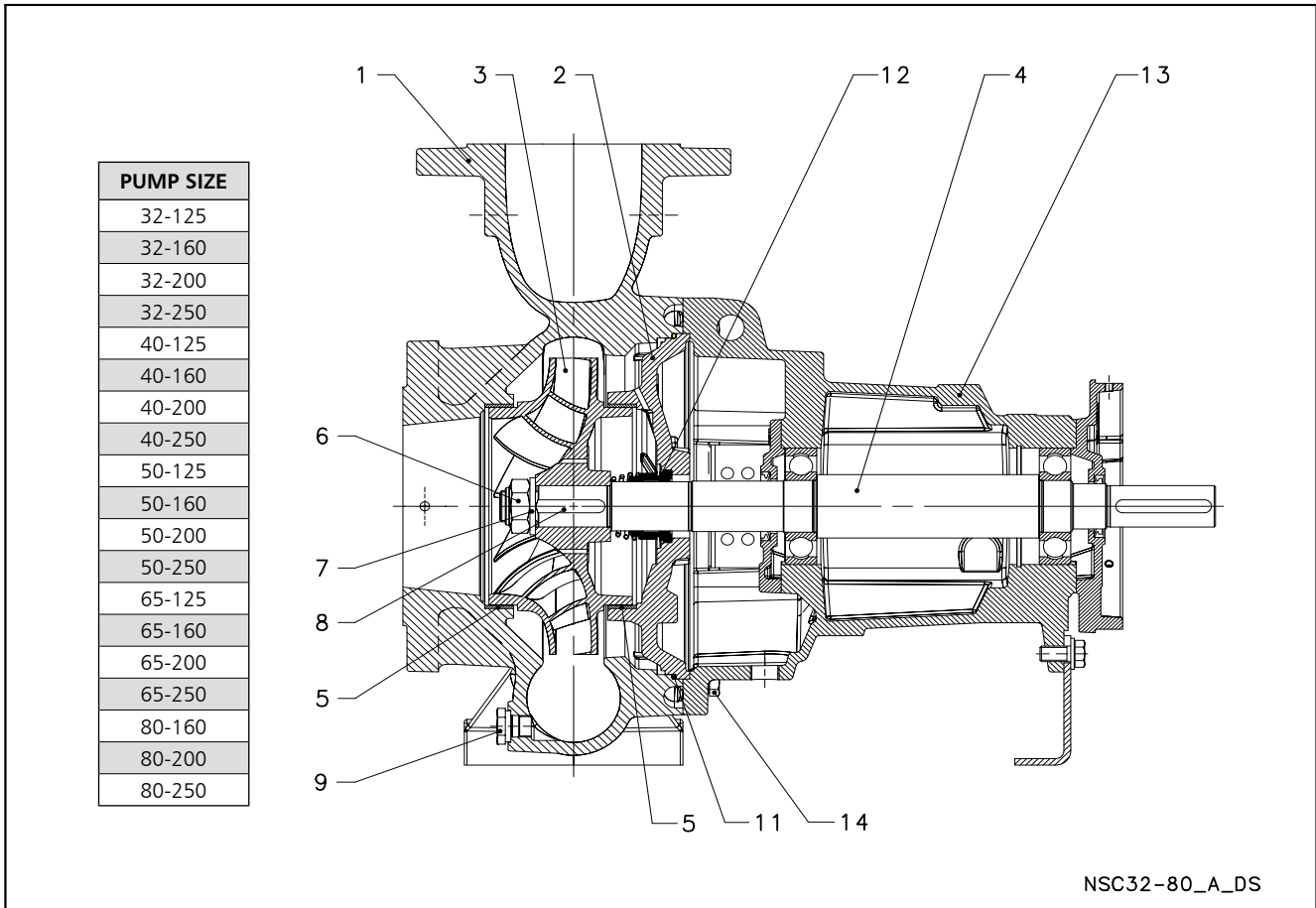


PUMP SIZE					
50-315	65-315	80-316	80-315	80-400	100-160
100-200	100-250	100-315	100-316	100-400	125-200
125-250	125-315	125-400	150-200	150-250	150-315
150-400	200-250	200-315	250-315		

NSCS100-200\_A\_DS

REF. N.	PART	MATERIAL	REFERENCE STANDARDS	
			EUROPE	USA
1	Volute casing	Cast iron	EN 1561 - GJL-250 (JL1040)	ASTM Class 35
		Stainless steel	EN 10213-GX5CrNiMo-19-11-2 (1.4408)	ASTM A743 CF8M
		Duplex	EN 10213-GX2CrNiMoCuN25-6-3-3 (1.4517)	ASTM A743 CD4MCu
	Volute casing (200-250, 200-315, 250-315)	Cast ductile iron	EN 1563 - EN-GJS400-15 (EN-JS1030)	ASTM A536 40-60-18
2	Casing cover	Cast iron	EN 1561 - GJL-250 (JL1040)	ASTM Class 35
		Stainless steel	EN 10213-GX5CrNiMo-19-11-2 (1.4408)	ASTM A743 CF8M
		Duplex	EN 10213-GX2CrNiMoCuN25-6-3-3 (1.4517)	ASTM A743 CD4MCu
	Casing cover (200-250, 200-315, 250-315)	Cast ductile iron	EN 1563 - EN-GJS400-15 (EN-JS1030)	ASTM A536 40-60-18
3	Impeller	Cast iron	EN 1561 - GJL-200 (JL1030)	ASTM Class 30
		Bronzo	EN 1982 - CuSn10-C (CC480K)	UNS C90700
		Stainless steel	EN 10213-GX5CrNiMo-19-11-2 (1.4408)	ASTM A743 CF8M
		Duplex	EN 10213-GX2CrNiMoCuN25-6-3-3 (1.4517)	ASTM A743 CD4MCu
4	Stub shaft	Stainless steel	EN 10088-1-X17CrNi16-2 (1.4057)	AISI 431
		Duplex	EN 10088-3-X2CrNiMoN22-5-3 (1.4462)	ASTM A182 F51
5	Wear ring	Stainless steel	EN 10088-1-X5CrNi18-10 (1.4301)	AISI 304
		Duplex	EN 10088-3-X2CrNiMoN22-5-3 (1.4462)	ASTM A182 F51
6	Impeller nut	Stainless steel	A4 (~ 1.4401)	
		Duplex	EN 10088-3-X2CrNiMoN22-5-3 (1.4462)	ASTM A182 F51
7	Impeller washer	Stainless steel	A4 (~ 1.4401)	
		Duplex	EN 10088-3-X2CrNiMoN22-5-3 (1.4462)	ASTM A182 F51
8	Impeller key	Stainless steel	EN 10088 - X6CrNiMo17-12-2 (1.4571)	AISI 316Ti
		Duplex	EN 10088-3-X2CrNiMoN22-5-3 (1.4462)	ASTM A182 F51
9	Plug	Stainless steel	EN 10088 - X6CrNiMo17-12-2 (1.4571)	AISI 316Ti
		Duplex	EN 10088-3-X2CrNiMoN22-5-3 (1.4462)	ASTM A182 F51
10	Gasket	Asbestos-free synthetic fiber AFM 34		
11	O-Ring	EPDM (versione standard)		
12	Mechanical seal	Carbon / Silicon carbide / EPDM (standard version)		
		Antimony impregnated carbon / Silicon carbide / EPDM (duplex version)		
13	Motor adapter	Cast iron	EN 1561 - GJL-250 (JL1040)	ASTM Class 35
14	Volute - casing fastening screws	Carbon steel		
		Stainless steel	A4	

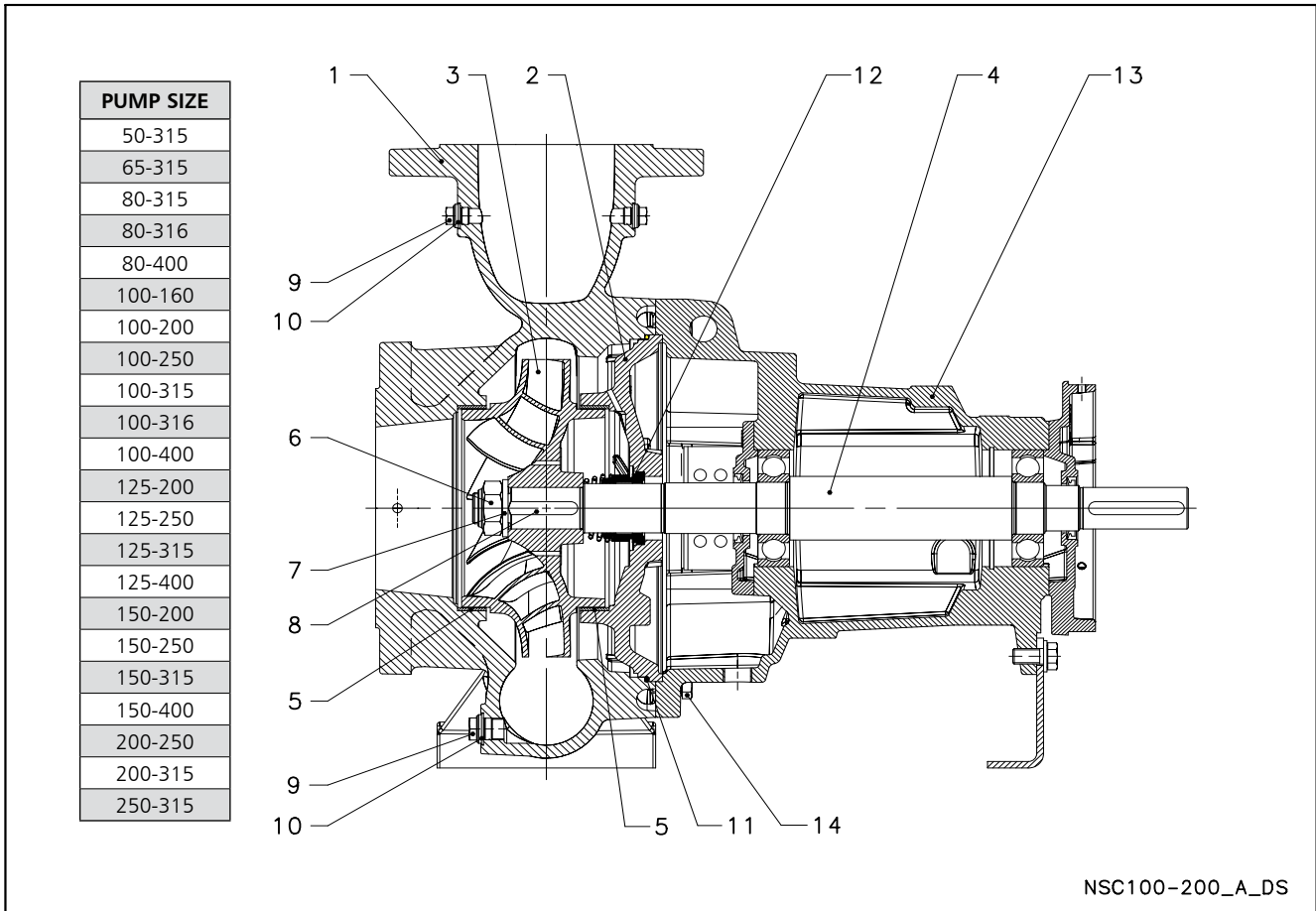
## NSC, NSCF, NSCC SERIES ELECTRIC PUMP CROSS-SECTION AND MAIN COMPONENTS



REF. N.	PART	MATERIAL	REFERENCE STANDARDS	
			EUROPE	USA
1	Volute casing	Cast iron	EN 1561 - GJL-250 (JL1040)	ASTM Class 35
	Volute casing (65, 80)	Stainless steel	EN 10213-GX5CrNiMo-19-11-2 (1.4408)	ASTM A743 CF8M
2	Casing cover	Cast iron	EN 1561 - GJL-250 (JL1040)	ASTM Class 35
	Casing cover (65, 80)	Stainless steel	EN 10213-GX5CrNiMo-19-11-2 (1.4408)	ASTM A743 CF8M
3	Impeller (32, 40, 50)	Duplex	EN 10213-GX2CrNiMoCuN25-6-3-3 (1.4517)	ASTM A743 CD4MCu
		Stainless steel	EN 10088-1-X5CrNi18-10 (1.4301)	AISI 304
	Impeller (65, 80)	Cast iron	EN 1561 - GJL-200 (JL1030)	ASTM Class 30
		Bronze	EN 1982 - CuSn10-C (CC480K)	UNS C90700
4	Stub shaft	Stainless steel	EN 10213-GX5CrNiMo-19-11-2 (1.4408)	ASTM A743 CF8M
	Stub shaft (65-250, 80-200, 80-250)	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
	Stub shaft (65, 80)	Duplex	EN 10088-1-X17CrNi16-2 (1.4057)	AISI 431
5	Wear ring	Duplex	EN 10088-3-X2CrNiMoN22-5-3 (1.4462)	ASTM A182 F51
	Wear ring (65, 80)	Stainless steel	EN 10088-1-X5CrNi18-10 (1.4301)	AISI 304
6	Impeller lock nut and washer	Duplex	EN 10088-3-X2CrNiMoN22-5-3 (1.4462)	ASTM A182 F51
	Impeller lock nut and washer (65, 80)	Stainless steel	EN 10088-1-X5CrNi18-10 (1.4301)	AISI 304
8	Impeller key	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
	Impeller key (65, 80)	Duplex	EN 10088-3-X2CrNiMoN22-5-3 (1.4462)	ASTM A182 F51
9	Fill and drain plugs	Stainless steel	EN 10088-3-X8CrNiS18-9 (1.4305)	AISI 303
	Fill and drain plugs (65, 80)	Duplex	EN 10088-3-X2CrNiMoN22-5-3 (1.4462)	ASTM A182 F51
11	O-Ring	EPDM (versione standard)		
12	Mechanical seal	Carbon / Silicon carbide / EPDM (standard version)		
13	Mechanical seal (65, 80)	Antimony impregnated carbon / Silicon carbide / EPDM (duplex version)		
13	Adapter *	Aluminium	EN 1706-AC-AISI11Cu2 (Fe) (AC46100)	-
	Adapter	Cast iron	EN 1561 - GJL-250 (JL1040)	ASTM Class 35
	Motor adapter	Cast iron	EN 1561 - GJL-250 (JL1040)	ASTM Class 35
14	Volute casing fastening bolts and screws	Galvanized steel		
	Volute casing fastening bolts and screws	Stainless steel	A4 (~ 1.4401)	

\* 2/4 pole: 32/40/50-125, 32/40-160

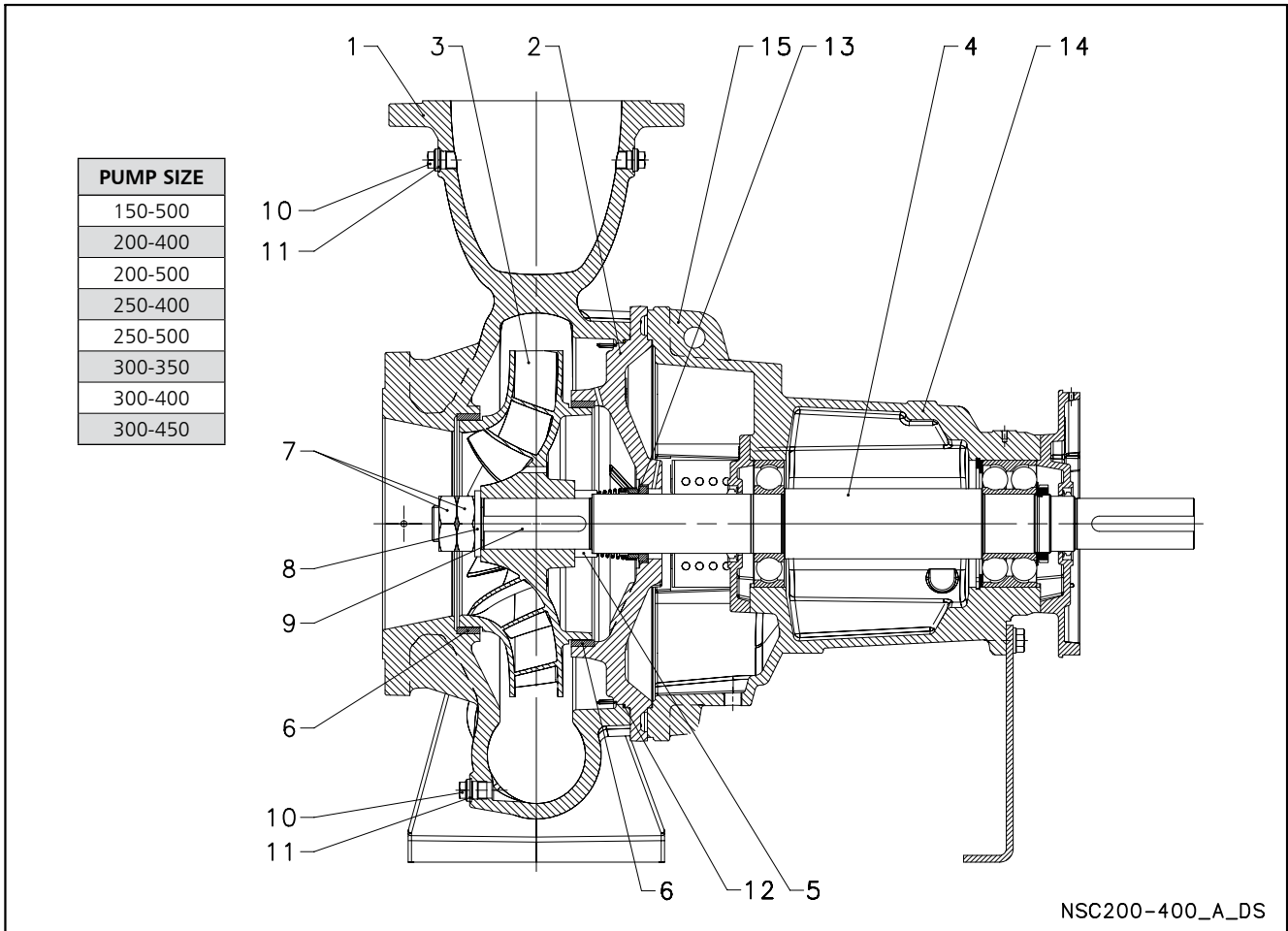
## NSC, NSCF, NSCC SERIES ELECTRIC PUMP CROSS-SECTION AND MAIN COMPONENTS



REF. N.	PART	MATERIAL	REFERENCE STANDARDS	
			EUROPE	USA
1	Volute casing	Cast iron	EN 1561 - GJL-250 (JL1040)	ASTM Class 35
		Stainless steel	EN 10213-GX5CrNiMo-19-11-2 (1.4408)	ASTM A743 CF8M
		Duplex	EN 10213-GX2CrNiMoCuN25-6-3-3 (1.4517)	ASTM A743 CD4MCu
	Volute casing (200-250, 200-315, 250-315)	Cast ductile iron	EN 1563 - EN-GJS400-15 (EN-JS1030)	ASTM A536 40-60-18
2	Casing cover	Cast iron	EN 1561 - GJL-250 (JL1040)	ASTM Class 35
		Stainless steel	EN 10213-GX5CrNiMo-19-11-2 (1.4408)	ASTM A743 CF8M
		Duplex	EN 10213-GX2CrNiMoCuN25-6-3-3 (1.4517)	ASTM A743 CD4MCu
	Casing cover (200-250, 200-315, 250-315)	Cast ductile iron	EN 1563 - EN-GJS400-15 (EN-JS1030)	ASTM A536 40-60-18
3	Impeller	Cast iron	EN 1561 - GJL-200 (JL1030)	ASTM Class 30
		Bronze	EN 1982 - CuSn10-C (CC480K)	UNS C90700
		Stainless steel	EN 10213-GX5CrNiMo-19-11-2 (1.4408)	ASTM A743 CF8M
		Duplex	EN 10213-GX2CrNiMoCuN25-6-3-3 (1.4517)	ASTM A743 CD4MCu
4	Shaft	Stainless steel	EN 10088-1-X17CrNi16-2 (1.4057)	AISI 431
		Duplex	EN 10088-3-X2CrNiMoN22-5-3 (1.4462)	ASTM A182 F51
5	Wear ring	Stainless steel	EN 10088-1-X5CrNi18-10 (1.4301)	AISI 304
		Duplex	EN 10088-3-X2CrNiMoN22-5-3 (1.4462)	ASTM A182 F51
6	Impeller nut	Stainless steel	A4 (~ 1.4401)	
		Duplex	EN 10088-3-X2CrNiMoN22-5-3 (1.4462)	ASTM A182 F51
7	Impeller washer	Stainless steel	A4 (~ 1.4401)	
		Duplex	EN 10088-3-X2CrNiMoN22-5-3 (1.4462)	ASTM A182 F51
8	Impeller key	Stainless steel	EN 10088 - X6CrNiMo17-12-2 (1.4571)	AISI 316Ti
		Duplex	EN 10088-3-X2CrNiMoN22-5-3 (1.4462)	ASTM A182 F51
9	Plug	Stainless steel	EN 10088 - X6CrNiMo17-12-2 (1.4571)	AISI 316Ti
		Duplex	EN 10088-3-X2CrNiMoN22-5-3 (1.4462)	ASTM A182 F51
10	Gasket	Asbestos-free synthetic fiber AFM 34		
11	O-Ring	EPDM (standard version)		
12	Mechanical seal	Carbon / Silicon carbide / EPDM (standard version)		
		Antimony impregnated carbon / Silicon carbide / EPDM (duplex version)		
13	Bearing bracket	Cast iron	EN 1561 - GJL-250 (JL1040)	ASTM Class 35
14	Volute - casing fastening screws	Carbon steel		
		Stainless steel	A4 (~ 1.4401)	

### NSC, NSCF, NSCC SERIES

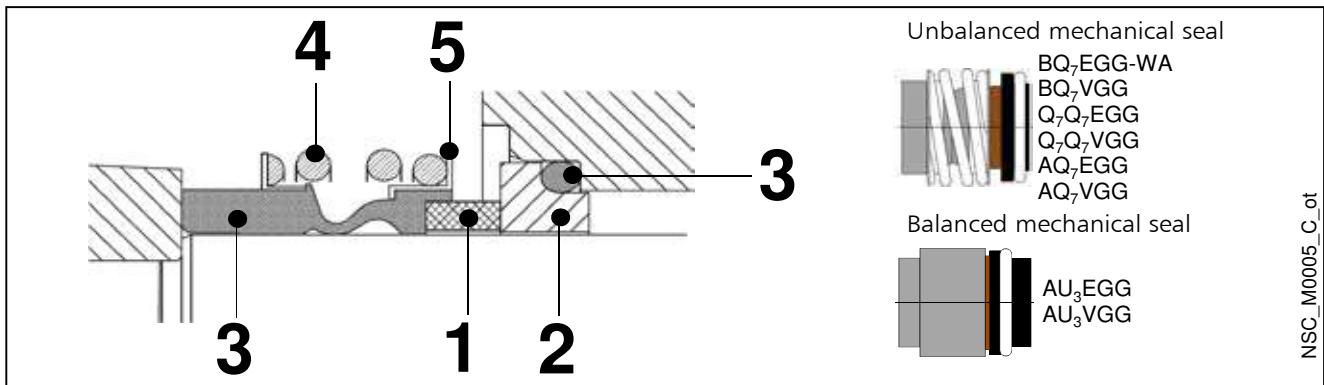
### ELECTRIC PUMP CROSS-SECTION AND MAIN COMPONENTS



REF. N.	PART	MATERIAL	REFERENCE STANDARDS	
			EUROPE	USA
1	Volute casing	Cast ductile iron	EN 1563 - EN-GJS400-15 (EN-JS1030)	ASTM A536 40-60-18
		Duplex	EN 10213-GX2CrNiMoCuN25-6-3-3 (1.4517)	ASTM A743 CD4MCu
2	Casing cover	Cast ductile iron	EN 1563 - EN-GJS400-15 (EN-JS1030)	ASTM A536 40-60-18
		Duplex	EN 10213-GX2CrNiMoCuN25-6-3-3 (1.4517)	ASTM A743 CD4MCu
3	Impeller	Cast iron	EN 1561 - GJL-200 (JL1030)	ASTM Class 30
		Bronze	EN 1982 - CuSn10-C (CC480K)	UNS C90700
		Stainless steel	EN 10213-GX5CrNiMo-19-11-2 (1.4408)	ASTM A743 CF8M
		Duplex	EN 10213-GX2CrNiMoCuN25-6-3-3 (1.4517)	ASTM A743 CD4MCu
4	Shaft	Stainless steel	EN 10088-1-X17CrNi16-2 (1.4057)	AISI 431
		Duplex	EN 10088-3-X2CrNiMoN22-5-3 (1.4462)	ASTM A182 F51
5	Spacer ring	Stainless steel	EN 10088-1-X17CrNi16-2 (1.4057)	AISI 431
		Duplex	EN 10088-3-X2CrNiMoN22-5-3 (1.4462)	ASTM A182 F51
6	Wear ring	Stainless steel	EN 10088-X5CrNi18-10 (1.4301)	AISI 304
		Duplex	EN 10088-3-X2CrNiMoN22-5-3 (1.4462)	ASTM A182 F51
7	Impeller nut	Stainless steel	A4 (~ 1.4401)	
		Duplex	EN 10088-3-X2CrNiMoN22-5-3 (1.4462)	ASTM A182 F51
8	Impeller washer	Stainless steel	A4 (~ 1.4401)	
		Duplex	EN 10088-3-X2CrNiMoN22-5-3 (1.4462)	ASTM A182 F51
9	Impeller key	Stainless steel	EN 10088 - X6CrNiMo17-12-2 (1.4571)	AISI 316Ti
		Duplex	EN 10088-3-X2CrNiMoN22-5-3 (1.4462)	ASTM A182 F51
10	Plug	Stainless steel	EN 10088 - X6CrNiMo17-12-2 (1.4571)	AISI 316Ti
		Duplex	EN 10088-3-X2CrNiMoN22-5-3 (1.4462)	ASTM A182 F51
11	Gasket	Asbestos-free synthetic fiber AFM 34		
12	O-Ring	EPDM (standard version)		
13	Mechanical seal	Carbon / Silicon carbide / EPDM (standard version)		
		Carbon / Silicon carbide / EPDM (standard version)		
14	Bearing bracket	Cast iron	EN 1561 - GJL-250 (JL1040)	ASTM Class 35
15	Volute - casing fastening screws	Cast iron		
		Stainless steel	A4 (~ 1.4401)	

## e-NSC SERIES MECHANICAL SEALS

Elastomer bellow seal with mounting dimensions according to EN 12756 and ISO 3069



POSITION 1 - 2	POSITION 3	POSITION 4 - 5
<b>B</b> : Resin impregnated carbon	<b>E</b> : EPDM	<b>G</b> : AISI 316
<b>A</b> : Antimony impregnated carbon	<b>V</b> : FKM (FPM)	
<b>Q<sub>7</sub></b> : Silicon carbide		
<b>U<sub>3</sub></b> : Tungsten carbide		

nsc\_ten-mec-en\_a\_tm

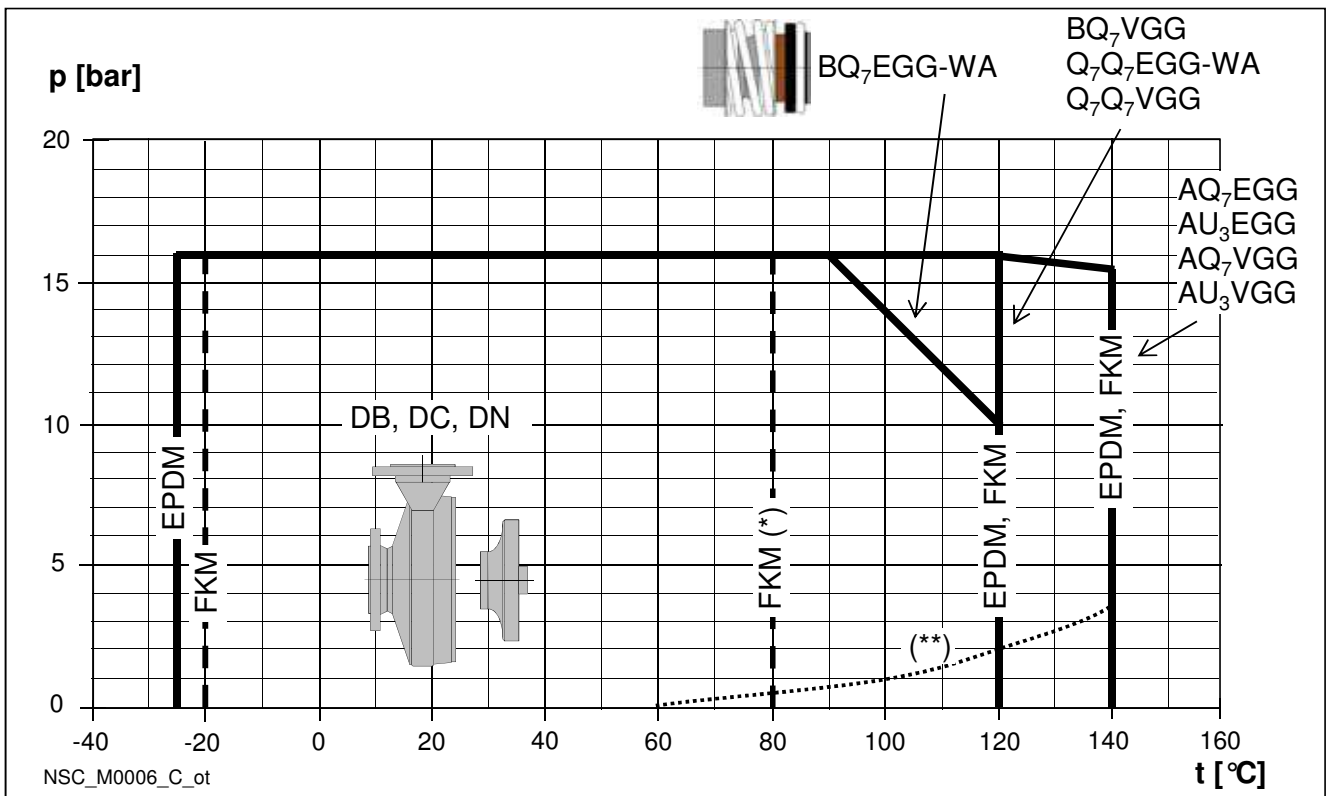
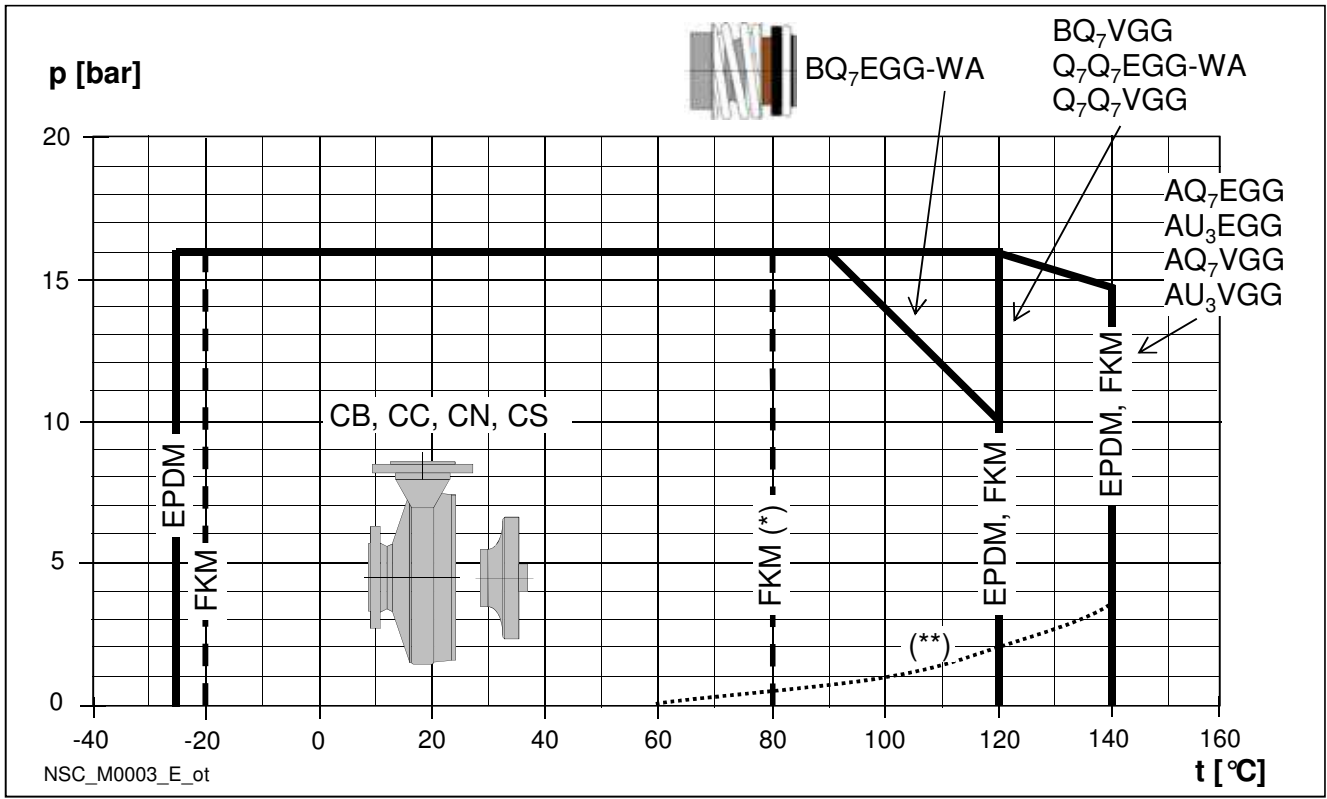
TYPE	POSITION					PRESSURE (bar)	RANGE TEMPERATURE (°C)
	1 ROTATING ASSEMBLY	2 FIXED ASSEMBLY	3 ELASTOMERS	4 SPRINGS	5 OTHER COMPONENTS		
<b>STANDARD MECHANICAL SEAL</b>							
B Q <sub>7</sub> E G G - WA	B	Q <sub>7</sub>	E	G	G	16/10	-25 ... +90/+120
<b>OTHER TYPES OF MECHANICAL SEAL</b>							
B Q <sub>7</sub> V G G	B	Q <sub>7</sub>	V	G	G	16	-20 ... +120 <sup>*)</sup>
Q <sub>7</sub> Q <sub>7</sub> E G G - WA	Q <sub>7</sub>	Q <sub>7</sub>	E	G	G	16	-25 ... +120
Q <sub>7</sub> Q <sub>7</sub> V G G	Q <sub>7</sub>	Q <sub>7</sub>	V	G	G	16	-20 ... +120 <sup>*)</sup>
A Q <sub>7</sub> E G G(Ø≤38)	A	Q <sub>7</sub>	E	G	G	16	-25 ... +140
A U <sub>3</sub> E G G(Ø>38)	A	U <sub>3</sub>	E	G	G	16	-25 ... +140
A Q <sub>7</sub> V G G(Ø≤38)	A	Q <sub>7</sub>	V	G	G	16	-20 ... +140 <sup>*)</sup>
A U <sub>3</sub> V G G(Ø>38)	A	U <sub>3</sub>	V	G	G	16	-20 ... +140 <sup>*)</sup>

<sup>\*)</sup> for hot water: max. +80 °C

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**e-NSC SERIES**

**PRESSURE/TEMPERATURE APPLICATION LIMITS FOR COMPLETE PUMP**

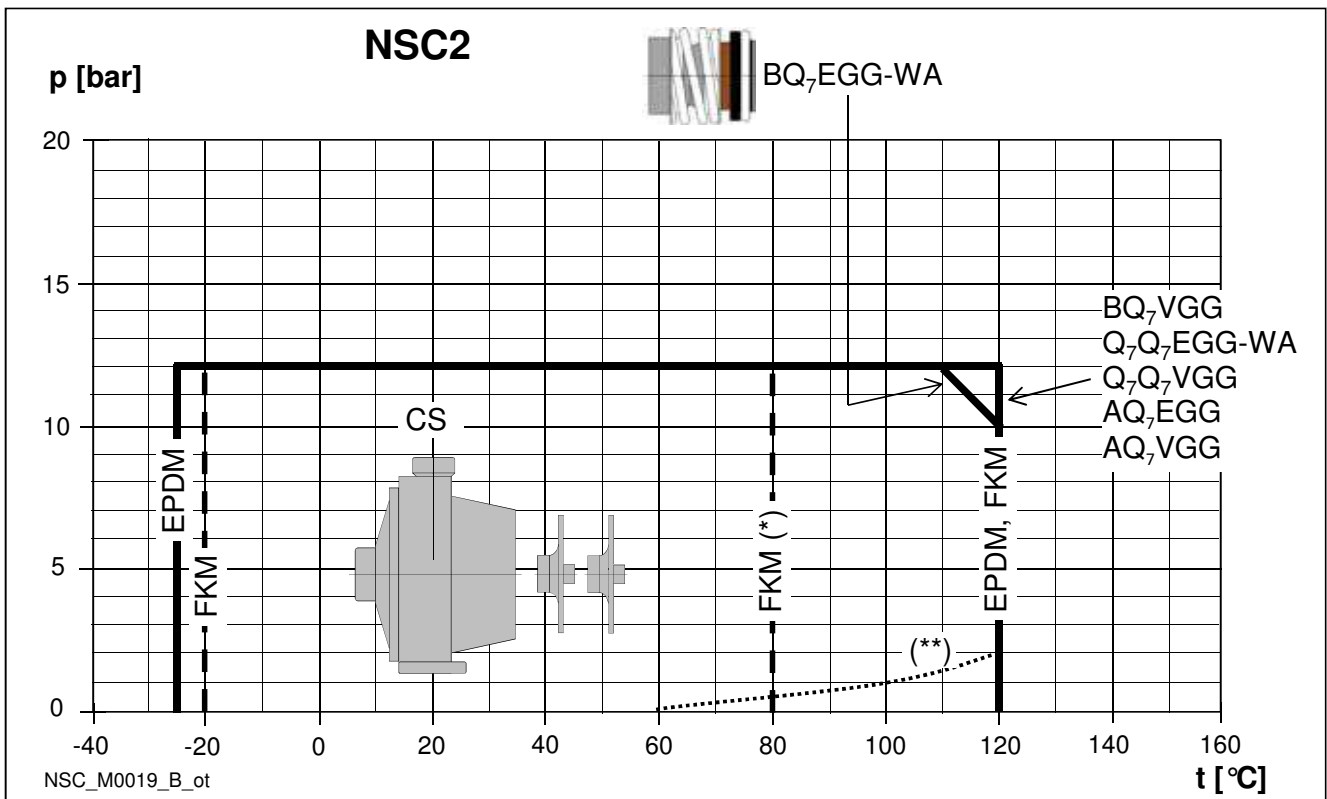
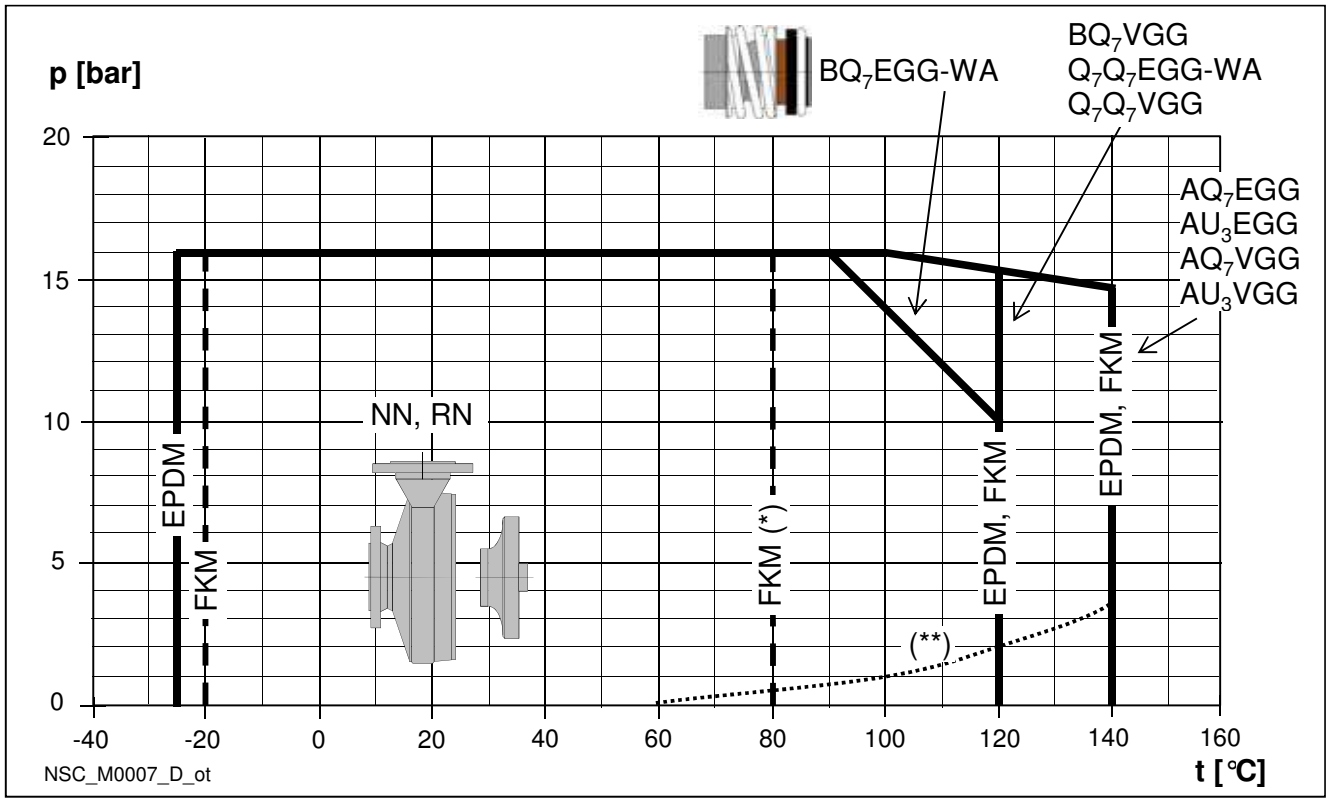


(\*) hot water: max +80°C.

(\*\*) minimum pressure required at mechanical seal (hot water; could be different in case of other liquids).

**e-NSC SERIES**

**PRESSURE/TEMPERATURE APPLICATION LIMITS FOR COMPLETE PUMP**



(\*) hot water: max +80°C.

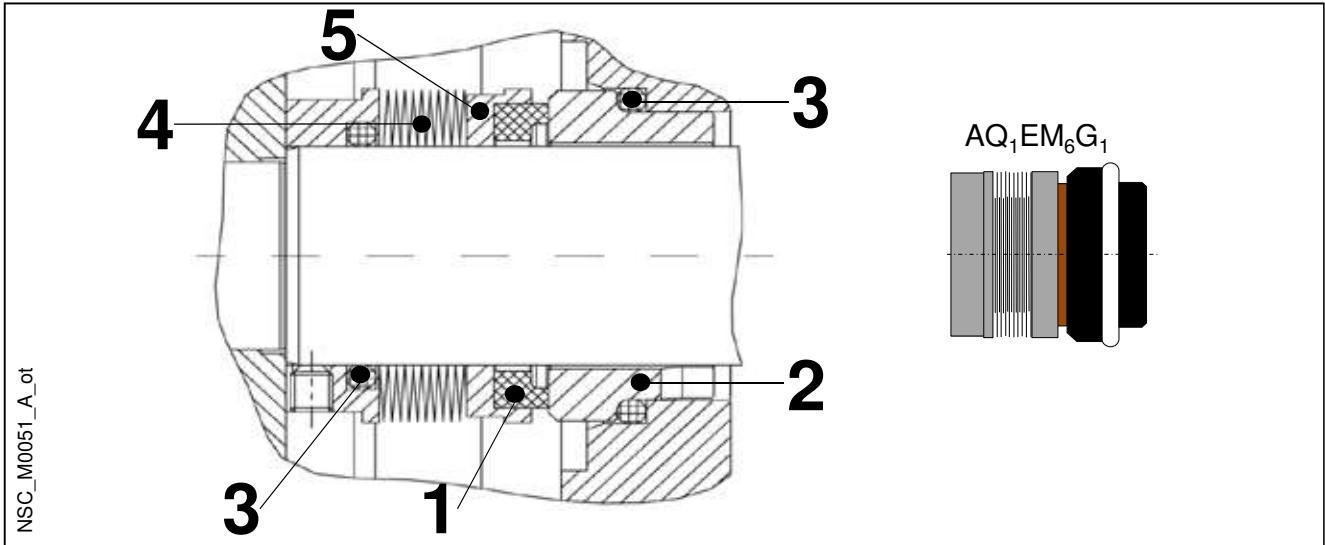
(\*\*) minimum pressure required at mechanical seal (hot water; could be different in case of other liquids).



**e-NSC SERIES**

**MECHANICAL SEALS FOR DUPLEX VERSION**

Balanced metal bellows seal with mounting dimensions according to EN 12756 and ISO 3069



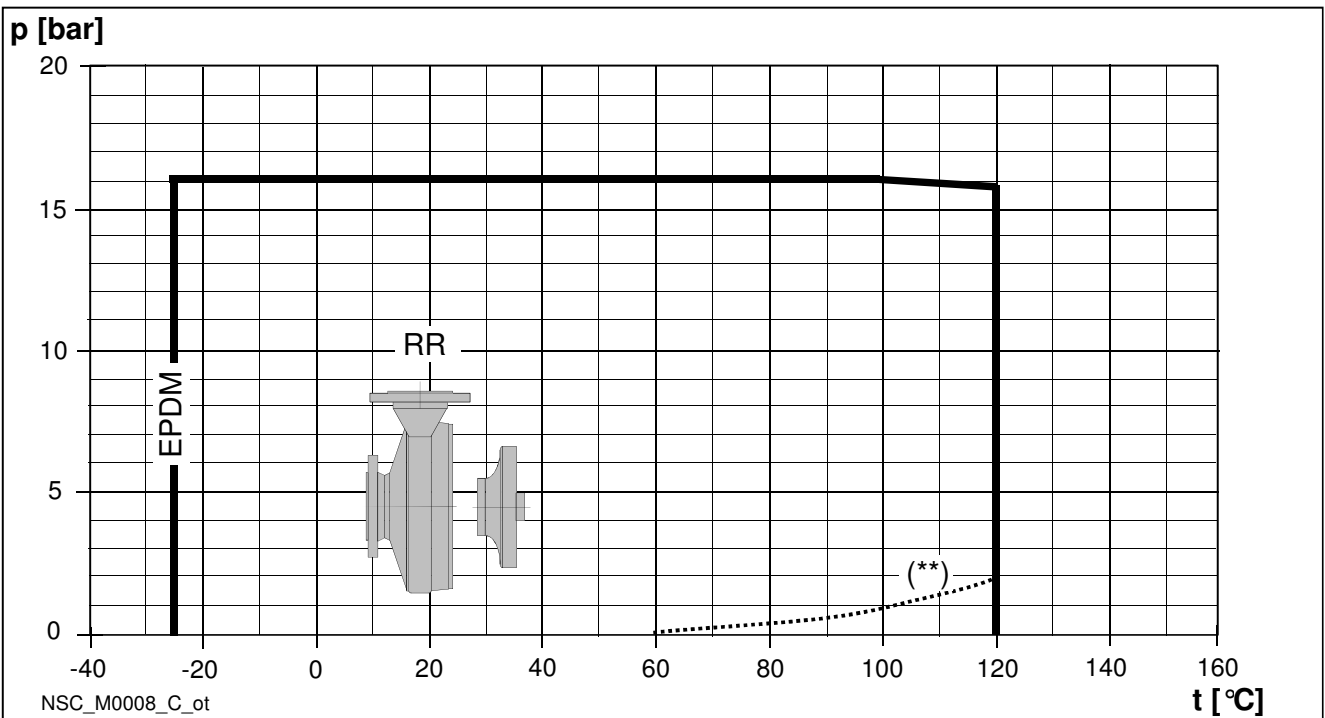
POSITION 1 - 2	POSITION 3	POSITION 4 - 5
<b>A</b> : Antimony impregnated carbon	<b>E</b> : EPDM	<b>M6</b> : Inconel® 718
<b>Q1</b> : Silicon carbide		<b>G1</b> : Duplex

nsc\_ten-mec\_duplex-en\_a\_tm

TYPE	POSITION					PRESSURE (bar)	RANGE TEMPERATURE (°C)
	1 ROTATING ASSEMBLY	2 FIXED ASSEMBLY	3 ELASTOMERS	4 SPRINGS	5 OTHER COMPONENTS		
<b>STANDARD MECHANICAL SEAL</b>							
A Q <sub>1</sub> E M <sub>6</sub> G <sub>1</sub>	A	Q <sub>1</sub>	E	M <sub>6</sub>	G <sub>1</sub>	16	-25 ... +120

nsc\_tipi-ten-mec-duplex-en\_a\_tc

**PRESSURE/TEMPERATURE APPLICATION LIMITS FOR COMPLETE PUMP**



NSC\_M0008\_C\_ot

(\*\*) minimum pressure required at mechanical seal (hot water; could be different in case of other liquids).

## e-NSC SERIES MOTORS

With the “Energy using Products” (EuP 2005/32/EC) and “Energy related Products” (ErP 2009/125/EC) directives, the European Commission has established requirements for promoting the use of products with low power consumption.

The various products considered include **three-phase 50 Hz surface motors with power outputs ranging from 0,75 to 375 kW**, also when integrated with other products, with characteristics as defined by the specific **Regulations (EC) No 640/2009** and **(EU) No 4/2014** implementing the requirements of the EuP and ErP Directives.

In accordance with regulations, the **three-phase 50 Hz surface motors with power outputs ranging from 0,75 to 375 kW** should have IE3 as minimum level of efficiency (or IE2 fitted with variable speed drive).

- Short-circuit squirrel-cage motor, enclosed construction with external ventilation (TEFC).
- Rated power from 1,1 to 200 kW for 2-pole range and from 0,25 to 355 kW for 4-pole range.
- **IP55** protection degree.
- Insulation class **155 (F)**.
- **Standard** three-phase surface motors  $\geq 0,75$  kW supplied as **IE3**.
- IE efficiency level according to EN 60034-30:2009 and EN 60034-30-1:2014 ( $\geq 0,75$  kW).
- Electrical performances according to EN 60034-1.
- Metric cable gland according to EN 50262.
- **Standard voltage**  
**Single-phase** version:  
 220-240 V 50 Hz  
 Built-in automatic reset overload protection.  
**Three-phase** version:  
 220-240/380-415 V 50 Hz for power up to 3 kW.  
 380-415/660-690 V 50 Hz for power above 3 kW.  
 Overload protection to be provided by the user.
- **PTC included** as standard only for WEG motors (one per phase, 155°C).
- Maximum ambient temperature: 40 °C.

## NSCE SERIES SINGLE-PHASE MOTORS AT 50 Hz, 2 POLES

P <sub>N</sub> kW	MOTOR TYPE	IEC SIZE*	Construction Design	INPUT CURRENT I <sub>n</sub> (A) 220-240 V	CAPACITOR		DATA FOR 230 V 50 Hz VOLTAGE						
					μF	V	min <sup>-1</sup>	I <sub>s</sub> / I <sub>n</sub>	η %	cosφ	T <sub>n</sub> Nm	T <sub>s</sub> /T <sub>n</sub>	T <sub>m</sub> /T <sub>n</sub>
1,1	SM90RB14S2/1115	90R	B14	6,88-6,65	30	450	2800	3,89	74,7	0,96	3,75	0,46	1,72
1,5	SM90RB14S2/1155	90R	B14	9,21-8,58	40	450	2810	4,00	76,1	0,98	5,15	0,39	1,74
2,2	PLM90B14S2/1225	90	B14	12,5-11,6	70	450	2825	4,47	82,4	0,97	7,43	0,53	1,87

\* R = Reduced size of motor casing as compared to shaft extension and flange.

Nsce-motm-2p50-en\_a\_te

## NSCE, NSC2 SERIES THREE-PHASE MOTORS AT 50 Hz, 2 POLES

P <sub>N</sub> kW	Efficiency $\eta_N$ %															IE	Year of manufacture			
	$\Delta$ 220 V Y 380 V			$\Delta$ 230 V Y 400 V			$\Delta$ 240 V Y 415 V			$\Delta$ 380 V Y 660 V			$\Delta$ 400 V Y 690 V					$\Delta$ 415 V		
	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4			4/4	3/4	2/4
1,1	84,0	84,7	83,4	84,4	84,5	82,5	84,3	84,0	81,4	84,0	84,0	81,4	84,0	84,0	81,4	84,0	84,0	81,4		
1,5	85,6	86,5	85,8	85,9	86,4	84,9	86,0	86,0	84,0	85,6	86,0	84,0	85,6	86,0	84,0	85,6	86,0	84,0		
2,2	86,5	87,4	86,8	86,4	86,9	85,7	86,6	86,7	85,0	86,4	86,7	85,0	86,4	86,7	85,0	86,4	86,7	85,0		
3	87,2	88,5	88,3	87,5	88,2	87,5	87,5	87,8	86,4	87,2	87,8	86,4	87,2	87,8	86,4	87,2	87,8	86,4		
4	89,1	90,1	89,2	89,1	90,1	89,2	89,1	90,1	89,2	89,1	90,3	90,4	89,6	90,4	89,9	89,6	90,1	89,2		
5,5	89,5	89,6	88,0	89,5	89,6	88,0	89,5	89,6	88,0	89,5	90,3	89,9	89,7	90,0	89,0	89,6	89,6	88,0		
7,5	90,6	90,5	89,0	90,6	90,5	89,0	90,6	90,5	89,0	90,6	91,0	90,2	90,8	90,8	89,6	90,7	90,5	89,0		
9,2	90,8	91,0	89,7	90,8	91,0	89,7	90,8	91,0	89,7	90,8	91,4	90,8	91,1	91,3	90,3	91,1	91,0	89,7		
11	91,3	92,0	91,1	91,3	92,0	91,1	91,3	92,0	91,1	91,3	92,2	92,2	91,6	92,2	91,7	91,7	92,0	91,1		
15	92,5	92,4	91,2	92,5	92,4	91,2	92,5	92,4	91,2	92,7	93,3	92,9	93,1	93,3	92,7	92,5	92,4	91,2		
18,5	92,6	93,1	92,4	92,6	93,1	92,4	92,6	93,1	92,4	92,6	93,2	93,0	92,9	93,3	92,8	92,9	93,1	92,4		
22	93,0	92,7	91,3	93,0	92,7	91,3	93,0	92,7	91,3	93,0	93,2	92,4	93,1	93,0	91,9	93,0	92,7	91,3		

P <sub>N</sub> kW	Manufacturer		IEC SIZE*	Construction Design	N. of Poles	f <sub>N</sub> Hz	Data for 400 V / 50 Hz Voltage																
	Xylem Service Italia Srl Reg. No. 07520560967 Montecchio Maggiore Vicenza - Italia						cos $\phi$	I <sub>s</sub> / I <sub>N</sub>	T <sub>N</sub> Nm	T <sub>s</sub> /T <sub>N</sub>	T <sub>m</sub> /T <sub>N</sub>												
	Model																						
1,1	SM90RB14S2/311 PE		90R	SPECIAL	2	50	0,79	8,31	3,63	3,95	3,95												
1,5	SM90RB14S2/315 PE		90R				0,80	8,80	4,96	4,31	4,10												
2,2	PLM90B14S2/322 E3		90				0,80	8,77	7,28	3,72	3,70												
3	PLM90B14S2/330 E3		90				0,79	7,81	9,93	4,26	3,94												
4	PLM112RB14S2/340 E3		112R				0,85	9,13	13,2	3,82	4,32												
5,5	PLM1122FHE/355 E3		112				SPECIAL	2	50	0,85	10,5	18,1	4,74	5,11									
	PLM112B14S2/355 E3		112																				
7,5	PLM1322FHE/375 E3		132							SPECIAL	2	50	0,85	10,2	24,4	3,43	4,76						
	PLM132B14S2/375 E3		132																				
	PLM132B14S3/375 E3		132																				
9,2	PLM132B14S2/392 E3		132										SPECIAL	2	50	0,85	10,1	30,0	3,73	4,81			
	PLM132B14S3/392 E3		132																				
11	PLM132B14S2/3110 E3		132	SPECIAL	2	50										0,86	9,89	35,9	3,46	4,59			
	PLM132B14S3/3110 E3		132																				
15	PLM160B34S3/3150 E3		160													SPECIAL	2	50	0,88	9,51	48,6	2,73	4,32
18,5	PLM160B34S3/3185 E3		160																0,88	9,81	59,9	2,81	4,53
22	PLM160B34S3/3220 E3		160																0,85	10,9	71,1	3,26	5,12

P <sub>N</sub> kW	Voltage U <sub>N</sub> V										n <sub>N</sub> min <sup>-1</sup>	Observe the regulations and codes locally in force regarding sorted waste disposal.	Operating conditions **				
	$\Delta$			Y			$\Delta$			Y			Altitude Above Sea Level (m)	T. amb min/max °C	ATEX		
	220 V	230 V	240 V	380 V	400 V	415 V	380 V	400 V	415 V	660 V						690 V	
1,1	4,19	4,14	4,16	2,42	2,39	2,40	2,41	2,38	2,38	1,39	1,37	2870 ÷ 2900	≤ 1000	-15 / 40	No		
1,5	5,56	5,49	5,51	3,21	3,17	3,18	3,21	3,18	3,19	1,85	1,84	2870 ÷ 2895					
2,2	7,97	7,90	7,98	4,6	4,56	4,61	4,57	4,54	4,57	2,64	2,62	2880 ÷ 2900					
3	11,0	11,0	11,2	6,35	6,33	6,44	6,29	6,27	6,34	3,63	3,62	2865 ÷ 2895					
4	13,6	13,4	13,4	7,87	7,75	7,74	7,80	7,62	7,61	4,50	4,40	2885 ÷ 2910					
5,5	18,1	17,9	18,1	10,4	10,4	10,4	10,6	10,5	10,7	6,10	6,05	2880 ÷ 2910					
7,5	24,8	24,4	24,3	14,3	14,1	14,0	14,4	14,1	14,2	8,32	8,16	2920 ÷ 2935					
9,2	30,6	30,1	30,2	17,6	17,4	17,5	17,5	17,2	17,3	10,1	9,93	2920 ÷ 2935					
11	35,7	35,0	34,9	20,6	20,2	20,2	20,6	20,2	20,2	11,9	11,7	2910 ÷ 2930					
15	47,6	46,1	45,2	27,5	26,6	26,1	27,5	26,6	26,1	15,9	15,3	2940 ÷ 2950					
18,5	58,3	56,7	55,6	33,7	32,7	32,1	34,0	33,0	32,7	19,6	19,0	2940 ÷ 2950					
22	72,9	73,1	73,7	42,1	42,2	42,6	40,9	40,4	40,6	23,6	23,3	2950 ÷ 2960					

\* R = Reduced size of motor casing as compared to shaft extension and flange.

\*\* Operating conditions to be referred to motor only. About electric pump, refer to limits in user's manual.

## NSCS SERIES

### THREE-PHASE MOTORS AT 50 Hz, 2 POLES (up to 22 kW)

P <sub>N</sub> kW	Efficiency $\eta_N$ %																		IE	Year of manufacture
	$\Delta$ 220 V Y 380 V			$\Delta$ 230 V Y 400 V			$\Delta$ 240 V Y 415 V			$\Delta$ 380 V Y 660 V			$\Delta$ 400 V Y 690 V			$\Delta$ 415 V				
	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4		
1,1	84,0	84,7	83,4	84,4	84,5	82,5	84,3	84,0	81,4	84,0	84,0	81,4	84,0	84,0	81,4	84,0	84,0	81,4	3	From 11/2014
1,5	85,6	86,5	85,8	85,9	86,4	84,9	86,0	86,0	84,0	85,6	86,0	84,0	85,6	86,0	84,0	85,6	86,0	84,0		
2,2	86,5	87,4	86,8	86,4	86,9	85,7	86,6	86,7	85,0	86,4	86,7	85,0	86,4	86,7	85,0	86,4	86,7	85,0		
3	87,2	88,5	88,3	87,5	88,2	87,5	87,5	87,8	86,4	87,2	87,8	86,4	87,2	87,8	86,4	87,2	87,8	86,4		
4	89,1	90,1	89,2	89,1	90,1	89,2	89,1	90,1	89,2	89,1	90,3	90,4	89,6	90,4	89,9	89,6	90,1	89,2		
5,5	89,5	89,6	88,0	89,5	89,6	88,0	89,5	89,6	88,0	89,5	90,3	89,9	89,7	90,0	89,0	89,6	89,6	88,0		
7,5	90,6	90,5	89,0	90,6	90,5	89,0	90,6	90,5	89,0	90,6	91,0	90,2	90,8	90,8	89,6	90,7	90,5	89,0		
11	91,8	92,3	91,5	91,8	92,3	91,5	91,8	92,3	91,5	91,8	92,3	91,9	92,2	92,5	91,8	92,3	92,4	91,5		
15	92,5	92,4	91,2	92,5	92,4	91,2	92,5	92,4	91,2	92,7	93,3	92,9	93,1	93,3	92,7	92,5	92,4	91,2		
18,5	92,6	93,1	92,4	92,6	93,1	92,4	92,6	93,1	92,4	92,6	93,2	93,0	92,9	93,3	92,8	92,9	93,1	92,4		
22	93,0	92,7	91,3	93,0	92,7	91,3	93,0	92,7	91,3	93,0	93,2	92,4	93,1	93,0	91,9	93,0	92,7	91,3		

P <sub>N</sub> kW	Manufacturer		IEC SIZE*	Construction Design	N. of Poles	f <sub>N</sub> Hz	Data for 400 V / 50 Hz Voltage				
	Xylem Service Italia Srl Reg. No. 07520560967 Montecchio Maggiore Vicenza - Italia						cos $\phi$	I <sub>s</sub> / I <sub>N</sub>	T <sub>N</sub> Nm	T <sub>s</sub> /T <sub>N</sub>	T <sub>m</sub> /T <sub>N</sub>
	Model										
1,1	SM80B5/311 PE		80	B5	2	50	0,79	8,31	3,63	3,95	3,95
1,5	SM90RB5/315 PE		90R				0,80	8,80	4,96	4,31	4,10
2,2	PLM90B5/322 E3		90				0,80	8,77	7,28	3,72	3,70
3	PLM100RB5/330 E3		100R				0,79	7,81	9,93	4,26	3,94
4	PLM112RB5/340 E3		112R				0,85	9,13	13,2	3,82	4,32
5,5	PLM132RB5/355 E3		132R				0,85	10,5	18,1	4,74	5,11
7,5	PLM132B5/375 E3		132				0,85	10,2	24,4	3,43	4,76
11	PLM160B35/3110 E3		160				0,88	8,59	35,6	2,36	4,14
15	PLM160B35/3150 E3		160				0,88	9,51	48,6	2,73	4,32
18,5	PLM160B35/3185 E3		160				0,88	9,81	59,9	2,81	4,53
22	PLM180RB35/3220 E3		180R				0,85	10,9	71,1	3,26	5,12

P <sub>N</sub> kW	Voltage U <sub>N</sub> V										n <sub>N</sub> min <sup>-1</sup>	Observe the regulations and codes locally in force regarding sorted waste disposal.	Operating conditions **			
	$\Delta$			Y			$\Delta$			Y			Altitude Above Sea Level (m)	T. amb min/max °C	ATEX	
	220 V	230 V	240 V	380 V	400 V	415 V	380 V	400 V	415 V	660 V						690 V
1,1	4,19	4,14	4,16	2,42	2,39	2,40	2,41	2,38	2,38	1,39	1,37	2870 ÷ 2900	≤ 1000	-15 / 40	No	
1,5	5,56	5,49	5,51	3,21	3,17	3,18	3,21	3,18	3,19	1,85	1,84	2870 ÷ 2895				
2,2	7,97	7,90	7,98	4,6	4,56	4,61	4,57	4,54	4,57	2,64	2,62	2880 ÷ 2900				
3	11,0	11,0	11,2	6,35	6,33	6,44	6,29	6,27	6,34	3,63	3,62	2865 ÷ 2895				
4	13,6	13,4	13,4	7,87	7,75	7,74	7,80	7,62	7,61	4,50	4,40	2885 ÷ 2910				
5,5	18,1	17,9	18,1	10,4	10,4	10,4	10,6	10,5	10,7	6,10	6,05	2880 ÷ 2910				
7,5	24,8	24,4	24,3	14,3	14,1	14,0	14,4	14,1	14,2	8,32	8,16	2920 ÷ 2935				
11	35,0	33,9	33,0	20,2	19,6	19,1	20,4	19,6	19,2	11,8	13,3	2935 ÷ 2950				
15	47,6	46,1	45,2	27,5	26,6	26,1	27,5	26,6	26,1	15,9	15,3	2940 ÷ 2950				
18,5	58,3	56,7	55,6	33,7	32,7	32,1	34,0	33,0	32,7	19,6	19,0	2940 ÷ 2950				
22	72,9	73,1	73,7	42,1	42,2	42,6	40,9	40,4	40,6	23,6	23,3	2950 ÷ 2960				

\* R = Reduced size of motor casing as compared to shaft extension and flange.

\*\* Operating conditions to be referred to motor only. About electric pump, refer to limits in user's manual.

## NSCS SERIES

### THREE-PHASE MOTORS AT 50 Hz, 2 POLES (from 30 to 90 kW)

P <sub>N</sub> kW	Efficiency $\eta_N$ %									IE	Year of manufacture
	$\Delta$ 380 V Y 660 V			$\Delta$ 400 V Y 690 V			$\Delta$ 415 V				
	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4		
30	94,0	94,0	93,1	94,1	94,0	92,8	94,2	93,9	92,6	3	from 11/2014
37	94,4	94,0	93,5	94,6	94,0	93,3	94,7	93,9	93,1		
45	94,8	94,9	94,6	95,1	95,1	94,6	95,3	95,2	94,5		
55	95,1	95,0	94,9	95,4	95,3	94,9	95,5	95,3	94,8		
75	95,4	95,2	94,6	95,6	95,3	94,5	95,7	95,3	94,4		
90	95,6	95,5	94,9	95,8	95,6	94,8	95,9	95,6	94,7		

P <sub>N</sub> kW	Manufacturer		IEC SIZE	Construction Design	N. of Poles	f <sub>N</sub> Hz	Data for 400 V / 50 Hz Voltage				
	WEG Equipamentos Elétricos S.A. Reg. No. 07.175.725/0010-50 Jaraguá do Sul - SC (Brazil)						cos $\phi$	I <sub>s</sub> / I <sub>N</sub>	T <sub>N</sub> Nm	T <sub>s</sub> /T <sub>N</sub>	T <sub>m</sub> /T <sub>n</sub>
	Model										
30	W22 200L B35 30KW E3		200	B35	2	50	0,86	7,30	96,60	2,60	2,90
37	W22 200L B35 37KW E3		200				0,86	7,30	119,20	2,60	2,90
45	W22 225S/M B35 45KW E3		225				0,88	8,00	144,70	2,70	3,20
55	W22 250S/M B35 55KW E3		250				0,89	7,90	177,10	2,80	2,90
75	W22 280S/M B35 75KW E3		280				0,90	7,60	240,3	2,30	2,90
90	W22 280S/M B35 90KW E3		280				0,90	7,40	288,4	2,20	2,80

P <sub>N</sub> kW	Voltage U <sub>N</sub> V					n <sub>N</sub> min <sup>-1</sup>	Operating conditions **			
	$\Delta$			Y			See note:	Altitude Above Sea Level (m)	T. amb min/max °C	ATEX
	380 V	400 V	415 V	660 V	690 V					
	I <sub>N</sub> (A)									
30	55,10	53,50	52,70	31,70	31,00	2960 ÷ 2970	≤ 1000	-15 / 40	No	
37	67,70	65,60	64,70	39,00	38,00	2960 ÷ 2970				
45	80,10	77,60	74,60	46,10	45,00	2965 ÷ 2970				
55	97,60	93,50	91,00	56,20	54,20	2960 ÷ 2965				
75	131,00	126,00	121,00	75,40	73,00	2975 ÷ 2980				
90	159,00	151,00	145,00	91,50	87,50	2975 ÷ 2980				

\*\* Operating conditions to be referred to motor only. About electric pump, refer to limits in user's manual.

Nscs-mott90-2p50-en\_b\_te

Note: Observe the regulations and codes locally in force regarding sorted waste disposal.

### NSCF, NSCC SERIES

### THREE-PHASE MOTORS AT 50 Hz, 2 POLES (up to 18,5 kW)

P <sub>N</sub> kW	Efficiency $\eta_N$															IE	Year of manufacture	
	%																	
	Δ 220 V Y 380 V			Δ 230 V Y 400 V			Δ 240 V Y 415 V			Δ 380 V Y 660 V			Δ 400 V Y 690 V					Δ 415 V
	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4
1,1	84,0	84,7	83,4	84,4	84,5	82,5	84,3	84,0	81,4	84,0	84,0	81,4	84,0	84,0	81,4	84,0	84,0	81,4
1,5	84,6	85,8	85,4	85,5	86,3	85,2	85,9	86,2	84,8	84,6	85,8	84,8	84,6	85,8	84,8	84,6	85,8	84,8
2,2	86,5	87,4	86,8	86,4	86,9	85,7	86,6	86,7	85,0	86,4	86,7	85,0	86,4	86,7	85,0	86,4	86,7	85,0
3	88,7	89,5	89,1	89,1	89,5	88,4	89,1	89,1	87,7	88,7	89,1	87,7	88,7	89,1	87,7	88,7	89,1	87,7
4	88,6	89,0	87,6	88,6	89,0	87,6	88,6	89,0	87,6	88,7	89,6	89,1	88,6	89,2	88,3	88,9	89,0	87,6
5,5	90,1	89,8	88,0	90,1	89,8	88,0	90,1	89,8	88,0	90,2	90,5	89,5	90,3	90,2	88,8	90,1	89,8	88,0
7,5	90,6	90,5	89,0	90,6	90,5	89,0	90,6	90,5	89,0	90,6	91,0	90,2	90,8	90,8	89,6	90,7	90,5	89,0
11	91,8	92,3	91,5	91,8	92,3	91,5	91,8	92,3	91,5	91,8	92,3	91,9	92,2	92,5	91,8	92,3	92,4	91,5
15	92,5	92,4	91,2	92,5	92,4	91,2	92,5	92,4	91,2	92,7	93,3	92,9	93,1	93,3	92,7	92,5	92,4	91,2
18,5	92,6	93,1	92,4	92,6	93,1	92,4	92,6	93,1	92,4	92,6	93,2	93,0	92,9	93,3	92,8	92,9	93,1	92,4

P <sub>N</sub> kW	Manufacturer		IEC SIZE*	Construction Design	N. of Poles	f <sub>N</sub> Hz	Data for 400 V / 50 Hz Voltage				
	Xylem Service Italia Srl Reg. No. 07520560967 Montecchio Maggiore Vicenza - Italia						cosφ	I <sub>s</sub> / I <sub>N</sub>	T <sub>N</sub> Nm	T <sub>s</sub> /T <sub>N</sub>	T <sub>m</sub> /T <sub>N</sub>
	Model										
1,1	SM80B3/311 PE		80	B3	2	50	0,79	8,31	3,63	3,95	3,95
1,5	PLM90B3/315 E3		90				0,86	8,04	4,96	3,34	3,27
2,2	PLM90B3/322 E3		90				0,80	8,77	7,28	3,72	3,70
3	PLM100B3/330 E3		100				0,84	9,65	9,84	3,59	4,26
4	PLM112B3/340 E3		112				0,86	9,41	13,2	3,95	4,46
5,5	PLM132B3/355 E3		132				0,83	10,0	17,9	3,33	4,65
7,5	PLM132B3/375 E3		132				0,85	10,2	24,4	3,43	4,76
11	PLM160B3/3110 E3		160				0,88	8,59	35,6	2,36	4,14
15	PLM160B3/3150 E3		160				0,88	9,51	48,6	2,73	4,32
18,5	PLM160B3/3185 E3		160				0,88	9,81	59,9	2,81	4,53

P <sub>N</sub> kW	Tensione U <sub>N</sub> V										n <sub>N</sub> min <sup>-1</sup>	Observe the regulations and codes locally in force regarding sorted waste disposal.	Operating conditions **		
	Δ			Y			Δ			Y			Altitude Above Sea Level (m)	T. amb min/max °C	ATEX
	220 V	230 V	240 V	380 V	400 V	415 V	380 V	400 V	415 V	660 V					
	I <sub>N</sub> (A)														
1,1	4,19	4,14	4,16	2,42	2,39	2,4	2,41	2,38	2,38	1,39	1,37	2870 ÷ 2900	≤ 1000	-15 / 40	No
1,5	5,35	5,11	5,04	3,09	2,95	2,91	3,09	2,96	2,91	1,78	1,71	2865 ÷ 2890			
2,2	7,97	7,90	7,98	4,6	4,56	4,61	4,57	4,54	4,57	2,64	2,62	2880 ÷ 2900			
3	10,2	10,0	10,1	5,91	5,79	5,82	5,94	5,83	5,87	3,43	3,37	2895 ÷ 2920			
4	13,3	13,1	13,1	7,69	7,56	7,55	7,70	7,56	7,57	4,45	4,36	2885 ÷ 2905			
5,5	18,9	18,8	18,9	10,9	10,9	10,9	10,7	10,6	10,7	6,2	6,14	2925 ÷ 2940			
7,5	24,8	24,4	24,3	14,3	14,4	14,0	14,4	14,1	14,2	8,32	8,16	2920 ÷ 2935			
11	35,0	33,9	33,0	20,2	19,6	19,1	20,4	19,6	19,2	11,8	11,3	2935 ÷ 2950			
15	47,6	46,1	45,2	27,5	26,6	26,1	27,5	26,6	26,1	15,9	15,3	2940 ÷ 2950			
18,5	58,3	56,7	55,6	33,7	32,7	32,1	34	33,0	32,7	19,6	19,0	2940 ÷ 2950			

\*\* Operating conditions to be referred to motor only. About electric pump, refer to limits in user's manual.

### NSCF, NSCC SERIES

### THREE-PHASE MOTORS AT 50 Hz, 2 POLES (from 22 to 200 kW)

P <sub>N</sub> kW	Efficiency $\eta_N$ %									IE	Year of manufacture
	$\Delta$ 380 V Y 660 V			$\Delta$ 400 V Y 690 V			$\Delta$ 415 V				
	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4		
22	93,4	93,2	92,7	93,7	93,3	92,5	93,8	93,3	92,3	3	from 11/2014
30	94,0	94,0	93,1	94,1	94,0	92,8	94,2	93,9	92,6		
37	94,4	94,0	93,5	94,6	94,0	93,3	94,7	93,9	93,1		
45	94,8	94,9	94,6	95,1	95,1	94,6	95,3	95,2	94,5		
55	95,1	95,0	94,9	95,4	95,3	94,9	95,5	95,3	94,8		
75	95,4	95,2	94,6	95,6	95,3	94,5	95,7	95,3	94,4		
90	95,6	95,5	94,9	95,8	95,6	94,8	95,9	95,6	94,7		
110	96,0	95,7	94,8	96,1	95,7	94,7	96,1	95,7	94,6		
132	96,1	95,8	95,3	96,3	95,9	95,2	96,4	95,9	95,1		
160	96,4	96,1	95,7	96,6	96,2	95,6	96,7	96,2	95,5		
200	96,5	96,4	96,0	96,7	96,5	96,0	96,8	96,5	95,9		

P <sub>N</sub> kW	Manufacturer		IEC SIZE	Construction Design	N. of Poles	f <sub>N</sub> Hz	Data for 400 V / 50 Hz Voltage				
	WEG Equipamentos Eletricos S.A. Reg. No. 07.175.725/0010-50 Jaragua do Sul - SC (Brazil)						cos $\phi$	I <sub>s</sub> / I <sub>N</sub>	T <sub>N</sub> Nm	T <sub>s</sub> /T <sub>N</sub>	T <sub>m</sub> /T <sub>N</sub>
	Model										
22	W22 180M B3 22KW E3		180	B3	2	50	0,87	8,00	71,10	2,50	3,30
30	W22 200L B3 30KW E3		200				0,86	7,30	96,60	2,60	2,90
37	W22 200L B3 37KW E3		200				0,86	7,30	119,20	2,60	2,90
45	W22 225S/M B3 45KW E3		225				0,88	8,00	144,70	2,70	3,20
55	W22 250S/M B3 55KW E3		250				0,89	7,90	177,1	2,80	2,90
75	W22 280S/M B3 75KW E3		280				0,90	7,60	240,3	2,30	2,90
90	W22 280S/M-B3 90kW E3		280				0,90	7,40	288,4	2,20	2,80
110	W22 315S/M-B3 110kW E3		315				0,89	7,60	352,5	2,50	3,00
132	W22 315S/M-B3 132kW E3		315				0,90	7,50	423,0	2,10	2,80
160	W22 315S/M-B3 160kW E3		315				0,91	7,90	512,7	2,30	2,80
200	W22 315L-B3 200kW E3		315				0,90	8,20	640,9	2,60	2,80

P <sub>N</sub> kW	Voltage U <sub>N</sub> V					n <sub>N</sub> min <sup>-1</sup>	Operating conditions **		
	$\Delta$			Y			Altitude Above Sea Level (m)	T. amb min/max °C	ATEX
	380 V	400 V	415 V	660 V	690 V				
	I <sub>N</sub> (A)								
22	40,70	39,00	37,90	23,40	22,60	2950 ÷ 2960	See note:  ≤ 1000	-15 /+ 40	No
30	55,10	53,50	52,70	31,70	31,00	2960 ÷ 2970			
37	67,70	65,60	64,70	39,00	38,00	2960 ÷ 2970			
45	80,10	77,60	74,60	46,10	45,00	2965 ÷ 2970			
55	97,60	93,50	91,00	56,20	54,20	2960 ÷ 2965			
75	131,0	126,0	121,0	75,40	73,00	2975 ÷ 2980			
90	159,0	151,0	145,0	91,50	87,50	2975 ÷ 2980			
110	193,0	186,0	181,0	111,0	108,0	2975 ÷ 2980			
132	232,0	220,0	212,0	134,0	128,0	2975 ÷ 2980			
160	274,0	263,0	253,0	158,0	152,0	2975 ÷ 2980			
200	346,0	332,0	319,0	199,0	192,0	2975 ÷ 2980			

\*\* Operating conditions to be referred to motor only. About electric pump, refer to limits in user's manual.

Nscf-mott200-2p50-en\_b\_te

Note: Observe the regulations and codes locally in force regarding sorted waste disposal.

## NSCE, NSC2 SERIES THREE-PHASE MOTORS AT 50 Hz, 4 POLES

P <sub>N</sub> kW	Efficiency $\eta_N$																		Year of manufacture		
	%																				
	$\Delta$ 220 V Y 380 V			$\Delta$ 230 V Y 400 V			$\Delta$ 240 V Y 415 V			$\Delta$ 380 V Y 660 V			$\Delta$ 400 V Y 690 V			$\Delta$ 415 V				IE	
	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4			
0,25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	06/11
0,37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
0,55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
0,75	83,0	84,3	83,5	83,4	84,1	82,6	83,8	84,0	81,9	83,0	84,3	83,5	83,4	84,1	82,6	83,8	84,0	81,9			01/17 11/14
1,1	84,9	85,7	84,7	85,3	85,5	83,8	85,3	85,0	82,7	84,9	85,0	82,7	84,9	85,0	82,7	84,9	85,0	82,7			
1,5	86,6	87,0	85,7	86,7	86,9	84,5	86,4	85,9	83,3	86,4	85,9	83,3	86,4	85,9	83,3	86,4	85,9	83,3			
2,2	87,6	88,6	88,3	88,2	88,8	87,9	88,5	88,7	87,4	87,6	88,6	87,4	87,6	88,6	87,4	87,6	88,6	87,4			
3	88,5	89,2	88,5	88,6	88,9	87,6	88,6	88,6	86,8	88,5	88,6	86,8	88,5	88,6	86,8	88,5	88,6	86,8			
4	88,6	89,1	87,9	88,6	89,1	87,9	88,6	89,1	87,9	88,6	89,2	88,9	88,6	89,2	88,4	88,8	89,1	87,9			

P <sub>N</sub> kW	Manufacturer		IEC SIZE*	Construction Design	N. of Poles	f <sub>N</sub> Hz	Data for 400 V / 50 Hz Voltage				
	Xylem Service Italia Srl Reg. No. 07520560967 Montecchio Maggiore Vicenza - Italia						cos $\phi$	I <sub>s</sub> / I <sub>N</sub>	T <sub>N</sub> Nm	T <sub>s</sub> /T <sub>N</sub>	T <sub>m</sub> /T <sub>N</sub>
	Model										
0,25	SM471B5/302		71	SPECIAL	4	50	0,59	3,58	1,71	3,16	2,63
0,37	SM471B5/304		71				0,60	3,39	2,57	3,40	2,47
0,55	SM490RB14S2/305		90R				0,67	3,95	3,77	2,45	2,38
0,75	LLM490RB14S2/307		90R				0,80	6,38	5,00	2,73	3,13
1,1	PLM4902FHE/311 E3		90				0,71	6,22	7,28	2,75	3,44
	PLM490B5S2/311 E3		90								
1,5	PLM490B5S2/315 E3		90				0,68	6,92	9,89	3,29	4,01
	PLM490B5S3/315 E3		90								
2,2	PLM4100B5S3/322 E3		100				0,78	7,47	14,5	2,38	3,69
3	PLM4100B5S3/330 E3		100				0,74	7,75	19,7	2,48	4,21
4	PLM4112B5S3/340 E3		112	0,79	8,32	26,3	3,19	4,02			

P <sub>N</sub> kW	Voltage U <sub>N</sub> V										$\eta_N$ min <sup>-1</sup>	Соблюдайте действующее нормативно-правовые акты в отнош. утилиз. отходов	Operating conditions **		
	$\Delta$			Y			$\Delta$		Y				Altitude Above Sea Level (m)	T. amb min/max °C	ATEX
	220 V	230 V	240 V	380 V	400 V	415 V	380 V	400 V	415 V	660 V					
0,25	1,68	1,71	1,77	0,97	0,99	1,02	-	-	-	-	-	1375 ÷ 1400	≤ 1000	-15 / 40	No
0,37	2,46	2,53	2,62	1,42	1,46	1,51	-	-	-	-	-	1355 ÷ 1380			
0,55	2,98	3,03	3,1	1,72	1,75	1,79	-	-	-	-	-	1380 ÷ 1400			
0,75	2,90	2,85	2,85	1,70	1,65	1,65	1,70	1,65	1,65	0,98	0,95	1420 ÷ 1435			
1,1	4,61	4,59	4,62	2,66	2,65	2,67	2,64	2,63	2,65	1,53	1,52	1435 ÷ 1445			
1,5	6,34	6,41	6,41	3,66	3,70	3,70	3,65	3,68	3,69	2,11	2,13	1440 ÷ 1450			
2,2	8,19	8,04	7,97	4,73	4,64	4,60	4,70	4,62	4,56	2,71	2,67	1445 ÷ 1455			
3	11,5	11,5	11,5	6,66	6,62	6,67	6,63	6,59	6,63	3,83	3,81	1450 ÷ 1460			
4	14,8	14,6	14,5	8,52	8,40	8,36	8,40	8,23	8,19	4,85	4,75	1445 ÷ 1455			

\* R = Reduced size of motor casing as compared to shaft extension and flange.

Nsce-IE3-mott-4p50-en\_c\_te

\*\* Operating conditions to be referred to motor only. About electric pump, refer to limits in user's manual.



## NSCS SERIES THREE-PHASE MOTORS AT 50 Hz, 4 POLES

P <sub>N</sub> kW	Efficiency $\eta_N$																		IE	Year of manufacture	
	%																				
	$\Delta$ 220 V Y 380 V			$\Delta$ 230 V Y 400 V			$\Delta$ 240 V Y 415 V			$\Delta$ 380 V Y 660 V			$\Delta$ 400 V Y 690 V			$\Delta$ 415 V					
	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4			
0,55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2011
0,75	83	84,3	83,5	83,4	84,1	82,6	83,8	84	81,9	83	84,3	83,5	83,4	84,1	82,6	83,8	84	81,9			01/17
1,1	84,9	85,7	84,7	85,3	85,5	83,8	85,3	85	82,7	84,9	85	82,7	84,9	85	82,7	84,9	85	82,7			3 11/14
1,5	86,6	87	85,7	86,7	86,9	84,5	86,4	85,9	83,3	86,4	85,9	83,3	86,4	85,9	83,3	86,4	85,9	83,3			
2,2	87,6	88,6	88,3	88,2	88,8	87,9	88,5	88,7	87,4	87,6	88,6	87,4	87,6	88,6	87,4	87,6	88,6	87,4			
3	88,5	89,2	88,5	88,6	88,9	87,6	88,6	88,6	86,8	88,5	88,6	86,8	88,5	88,6	86,8	88,5	88,6	86,8			
4	88,6	89,1	87,9	88,6	89,1	87,9	88,6	89,1	87,9	88,6	89,2	88,9	88,6	89,2	88,4	88,8	89,1	87,9			
5,5	90,4	90,9	89,7	90,4	90,9	89,7	90,4	90,9	89,7	90,4	91,0	90,5	90,9	91,1	90,2	90,9	90,9	89,7			
7,5	90,4	91,2	90,4	90,4	91,2	90,4	90,4	91,2	90,4	90,4	91,2	91,1	90,7	91,3	90,8	90,9	91,2	90,4			
11	91,5	92,2	91,4	91,5	92,2	91,4	91,5	92,2	91,4	91,5	92,4	92,4	91,9	92,5	92,0	91,9	92,2	91,4			
15	92,2	92,2	90,8	92,2	92,2	90,8	92,2	92,2	90,8	92,5	93,0	92,7	92,5	92,7	91,8	92,2	92,2	90,8			

P <sub>N</sub> kW	Manufacturer		IEC SIZE	Construction Design	N. of Poles	f <sub>N</sub> Hz	Data for 400 V / 50 Hz Voltage				
	Xylem Service Italia Srl Reg. No. 07520560967 Montecchio Maggiore Vicenza - Italia						cos $\phi$	I <sub>s</sub> / I <sub>N</sub>	T <sub>N</sub> Nm	T <sub>s</sub> /T <sub>N</sub>	T <sub>m</sub> /T <sub>N</sub>
	Model										
0,55	SM480B5/305		80	B5	4	50	0,67	3,95	3,77	2,45	2,38
0,75	LLM480B5/307		80				0,80	6,38	5,00	2,73	3,31
1,1	PLM490B5/311 E3		90				0,71	6,22	7,28	2,75	3,44
1,5	PLM490B5/315 E3		90				0,68	6,92	9,89	3,29	4,01
2,2	PLM4100B5/322 E3		100				0,78	7,47	14,5	2,38	3,69
3	PLM4100B5/330 E3		100				0,74	7,75	19,7	2,48	4,21
4	PLM4112B5/340 E3		112				0,79	8,32	26,3	3,19	4,02
5,5	PLM4132B5/355 E3		132				0,76	7,64	35,9	2,85	3,65
7,5	PLM4132B5/375 E3		132				0,79	7,70	49,1	2,69	3,57
11	PLM4160B35/3110 E3		160	B35			0,81	7,19	71,5	2,45	3,26
15	PLM4160B35/3150 E3		160				0,77	8,23	97,2	2,97	3,99

P <sub>N</sub> kW	Voltage U <sub>N</sub> V										$\eta_N$ min <sup>-1</sup>	Operating conditions **					
	$\Delta$			Y			$\Delta$			Y			Altitude Above Sea Level (m)	T. amb min/max °C	ATEX		
	220 V	230 V	240 V	380 V	400 V	415 V	380 V	400 V	415 V	660 V		690 V				I <sub>N</sub> (A)	
0,55	2,98	3,03	3,10	1,72	1,75	1,79	-	-	-	-	-	1380 ÷ 1400			≤ 1000	-15 / 40	No
0,75	2,90	2,85	2,85	1,70	1,65	1,65	1,70	1,65	1,65	0,98	0,95	1420 ÷ 1435					
1,1	4,61	4,59	4,62	2,66	2,65	2,67	2,64	2,63	2,65	1,53	1,52	1435 ÷ 1445					
1,5	6,34	6,41	6,41	3,66	3,7	3,7	3,65	3,68	3,69	2,11	2,13	1440 ÷ 1450					
2,2	8,19	8,04	7,97	4,73	4,64	4,6	4,70	4,62	4,56	2,71	2,67	1445 ÷ 1455					
3	11,5	11,5	11,5	6,66	6,62	6,67	6,63	6,59	6,63	3,83	3,81	1450 ÷ 1460					
4	14,8	14,6	14,5	8,52	8,40	8,36	8,40	8,23	8,19	4,85	4,75	1445 ÷ 1455					
5,5	20,0	19,7	19,4	11,6	11,4	11,2	11,7	11,5	11,4	6,75	6,62	1455 ÷ 1465					
7,5	26,6	26,1	25,8	15,4	15,1	14,9	15,5	15,2	15,1	8,95	8,75	1450 ÷ 1460					
11	38,3	37,3	37,5	22,1	21,8	21,7	21,9	21,4	21,3	12,6	12,3	1465 ÷ 1470					
15	51,8	52	52,7	29,9	30,0	30,4	30,5	30,7	31,4	17,6	17,7	1465 ÷ 1475					

Observe the regulations and codes locally in force regarding sorted waste disposal.

\*\* Operating conditions to be referred to motor only. About electric pump, refer to limits in user's manual.

## NSCS SERIES

### THREE-PHASE MOTORS AT 50 Hz, 4 POLES (from 18,5 to 90 kW)

P <sub>N</sub> kW	Efficiency $\eta_N$ %									IE	Year of manufacture
	$\Delta$ 380 V Y 660 V			$\Delta$ 400 V Y 690 V			$\Delta$ 415 V				
	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4		
18,5	93,1	92,9	92,5	93,3	92,9	92,2	93,4	92,8	91,8	3	from 11/2014
22	93,4	93,1	92,8	93,6	93,0	92,4	93,6	92,8	91,9		
30	94,1	94,1	93,5	94,2	94,0	93,0	94,2	93,9	92,5		
37	94,3	94,5	94,1	94,6	94,6	94,0	94,7	94,6	93,8		
45	94,7	94,7	94,3	94,8	94,8	94,2	94,8	94,8	94,0		
55	95,1	94,9	94,7	95,3	95,0	94,6	95,4	94,9	94,4		
75	95,4	95,2	94,8	95,6	95,2	94,7	95,7	95,2	94,6		
90	95,6	95,4	95,1	95,8	95,5	95,0	95,9	95,5	94,9		

P <sub>N</sub> kW	Manufacturer		IEC SIZE	Construction Design	N. of Poles	f <sub>N</sub> Hz	Data for 400 V / 50 Hz Voltage				
	WEG Equipamentos Eletricos S.A. Reg. No. 07.175.725/0010-50 Jaragua do Sul - SC (Brazil)						cos $\phi$	I <sub>s</sub> / I <sub>N</sub>	T <sub>N</sub> Nm	T <sub>s</sub> /T <sub>N</sub>	T <sub>m</sub> /T <sub>N</sub>
	Model										
18,5	W22 180M4-B35 18.5kW E3		180	B35	4	50	0,82	7,30	120,20	2,70	3,00
22	W22 180L4-B35 22kW E3		180				0,83	7,30	142,90	2,80	3,30
30	W22 200L4-B35 30kW E3		200				0,82	7,30	193,60	2,50	3,00
37	W22 225S/M4-B35 37kW E3		225				0,86	7,80	238,70	2,70	3,00
45	W22 225S/M4-B35 45kW E3		225				0,85	7,90	290,40	2,80	3,20
55	W22 250S/M4-B35 55kW E3		250				0,86	7,90	354,90	2,80	3,30
75	W22 280S/M4-B35 75kW E3		280				0,87	7,60	482,30	2,30	2,80
90	W22 280S/M4-B35 90kW E3		280				0,86	7,40	578,80	2,30	2,80

P <sub>N</sub> kW	Voltage U <sub>N</sub> V					n <sub>N</sub> min <sup>-1</sup>	Operating conditions **		
	$\Delta$			Y			Altitude Above Sea Level (m)	T. amb min/max °C	ATEX
	380 V	400 V	415 V	660 V	690 V				
18,5	35,90	34,90	34,40	20,70	20,20	1470	See note.  ≤ 1000	-15 / +40	No
22	42,10	40,90	40,40	24,20	23,70	1470			
30	57,70	56,10	55,40	33,20	32,50	1480			
37	68,50	65,60	63,90	39,40	38,00	1480			
45	83,90	79,40	78,60	48,30	46,00	1480			
55	100,0	96,90	94,40	57,60	56,20	1480			
75	136,0	130,0	127,0	78,30	75,40	1485			
90	164,0	158,0	154,0	94,40	91,60	1485			

\*\* Operating conditions to be referred to motor only. About electric pump, refer to limits in user's manual.

Nscs-mott90-4p50-en\_a\_te

Note: Observe the regulations and codes locally in force regarding sorted waste disposal.

### NSCF, NSCC SERIES

### THREE-PHASE MOTORS AT 50 Hz, 4 POLES (from 0,25 to 15 kW)

P <sub>N</sub> kW	Efficiency $\eta_N$																		Year of manufacture		
	%																				
	$\Delta$ 220 V Y 380 V			$\Delta$ 230 V Y 400 V			$\Delta$ 240 V Y 415 V			$\Delta$ 380 V Y 660 V			$\Delta$ 400 V Y 690 V			$\Delta$ 415 V				IE	
	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4			
0,25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	06/11
0,37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
0,55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
0,75	83,0	84,3	83,5	83,4	84,1	82,6	83,8	84,0	81,9	83,0	84,3	83,5	83,4	84,1	82,6	83,8	84,0	81,9			01/17
1,1	84,9	85,7	84,7	85,3	85,5	83,8	85,3	85,0	82,7	84,9	85,0	82,7	84,9	85,0	82,7	84,9	85,0	82,7			
1,5	86,6	87,0	85,7	86,7	86,9	84,5	86,4	85,9	83,3	86,4	85,9	83,3	86,4	85,9	83,3	86,4	85,9	83,3			
2,2	87,6	88,6	88,3	88,2	88,8	87,9	88,5	88,7	87,4	87,6	88,6	87,4	87,6	88,6	87,4	87,6	88,6	87,4			
3	88,5	89,2	88,5	88,6	88,9	87,6	88,6	88,6	86,8	88,5	88,6	86,8	88,5	88,6	86,8	88,5	88,6	86,8			
4	88,6	89,1	87,9	88,6	89,1	87,9	88,6	89,1	87,9	88,6	89,2	88,9	88,6	89,2	88,9	88,6	88,8	89,1			
5,5	90,4	90,9	89,7	90,4	90,9	89,7	90,4	90,9	89,7	90,4	91,0	90,5	90,9	91,1	90,2	90,9	90,9	89,7			
7,5	90,4	91,2	90,4	90,4	91,2	90,4	90,4	91,2	90,4	90,4	91,2	91,1	90,7	91,3	90,8	90,9	91,2	90,4			
11	91,5	92,2	91,4	91,5	92,2	91,4	91,5	92,2	91,4	91,5	92,4	92,4	91,9	92,5	92,0	91,9	92,2	91,4			
15	92,2	92,2	90,8	92,2	92,2	90,8	92,2	92,2	90,8	92,5	93,0	92,7	92,5	92,7	91,8	92,2	92,2	90,8			

P <sub>N</sub> kW	Manufacturer		IEC SIZE	Construction Design	N. of Poles	f <sub>N</sub> Hz	Data for 400 V / 50 Hz Voltage				
	Xylem Service Italia Srl Reg. No. 07520560967 Montecchio Maggiore Vicenza - Italia						cos $\phi$	I <sub>s</sub> / I <sub>N</sub>	T <sub>N</sub> Nm	T <sub>s</sub> /T <sub>N</sub>	T <sub>m</sub> /T <sub>N</sub>
	Model										
0,25	SM471B3/302		71	B3	4	50	0,59	3,58	1,71	3,16	2,63
0,37	SM471B3/304		71				0,60	3,39	2,57	3,40	2,47
0,55	SM480B3/305		80				0,67	3,95	3,77	2,45	2,38
0,75	LLM480B3/307		80				0,80	6,38	5,00	2,73	3,31
1,1	PLM490B3/311 E3		90				0,71	6,22	7,28	2,75	3,44
1,5	PLM490B3/315 E3		90				0,68	6,92	9,89	3,29	4,01
2,2	PLM4100B3/322 E3		100				0,78	7,47	14,5	2,38	3,69
3	PLM4100B3/330 E3		100				0,74	7,75	19,7	2,48	4,21
4	PLM4112B3/340 E3		112				0,79	8,32	26,3	3,19	4,02
5,5	PLM4132B3/355 E3		132				0,76	7,64	35,9	2,85	3,65
7,5	PLM4132B3/375 E3		132				0,79	7,70	49,1	2,69	3,57
11	PLM4160B3/3110 E3		160				0,81	7,19	71,5	2,45	3,26
15	PLM4160B3/3150 E3		160				0,77	8,23	97,2	2,97	3,99

P <sub>N</sub> kW	Voltage U <sub>N</sub>											n <sub>N</sub> min <sup>-1</sup>	Observe the regulations and codes locally in force regarding sorted waste disposal.	Operating conditions **		
	V													Altitude Above Sea Level (m)	T. amb min/max °C	ATEX
	$\Delta$		Y		$\Delta$		Y									
	220 V	230 V	240 V	380 V	400 V	415 V	380 V	400 V	415 V	660 V	690 V					
	I <sub>N</sub> (A)															
0,25	1,68	1,71	1,77	0,97	0,99	1,02	-	-	-	-	-	1375 ÷ 1400				
0,37	2,46	2,53	2,62	1,42	1,46	1,51	-	-	-	-	-	1355 ÷ 1380				
0,55	2,98	3,03	3,1	1,72	1,75	1,79	-	-	-	-	-	1380 ÷ 1400				
0,75	2,90	2,85	2,85	1,70	1,65	1,65	1,70	1,65	1,65	0,98	0,95	1420 ÷ 1435				
1,1	4,61	4,59	4,62	2,66	2,65	2,67	2,64	2,63	2,65	1,53	1,52	1435 ÷ 1445				
1,5	6,34	6,41	6,41	3,66	3,70	3,70	3,65	3,68	3,69	2,11	2,13	1440 ÷ 1450				
2,2	8,19	8,04	7,97	4,73	4,64	4,60	4,70	4,62	4,56	2,71	2,67	1445 ÷ 1455				
3	11,5	11,5	11,5	6,66	6,62	6,67	6,63	6,59	6,63	3,83	3,81	1450 ÷ 1460				
4	14,8	14,6	14,5	8,52	8,40	8,36	8,40	8,23	8,19	4,85	4,75	1445 ÷ 1455				
5,5	20,0	19,7	19,4	11,6	11,4	11,2	11,7	11,5	11,4	6,75	6,62	1455 ÷ 1465				
7,5	26,6	26,1	25,8	15,4	15,1	14,9	15,5	15,2	15,1	8,95	8,75	1450 ÷ 1460				
11	38,3	37,3	37,5	22,1	21,8	21,7	21,9	21,4	21,3	12,6	12,3	1465 ÷ 1470				
15	51,8	52	52,7	29,9	30,0	30,4	30,5	30,7	31,4	17,6	17,7	1465 ÷ 1475				

\*\* Operating conditions to be referred to motor only. About electric pump, refer to limits in user's manual.

Nscf-IE3-mott15-4p50-en\_b\_te

### NSCF, NSCC SERIES

### THREE-PHASE MOTORS AT 50 Hz, 4 POLES (from 18,5 to 315 kW)

P <sub>N</sub> kW	Efficiency $\eta_N$ %									IE	Year of manufacture
	$\Delta$ 380 V Y 660 V			$\Delta$ 400 V Y 690 V			$\Delta$ 415 V				
	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4		
18,5	93,1	92,9	92,5	93,3	92,9	92,2	93,4	92,8	91,8	3	from 11/2014
22	93,4	93,1	92,8	93,6	93,0	92,4	93,6	92,8	91,9		
30	94,1	94,1	93,5	94,2	94,0	93,0	94,2	93,9	92,5		
37	94,3	94,5	94,1	94,6	94,6	94,0	94,7	94,6	93,8		
45	94,7	94,7	94,3	94,8	94,8	94,2	94,8	94,8	94,0		
55	95,1	94,9	94,7	95,3	95,0	94,6	95,4	94,9	94,4		
75	95,4	95,2	94,8	95,6	95,2	94,7	95,7	95,2	94,6		
90	95,6	95,4	95,1	95,8	95,5	95,0	95,9	95,5	94,9		
110	96,2	95,9	95,5	96,3	95,9	95,4	96,3	95,8	95,2		
132	96,3	96,0	95,6	96,4	96,0	95,5	96,4	95,9	95,3		
160	96,3	96,2	95,8	96,5	96,2	95,7	96,6	96,2	95,5		
200	96,5	96,5	96,2	96,7	96,5	96,1	96,7	96,5	95,9		
250	96,8	96,6	96,4	96,9	96,6	96,2	96,9	96,5	96,0		
315	96,8	96,7	96,5	96,9	96,7	96,4	97,0	96,7	96,3		
355	96,8	96,8	96,6	96,9	96,8	96,5	97,0	96,8	96,4		

P <sub>N</sub> kW	Manufacturer		IEC SIZE	Construction Design	N. of Poles	f <sub>N</sub> Hz	Data for 400 V / 50 Hz Voltage				
	WEG Equipamentos Eletricos S.A. Reg. No. 07.175.725/0010-50 Jaragua do Sul - SC (Brazil)						cos $\phi$	I <sub>s</sub> / I <sub>N</sub>	T <sub>N</sub> Nm	T <sub>s</sub> /T <sub>N</sub>	T <sub>m</sub> /T <sub>N</sub>
	Model										
18,5	W22 180M4-B3 18.5kW E3		180	B3	4	50	0,82	7,30	120,20	2,70	3,00
22	W22 180L4-B3 22kW E3		180				0,83	7,30	142,90	2,80	3,30
30	W22 200L4-B3 30kW E3		200				0,82	7,30	193,60	2,50	3,00
37	W22 225S/M4-B3 37kW E3		225				0,86	7,80	238,70	2,70	3,00
45	W22 225S/M4-B3 45kW E3		225				0,85	7,90	290,40	2,80	3,20
55	W22 250S/M4-B3 55kW E3		250				0,86	7,90	354,90	2,80	3,30
75	W22 280S/M4-B3 75kW E3		280				0,87	7,60	482,30	2,30	2,80
90	W22 280S/M4-B3 90kW E3		280				0,86	7,40	578,80	2,30	2,80
110	W22 315S/M4-B3 110kW E3		315				0,86	7,50	705,00	2,60	2,70
132	W22 315S/M4-B3 132kW E3		315				0,86	7,60	846,00	2,90	3,00
160	W22 315S/M4-B3 160kW E3		315				0,87	7,60	1025,0	2,60	2,60
200	W22 315L4-B3 200kW E3		315				0,87	7,60	1282,0	2,50	2,50
250	W22 315L4-B3 250kW E3		315				0,86	8,00	1602,0	2,70	2,60
315	W22 355M/L4-B3 315kW E3		355				0,86	7,30	2019,0	2,30	2,40
355	W22 355M/L4-B3 355kW E3		355				0,86	7,20	2275,0	2,40	2,50

P <sub>N</sub> kW	Voltage U <sub>N</sub> V					n <sub>N</sub> min <sup>-1</sup>	Operating conditions **			
	$\Delta$			Y			Altitude Above Sea Level (m)	T. amb min/max °C	ATEX	
	380 V	400 V	415 V	660 V	690 V					
18,5	35,90	34,90	34,40	20,70	20,20	1470	See note	≤ 1000	-20 / +40	No
22	42,10	40,90	40,40	24,20	23,70	1470				
30	57,70	56,10	55,40	33,20	32,50	1480				
37	68,50	65,60	63,90	39,40	38,00	1480				
45	83,90	79,40	78,60	48,30	46,00	1480				
55	100,0	96,90	94,40	57,60	56,20	1480				
75	136,0	130,0	127,0	78,30	75,40	1485				
90	164,0	158,0	154,0	94,40	91,60	1485				
110	200,0	192,0	187,0	115,0	111,0	1490				
132	239,0	230,0	224,0	138,0	133,0	1490				
160	287,0	275,0	268,0	165,0	159,0	1490				
200	358,0	343,0	335,0	206,0	199,0	1490				
250	451,0	433,0	422,0	260,0	251,0	1490				
315	575,0	552,0	538,0	331,0	320,0	1490				
355	640,0	615,0	599,0	368,0	357,0	1490				

\*\* Operating conditions to be referred to motor only. About electric pump, refer to limits in user's manual.

Nscf-mott355-4p50-en\_c\_te

Note: Observe the regulations and codes locally in force regarding sorted waste disposal.

### e-NSC SERIES

### AVAILABLE VOLTAGES FOR SM AND PLM MOTORS

P <sub>N</sub> kW	SINGLE-PHASE							
	50 Hz			60 Hz				
	1 x 220-240							
	1 x 100							
	1 x 110-120							
	1 x 220-230							
	1 x 100							
	1x 110-115							
	1 x 120-127							
	1 x 200-210							
0,37	s	o	o	s	-	o	-	-
0,55	s	o	o	s	o	o	o	o
0,75	s	o	o	s	o	o	o	o
1,1	s	-	o	s	-	o	-	o
1,5	s	-	-	s	-	o	-	o
2,2	s	-	-	s	-	-	-	-

P <sub>N</sub> kW	THREE-PHASE														
	50/60 Hz		50 Hz							60 Hz					
	3 x 230/400 50 Hz														
	3 x 265/460 60 Hz														
	3 x 400/690 50 Hz														
	3 x 460/- 60 Hz														
	3 x 220-230-240/380-400-415														
	3 x 380-400-415/660-690														
	3 x 200-208/346-360														
	3 x 255-265/440-460														
	3 x 290-300/500-525														
	3 x 440-460/-														
	3 x 500-525/-														
	3 x 220-230/380-400														
	3 x 255-265-277/440-460-480														
	3 x 380-400/660-690														
	3 x 440-460-480/-														
	3 x 110-115/190-200														
	3 x 200-208/346-360														
	3 x 330-346/575-600														
	3 x 575/-														
0,37	s	o	o	o	o	o	o	o	o	o	s	o	o	o	o
0,55	s	o	o	o	o	o	o	o	o	o	s	o	o	o	o
0,75	s	o	o	o	o	o	o	o	o	o	s	o	o	o	o
1,1	s	o	o	o	o	o	o	o	o	o	s	o	o	o	o
1,5	s	o	o	o	o	o	o	o	o	o	s	o	o	o	o
2,2	s	o	o	o	o	o	o	o	o	o	s	o	o	o	o
3	s	o	o	o	o	o	o	o	o	o	s	o	o	o	o
4	o	s	o	o	o	o	o	o	o	o	s	o	o	o	o
5,5	o	s	o	o	o	o	o	o	o	o	s	o	o	o	o
7,5	o	s	o	o	o	o	o	o	o	o	s	o	o	o	o
11	o	s	o	o	o	o	o	o	o	o	s	o	o	o	o
15	o	s	o	o	o	o	o	o	o	o	s	o	o	o	o
18,5	o	s	o	o	o	o	o	o	o	o	s	o	o	o	o
22	o	s	o	o	o	o	o	o	o	o	s	o	o	o	o

s = Standard voltage    o = Voltage upon request    - = Not available  
 For higher power motors special voltages available on request.

nsc-volt-low-a-en\_a\_te

## e-NSC SERIES MOTOR NOISE

The tables below show the mean sound pressure levels (Lp) measured at 1 meter distance in a free field according to EN ISO 11203.

The noise values are measured on 50 Hz motors and have a tolerance of 3 dB (A) according to EN ISO 4871.

### MOTORS 2 POLES 50 Hz

POWER	MOTOR TYPE	NOISE
kW	IEC SIZE	LpA dB
1,1	80	<70
	90R	<70
1,5	90R	<70
	90	<70
2,2	90	<70
3	90	<70
	100R	<70
	100	<70
4	112R	<70
	112	<70
5,5	112	<70
	132R	<70
7,5	132	71
	132	71
9,2	132	73
11	132	73
	160	71
15	160	71
18,5	160	73
22	160	70
	180R	70
	180	67
30	200	69
37	200	69
45	225	74
55	250	74
75	280	77
90	280	77
110	315	77
132	315	77
160	315	77
200	315	80

### MOTORS 4 POLES 50 Hz

POWER	MOTOR TYPE	NOISE
kW	IEC SIZE	LpA dB
0,25	71	<70
0,37	71	<70
0,55	80	<70
	90R	<70
0,75	80	<70
	90R	<70
1,1	90	<70
1,5	90	<70
2,2	100	<70
3	100	<70
4	112	<70
5,5	132	<70
7,5	132	<70
11	160	<70
15	160	<70
18,5	180	<70
22	180	<70
30	200	<70
37	225	<70
45	225	<70
55	250	<70
75	280	<70
90	280	<70
110	315	71
132	315	71
160	315	71
200	315	73
250	315	73
315	355	74
355	355	74

\*R=Reduced size of motor as compared to shaft extension and flange.

Nscs-Nscf\_mott-en\_d\_tr

## e-NSC SERIES PUMPS

With the “Energy using Products” (EuP 2005/32/EC) and “Energy related Products” (ErP 2009/125/EC) directives, the European Commission has established requirements for promoting the use of products with low power consumption.

The **Commission Regulation (EU) No 547/2012** has implemented two directives with regard to ecodesign requirements for **some types of clean water pumps** placed on the market and put into service inside EU zone as self-alone units or integrated in other products.

For end-suction close-coupled pumps (ESCC for the Regulation) and end-suction own-bearing pumps (ESOB for the Regulation) the efficiency assessment refers to:

- just the pump and not the pump and motor assembly (electric or combustion);
- pumps with just one impeller;
- pumps with a nominal pressure PN not higher than 16 bar (1600 kPa);
- pumps with a minimum nominal flow not less than 6 m<sup>3</sup>/h;
- pumps with a maximum nominal power at the shaft not higher than 150 kW;
- pumps designed to operate at a speed of 2900 min<sup>-1</sup> (for electric pumps this means 50 Hz 2-pole electric motors) and with a head not greater than 140 metres;
- pumps designed to operate at a speed of 1450 min<sup>-1</sup> (for electric pumps this means 50 Hz 4-pole electric motors) and with a head not greater than 90 metres;
- use with clean water at a temperature ranging from -10°C to 120°C (the test is performed with cold water at a temperature not higher than 40°C).

According to the definitions established in the Regulation NSCE and NSCS versions correspond to the “end-suction close-coupled pump” while NSC, NSCF and NSCC versions correspond to the “end-suction own bearing pump”. This regulation states that water pumps shall have a minimum index MEI coming from a dedicated formula which considers hydraulic efficiency values at ‘best efficiency point’ (BEP), 75 % of the flow at BEP (Part load – PL) and 110 % of the flow at BEP (Over load – OL).

The Regulation also establishes the following deadlines.

from	minimum efficiency index (MEI)
1 <sup>st</sup> January 2013	MEI ≥ 0,1
1 <sup>st</sup> January 2015	MEI ≥ 0,4

NSC2 models are out of the scope of the Regulation.

### Regulation (EU) n. 547/2012 – Annex II – point 2 (Product information requirements)

- 1) Minimum efficiency index: see MEI values in specific tables on following page.
- 2) “The benchmark for most efficient water pumps is MEI ≥ 0,70”.
- 3) Year of manufacture: 2014.
- 4) Manufacturer: Xylem Service Italia Srl - Reg. No 07520560967 - Montecchio Maggiore, Vicenza, Italy.
- 5) Product type: see the PUMP TYPE column in the tables in the *Hydraulic performance* section.
- 6) Hydraulic pump efficiency with trimmed impeller: see  $\eta_{np}$  and  $\varnothing$  columns in the tables in the *Hydraulic performance* section.
- 7) Pump performance curves, including the performance curve: see the *Operating Characteristics* graphs in the following pages.
- 8) “The efficiency of a pump with a trimmed impeller is usually lower than that of a pump with the full impeller diameter. The trimming of the impeller will adapt the pump to a fixed duty point, leading to reduced energy consumption. The minimum efficiency index (MEI) is based on the full impeller diameter”.
- 9) “The operation of this water pump with variable duty points may be more efficient and economic when controlled, for example, by the use of a variable speed drive that matches the pump duty to the system”.
- 10) Information relevant for disassembly, recycling or disposal at end-of-life: observe the current laws and by-laws governing sorted waste disposal. Consult the product operating manual.
- 11) “Designed for use below – 10 °C only”: note not applicable to these products.
- 12) “Designed for use above 120 °C only”: note not applicable to these products.
- 13) Specific instructions for pumps as per points 11 and 12: not applicable to these products.
- 14) “Information on benchmark efficiency is available at”: [www.europump.org](http://www.europump.org) (Ecodesign section).
- 15) The benchmark efficiency graphs with MEI = 0.7 and MEI = 0.4 are available at [www.europump.org](http://www.europump.org), Ecodesign, Efficiency charts (refer to “ESCC 1450 rpm”, “ESCC 2900 rpm”, “ESOB 1450 rpm”, “ESOB 2900 rpm”).

**e-NSC SERIES**  
**MINIMUM EFFICIENCY INDEX (MEI)**

PUMP SIZE (1)	2-POLE	
	NSC, NSCE NSCF, NSCC	NSCS
32-125	≥0,40	≥0,40
32-160	≥0,40	≥0,40
32-200	≥0,40	≥0,40
NSC2 32-250	---	---
32-250	≥0,40	≥0,40
40-125	≥0,40	≥0,40
40-160	≥0,40	≥0,40
40-200	≥0,40	≥0,40
40-250	≥0,40	≥0,40
50-125	≥0,40	≥0,40
50-160	≥0,40	≥0,40
50-200	≥0,40	≥0,40
50-250	≥0,40	≥0,40
50-315	≥0,40	≥0,40
65-125	≥0,40	≥0,40
65-160	≥0,40	≥0,40
65-200	≥0,40	≥0,40
65-250	≥0,40	≥0,40
65-315	≥0,40	≥0,40
80-160	≥0,40	≥0,40
80-200	≥0,40	≥0,40
80-250	≥0,40	≥0,40
80-316	≥0,40	≥0,40
100-160	≥0,70	≥0,70
100-200	0,69	≥0,70
100-250	≥0,70	≥0,70
100-316	0,43	---
125-200	≥0,70	≥0,70
125-315	---	---

PUMP SIZE (1)	4-POLE	
	NSC, NSCE NSCF, NSCC	NSCS
32-125	≥0,40	≥0,40
32-160	≥0,40	≥0,40
32-200	≥0,40	≥0,40
NSC2 32-250	---	---
32-250	≥0,40	≥0,40
40-125	≥0,40	≥0,40
40-160	≥0,40	≥0,40
40-200	≥0,40	≥0,40
40-250	≥0,40	≥0,40
50-125	≥0,40	≥0,40
50-160	≥0,40	≥0,40
50-200	≥0,40	≥0,40
50-250	≥0,40	≥0,40
50-315	≥0,40	≥0,40
65-125	≥0,40	≥0,40
65-160	≥0,40	≥0,40
65-200	≥0,40	≥0,40
65-250	≥0,40	≥0,40
65-315	≥0,40	≥0,40
80-160	≥0,40	≥0,40
80-200	≥0,40	≥0,40
80-250	≥0,40	≥0,40
80-316	≥0,40	≥0,40
80-400	≥0,40	≥0,40
100-160	≥0,70	≥0,70
100-200	0,64	0,69
100-250	≥0,70	≥0,70
100-315	0,64	0,69
100-400	0,50	0,55
125-200	0,66	≥0,70
125-250	≥0,70	≥0,70
125-315	≥0,70	≥0,70
125-400	0,66	≥0,70
150-200	0,69	≥0,70
150-250	0,64	0,68
150-315	0,53	0,58
150-400	≥0,70	≥0,70
150-500	---	---
200-250	0,65	0,70
200-315	0,51	0,56
200-400	0,50	---
200-500	---	---
250-315	0,62	0,66
250-400	---	---
250-500	---	---
300-350	≥0,70	---
300-400	---	---
300-450	---	---

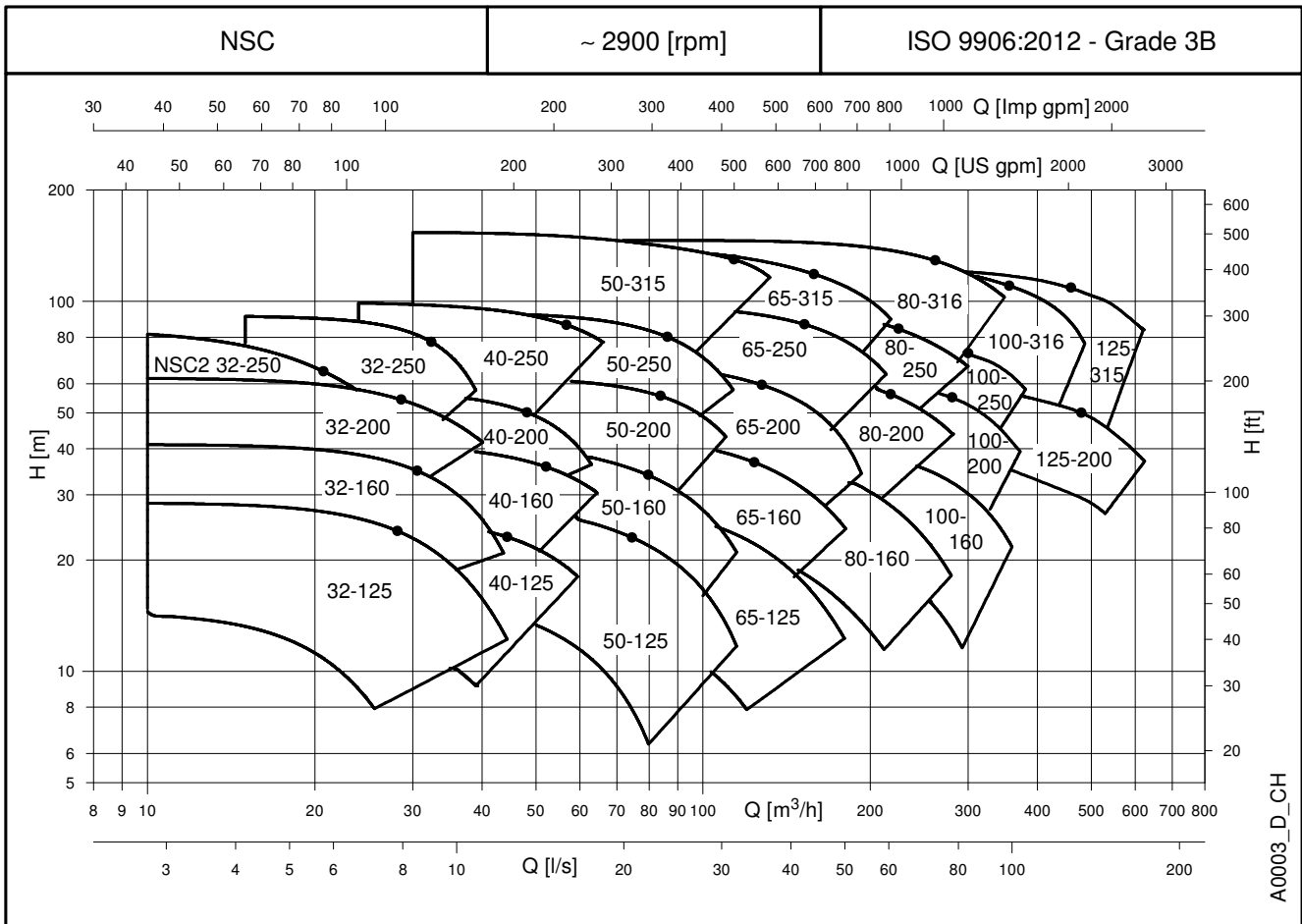
(1) MEI referred to full impeller diameter

Nsc-MEI-en\_c\_sc



**e-NSC SERIES**

**HYDRAULIC PERFORMANCE RANGE AT 50 Hz, 2 POLES**





## e-NSC 65, 80 SERIES

### HYDRAULIC PERFORMANCE TABLE AT 50 Hz, 2 POLES

PUMP TYPE	P <sub>N</sub> kW	Ø Impeller (mm)				Q = DELIVERY												
		STD (1)	□ (2)	● (3)	η <sub>p</sub> % (3)	l/s	6	11,8	17,1	22,4	27,8	33,1	38,4	43,7	49,0	54,4	59,7	65
						m <sup>3</sup> /h	0	23	42	62	81	100	119	138	157	177	196	215
H = TOTAL HEAD METRES COLUMN OF WATER																		
65-125/40	4	113	112	○	77,9	14,4		14,5	13,7	12,2	10,3	8,0						
65-125/55	5,5	127	125,5	○	79,7	19,5		19,4	18,4	16,7	14,5	11,7						
65-125/75	7,5	137	136	○	80,3	23,8		23,9	23,2	21,7	19,6	16,8	13,7	10,5				
65-125/92	9,2	146	143	○	81,4	28,3		28,1	27,4	26,2	24,4	22,1	19,2	16,1				
65-125/110A	11	146	143	○	81,4	28,3		28,1	27,4	26,2	24,4	22,1	19,2	16,1				
65-125/110	11	148	146	●	81,9	29,5		29,1	28,3	27,2	25,6	23,6	21,0	18,0	14,5			
65-160/75	7,5	145	144	○	79,1	27,0		26,5	25,3	23,2	20,2	16,6						
65-160/92	9,2	151	152	○	80,9	29,8		29,4	28,5	26,7	23,9	20,4	16,4					
65-160/110A	11	151	152	○	80,9	29,8		29,4	28,5	26,7	23,9	20,4	16,4					
65-160/110	11	159	160	○	81,4	33,3		33,0	32,1	30,5	27,9	24,6	20,5					
65-160/150	15	175	176	○	82,4	41,3		41,1	40,4	39,2	37,1	34,3	30,7	26,5				
65-160/185	18,5	180	180	●	83,4	44,7		44,3	43,7	42,5	40,7	38,2	35,1	31,3	26,8			
65-200/110	11	165	162	○	73,0	36,4		35,6	33,8	30,6	25,8	19,5						
65-200/150	15	177	177	○	77,4	43,1		42,8	41,6	39,1	35,2	29,7	22,8					
65-200/185	18,5	189	189	○	78,5	49,9		49,4	48,3	46,1	42,7	37,8	31,4					
65-200/220	22	199	199	○	79,2	55,9		55,6	54,6	52,7	49,6	45,0	38,9	31,0				
65-200/300	30	220	218	●	80,1	70,2		69,6	68,7	67,3	65,0	61,7	57,2	51,1	43,1			
65-250/220	22	195	192	○	76,0	51,0		53,7	52,4	50,0	46,7	42,3	36,6	29,1				
65-250/300	30	215	213	○	76,8	63,7		66,6	65,5	63,4	60,5	56,6	51,6	45,0	36,4			
65-250/370	37	229	226	○	79,1	73,3		77,2	76,4	74,6	72,0	68,7	64,5	59,1	52,0	42,5		
65-250/450	45	243	240	○	79,4	83,7		87,8	87,1	85,5	83,3	80,6	77,0	72,4	66,3	57,9	46,3	
65-250/550	55	258	255	●	80,3	98,5		99,7	99,1	97,9	95,9	93,3	89,8	85,2	79,4	72,0	62,8	51,4
65-315/550	55	272	272	○	68,0	103,6	103,8	103,3	101,6	98,7	94,7	89,6	83,4	75,7	66,0			
65-315/750	75	298	298	○	68,9	126,1		125,7	124,5	122,0	118,4	113,7	108,1	101,5	93,6	83,7		
65-315/900	90	315	315	●	69,2	142,4		141,7	140,8	138,7	135,4	130,9	125,4	119,0	111,5	102,7	91,7	

PUMP TYPE	P <sub>N</sub> kW	Ø Impeller (mm)				Q = DELIVERY												
		STD (1)	□ (2)	● (3)	η <sub>p</sub> % (3)	l/s	11	18,4	26,2	34,1	41,9	49,8	57,7	65,5	73,4	81,2	89,1	97
						m <sup>3</sup> /h	38	66	94	123	151	179	208	236	264	292	321	349
H = TOTAL HEAD METRES COLUMN OF WATER																		
80-160/110	11	144	144	○	76,0	26,8		25,7	23,8	21,4	18,5	15,3	12,0					
80-160/150	15	158	158	○	79,5	33,4		32,4	31,1	29,0	26,3	22,9	19,1	15,1				
80-160/185	18,5	168	168	○	80,3	38,0		37,2	36,0	34,0	31,2	27,8	23,8	19,6				
80-160/220	22	177	177	●	80,8	42,3		41,6	40,5	38,8	36,4	33,3	29,5	25,3	20,7			
80-200/220	22	181	177	○	79,7	43,5		43,7	42,8	40,9	38,0	34,2	29,7					
80-200/300	30	195	192	○	81,8	52,1		52,1	51,6	50,2	47,8	44,3	40,0	34,9				
80-200/370	37	208	204	○	82,6	60,5		60,2	59,5	58,0	55,8	52,7	48,7	43,8				
80-200/450	45	219	216	●	83,3	67,8		67,7	67,1	66,0	64,1	61,3	57,7	53,1	47,6			
80-250/370	37	214	211	○	80,6	65,0		65,8	64,4	62,0	58,8	54,6	49,5					
80-250/450	45	227	224	○	81,8	73,9		75,1	74,3	72,4	69,4	65,2	60,1	54,2				
80-250/550	55	241	238	○	82,3	83,5		85,1	84,3	82,6	79,9	76,0	71,2	65,5	59,0			
80-250/750	75	259	256	●	83,6	98,8		98,1	96,9	94,9	91,8	87,6	82,2	75,9	68,6			
80-316/900	90	280	280	○	76,3	110,7	110,2	110,0	109,9	109,0	106,7	102,7	97,1	90,3	82,8	74,1		
80-316/1100	110	298	298	○	76,7	125,2		124,5	124,3	123,8	122,5	119,9	115,6	109,8	102,5	94,0	84,5	
80-316/1320	132	310	310	○	77,7	135,1		134,7	134,6	134,1	132,9	130,8	127,4	122,7	116,5	108,7	99,5	
80-316/1600	160	321	321	●	77,9	146,1		145,4	145,3	144,9	143,8	141,8	138,6	134,2	128,5	121,3	112,7	102,7

Hydraulic performances in compliance with ISO 9906:2012 - Grade 3B (ex ISO 9906:1999 - Annex A)

Nsc-65-80\_2p50-en\_f\_th

(1) STD = Cast iron/Stainless steel - B = Bronze (2) ● = Full impeller diameter - ○ = Trimmed impeller diameter (3) Hydraulic efficiency of pump.

## e-NSC 100, 125 SERIES

### HYDRAULIC PERFORMANCE TABLE AT 50 Hz, 2 POLES

PUMP TYPE	P <sub>N</sub> kW	Ø Impeller (mm)				Q = DELIVERY												
		STD (1)	B (2)	Ø (3)	η <sub>p</sub> % (3)	l/s	11	22,5	33,8	45,1	56,3	67,6	78,9	90,2	101,4	112,7	124	135
						m <sup>3</sup> /h	0	40	81	122	162	203	243	284	325	365	406	446
H = TOTAL HEAD METRES COLUMN OF WATER																		
100-160/150	15	144	144	○	76,7	24,7	24,8	24,6	23,8	22,3	19,9	16,6	12,6					
100-160/185	18,5	156	156	○	79,7	29,1		28,7	28,2	26,9	24,6	21,3	17,1					
100-160/220	22	167	167	○	80,5	34,1		33,4	32,8	31,5	29,3	26,0	21,7	16,7				
100-160/300	30	187	187	●	83,8	44,1		42,7	41,9	40,6	38,7	35,9	32,1	27,1				
100-200/300	30	188	188	○	79,7	46,5		45,7	44,8	42,7	39,2	34,3	28,1	21,0				
100-200/370	37	202	202	○	82,0	53,9		53,4	52,8	51,2	48,2	43,8	38,0	31,0				
100-200/450	45	213	213	○	83,4	60,4		59,8	59,5	58,3	55,7	51,8	46,4	39,7	31,8			
100-200/550	55	227	227	●	84,6	69,2		68,9	68,2	66,9	64,7	61,3	56,6	50,6	43,0			
100-250/450	45	213	213	○	80,4	58,7		58,3	58,0	56,9	54,4	50,3	44,8	38,5	31,5			
100-250/550	55	227	227	○	83,1	67,8		67,7	67,4	66,2	64,0	60,5	55,7	49,6	42,4			
100-250/750	75	249	249	○	84,3	82,8		82,7	82,5	81,8	80,0	76,9	72,4	66,7	60,2	52,9		
100-250/900	90	259	259	●	85,0	90,1		90,1	89,8	88,8	87,0	84,0	79,8	74,4	67,6	59,6		
100-316/1100	110	270	270	○	78,6	104,7		104,3	103,5	101,9	99,3	95,6	90,5	83,7	74,6	62,4		
100-316/1320	132	286	286	○	79,9	116,6		116,2	115,7	114,2	111,8	108,5	104,2	98,6	91,4	81,5	67,3	
100-316/1600	160	302	302	●	80,8	131,3		130,9	130,8	129,9	128,0	124,8	120,4	115,0	108,8	101,5	91,8	77,0

PUMP TYPE	P <sub>N</sub> kW	Ø Impeller (mm)				Q = DELIVERY												
		STD (1)	B (2)	Ø (3)	η <sub>p</sub> % (3)	l/s	24	37,6	51,6	65,6	79,6	93,6	107,7	121,7	135,7	149,7	163,8	178
						m <sup>3</sup> /h	0	85	135	186	236	287	337	388	438	489	539	590
H = TOTAL HEAD METRES COLUMN OF WATER																		
125-200/450	45	179	179	○	80,4	34,9	34,5	34,5	34,4	34,2	33,8	33,1	31,7	29,6	26,6	22,3		
125-200/550	55	195	195	○	83,1	43,1		43,0	43,0	42,7	42,1	40,9	39,0	36,2	32,6	28,4		
125-200/750	75	215	215	○	84,4	55,1		54,9	54,9	54,7	54,2	53,2	51,6	49,3	46,1	42,0	37,1	
125-200/900	90	225	225	●	85,7	61,8		61,6	61,5	61,2	60,7	59,8	58,3	56,1	53,0	49,1	44,5	39,3
125-315/1100	110	250	250	○	81,4	84,0		83,8	83,2	81,6	78,7	74,3	68,2	60,4	51,0			
125-315/1320	132	265	265	○	81,1	96,8		96,7	96,2	95,0	92,6	89,0	83,9	77,1	68,4			
125-315/1600	160	280	280	○	81,9	109,8		109,8	109,5	108,6	106,9	104,0	99,7	93,8	86,1	76,4		
125-315/2000	200	290	290	●	82,9	118,9		119,0	118,8	118,1	116,7	114,3	110,6	105,4	98,3	89,3	78,3	

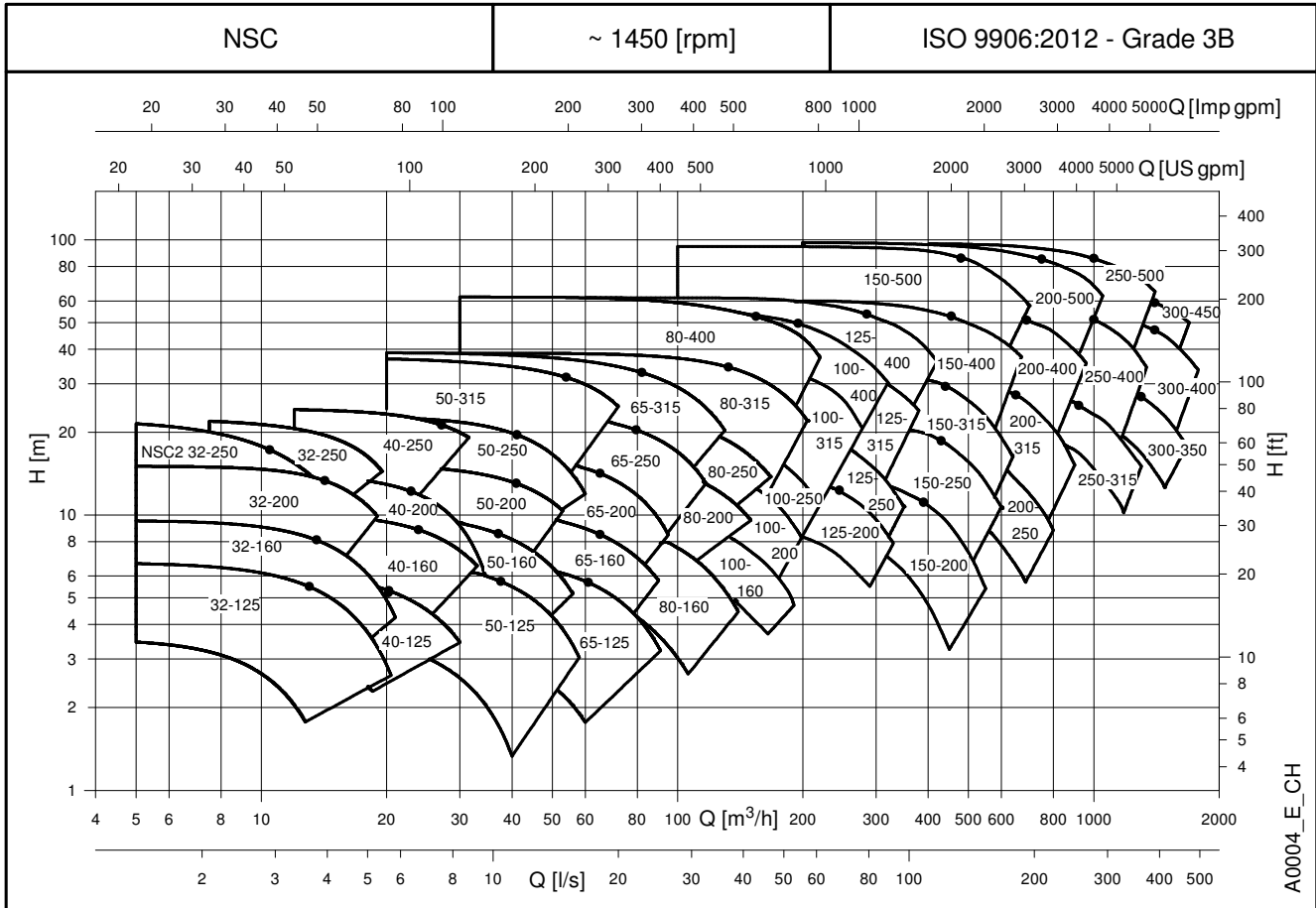
Hydraulic performances in compliance with ISO 9906:2012 - Grade 3B (ex ISO 9906:1999 - Annex A)

Nsc-100-125\_2p50-en\_e\_th

(1) STD = Cast iron/Stainless steel - B = Bronze (2) ● = Full impeller diameter - ○ = Trimmed impeller diameter (3) Hydraulic efficiency of pump.

**e-NSC SERIES**

**HYDRAULIC PERFORMANCE RANGE AT 50 Hz, 4 POLES**





**e-NSC 65, 80 SERIES**
**HYDRAULIC PERFORMANCE RANGE AT 50 Hz, 4 POLES**

PUMP TYPE	P <sub>N</sub> kW	Ø Impeller (mm)				Q = DELIVERY												
		STD (1)	B (2)	Ø (3)	η <sub>p</sub> % (3)	l/s	3,3	6,3	9,3	12,2	15,2	18,2	21,2	24,2	27,2	30,1	33,1	36,1
						m <sup>3</sup> /h	0	12	23	33	44	55	66	76	87	98	109	119
H = TOTAL HEAD METRES COLUMN OF WATER																		
65-125/05	0,55	113	112	○	75,0	3,5		3,4	3,1	2,7	2,1							
65-125/07	0,75	127	126	○	77,0	4,9		4,7	4,4	3,9	3,2	2,4						
65-125/11	1,1	137	136	○	78,3	5,8		5,8	5,6	5,1	4,5	3,6	2,7					
65-125/15	1,5	148	146	●	79,5	7,2		7,1	6,9	6,5	6,0	5,4	4,6	3,6				
65-160/11A	1,1	145	144	○	77,1	6,4		6,4	6,0	5,4	4,4	3,4						
65-160/15B	1,5	145	144	○	77,1	6,4		6,4	6,0	5,4	4,4	3,4						
65-160/11	1,1	151	152	○	78,0	7,2		7,0	6,7	6,1	5,2	4,1						
65-160/15A	1,5	151	152	○	78,0	7,2		7,0	6,7	6,1	5,2	4,1						
65-160/15	1,5	159	160	○	79,6	8,2		8,0	7,7	7,1	6,3	5,3						
65-160/22A	2,2	175	176	○	81,8	10,2		10,1	9,9	9,4	8,8	7,9	6,8	5,6				
65-160/22	2,2	180	180	●	82,1	10,9		10,8	10,5	10,0	9,3	8,4	7,4	6,1				
65-200/15	1,5	165	162	○	73,1	8,9	8,9	8,7	8,2	7,2	5,7							
65-200/22A	2,2	177	177	○	74,6	10,6		10,5	10,0	9,2	7,8	6,0						
65-200/22	2,2	189	189	○	76,9	12,1		12,0	11,6	10,8	9,6	7,9	5,7					
65-200/30	3	199	199	○	78,0	13,6		13,6	13,2	12,6	11,5	9,9	7,8					
65-200/40	4	220	218	●	80,0	17,0		16,9	16,7	16,1	15,3	14,1	12,5	10,3				
65-250/30	3	195	192	○	73,9	12,6		13,2	12,8	12,0	10,8	9,3	7,3					
65-250/40	4	215	213	○	74,3	15,7		16,2	15,8	15,1	14,1	12,7	11,0	8,9				
65-250/55A	5,5	229	226	○	76,0	18,1		19,0	18,7	18,1	17,3	16,1	14,6	12,8	10,5			
65-250/55	5,5	243	240	○	77,2	20,7		21,3	21,2	20,7	20,0	18,9	17,5	15,8	13,7			
65-250/75	7,5	258	255	●	77,6	24,3		24,6	24,3	23,8	23,0	22,0	20,8	19,2	17,4	15,2		
65-315/55	5,5	260	260	○	68,1	22,7		22,4	21,7	20,8	19,6	18,0	15,7	12,7				
65-315/75	7,5	285	285	○	70,4	27,6		27,3	26,8	26,0	24,8	23,3	21,4	18,9	15,9			
65-315/110	11	315	315	○	71,4	34,7		34,5	34,0	33,3	32,3	31,0	29,3	27,2	24,6	21,4	17,3	
65-315/150	15	334	334	●	72,2	39,0		38,9	38,5	37,8	36,8	35,5	33,9	32,0	29,7	27,0	23,8	20,3

PUMP TYPE	P <sub>N</sub> kW	Ø Impeller (mm)				Q = DELIVERY												
		STD (1)	B (2)	Ø (3)	η <sub>p</sub> % (3)	l/s	5,6	10,7	15,7	20,8	25,8	30,9	35,9	40,9	46,0	51,0	56,1	61,1
						m <sup>3</sup> /h	0	20	38	57	75	93	111	129	147	166	184	202
H = TOTAL HEAD METRES COLUMN OF WATER																		
80-160/15	1,5	144	144	○	72,1	6,5		6,2	5,5	4,5	3,5							
80-160/22A	2,2	158	158	○	78,4	8,3		7,9	7,3	6,5	5,4	4,2						
80-160/22	2,2	168	168	○	79,0	9,3		9,0	8,5	7,6	6,5	5,2	3,8					
80-160/30	3	177	177	●	81,2	10,5		10,2	9,8	9,0	8,0	6,7	5,3					
80-200/30	3	181	177	○	77,1	10,8		10,6	10,1	9,3	8,2							
80-200/40	4	195	192	○	79,7	12,8		12,7	12,4	11,6	10,4	8,9						
80-200/55A	5,5	208	204	○	82,0	15,0		14,9	14,5	13,9	12,8	11,3						
80-200/55	5,5	219	216	●	82,5	16,9		16,5	16,2	15,6	14,7	13,5	11,8					
80-250/55A	5,5	214	211	○	80,0	16,4		16,0	15,4	14,4	13,1	11,3	9,1	6,5				
80-250/55	5,5	227	224	○	80,1	18,2		18,2	17,6	16,6	15,3	13,5						
80-250/75	7,5	241	238	○	80,8	21,0		20,7	20,2	19,4	18,1	16,4	14,4					
80-250/110	11	259	256	●	82,2	24,1		23,9	23,7	23,2	22,2	20,8	19,0	16,7				
80-315/110A	11	262	262	○	75,8	23,1		23,1	22,7	21,9	20,4	18,4	15,8	12,8	9,6			
80-315/110	11	280	280	○	76,0	26,6		26,6	26,4	25,7	24,5	22,8	20,4	17,5				
80-315/150	15	304	304	○	76,9	31,6		31,7	31,6	31,2	30,3	28,9	26,8	24,3	21,2			
80-315/185	18,5	321	321	○	77,2	35,5		35,6	35,5	35,2	34,4	33,2	31,4	29,1	26,2	22,7		
80-315/220	22	334	334	●	77,8	38,6		38,7	38,6	38,3	37,6	36,4	34,8	32,7	30,0	26,7		
80-400/185	18,5	338	338	○	69,9	39,1		39,0	38,2	37,0	35,3	33,3	30,6	27,0	22,0	15,0	5,1	
80-400/220	22	356	356	○	71,3	43,8	44,0	43,8	43,2	42,0	40,4	38,4	36,1	33,1	29,1			
80-400/300	30	388	388	○	72,5	53,1		52,8	52,6	51,7	50,2	48,3	46,1	43,7	40,8			
80-400/370	37	418	418	●	73,8	62,6		61,9	61,7	61,0	59,7	57,9	55,9	53,5	50,9	47,8		

Hydraulic performances in compliance with ISO 9906:2012 - Grade 3B (ex ISO 9906:1999 - Annex A)

Nsc-65-80\_4p50-en\_e\_th

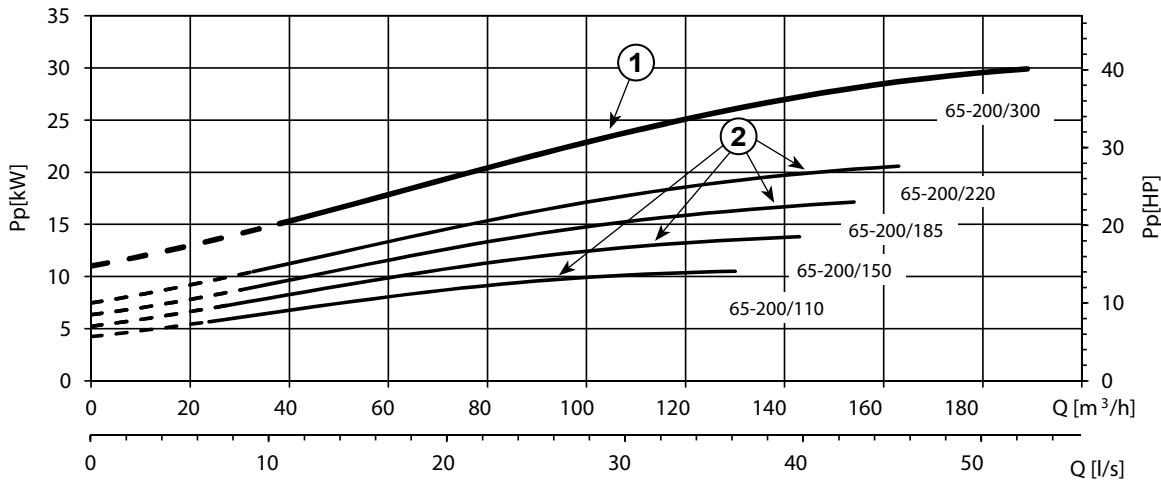
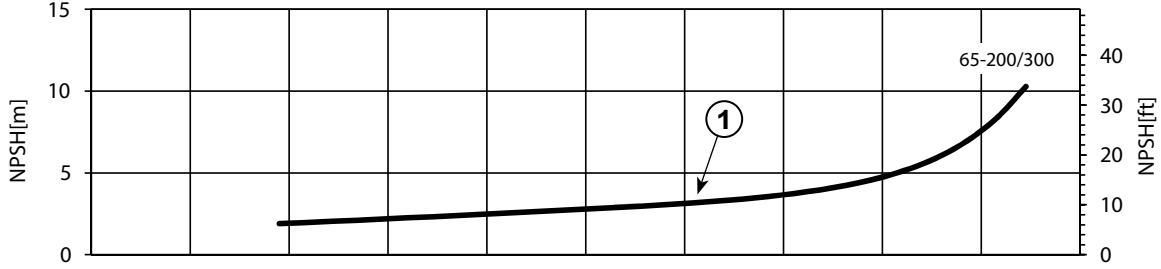
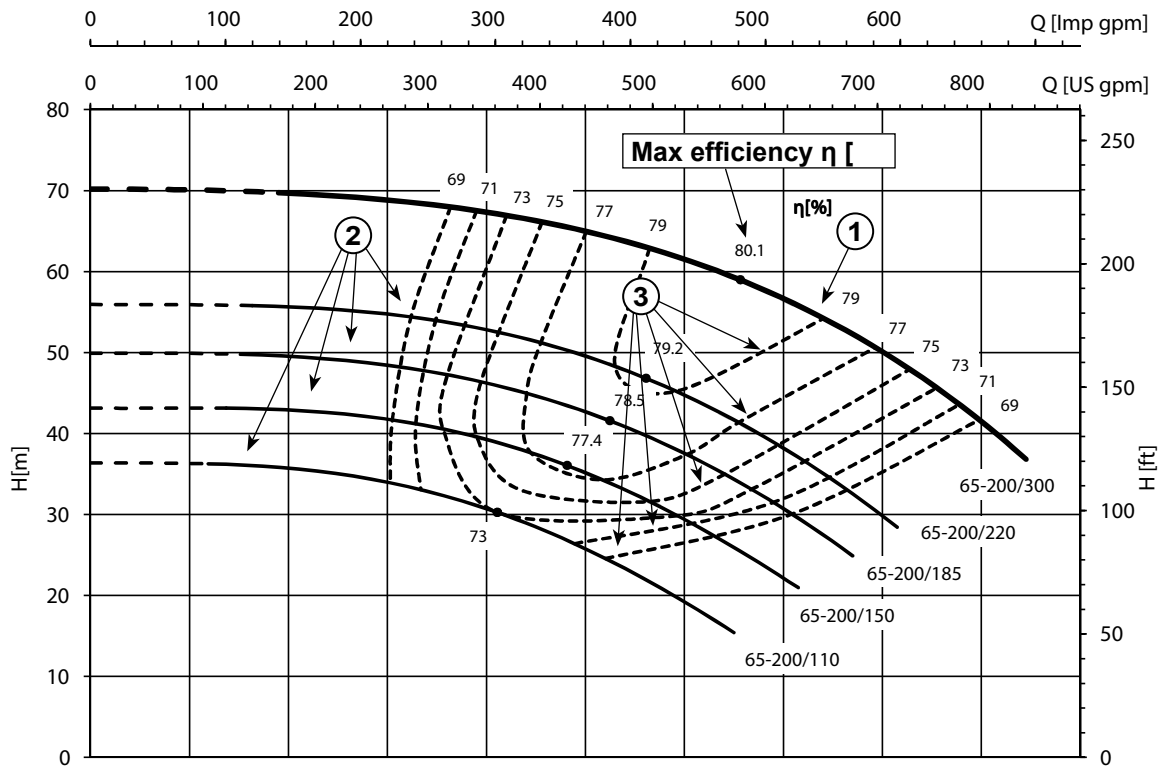
(1) STD = Cast iron/Stainless steel - B = Bronze (2) ● = Full impeller diameter - ○ = Trimmed impeller diameter (3) Hydraulic efficiency of pump.







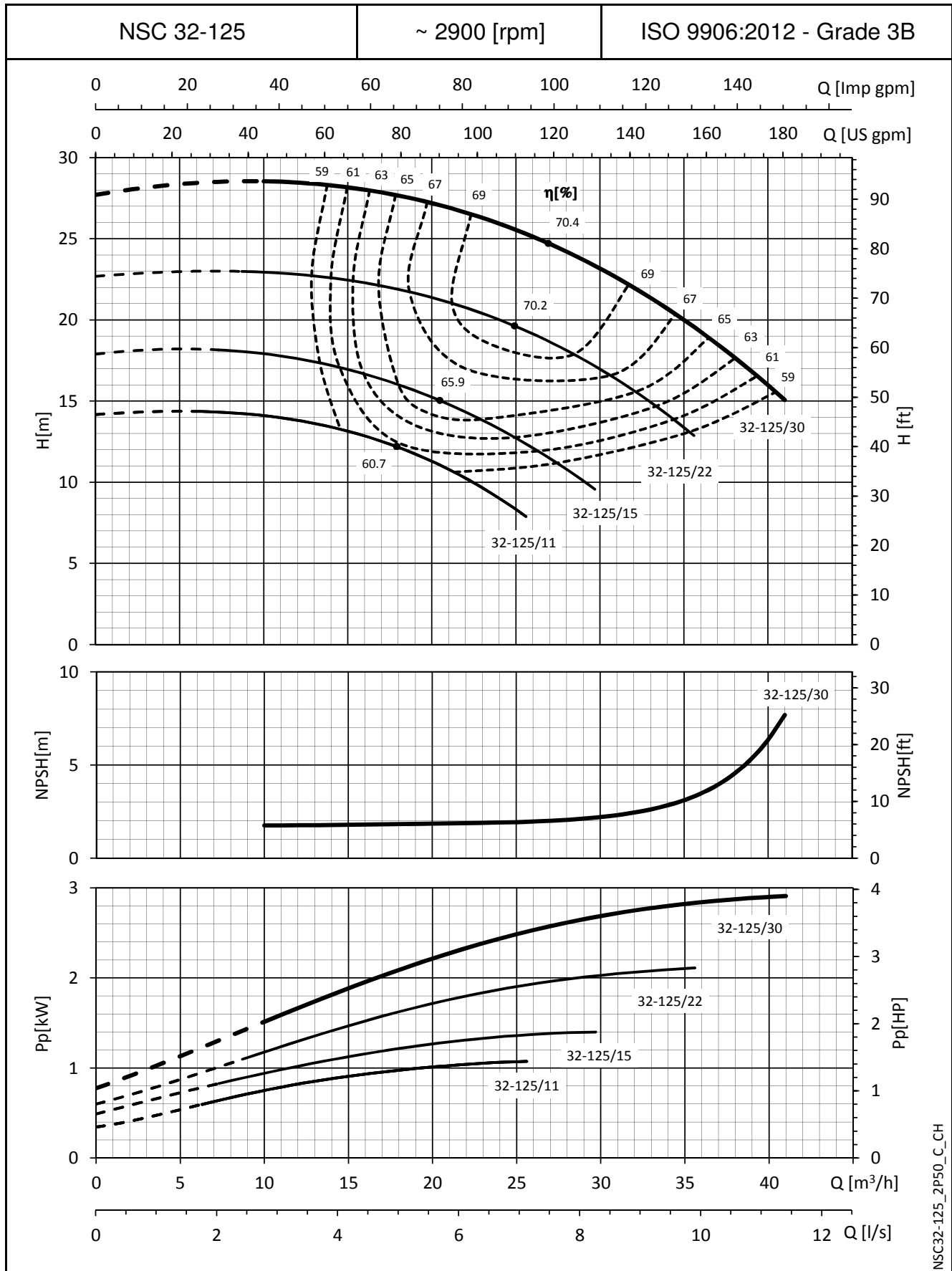
### e-NSC SERIES IDENTIFICATION OF GRAPH



REF	TYPE	DESCRIPTION
①		Full Diameter impeller operating range
②		Trimmed diameter impeller operating range
③		Isoefficiency curve

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 2 POLES**

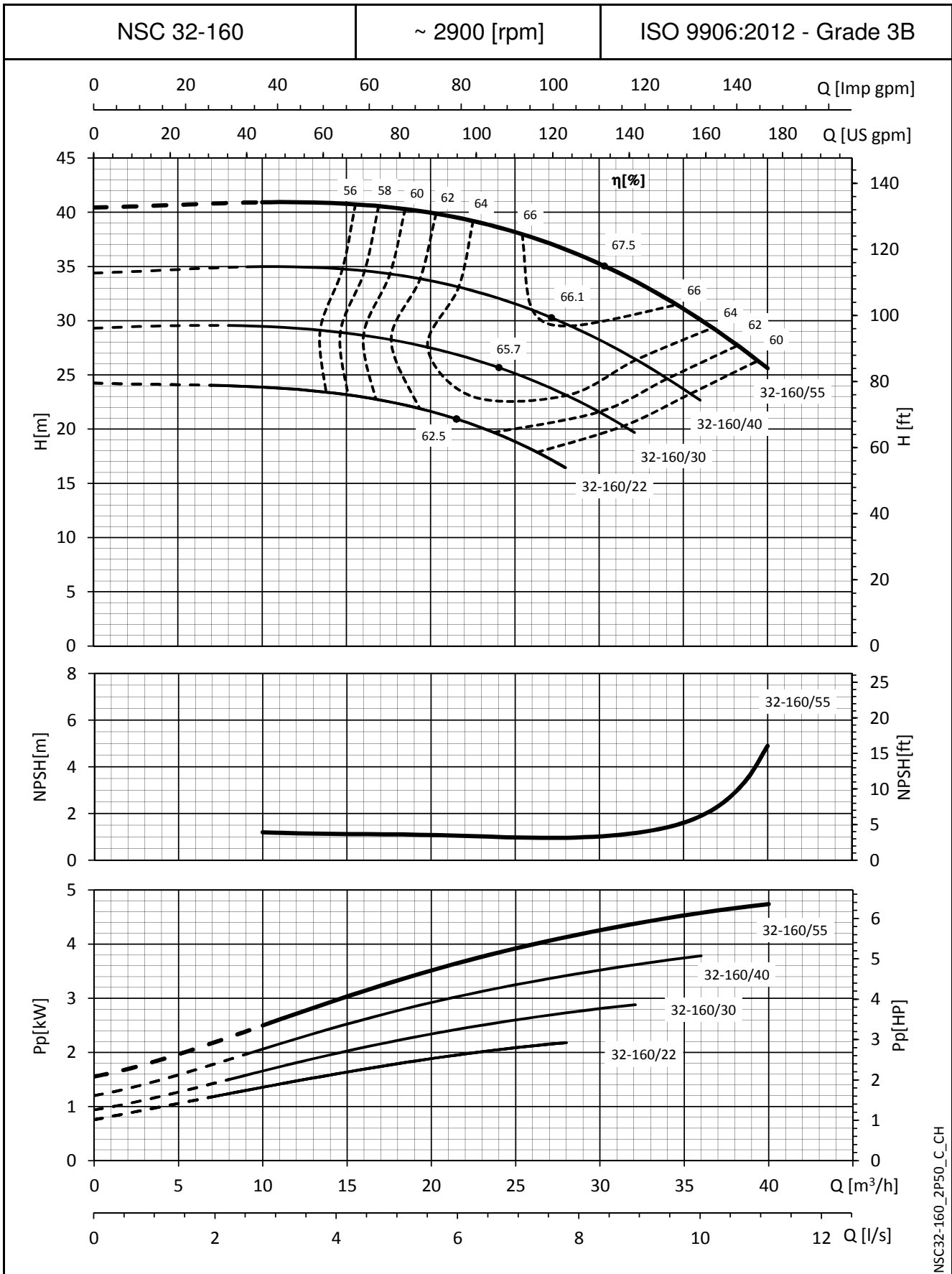


NSC32-125\_2P50\_C\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 2 POLES**

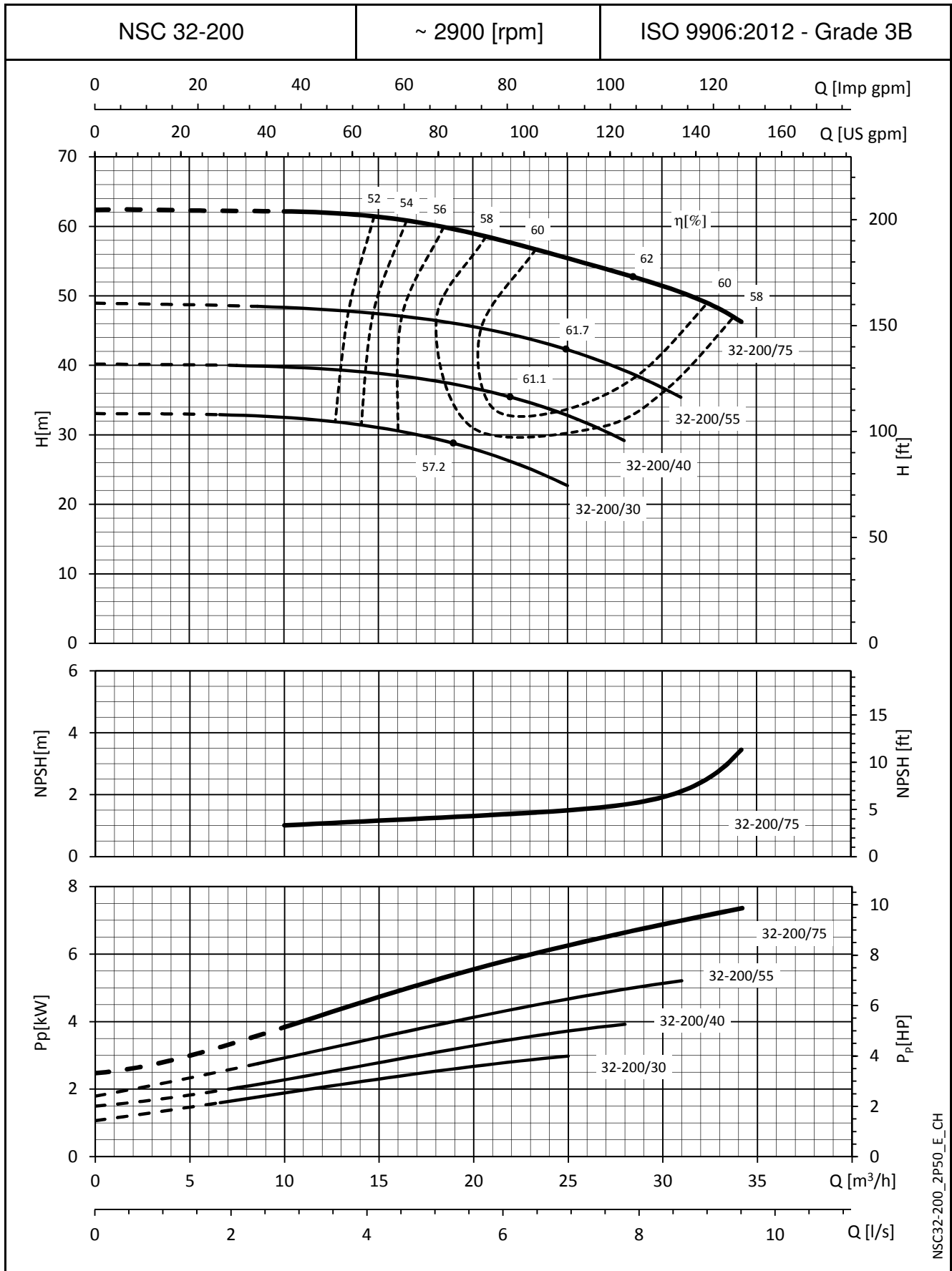


NSC32-160\_2P50\_C\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 2 POLES**

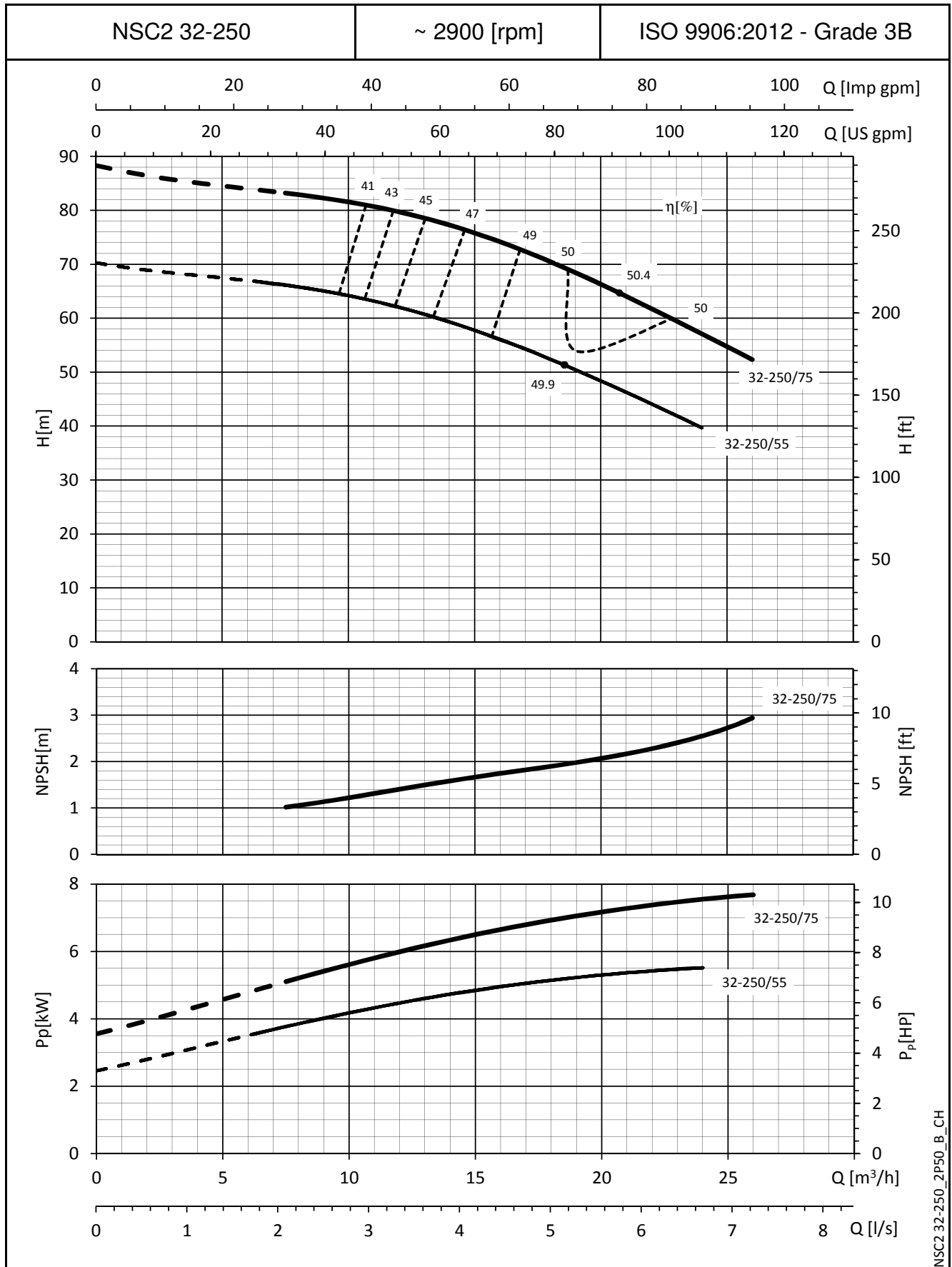


NSC32-200\_2P50\_E\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 2 POLES**

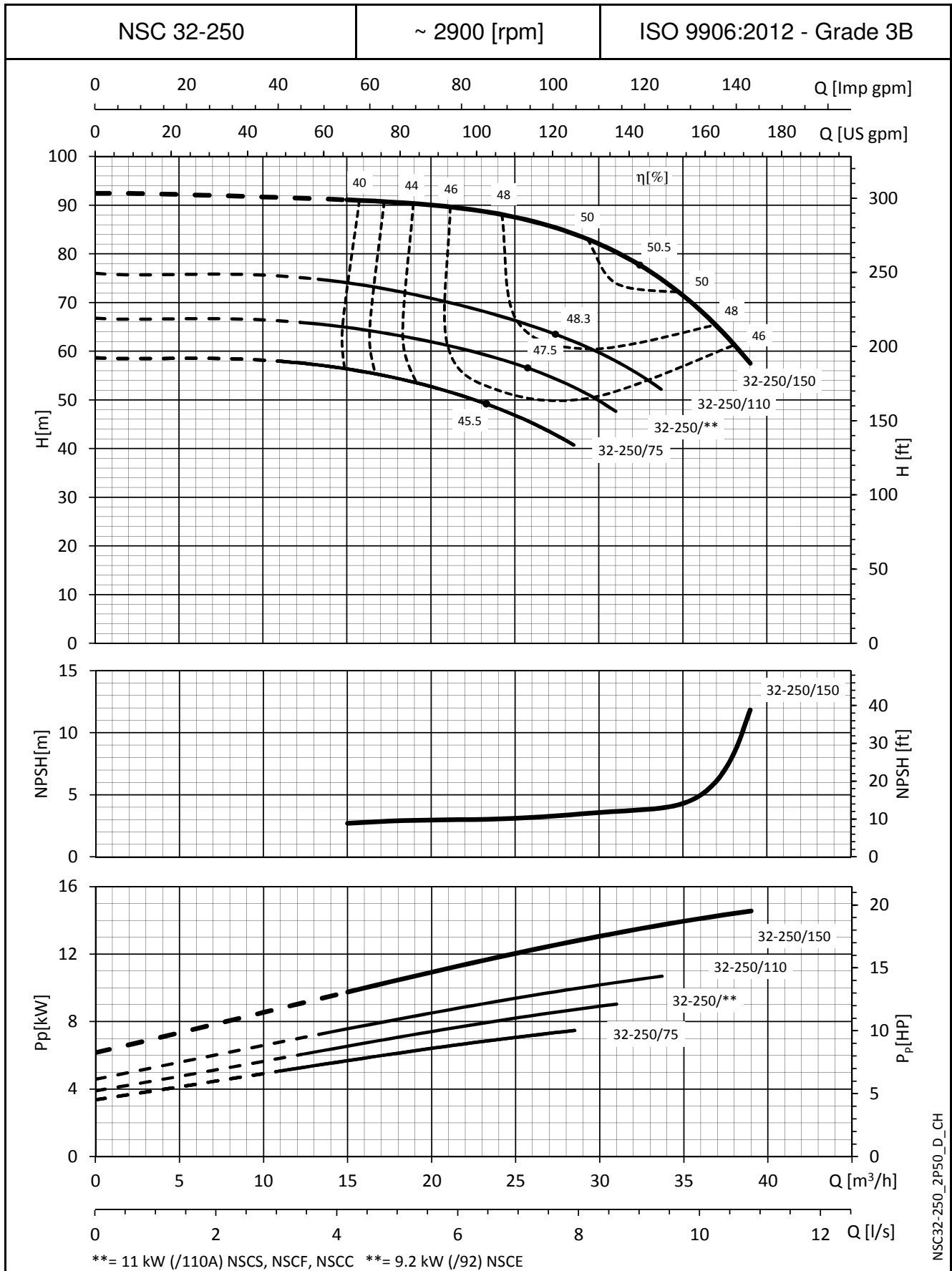


NSC2 32-250\_2P50\_B\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

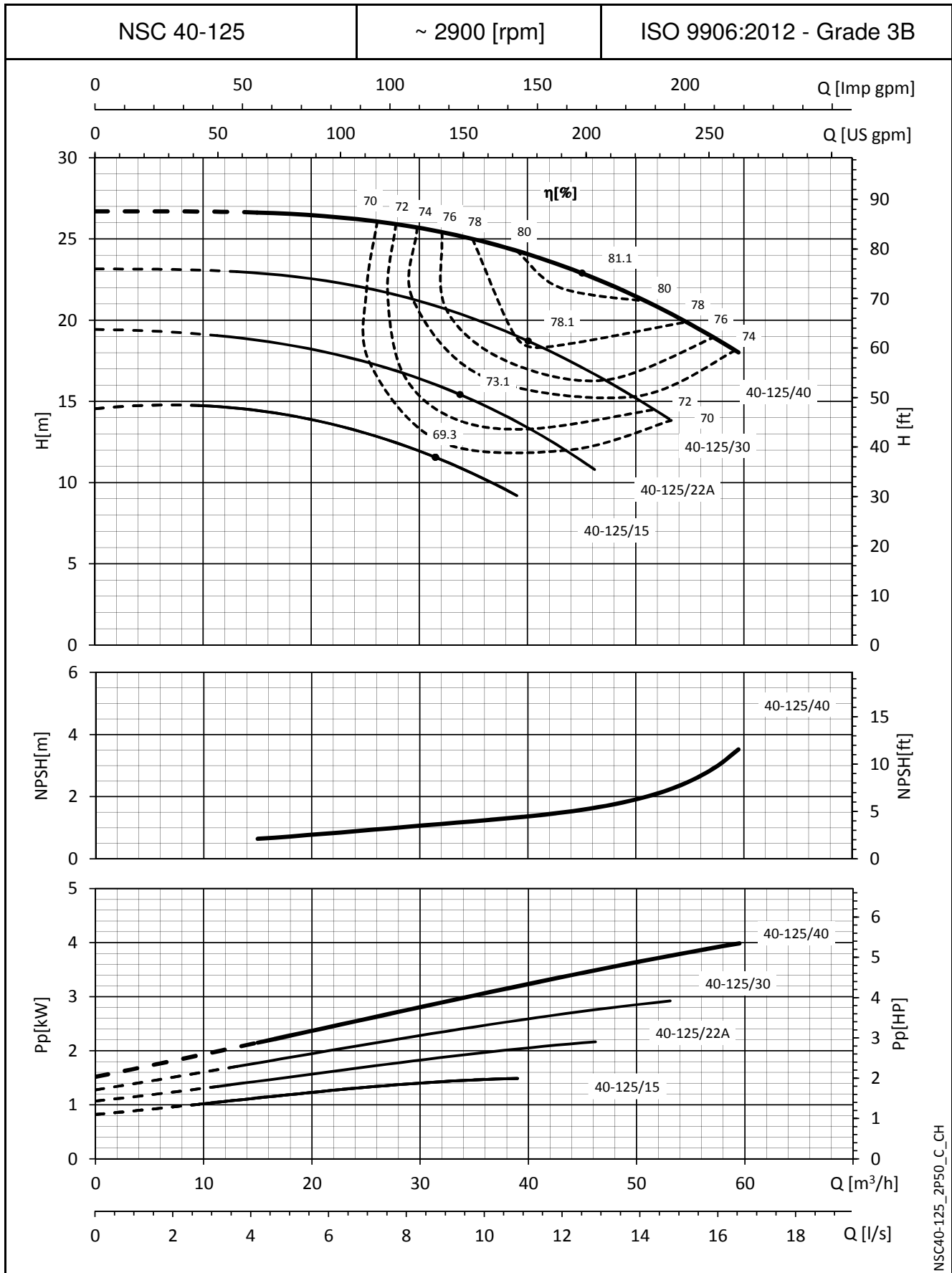
**OPERATING CHARACTERISTICS AT 50 Hz, 2 POLES**



The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 2 POLES**



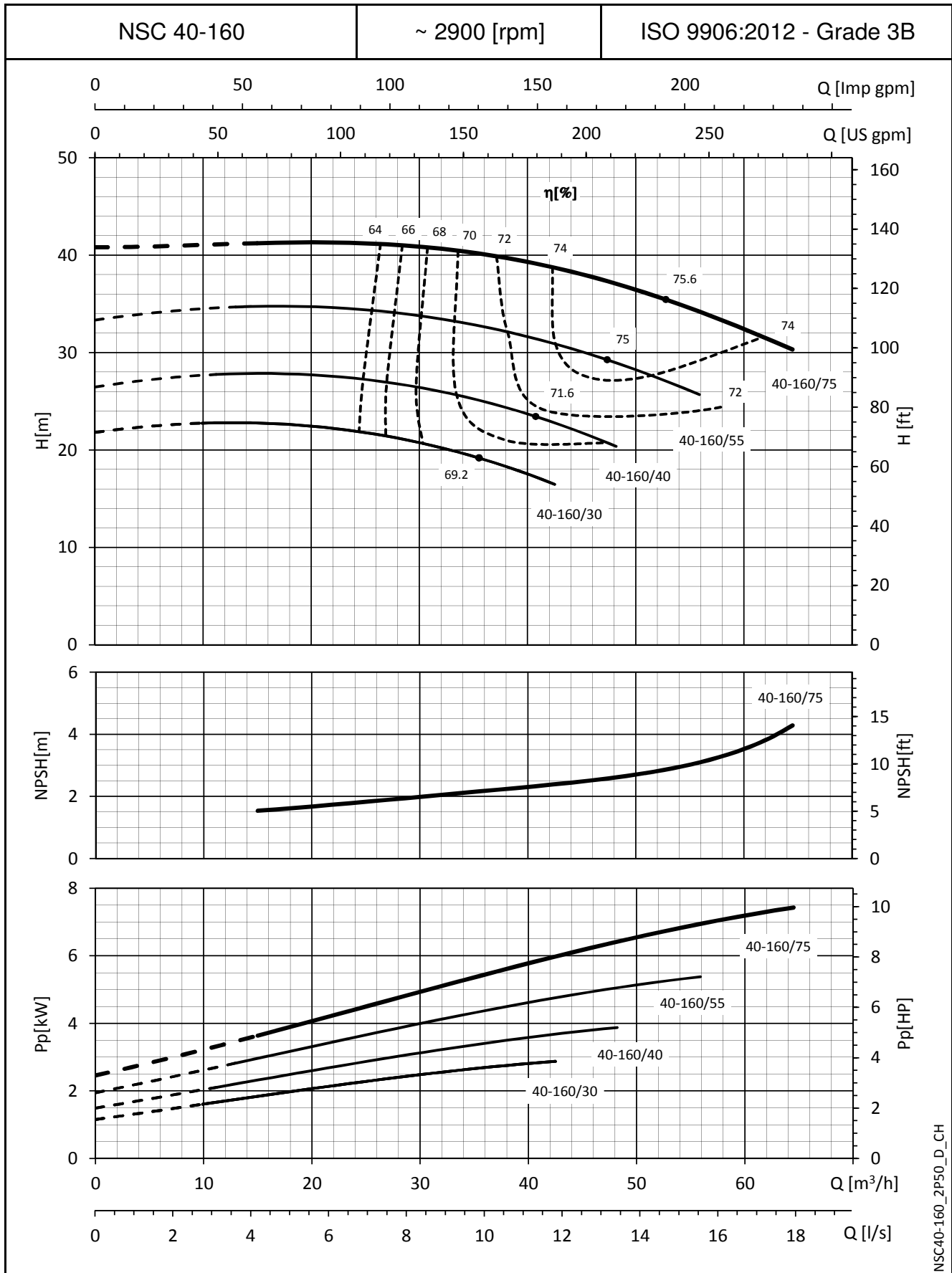
NSC40-125\_2P50\_C\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .



**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 2 POLES**

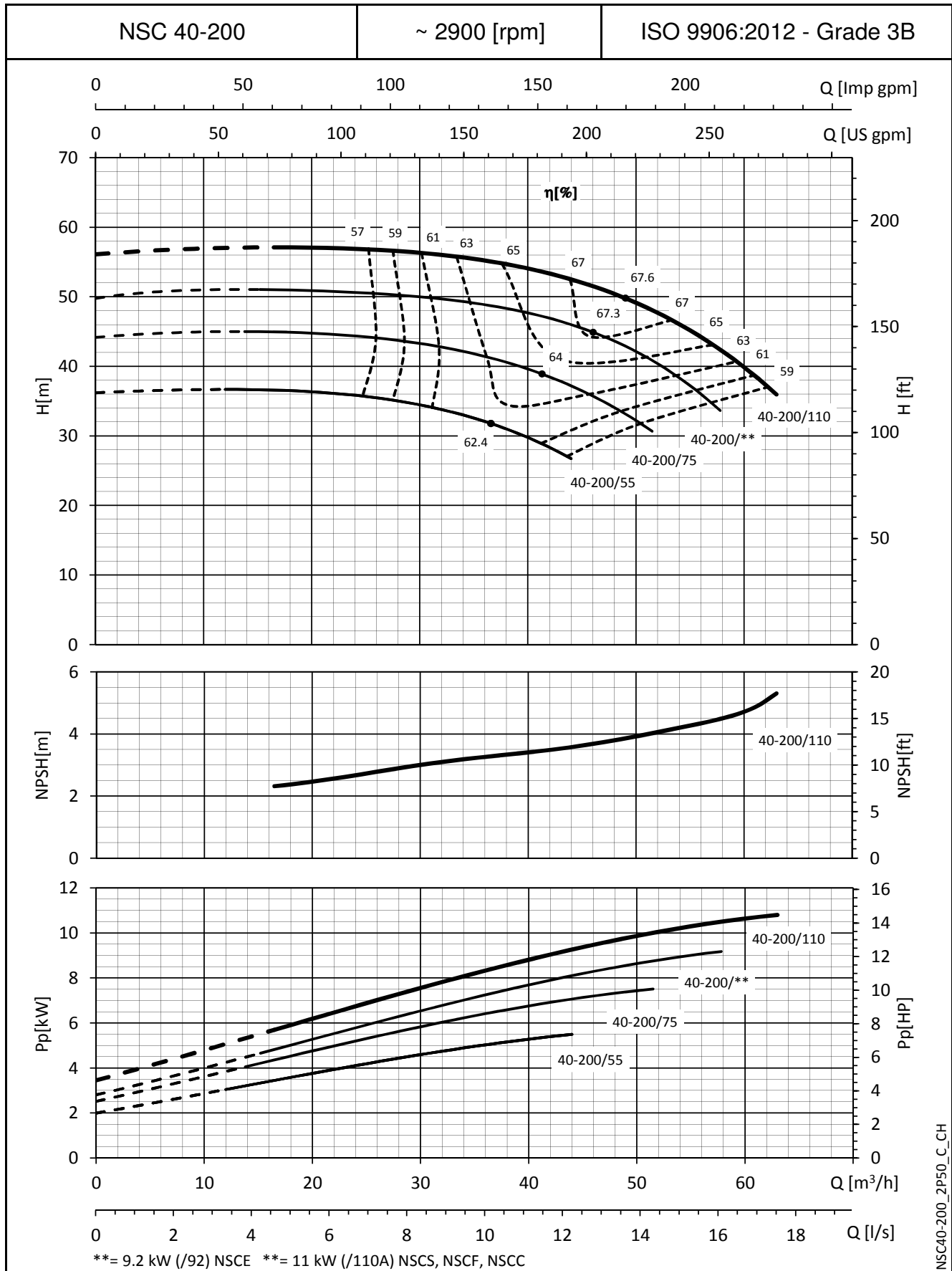


NSC40-160\_2P50\_D\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

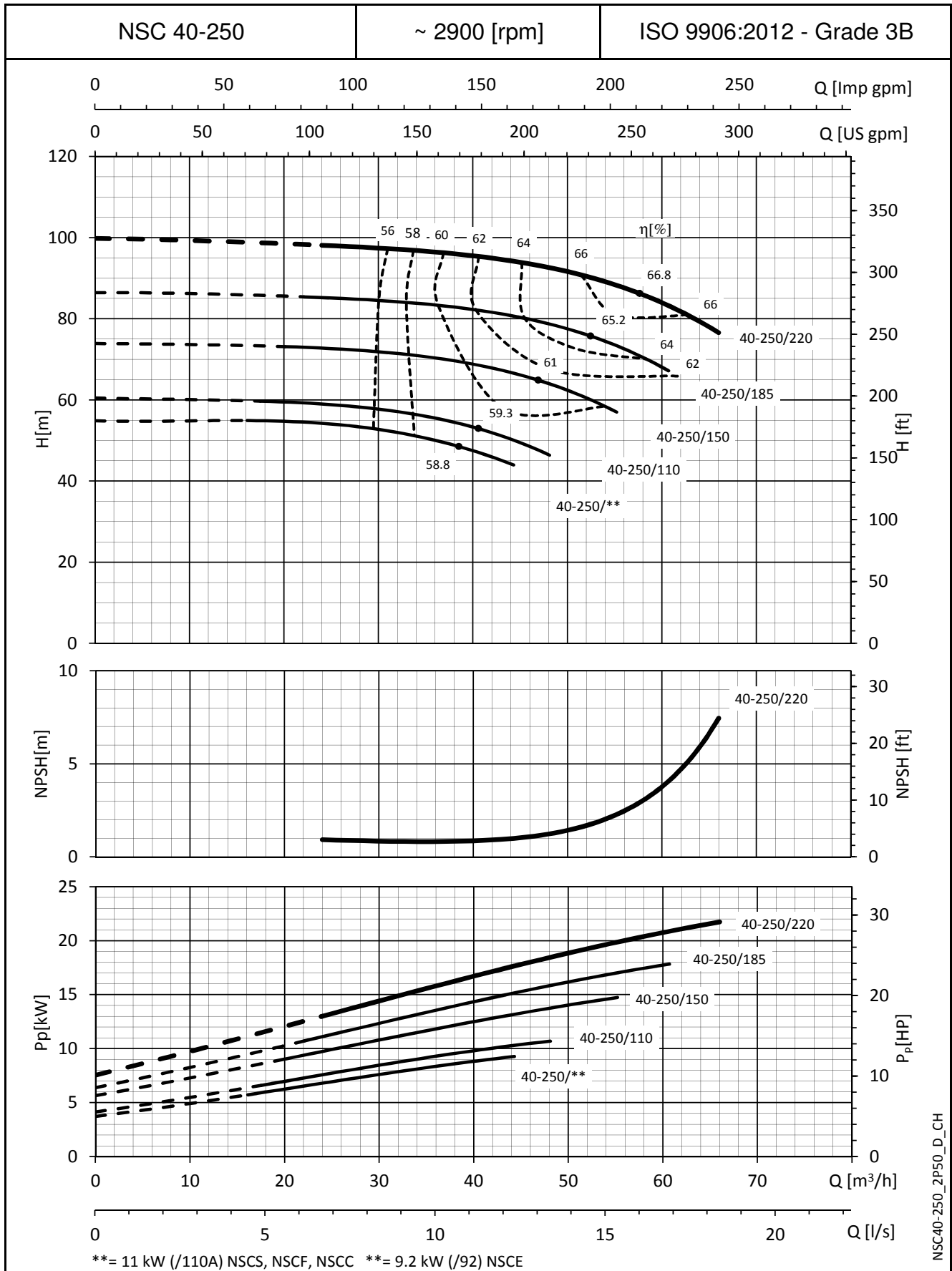
**OPERATING CHARACTERISTICS AT 50 Hz, 2 POLES**



The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

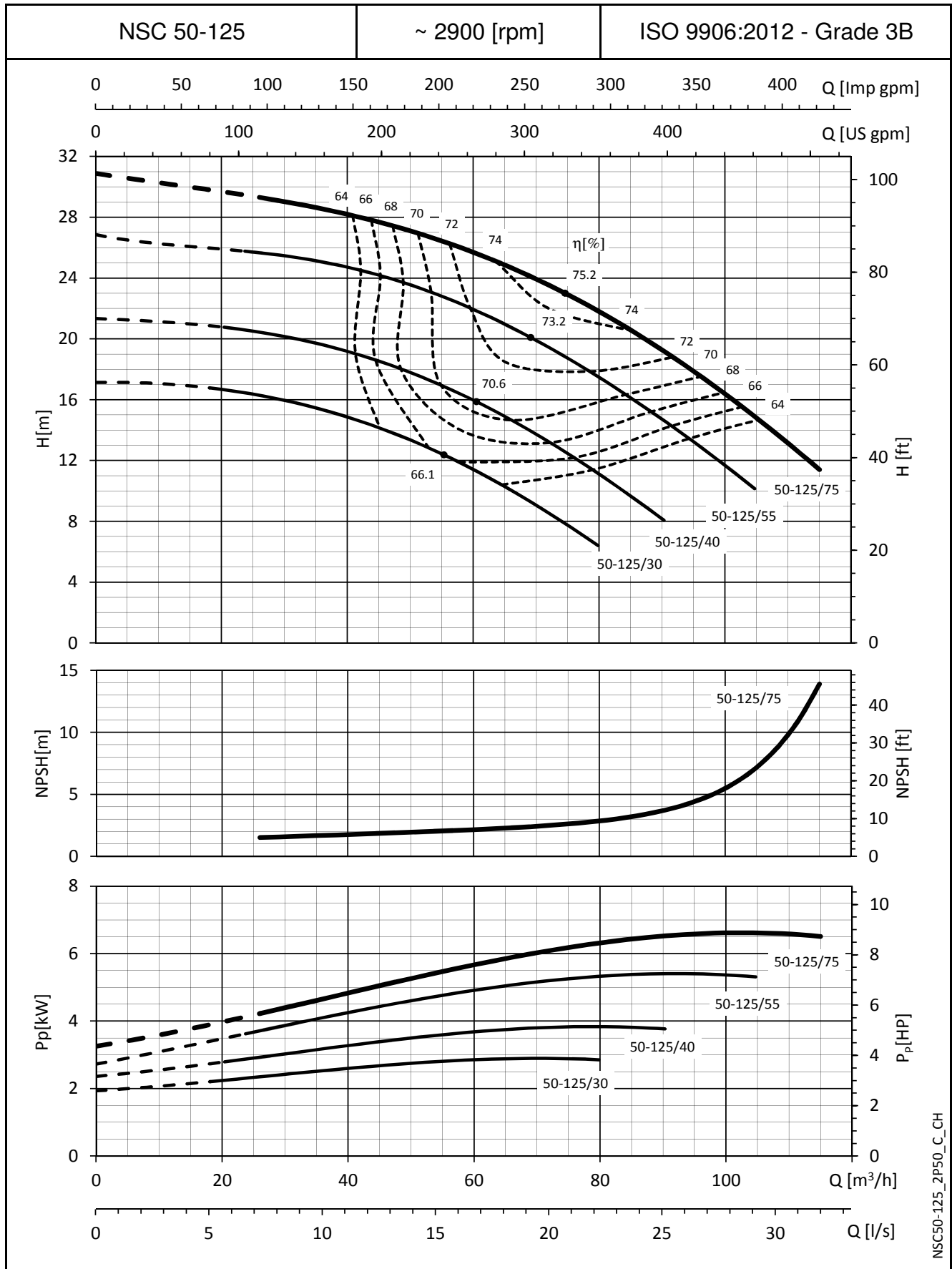
**OPERATING CHARACTERISTICS AT 50 Hz, 2 POLES**



The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 2 POLES**

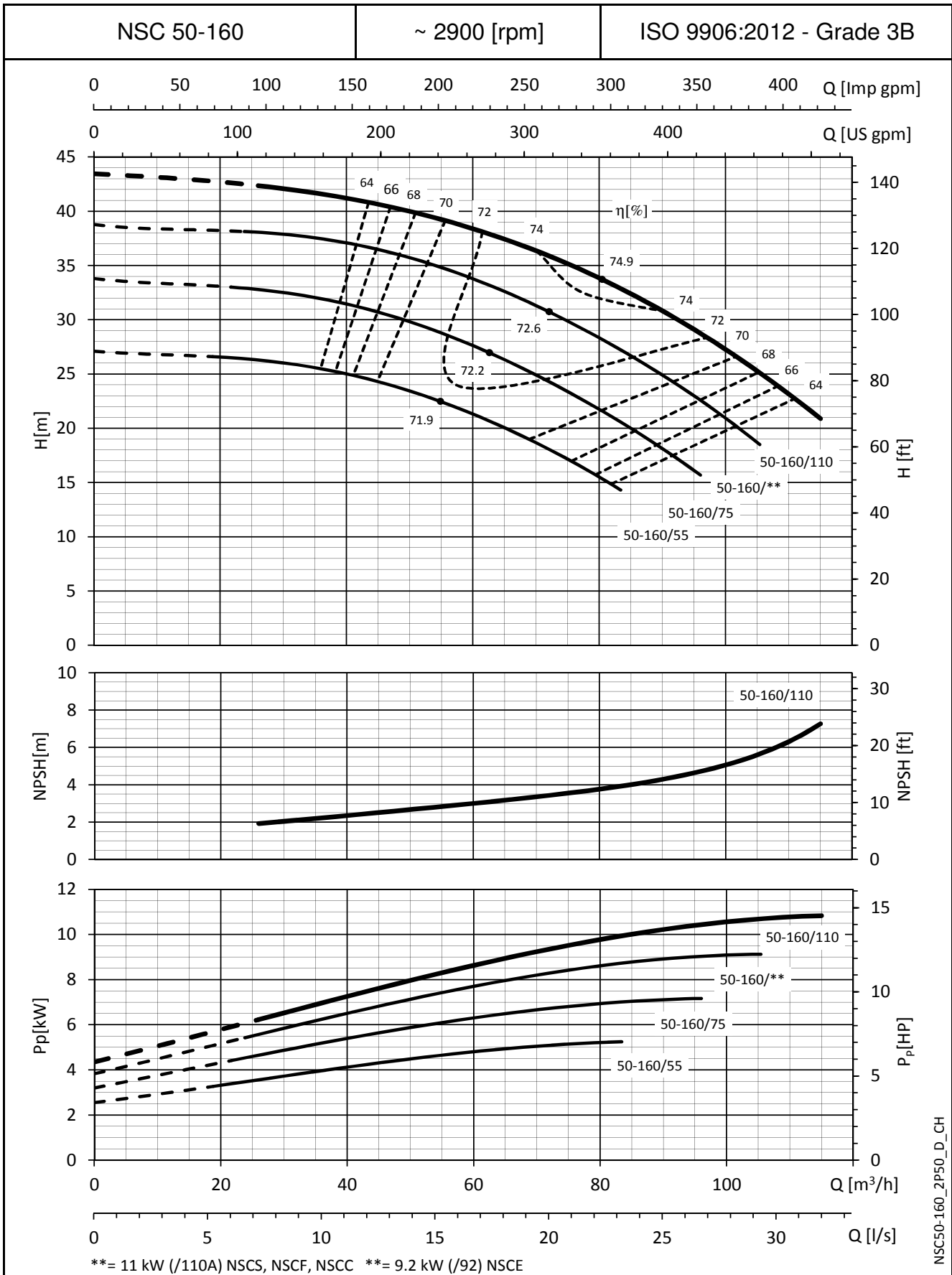


NSC50-125\_2P50\_C\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

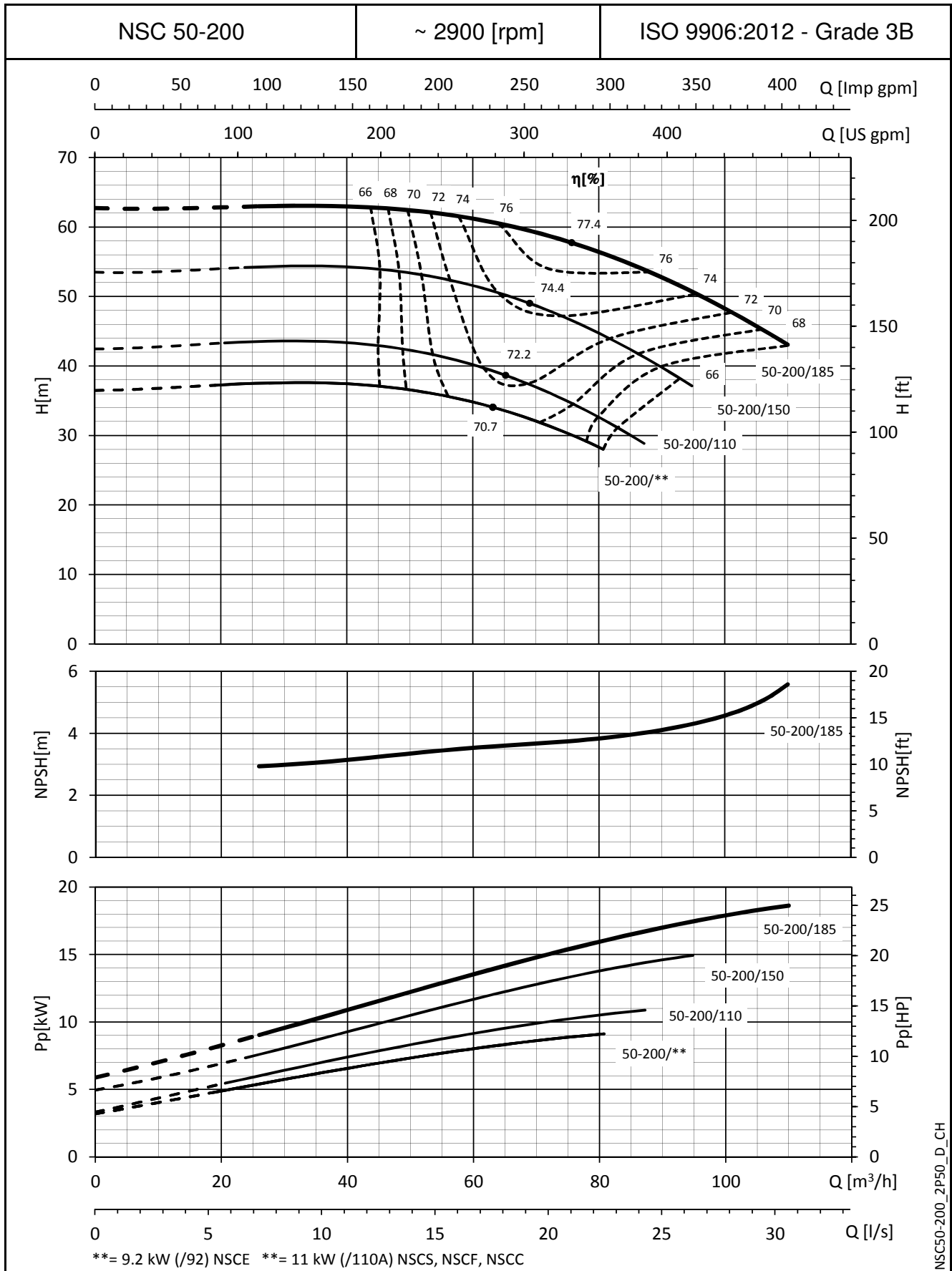
**OPERATING CHARACTERISTICS AT 50 Hz, 2 POLES**



The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 2 POLES**

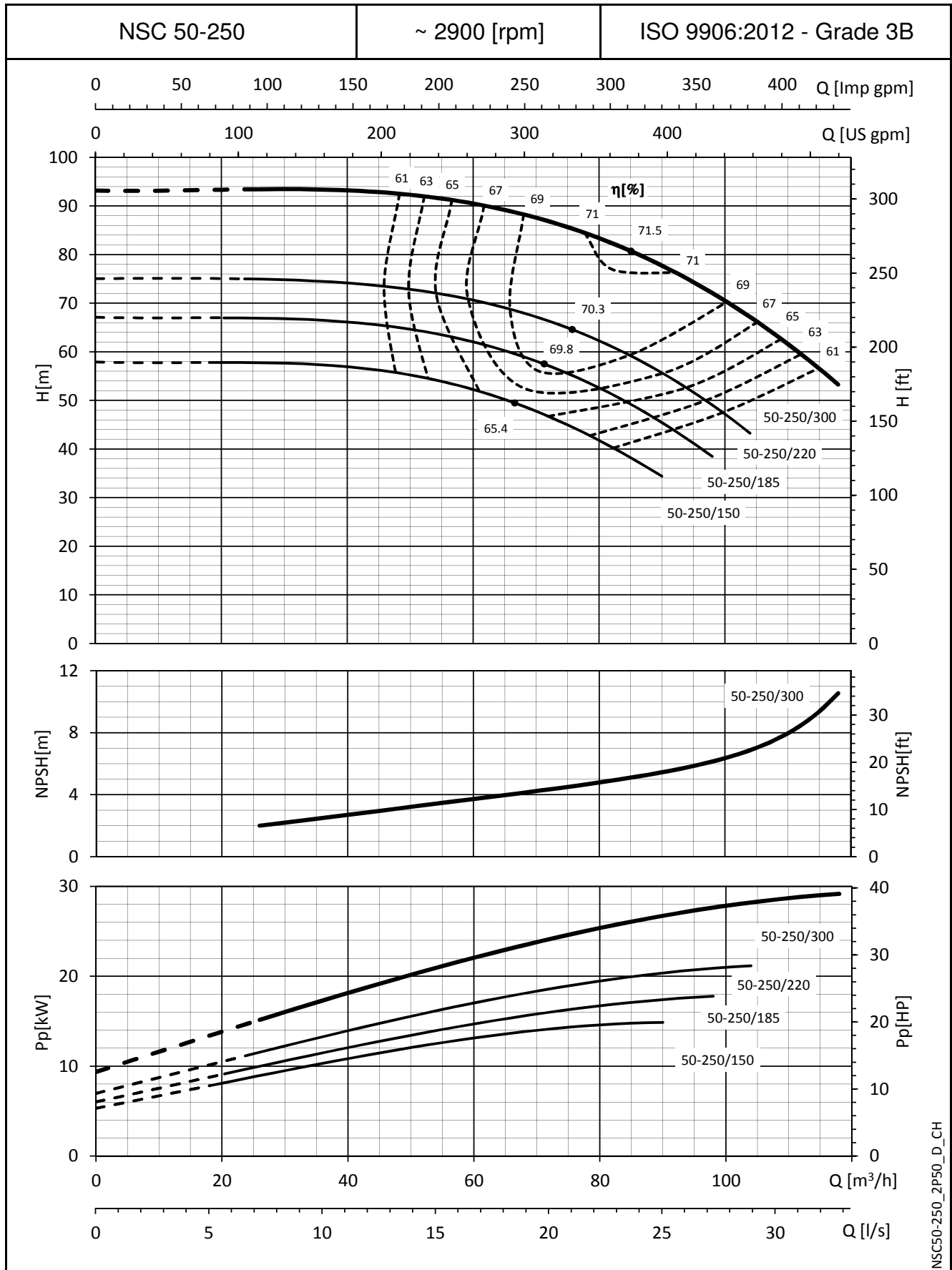


NSC50-200\_2P50\_D\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 2 POLES**

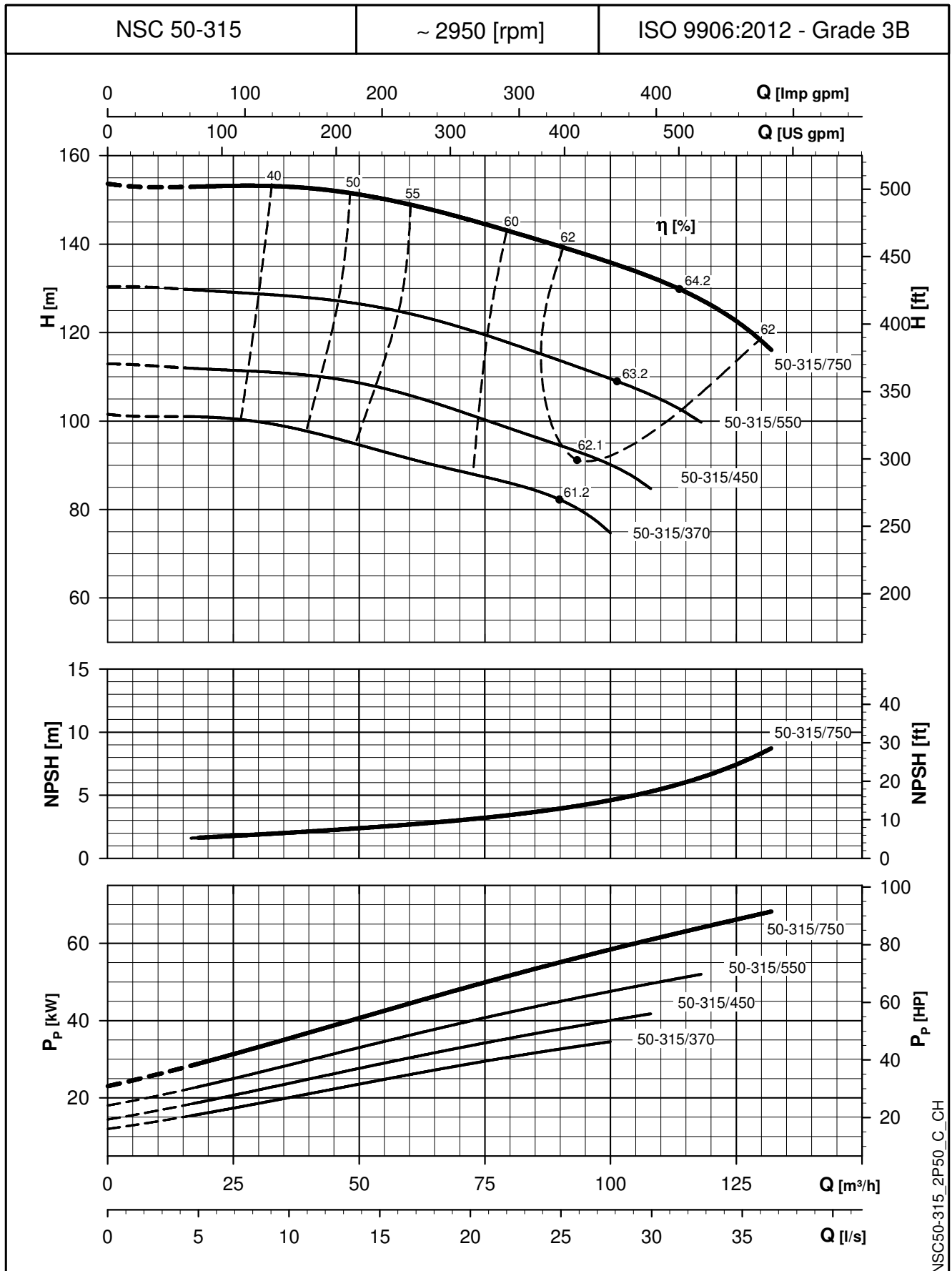


NSC50-250\_2P50\_D\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 2 POLES**

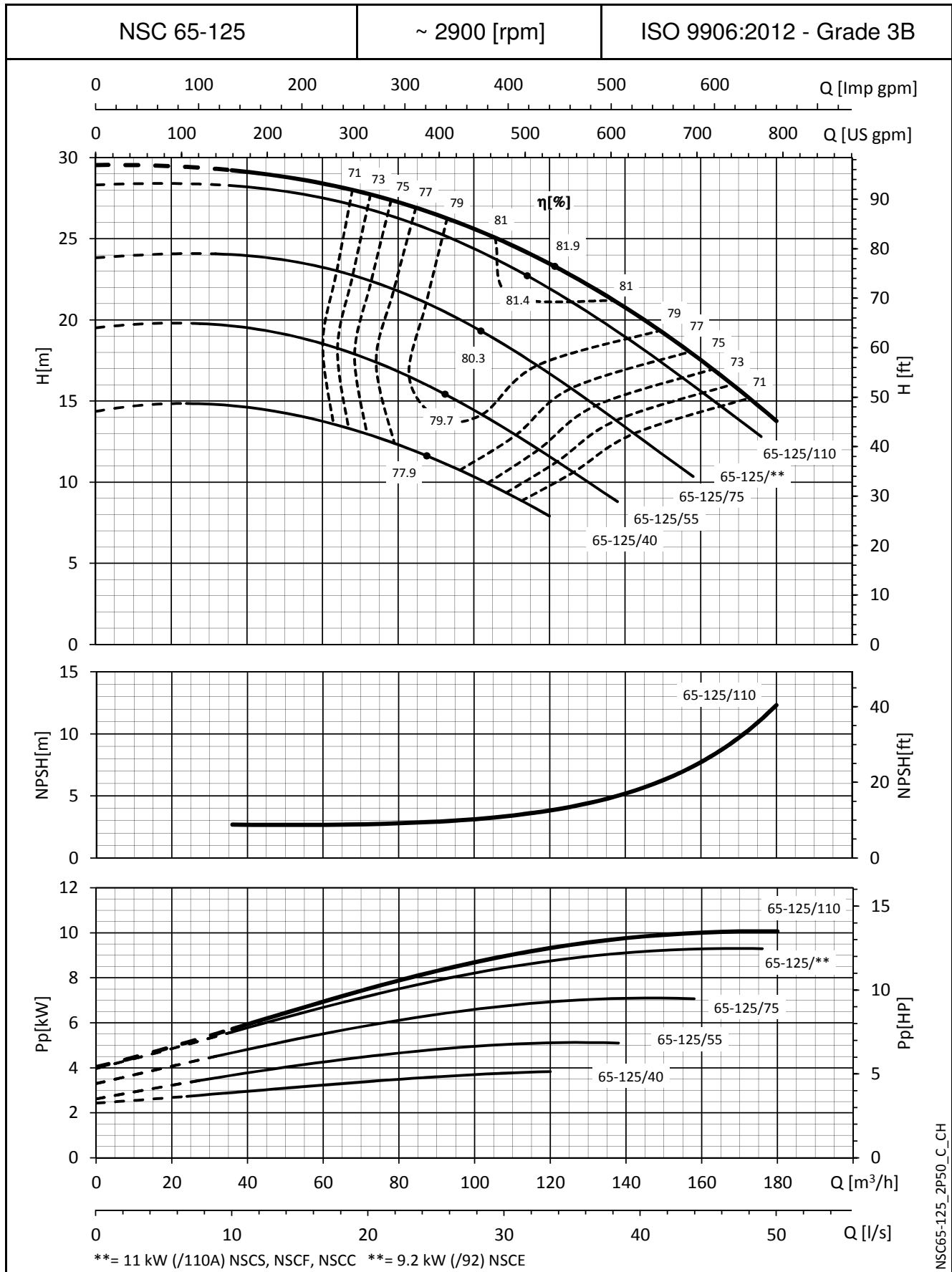


The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .



**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 2 POLES**

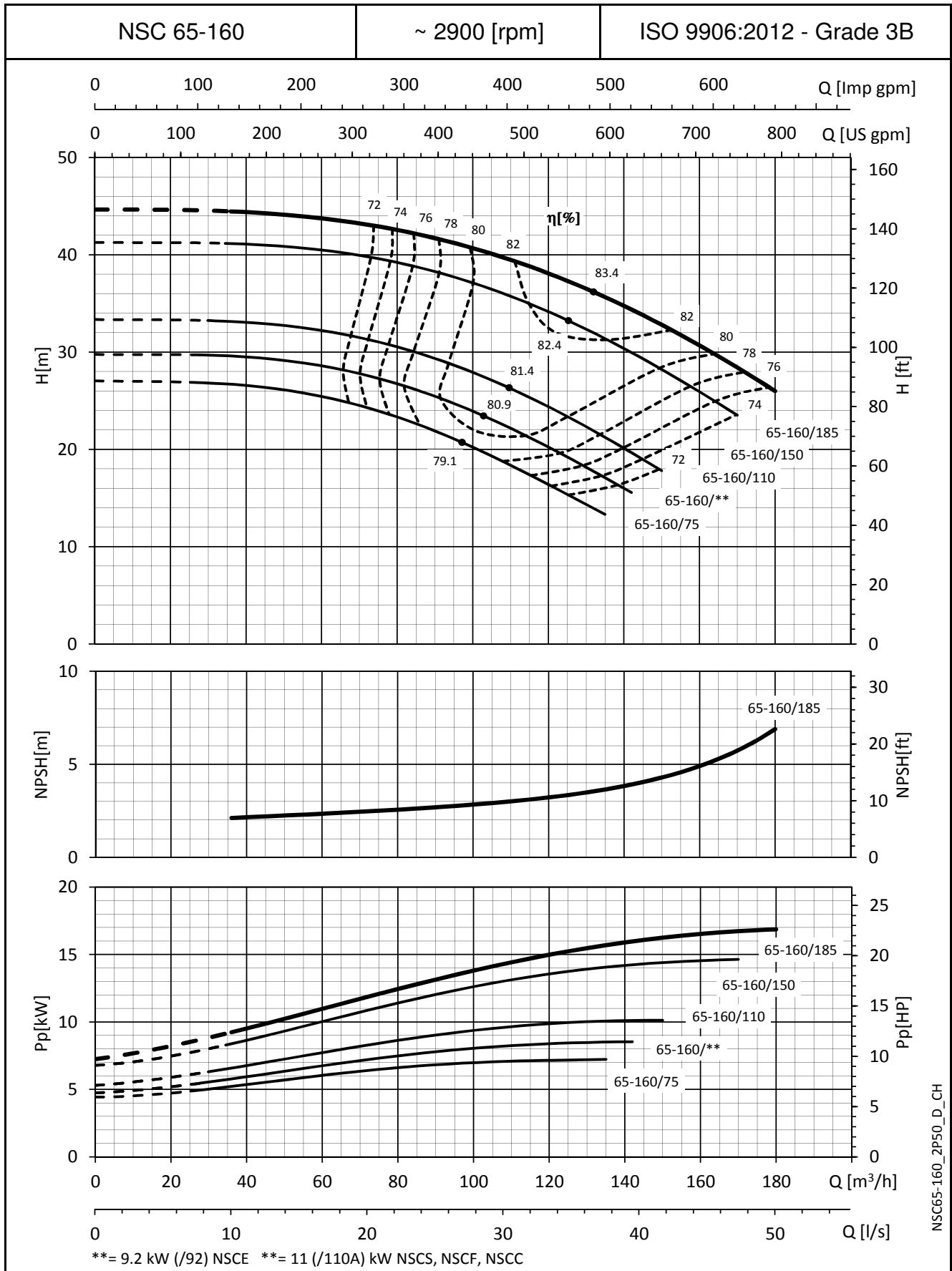


NSC65-125\_2P50\_C\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 2 POLES**

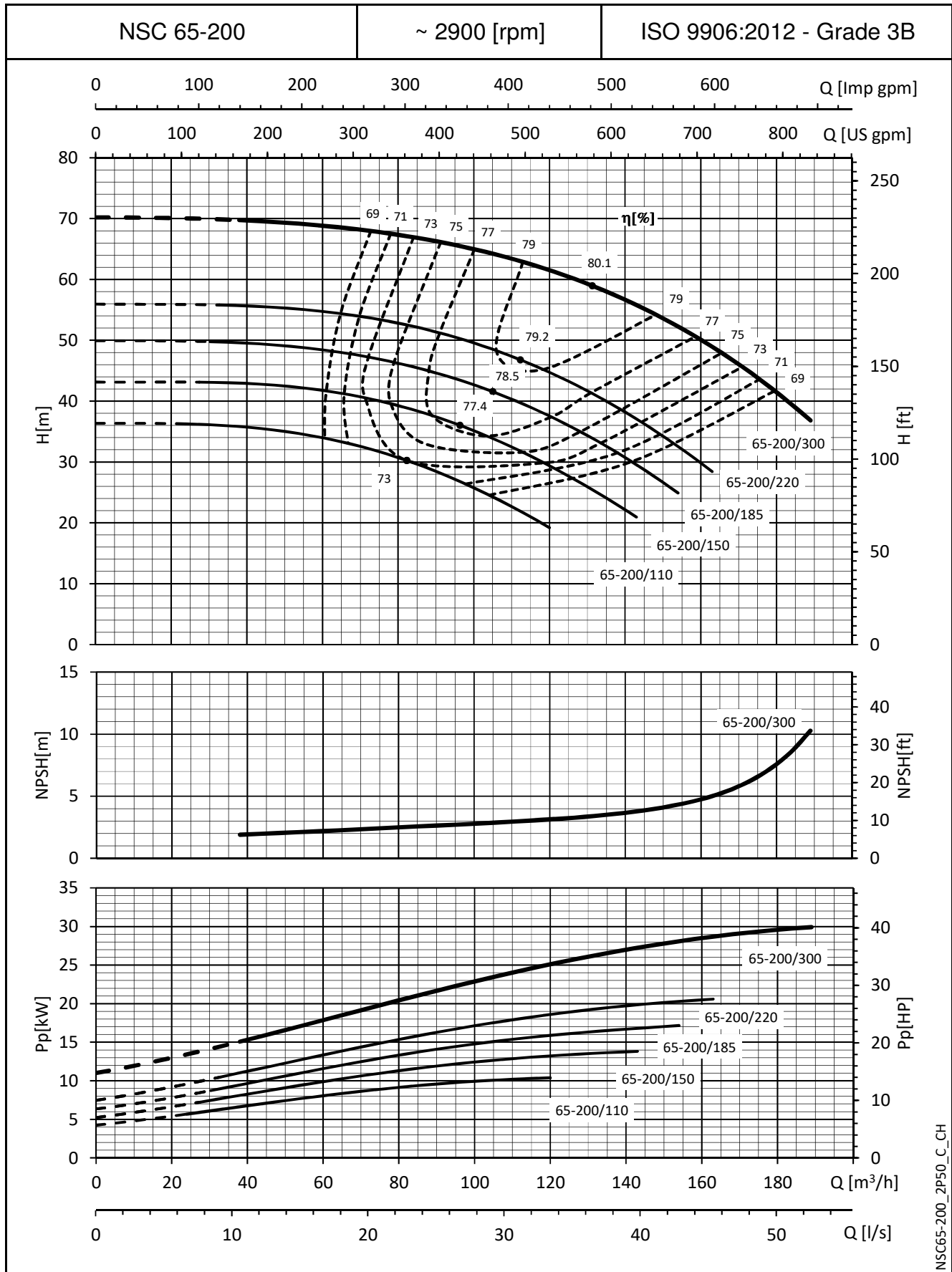


NSC65-160\_2P50\_D\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 2 POLES**

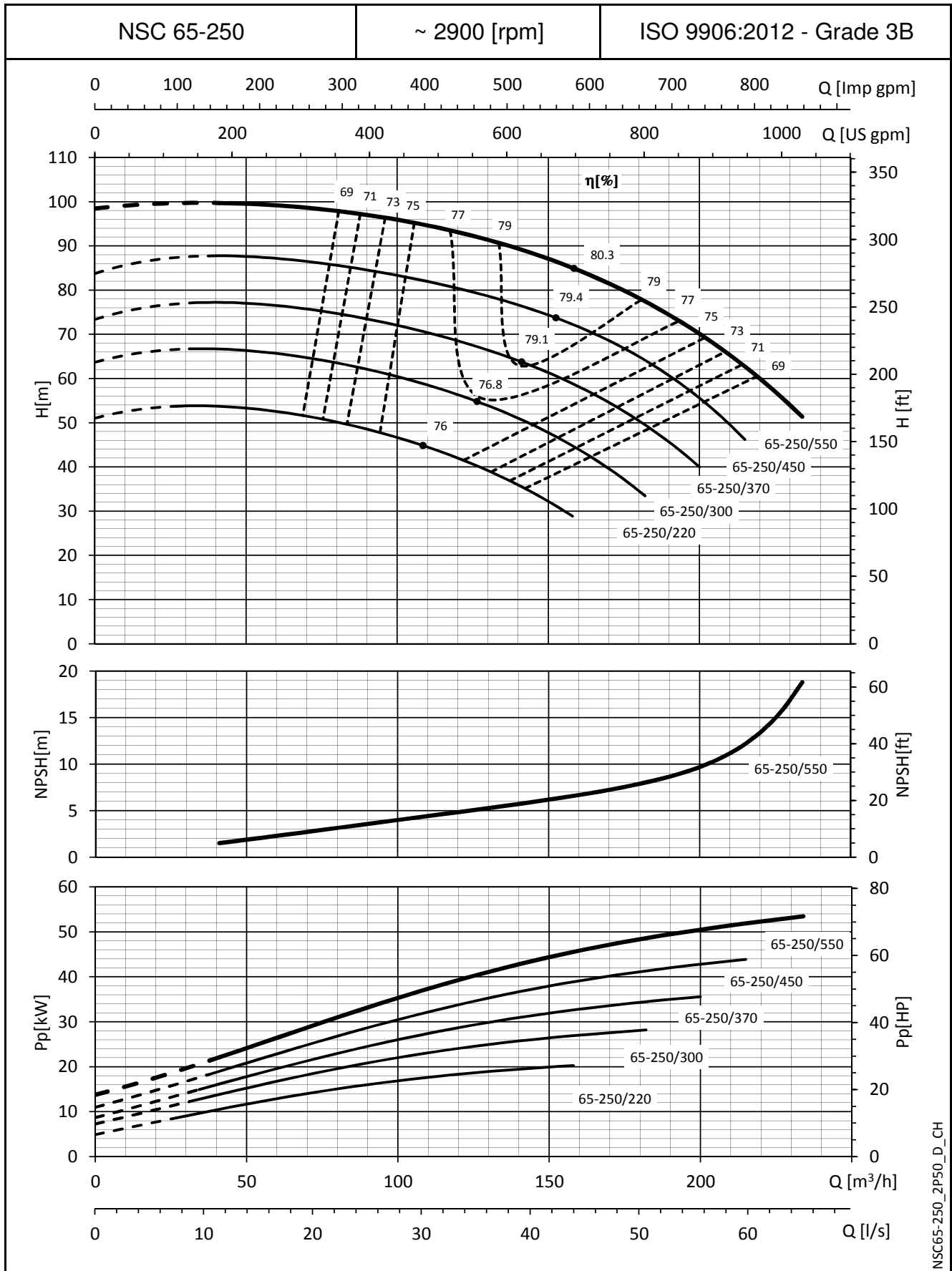


NSC65-200\_2P50\_C\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 2 POLES**

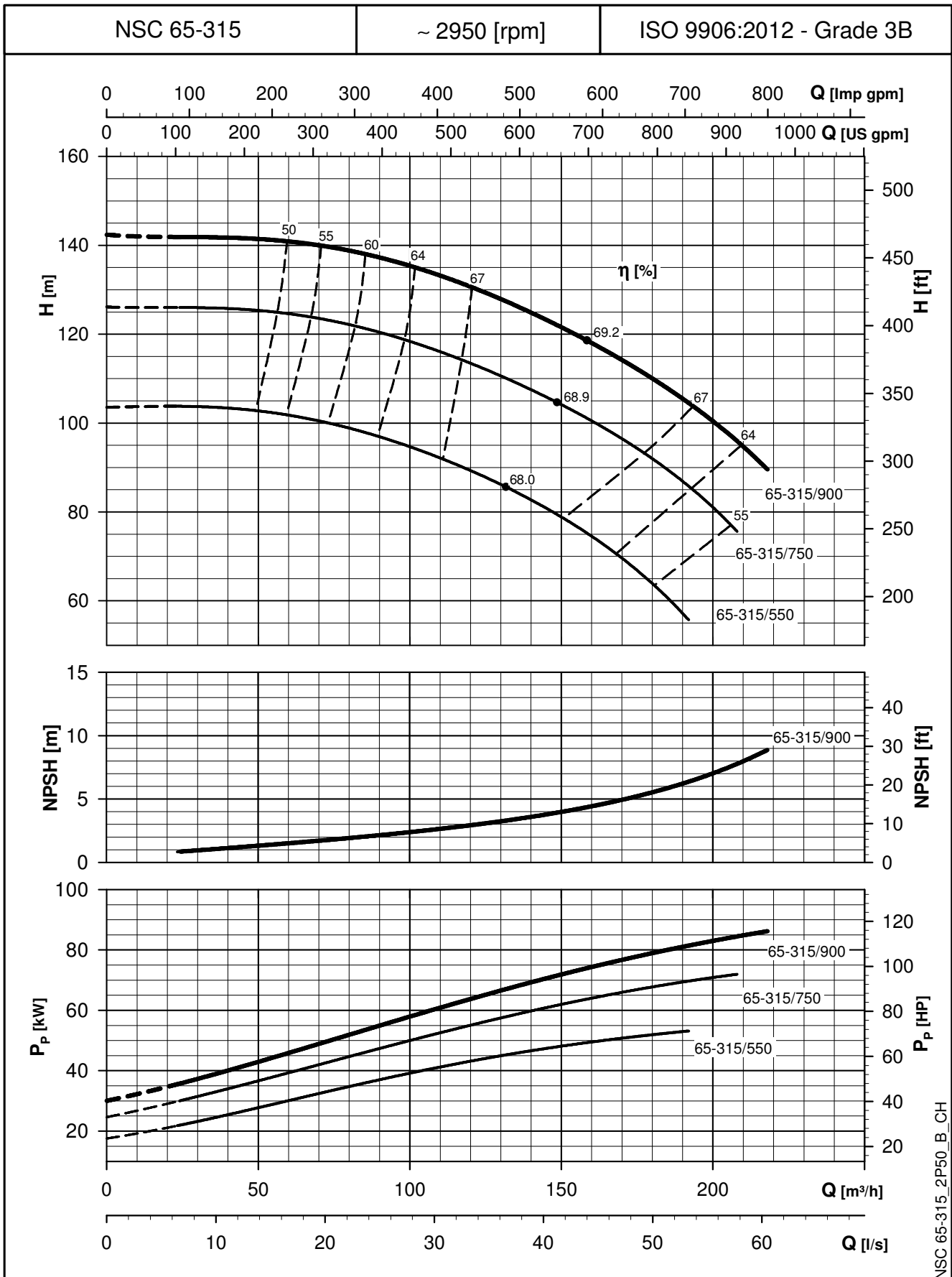


NSC65-250\_2P50\_D\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 2 POLES**

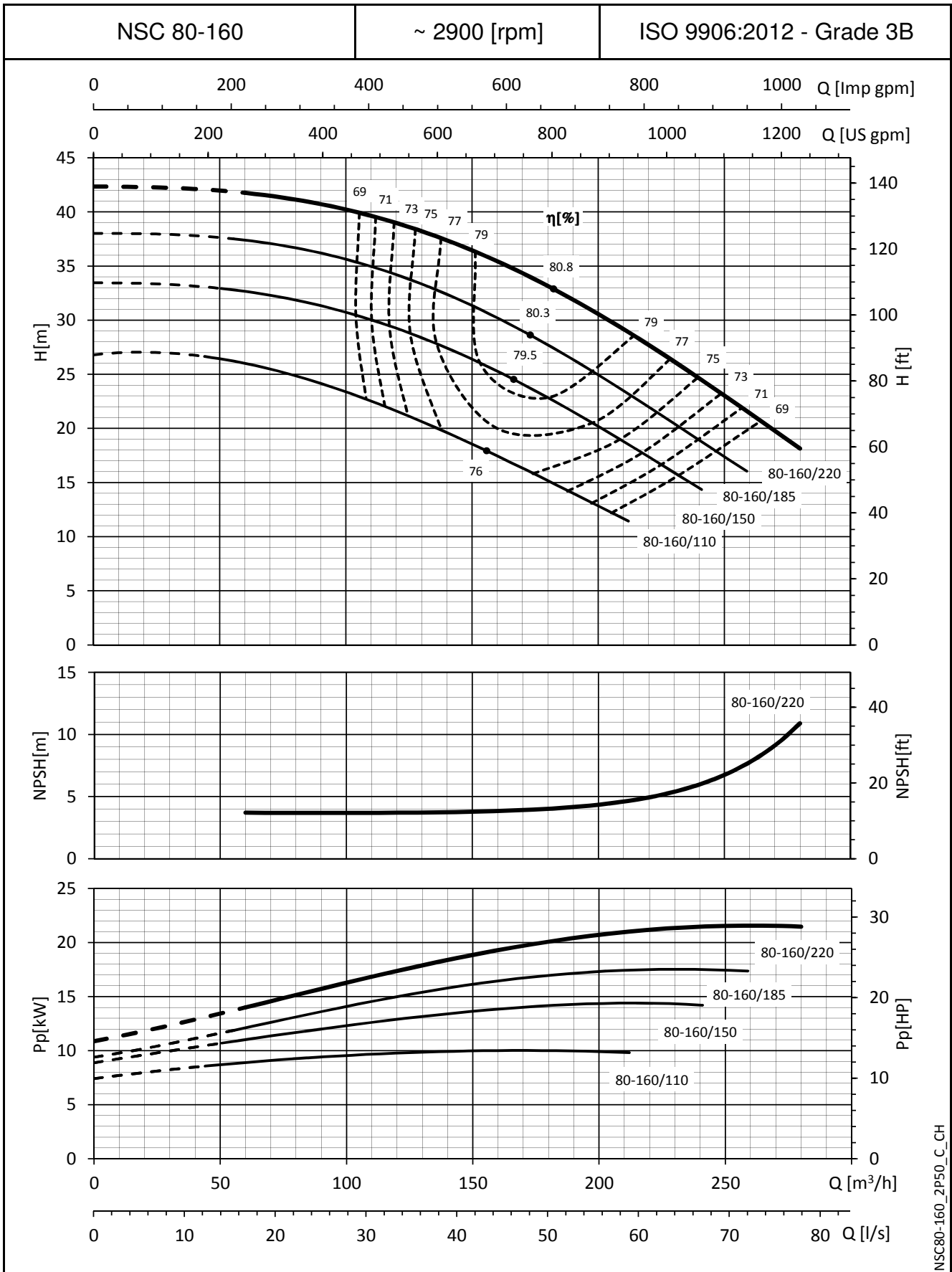


NSC 65-315\_2P50\_B\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 2 POLES**

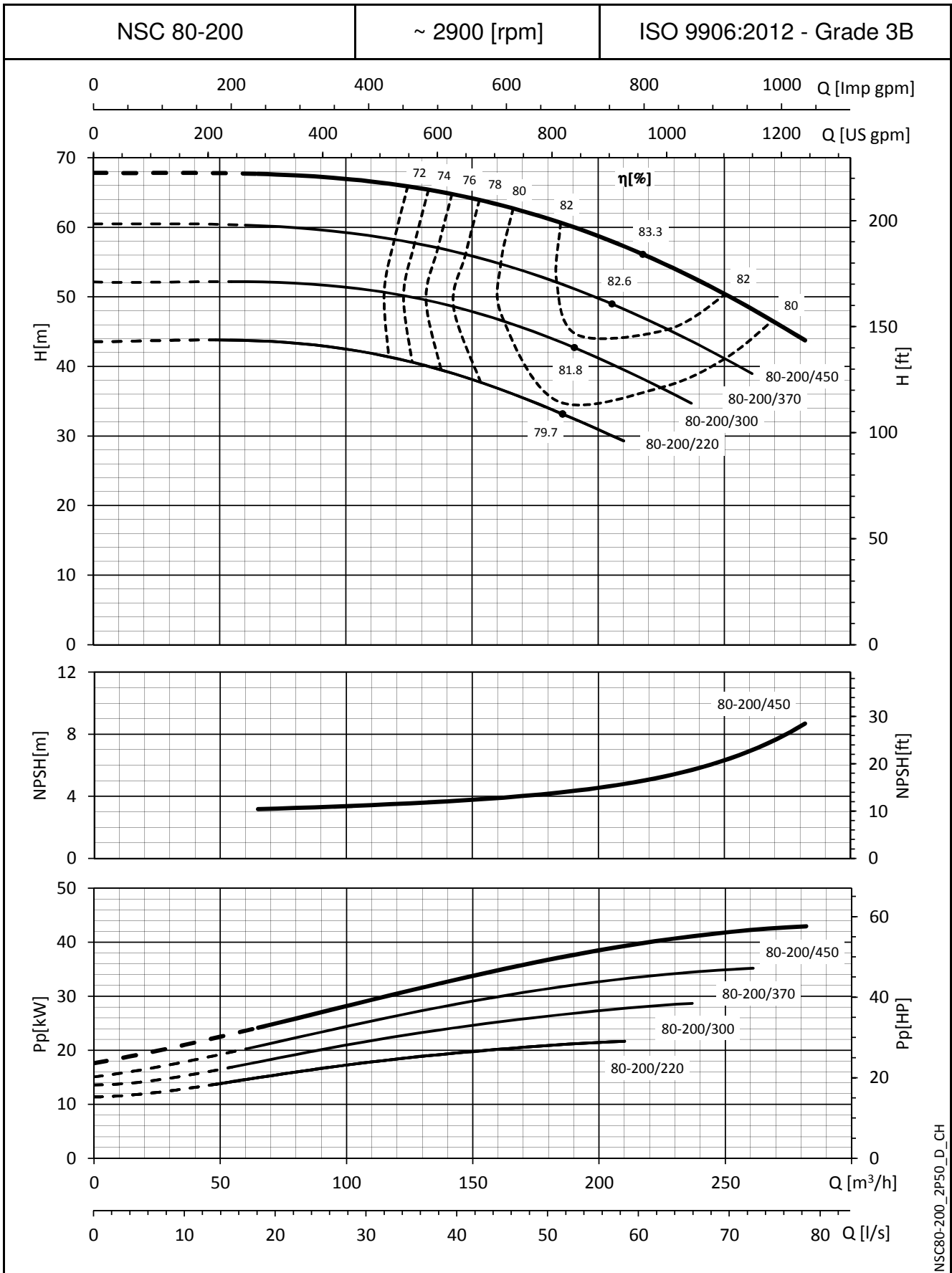


NSC80-160\_2P50\_C\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

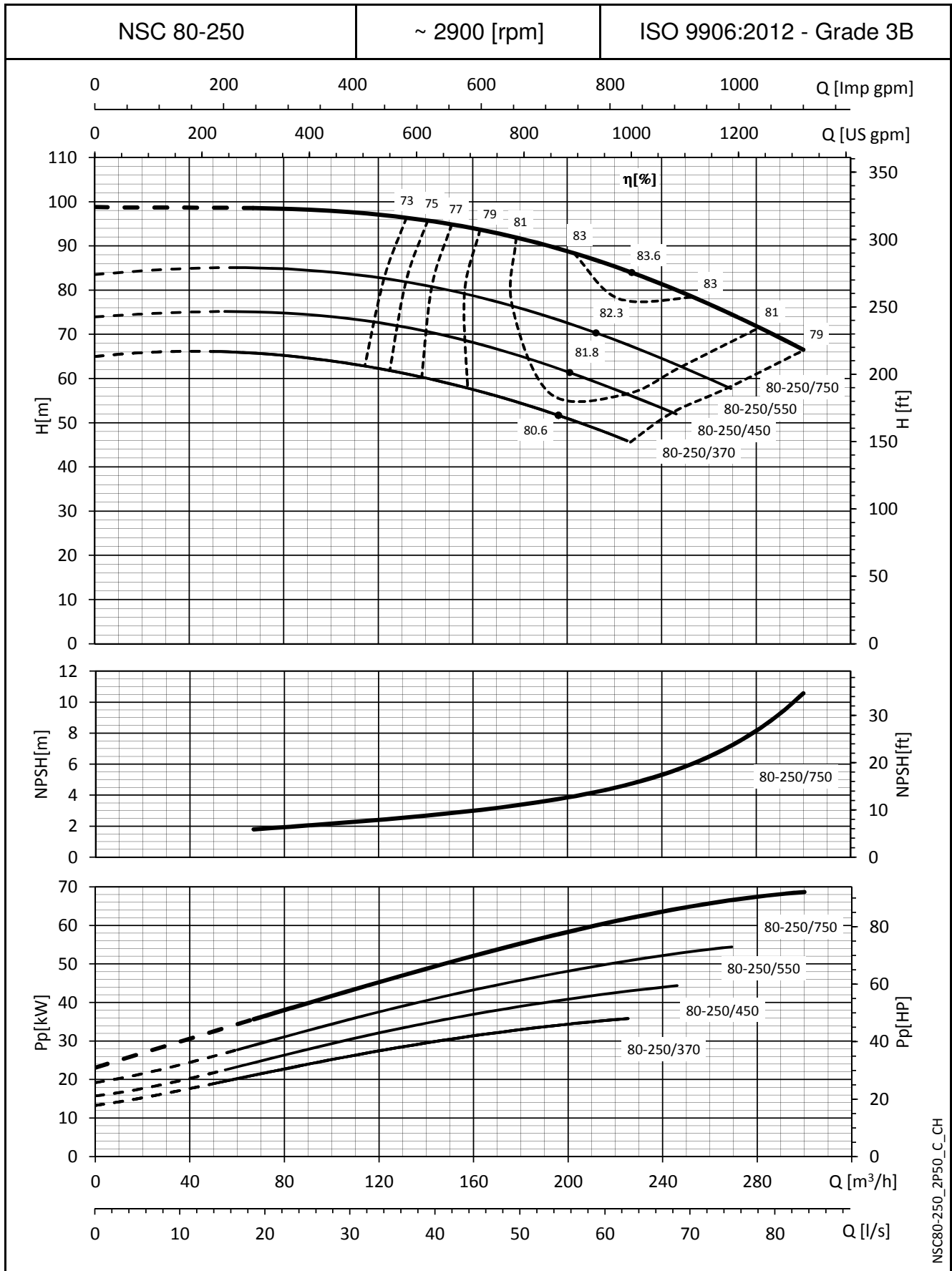
**OPERATING CHARACTERISTICS AT 50 Hz, 2 POLES**



NSC80-200\_2P50\_D\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**  
**OPERATING CHARACTERISTICS AT 50 Hz, 2 POLES**



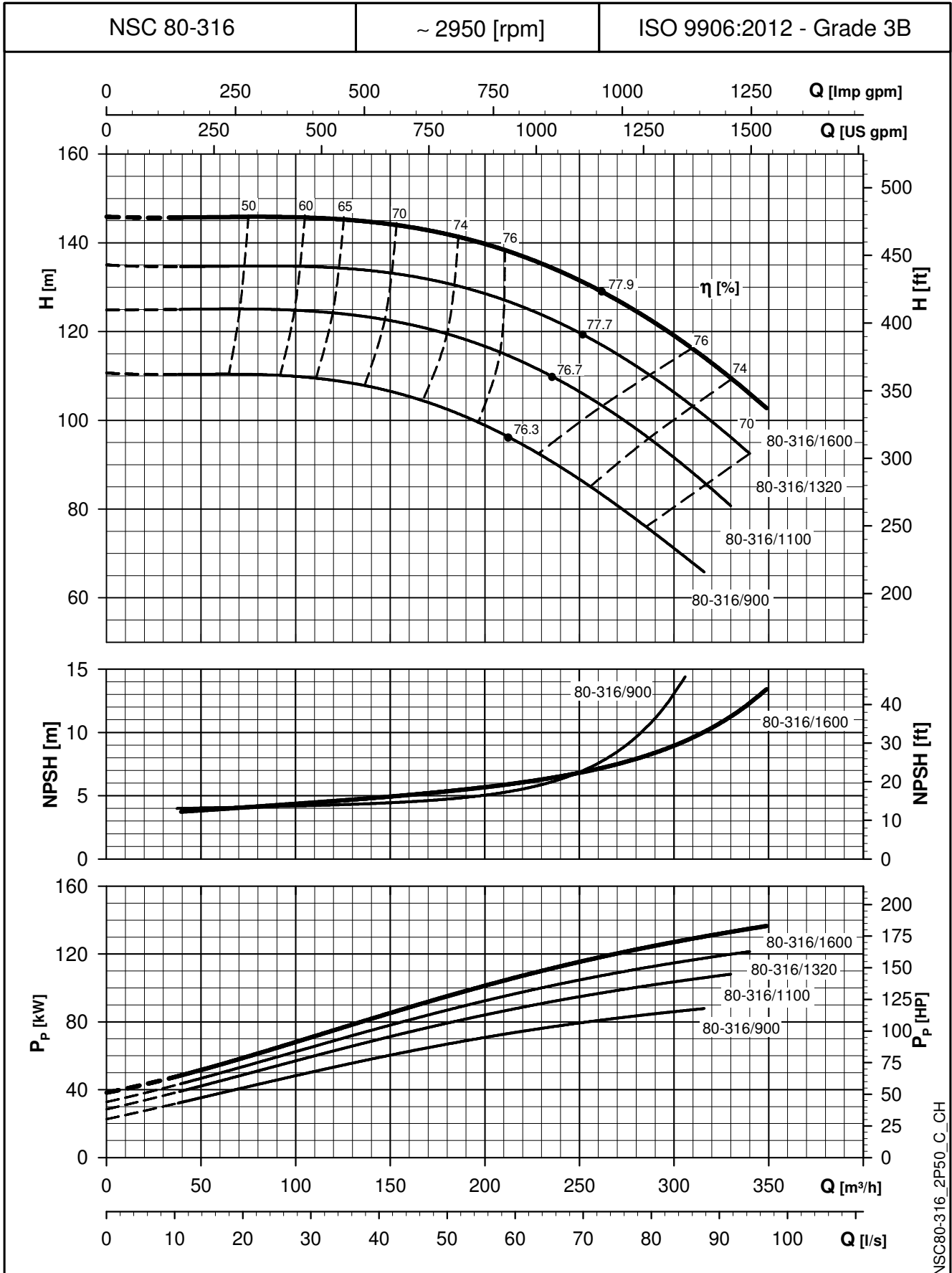
NSC80-250\_2P50\_C\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .



**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 2 POLES**

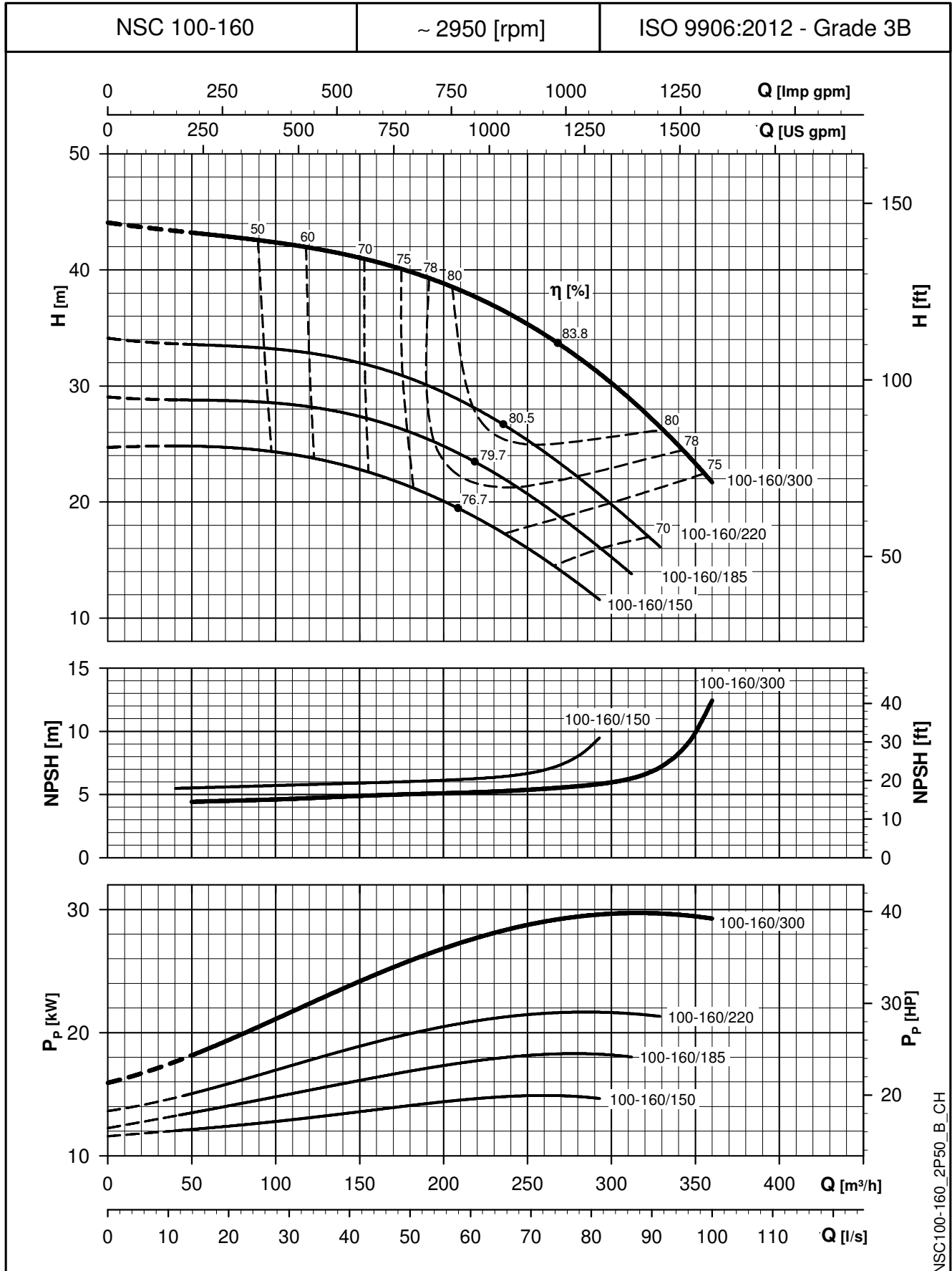


NSC80-316\_2P50\_C\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

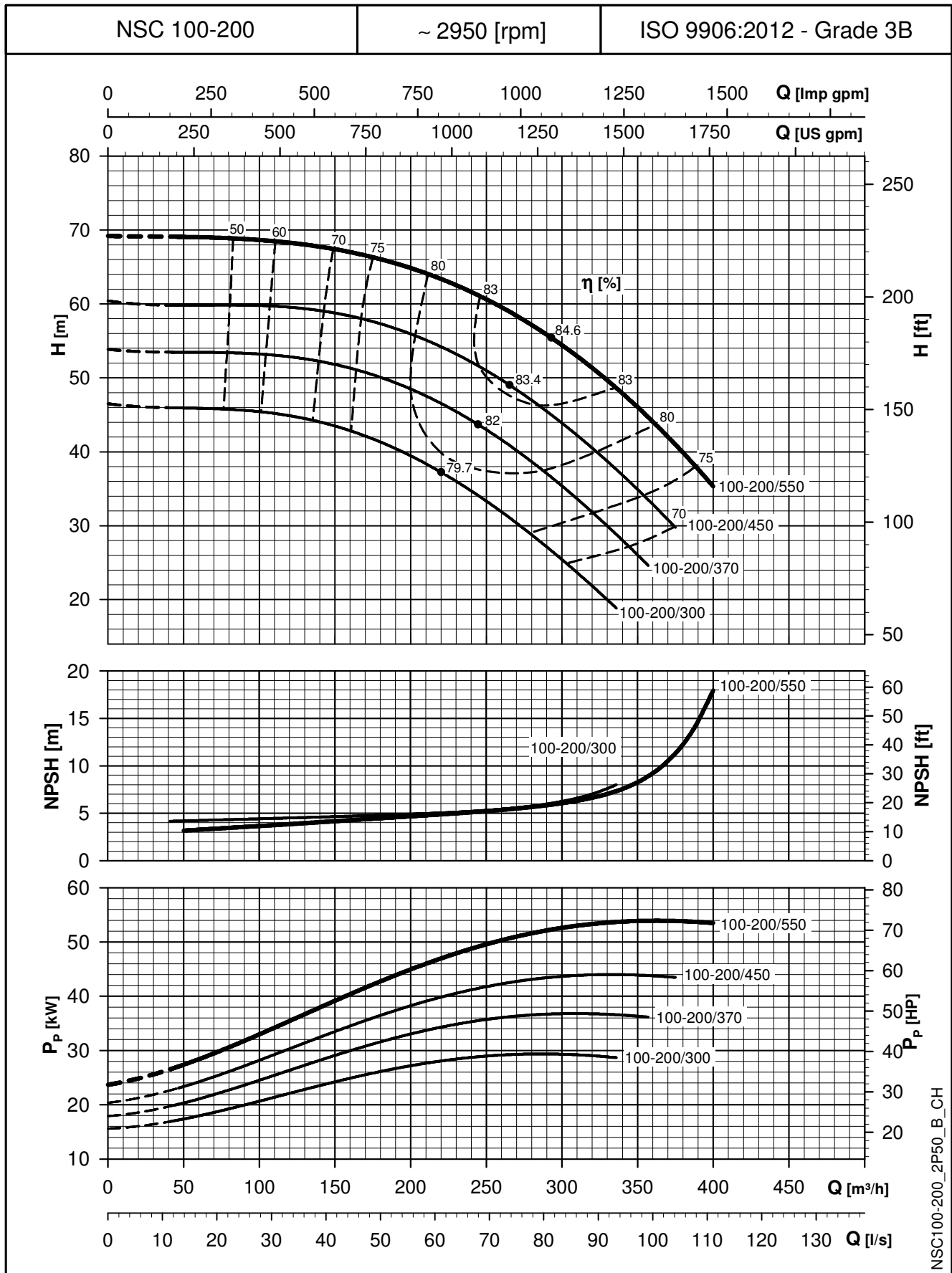
**OPERATING CHARACTERISTICS AT 50 Hz, 2 POLES**



The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

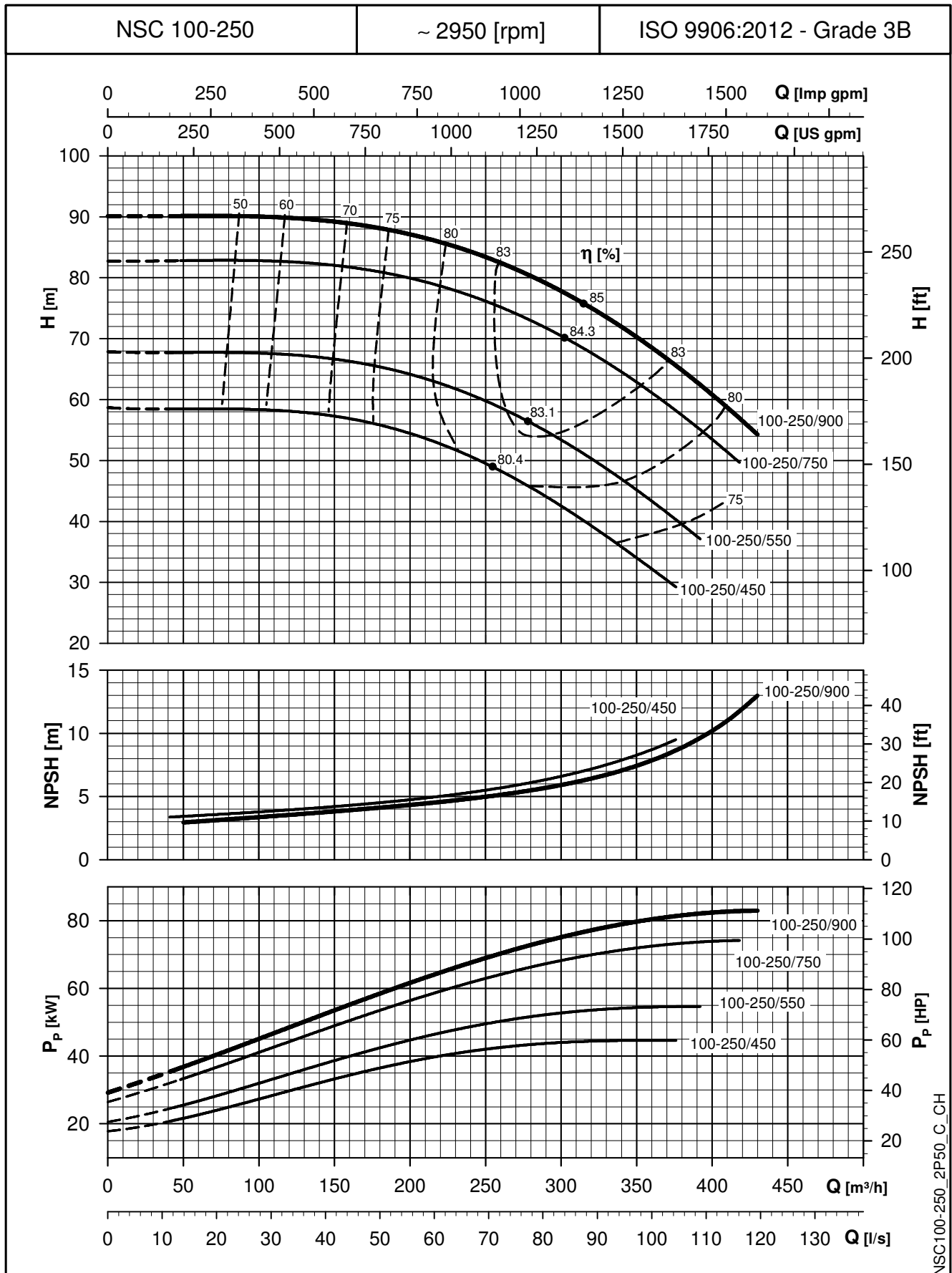
**OPERATING CHARACTERISTICS AT 50 Hz, 2 POLES**



The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 2 POLES**

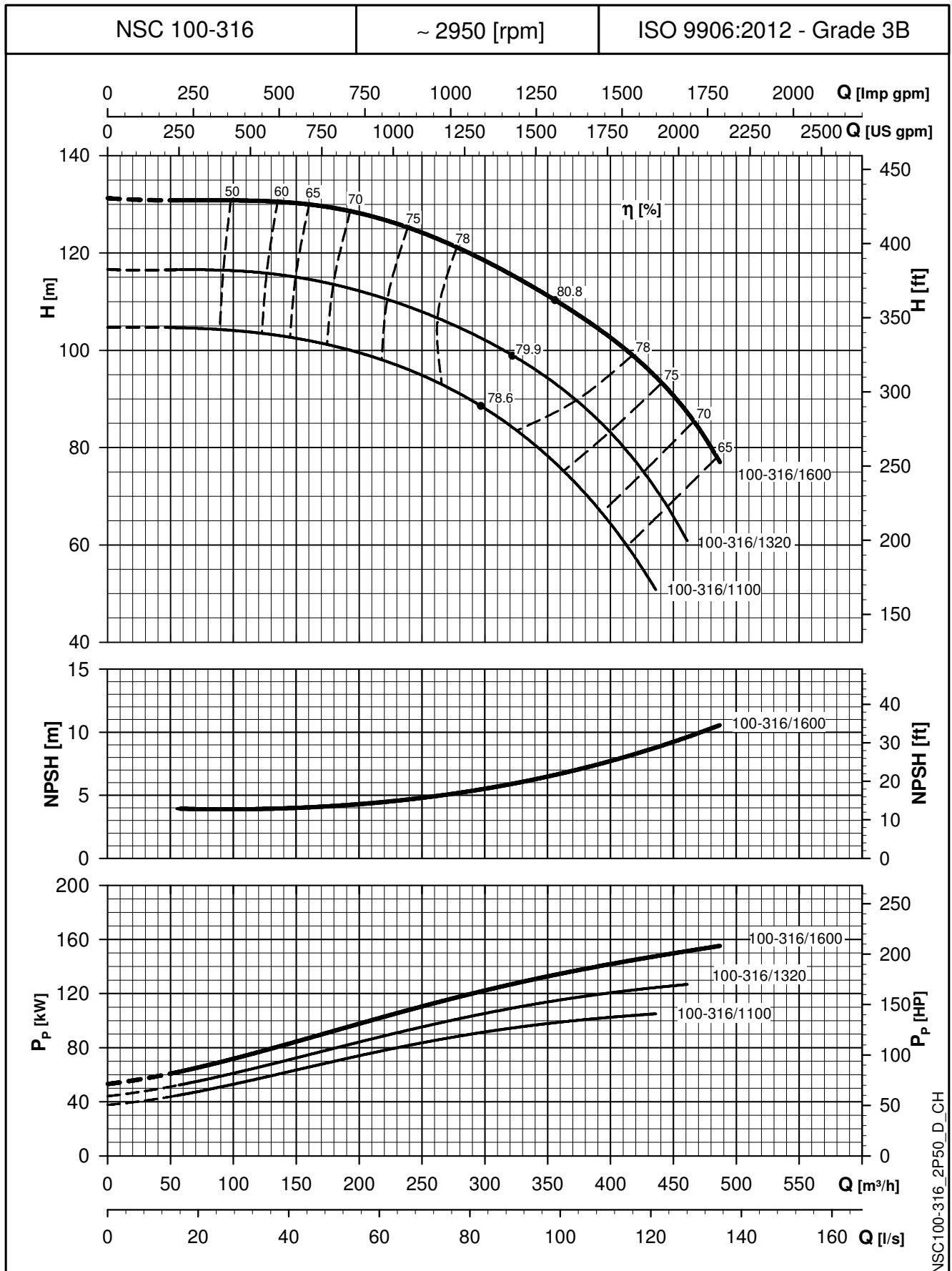


NSC100-250\_2P50\_C\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 2 POLES**

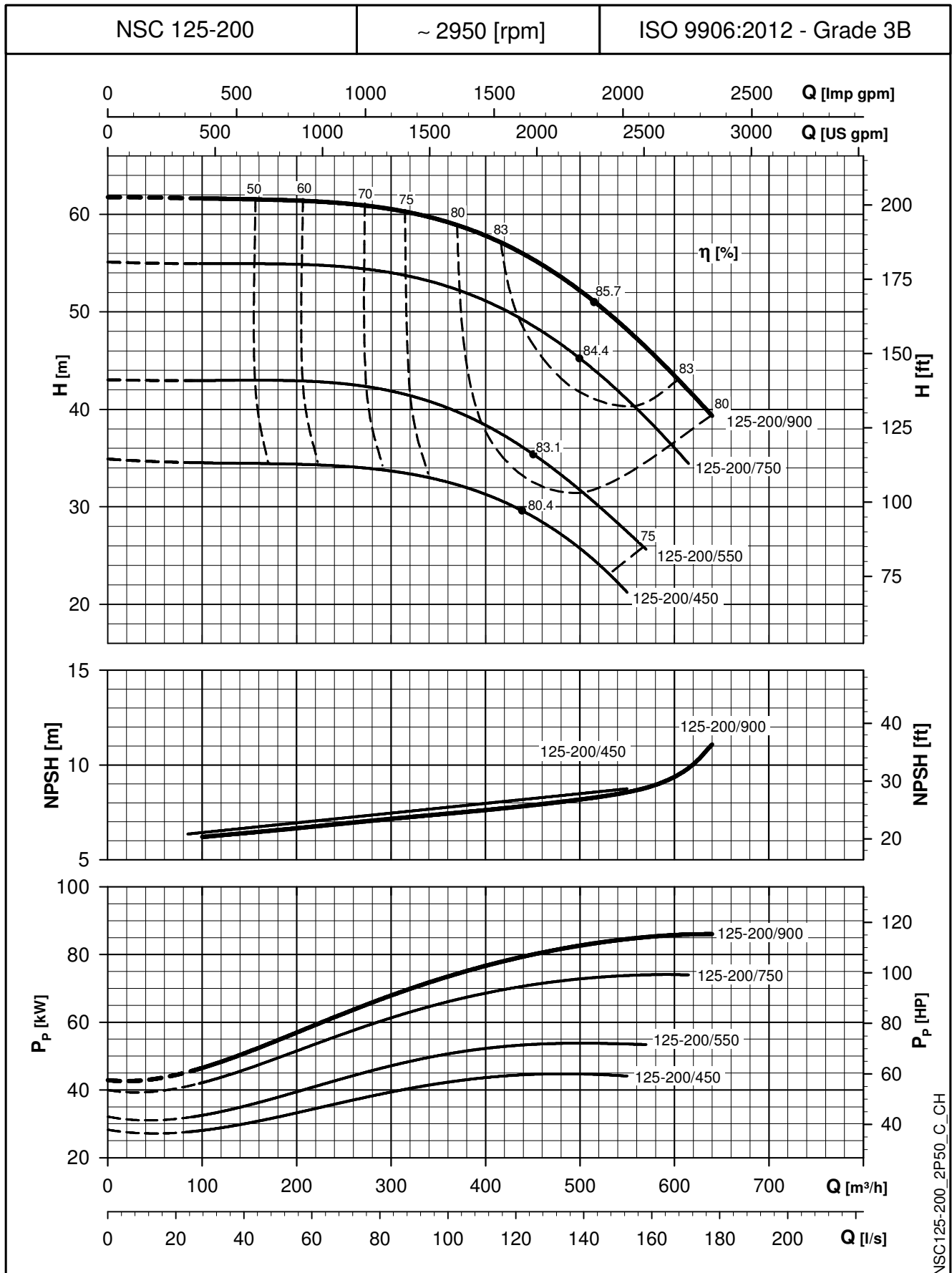


NSC100-316\_2P50\_D\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 2 POLES**

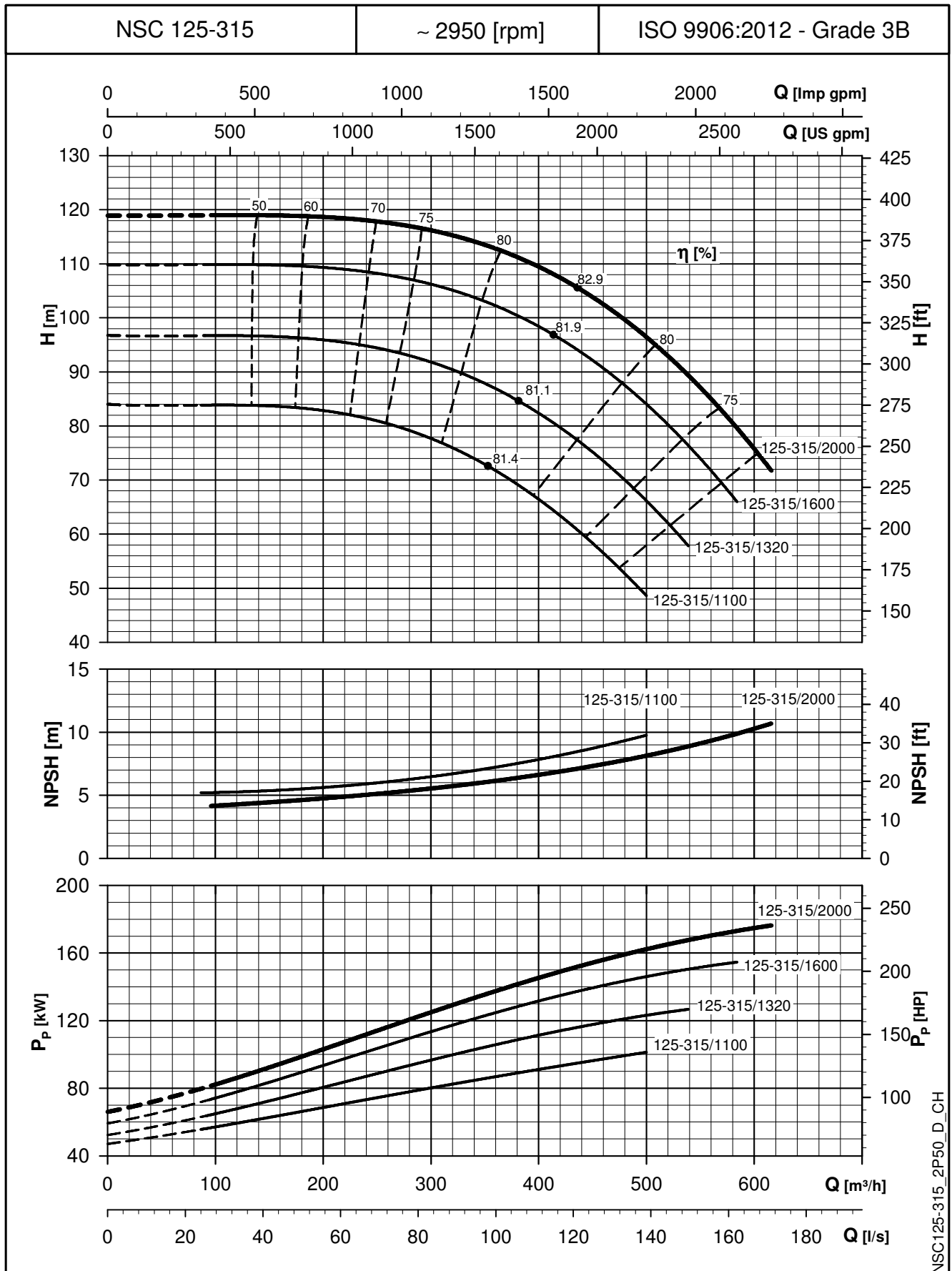


NSC125-200\_2P50\_C\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 2 POLES**

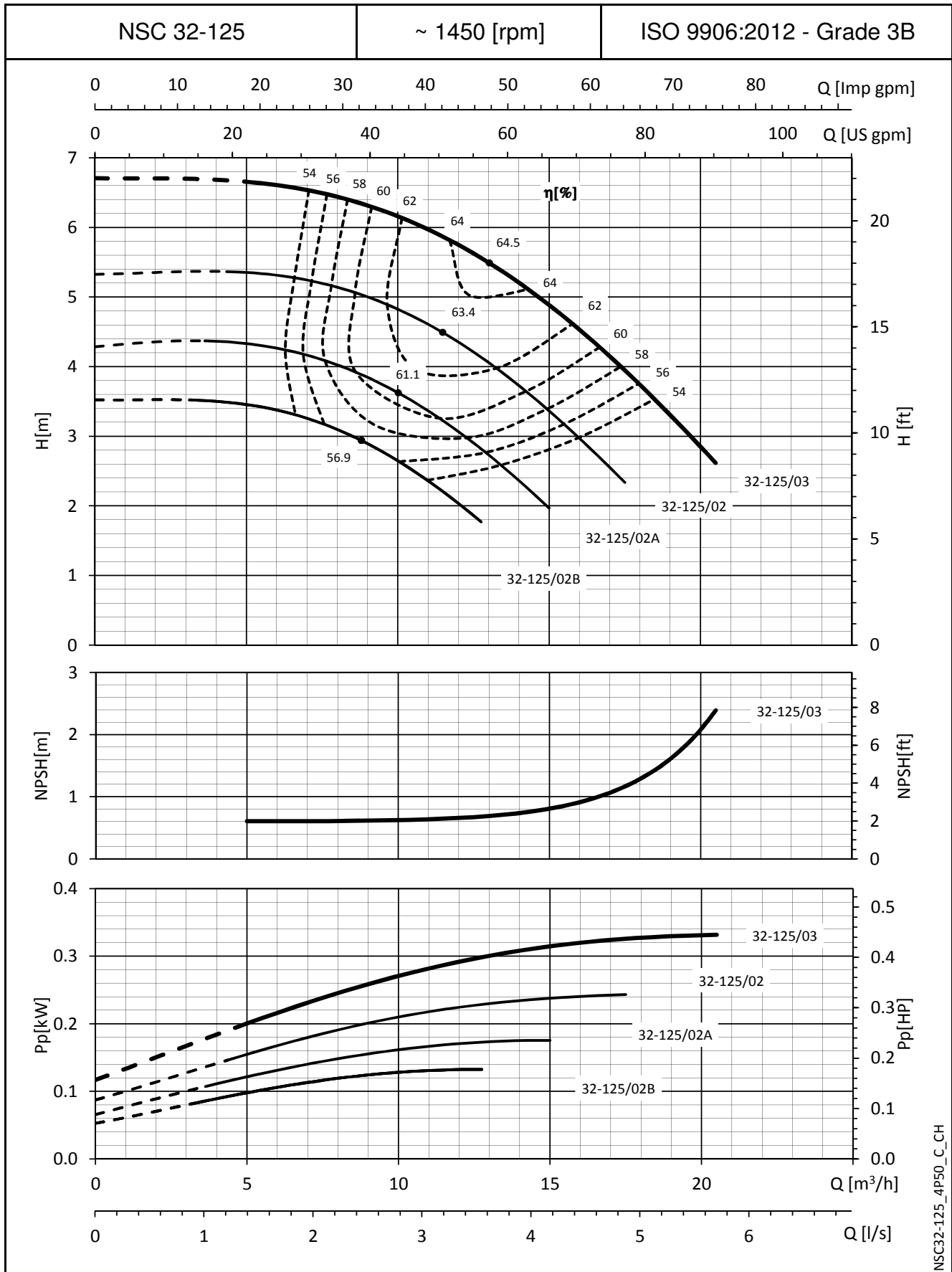


NSC125-315\_2P50\_D\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**



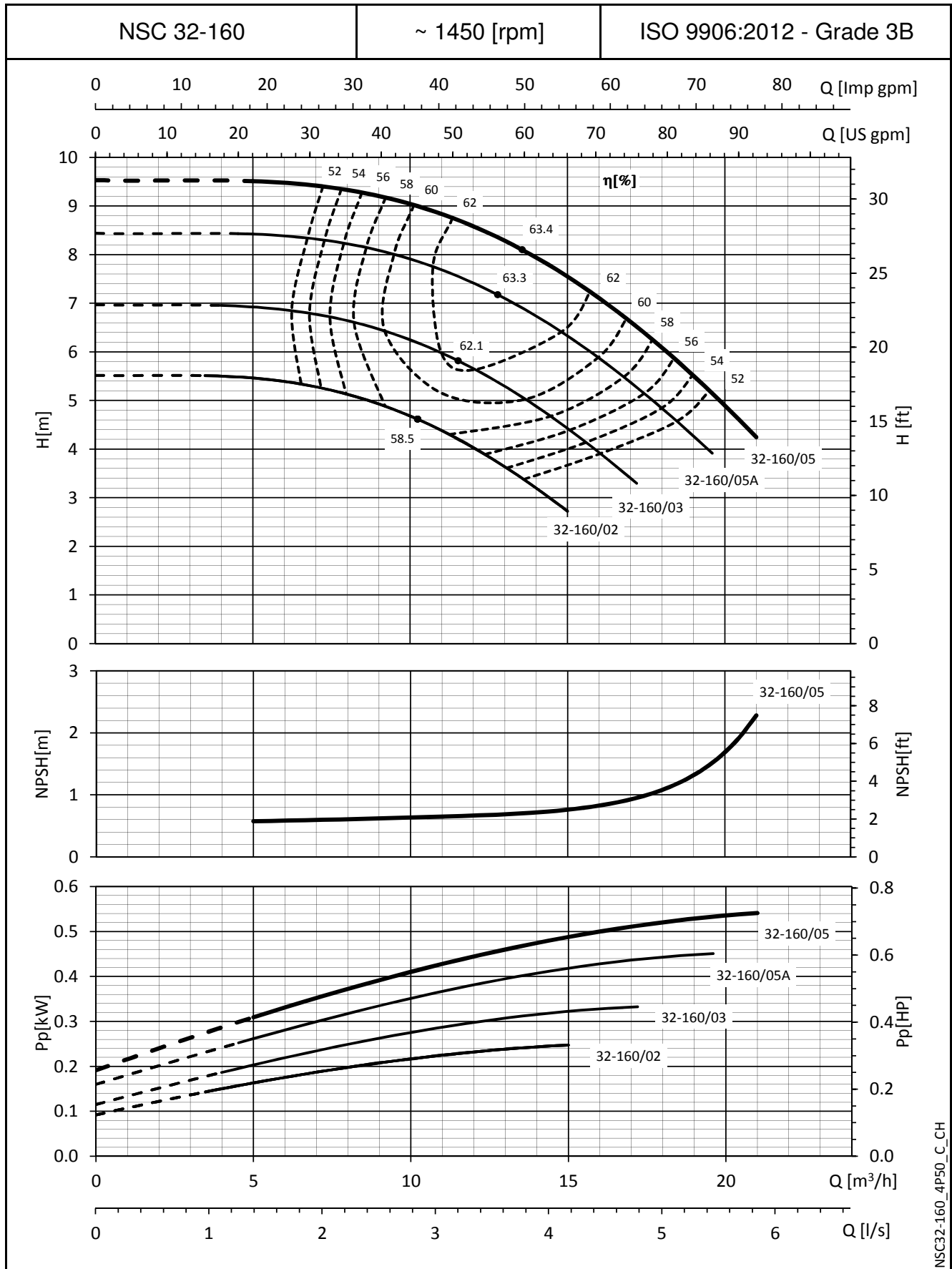
NSC32-125\_4P50\_C\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .



**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**

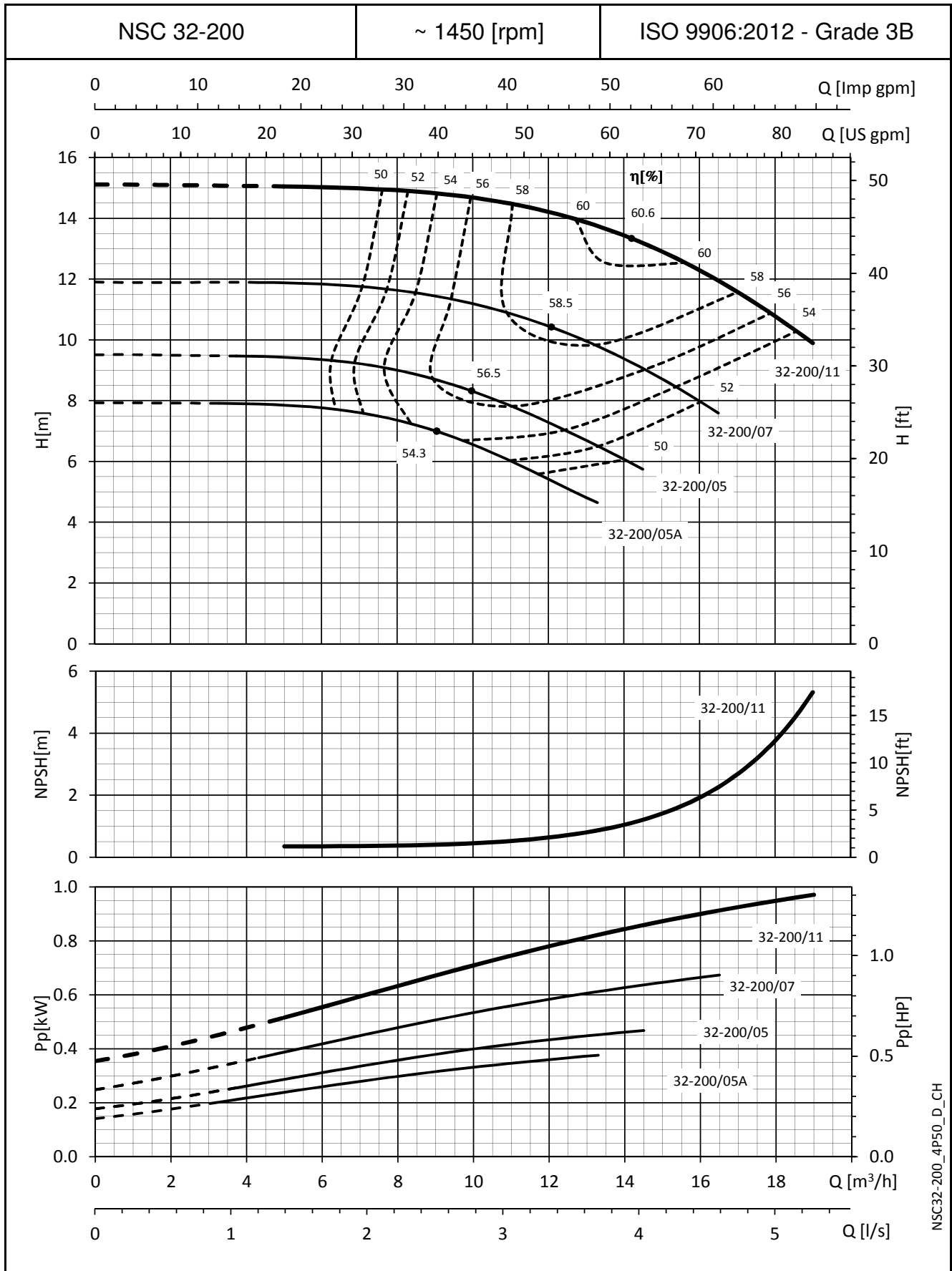


NSC32-160\_4P50\_C\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**

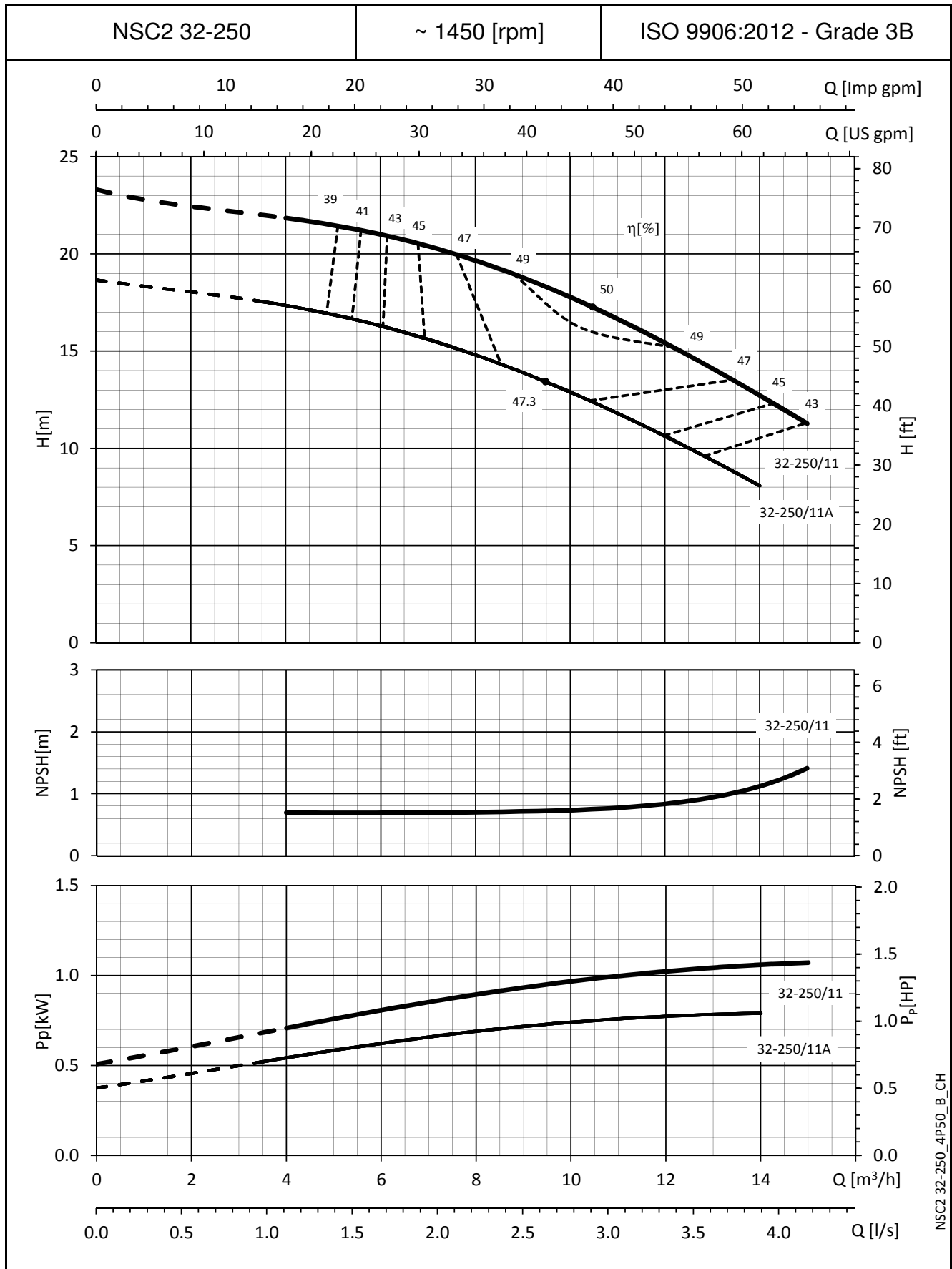


NSC32-200\_4P50\_D\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

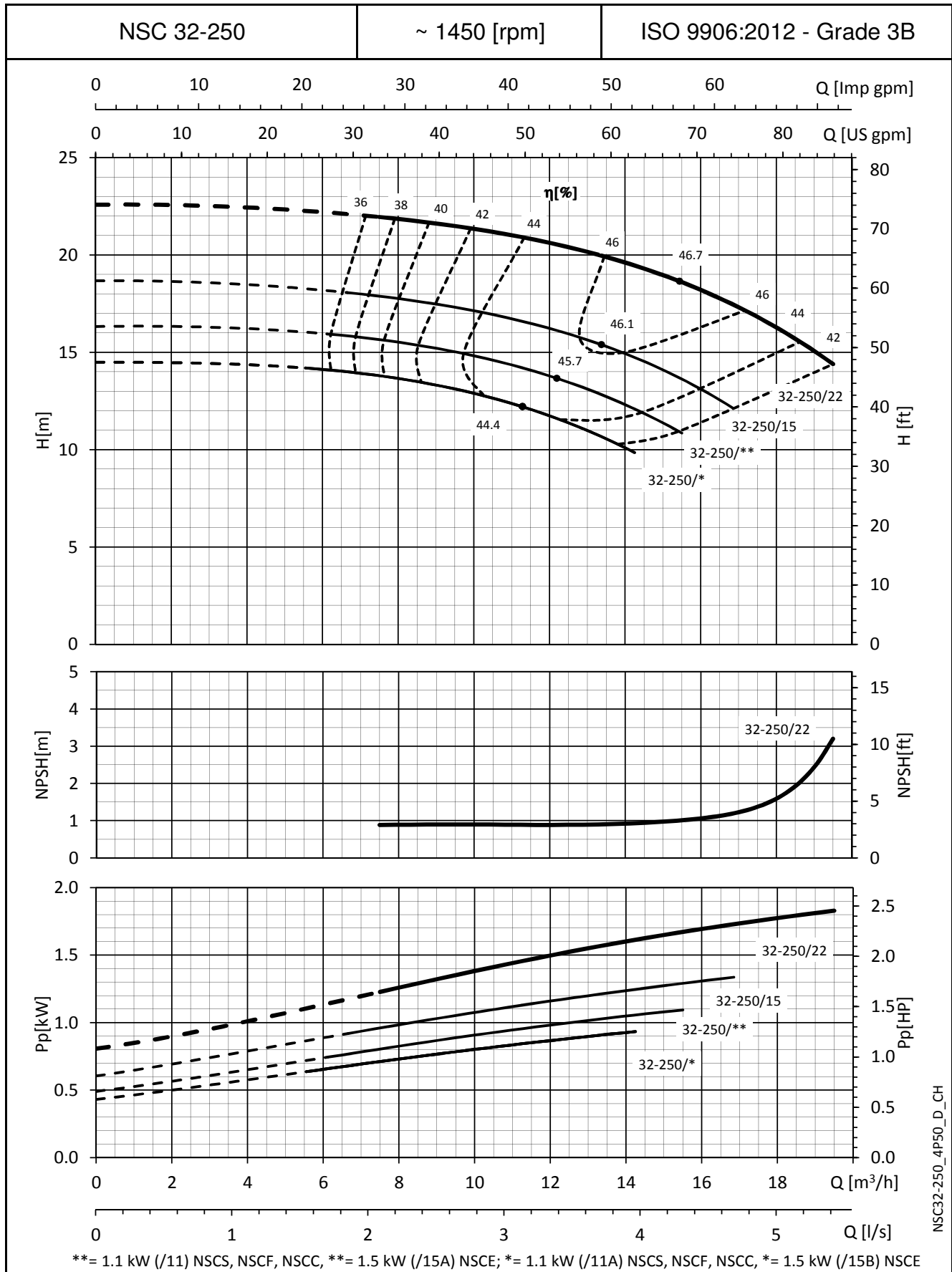
**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**



The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

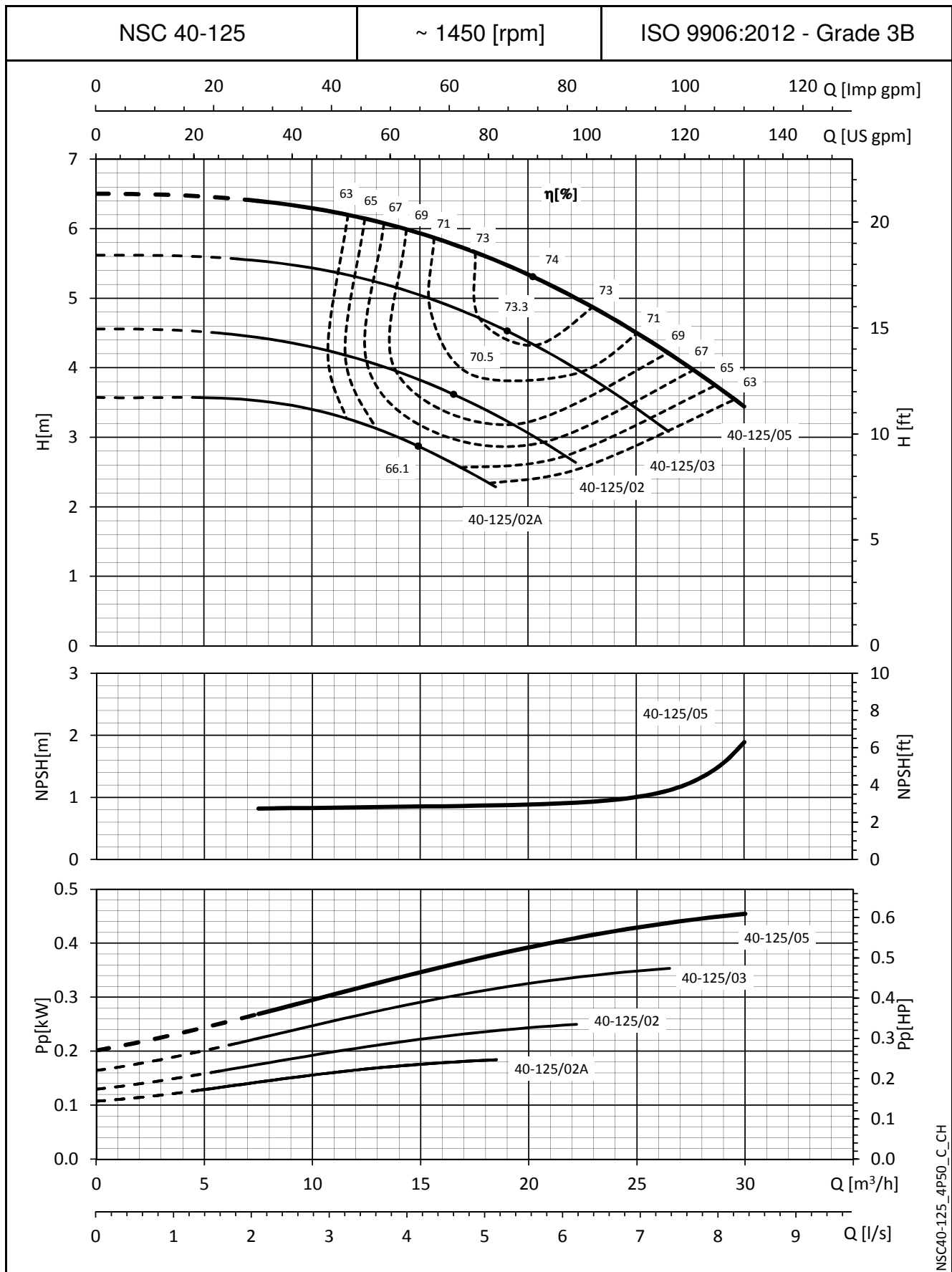
**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**



The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**

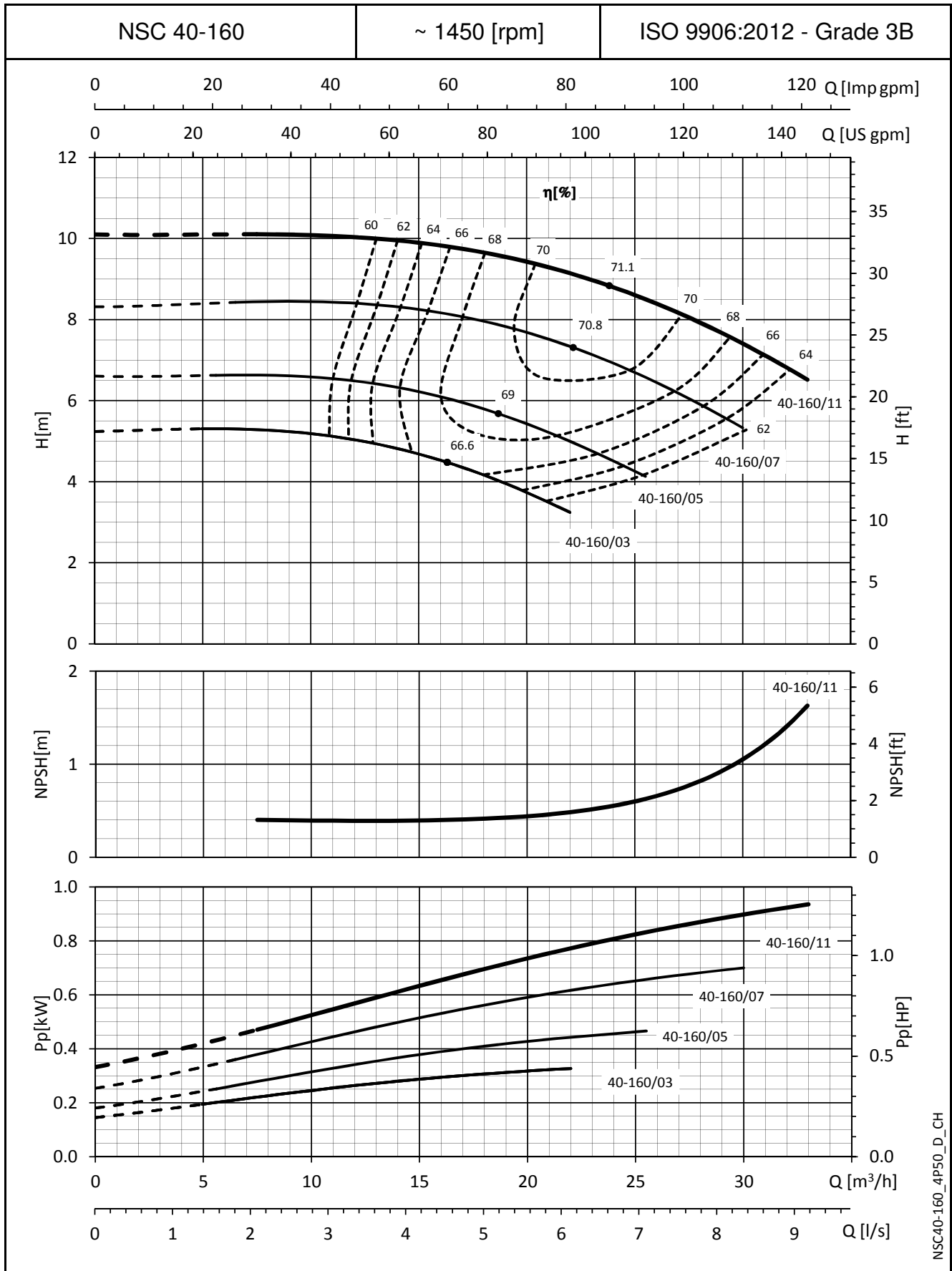


NSC40-125\_4P50\_C\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**

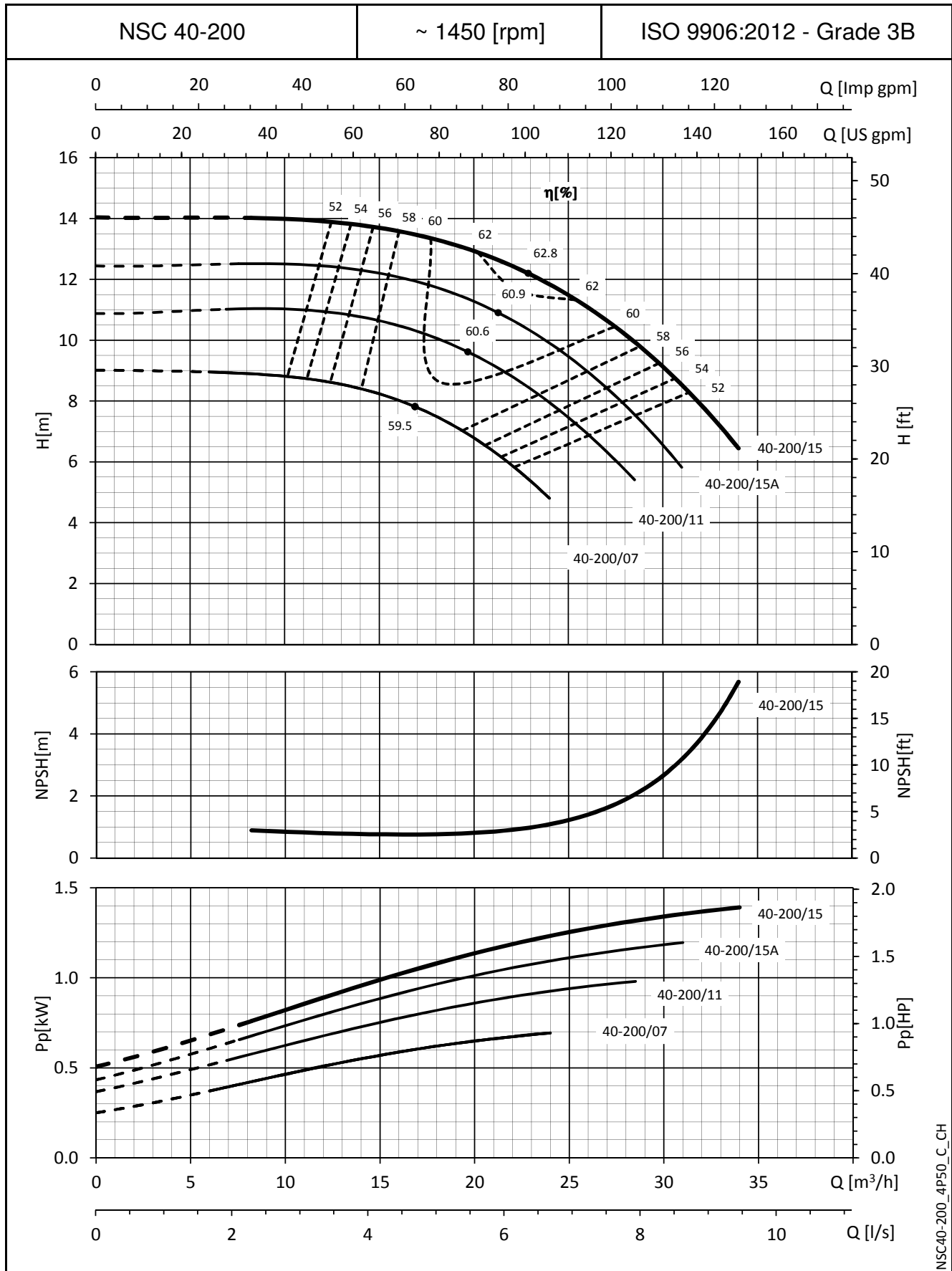


NSC40-160\_4P50\_D\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**

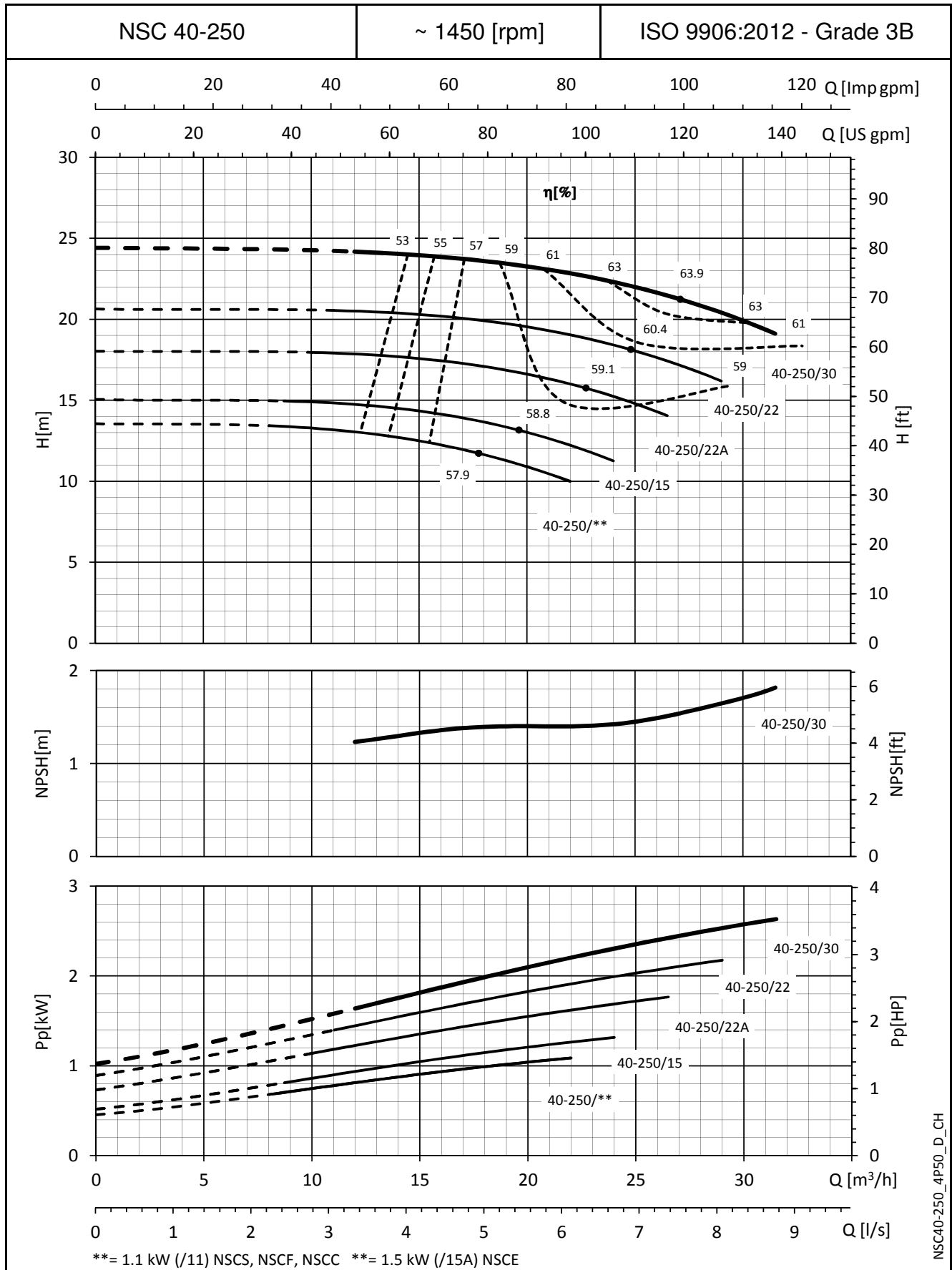


NSC40-200\_4P50\_C\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**



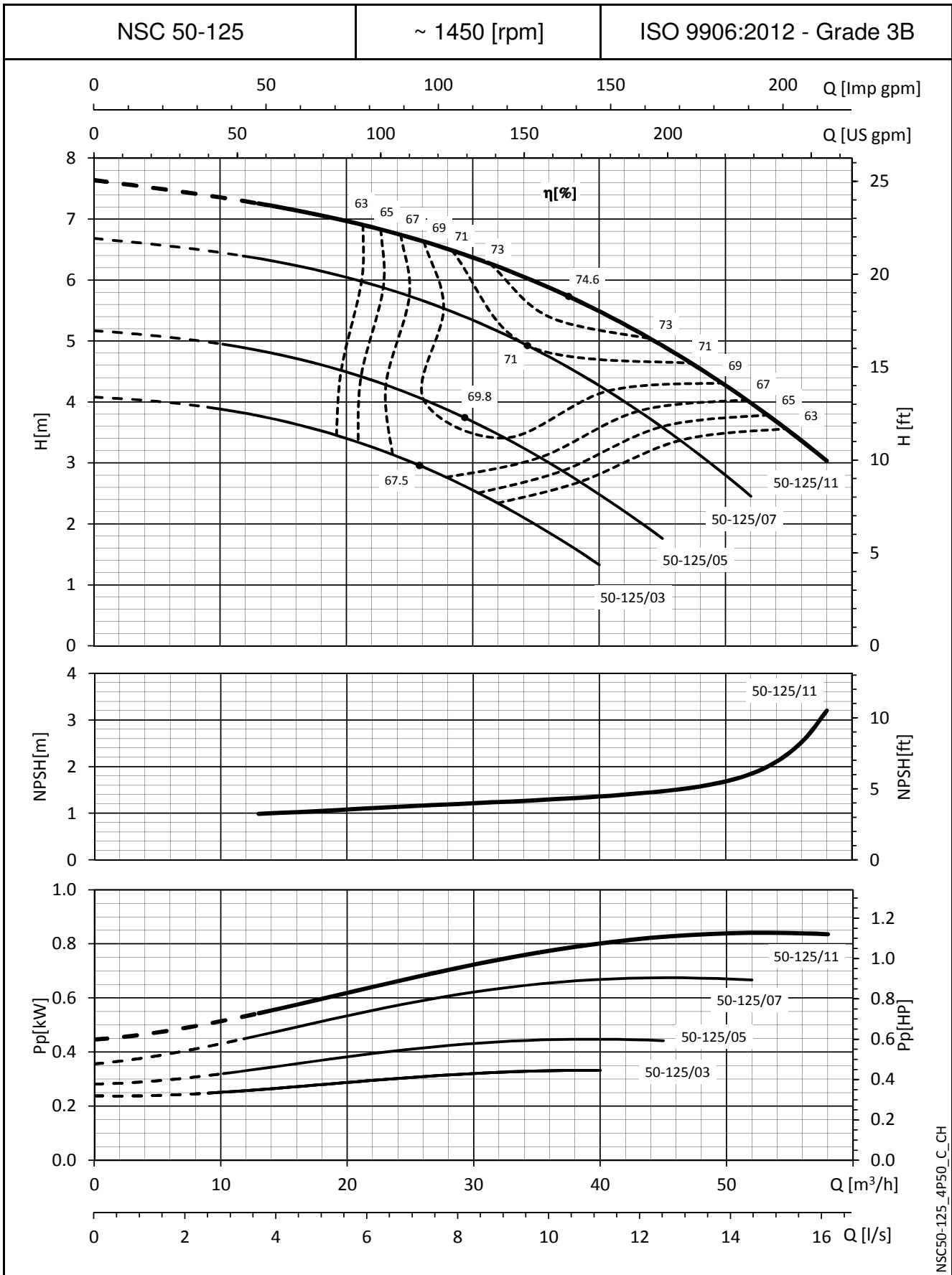
NSC40-250\_4P50\_D\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .



**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**

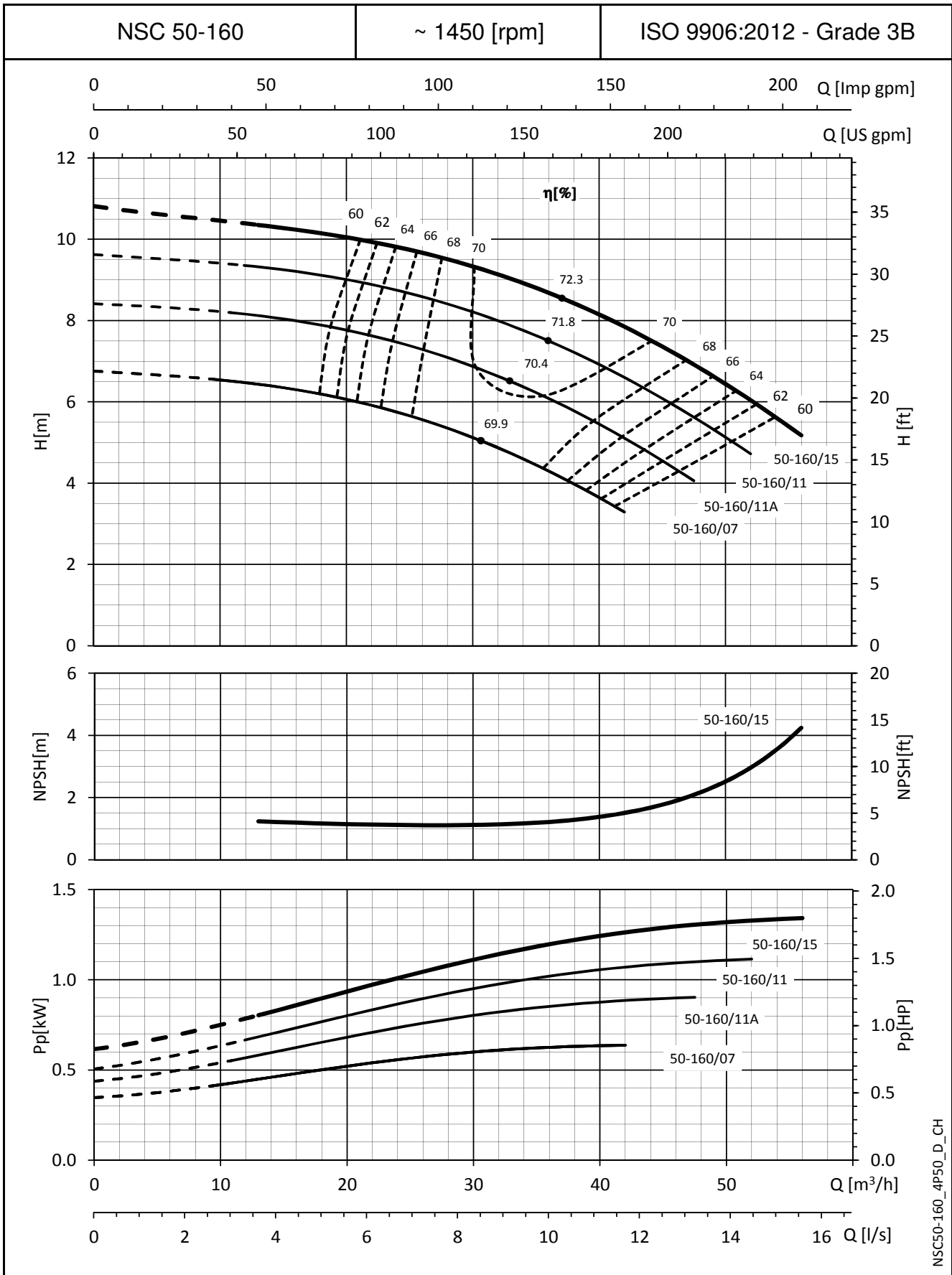


NSC50-125\_4P50\_C\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**

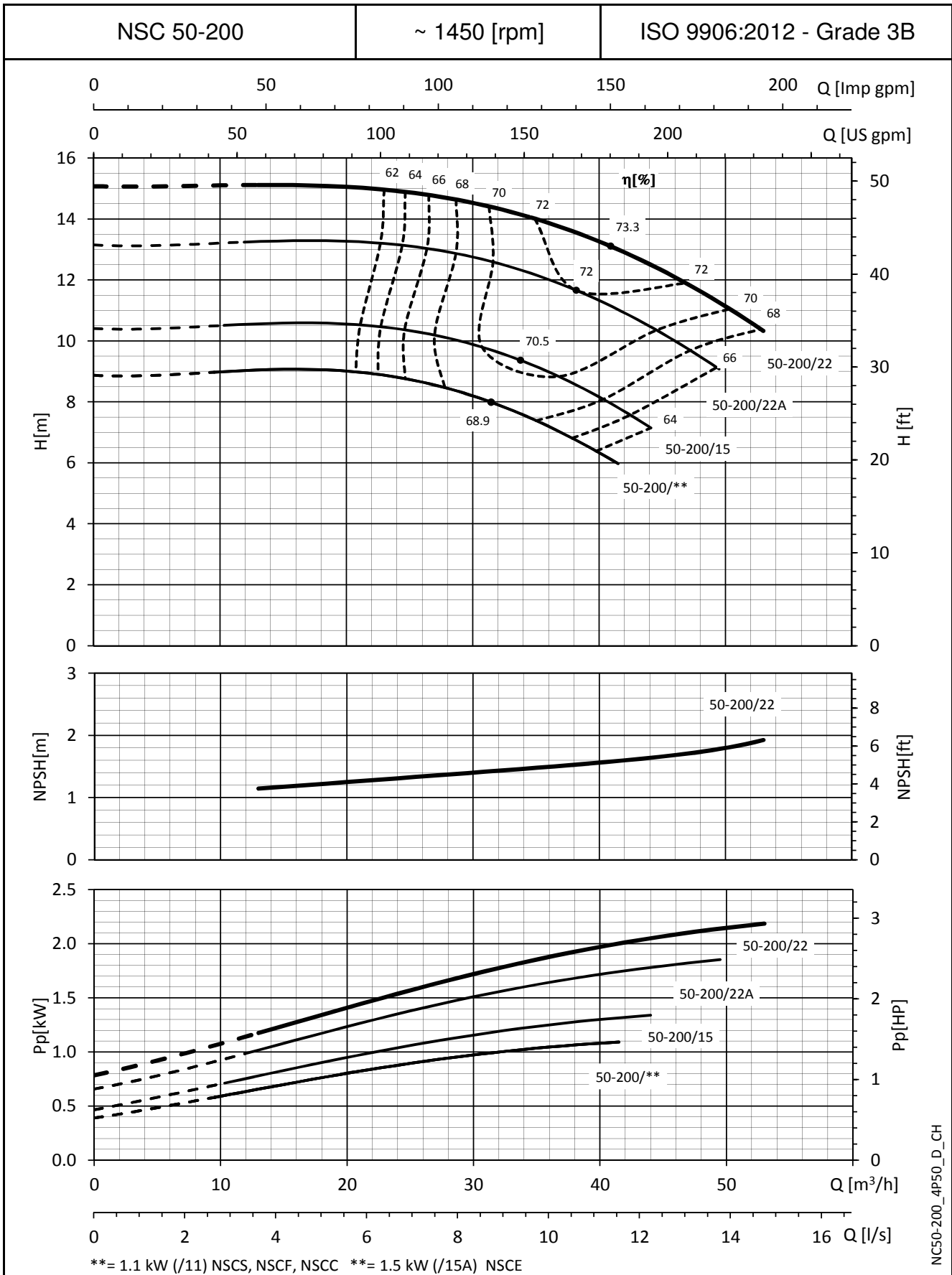


NSC50-160\_4P50\_D\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

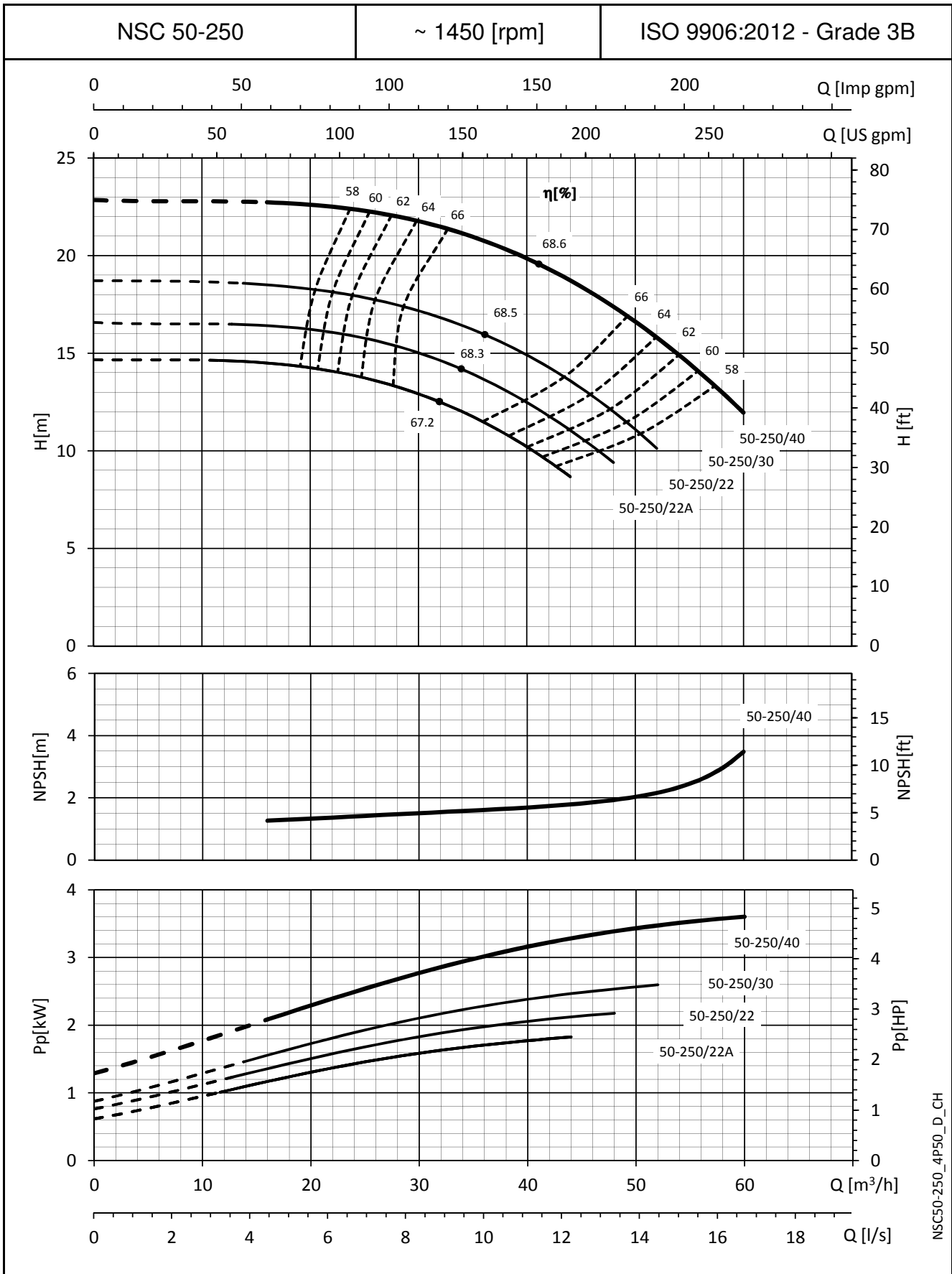
**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**



The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**

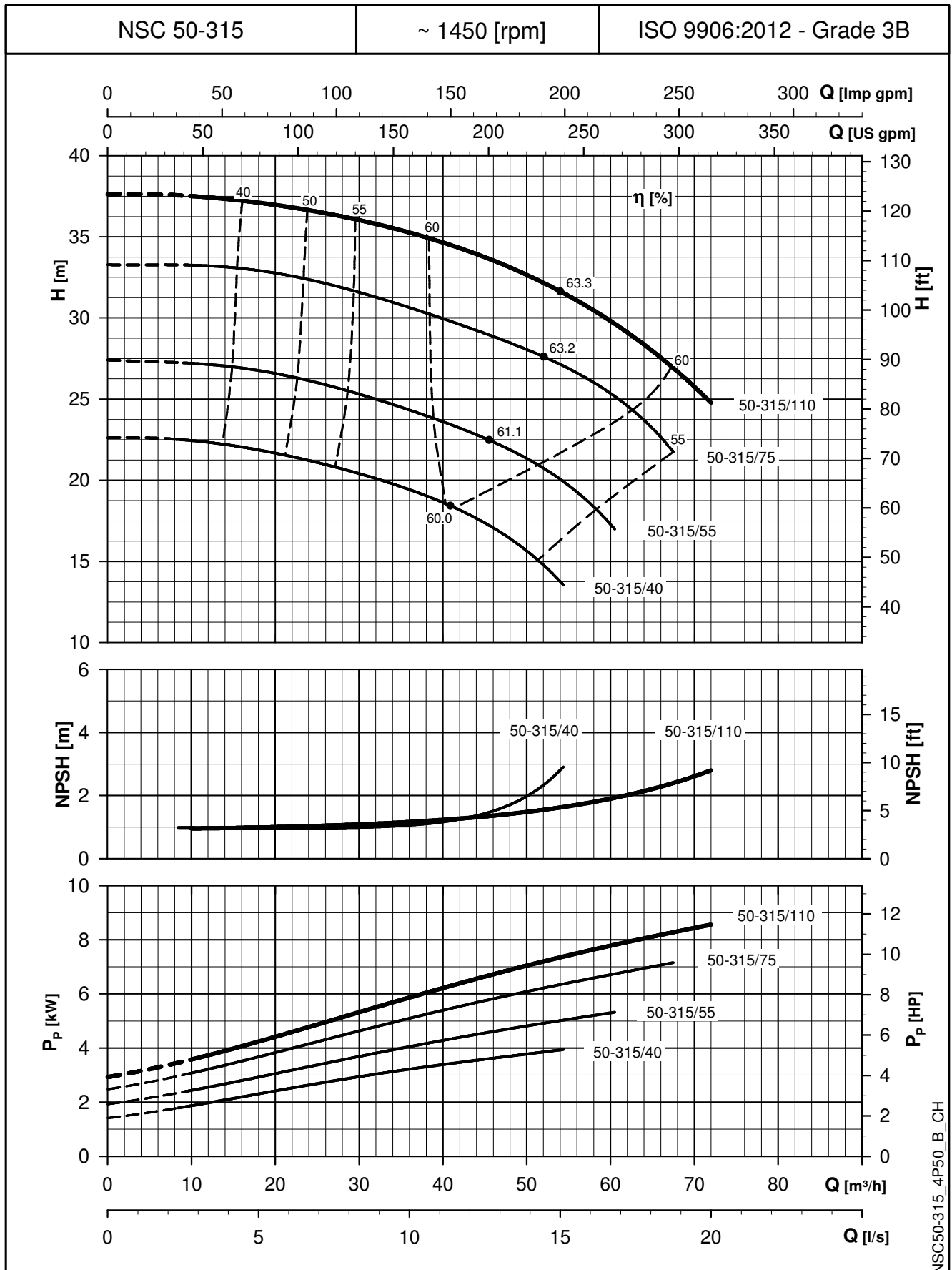


NSC50-250\_4P50\_D\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**

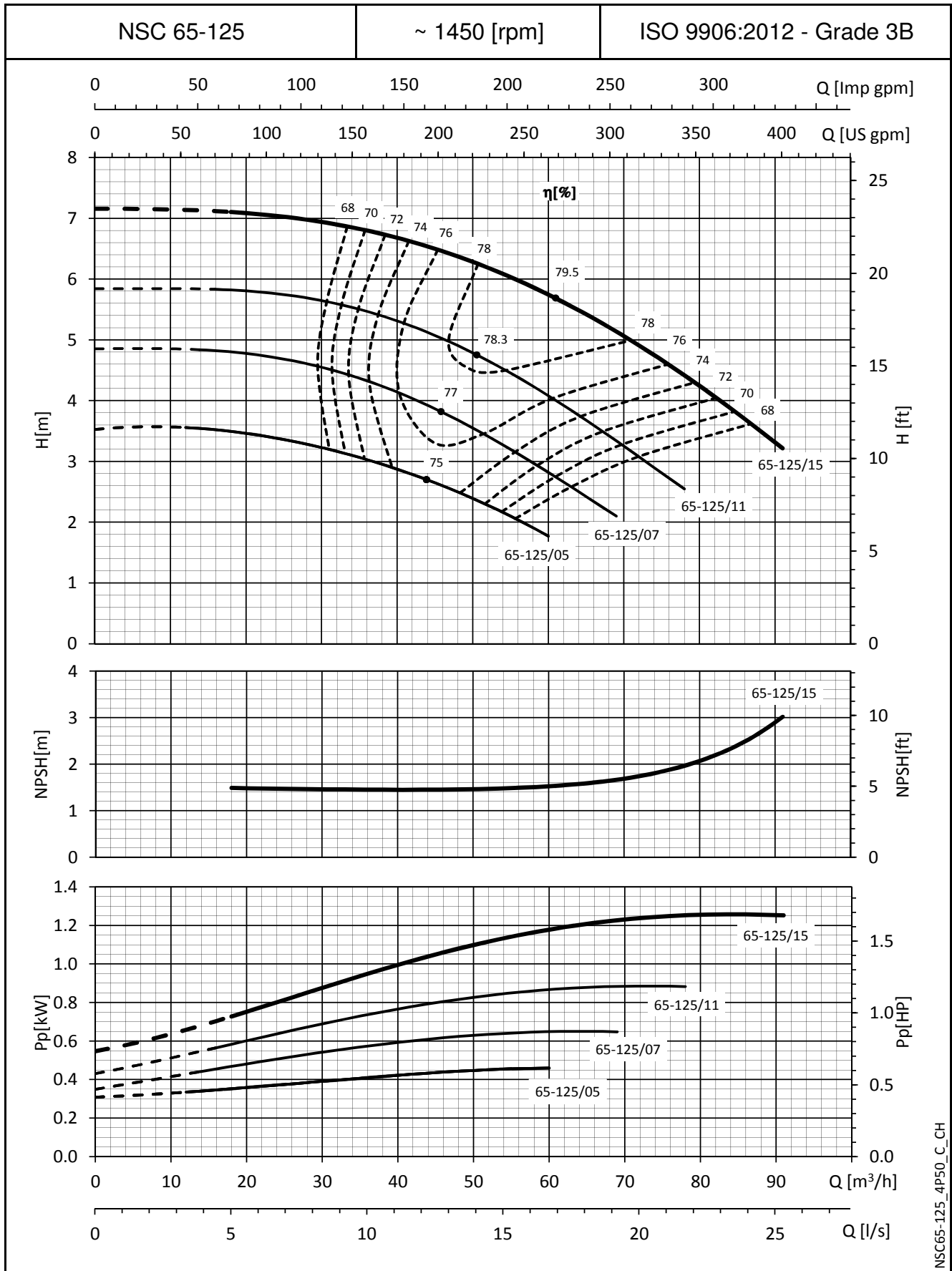


NSC50-315\_4P50\_B\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**

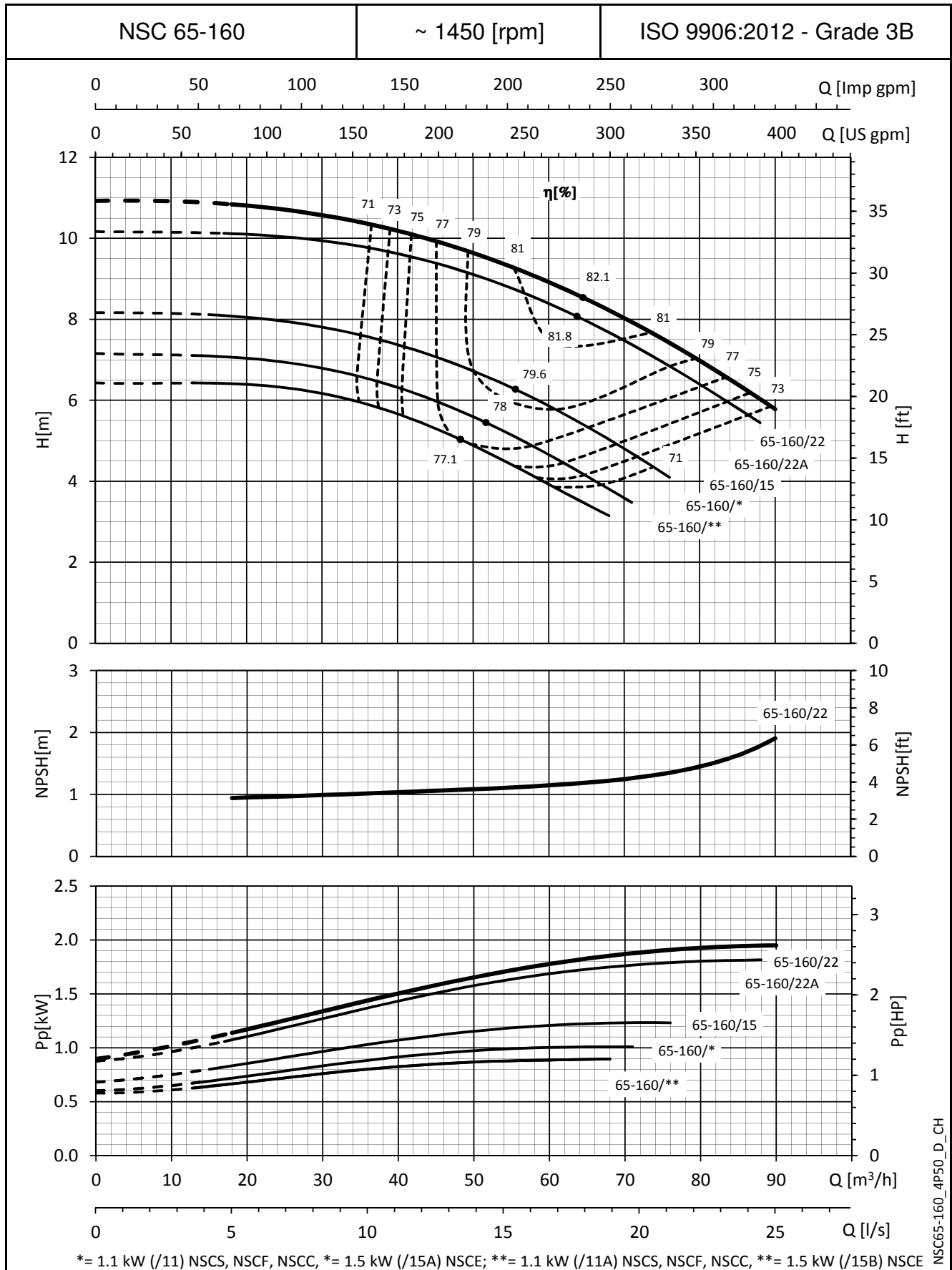


NSC65-125\_4P50\_C\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

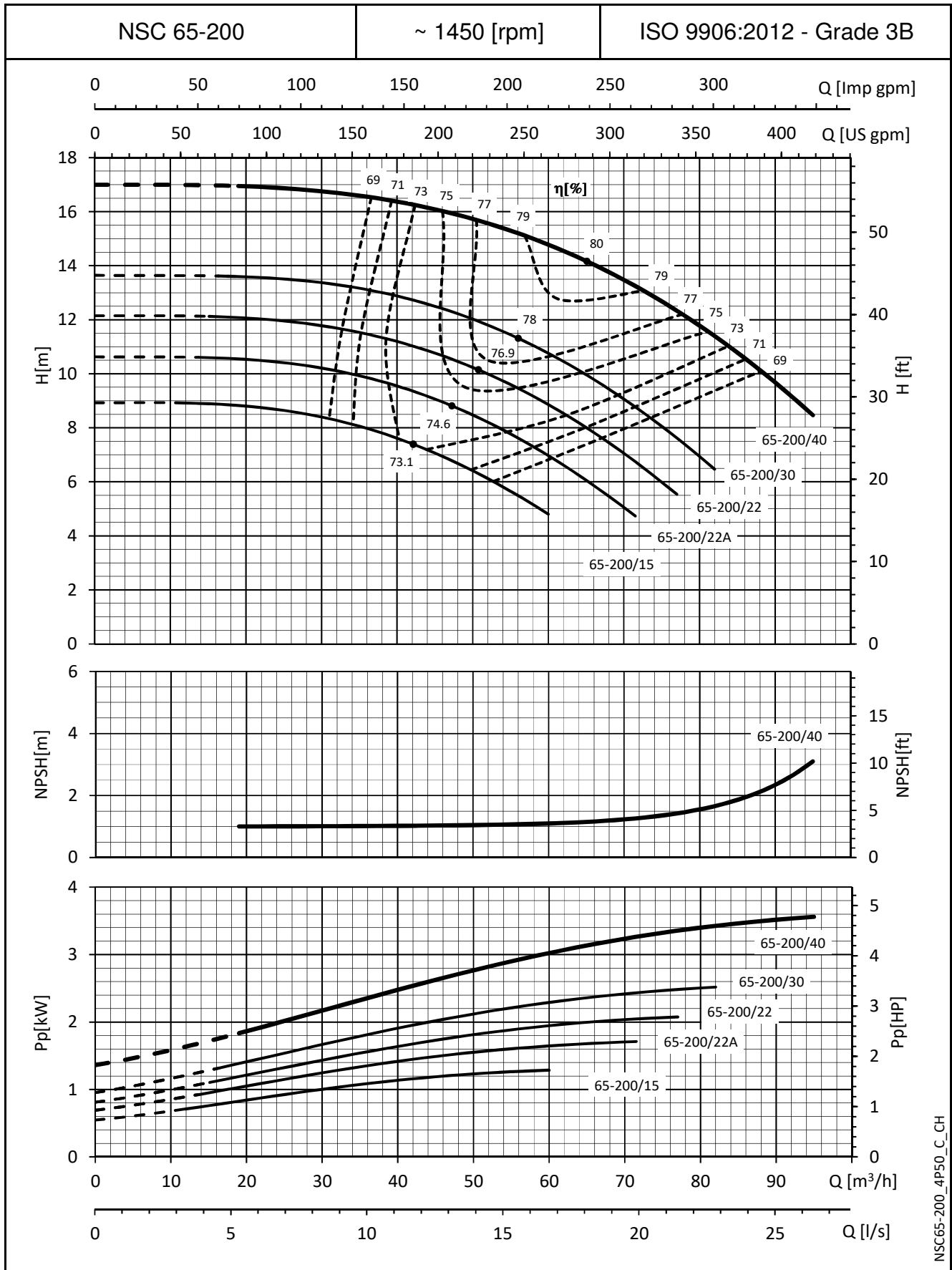
**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**



The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**



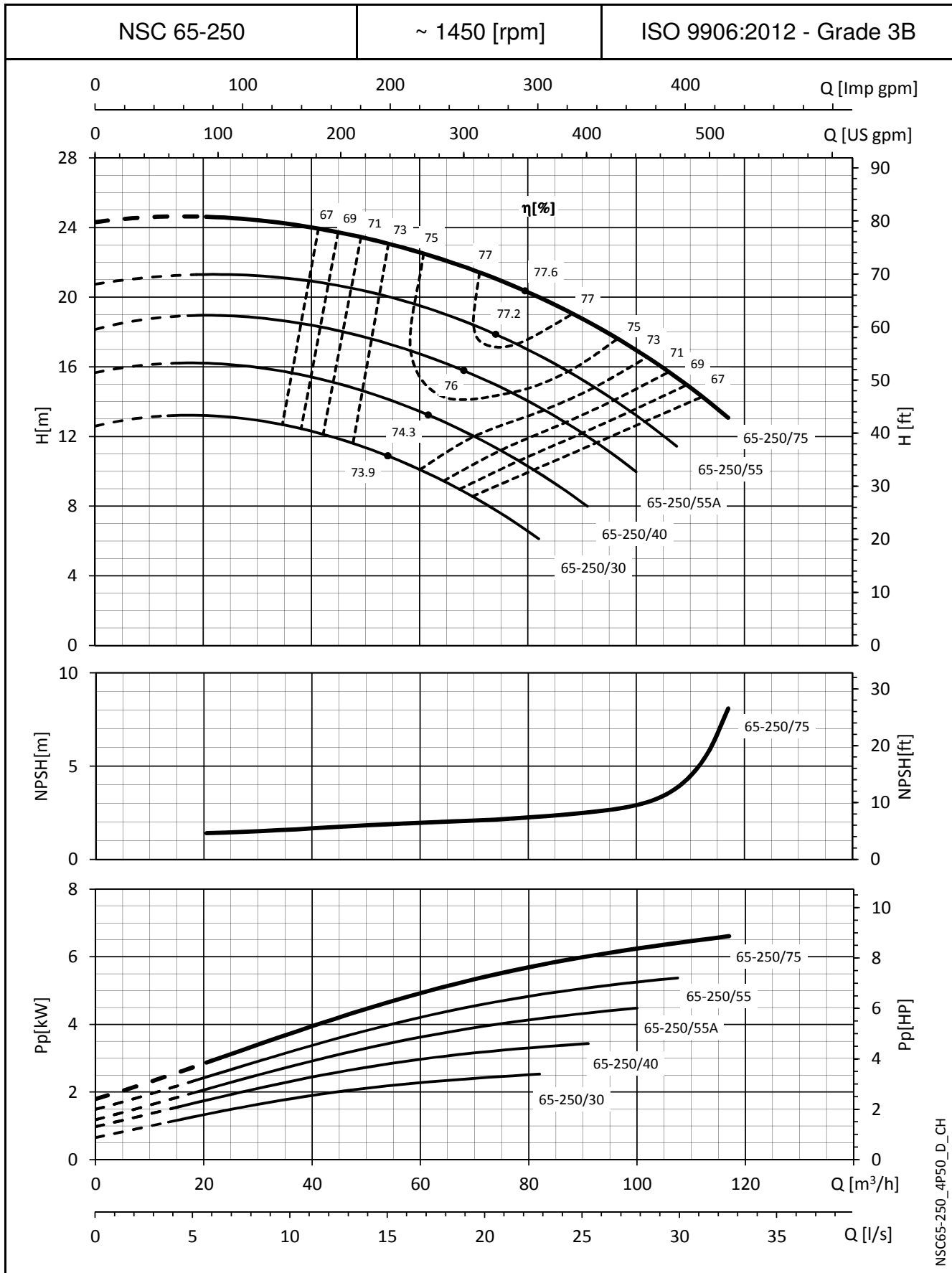
NSC65-200\_4P50\_C\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .



**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**

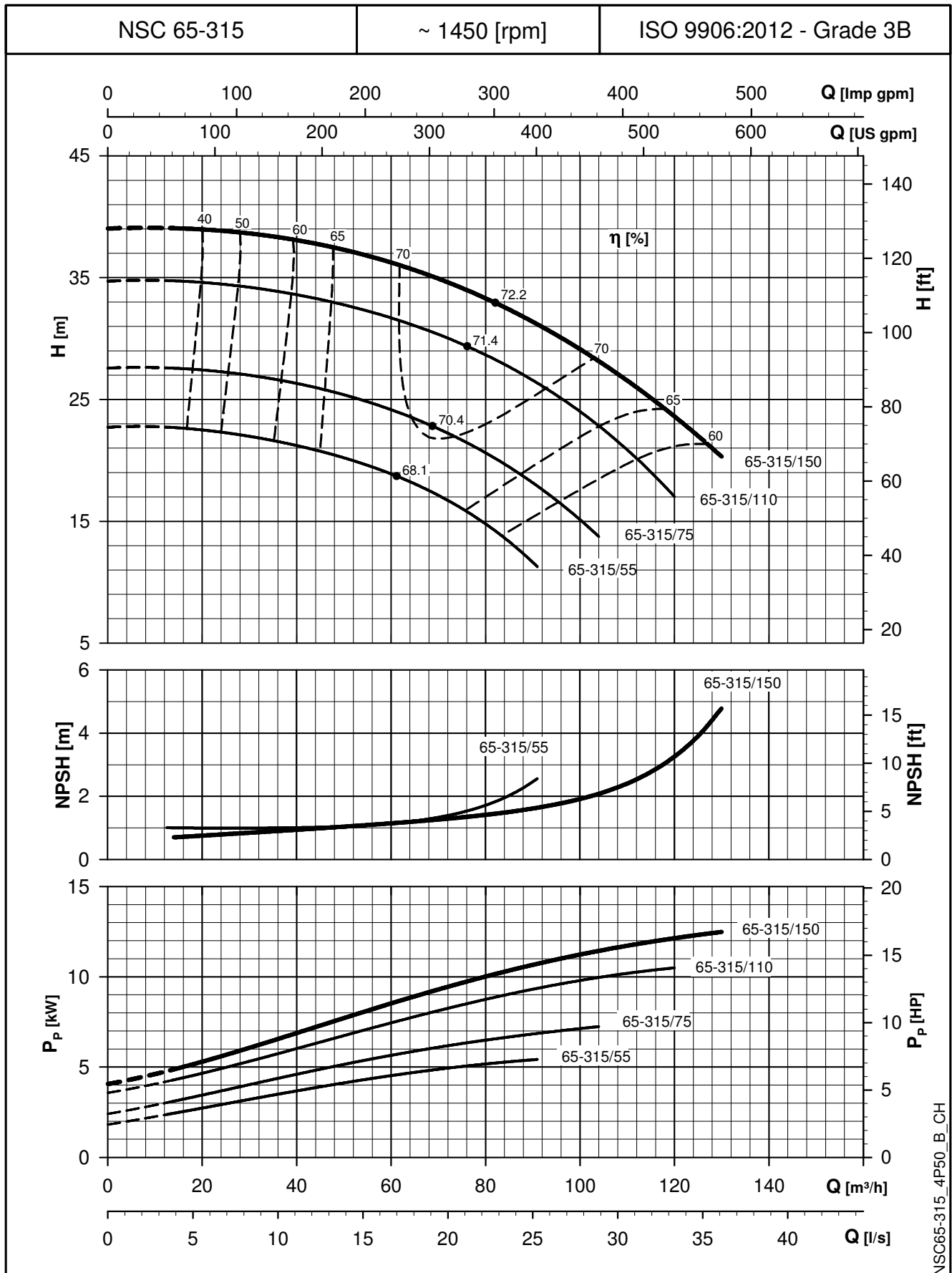


NSC65-250\_4P50\_D\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**

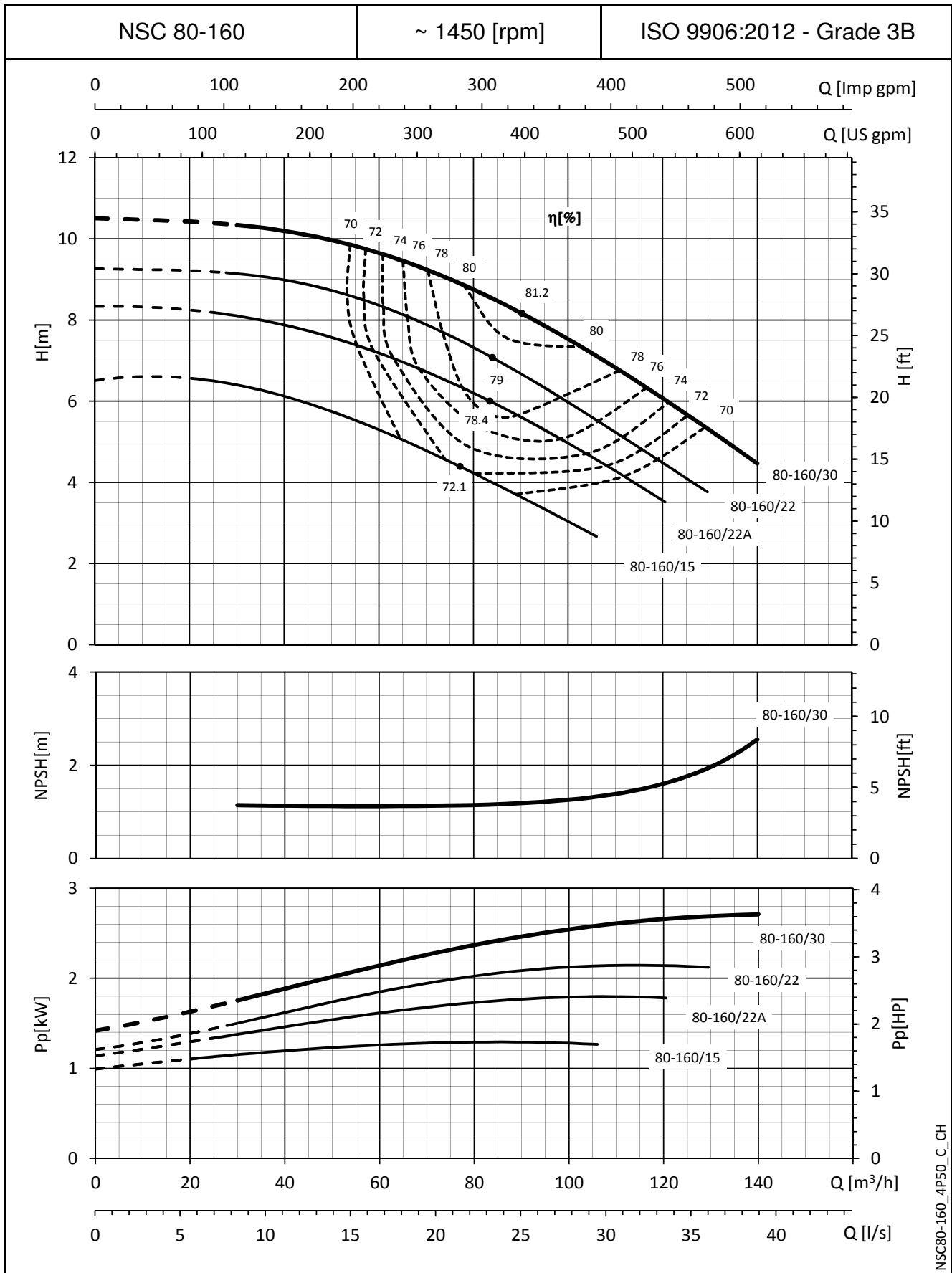


NSC65-315\_4P50\_B\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**

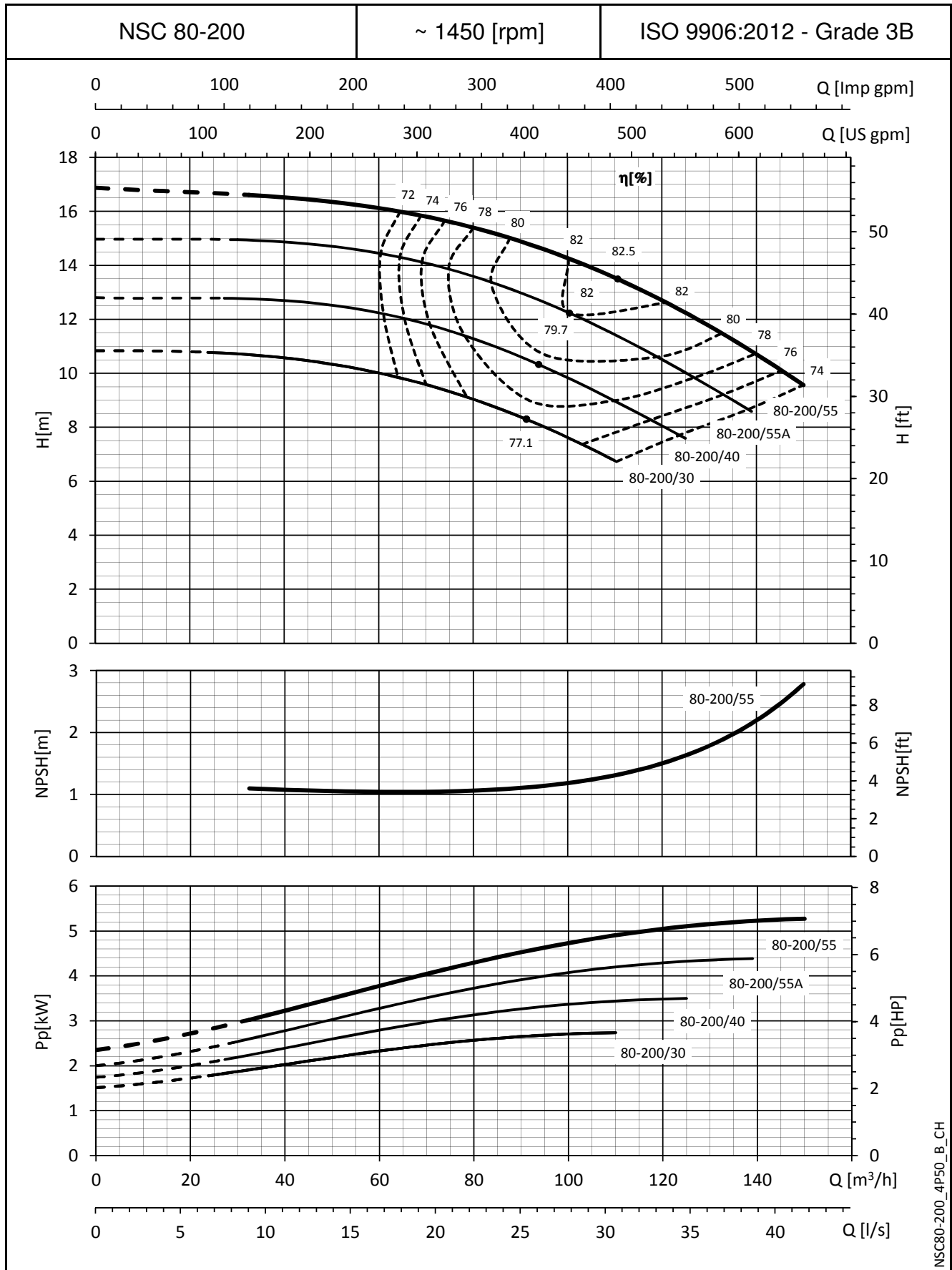


NSC80-160\_4P50\_C\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**

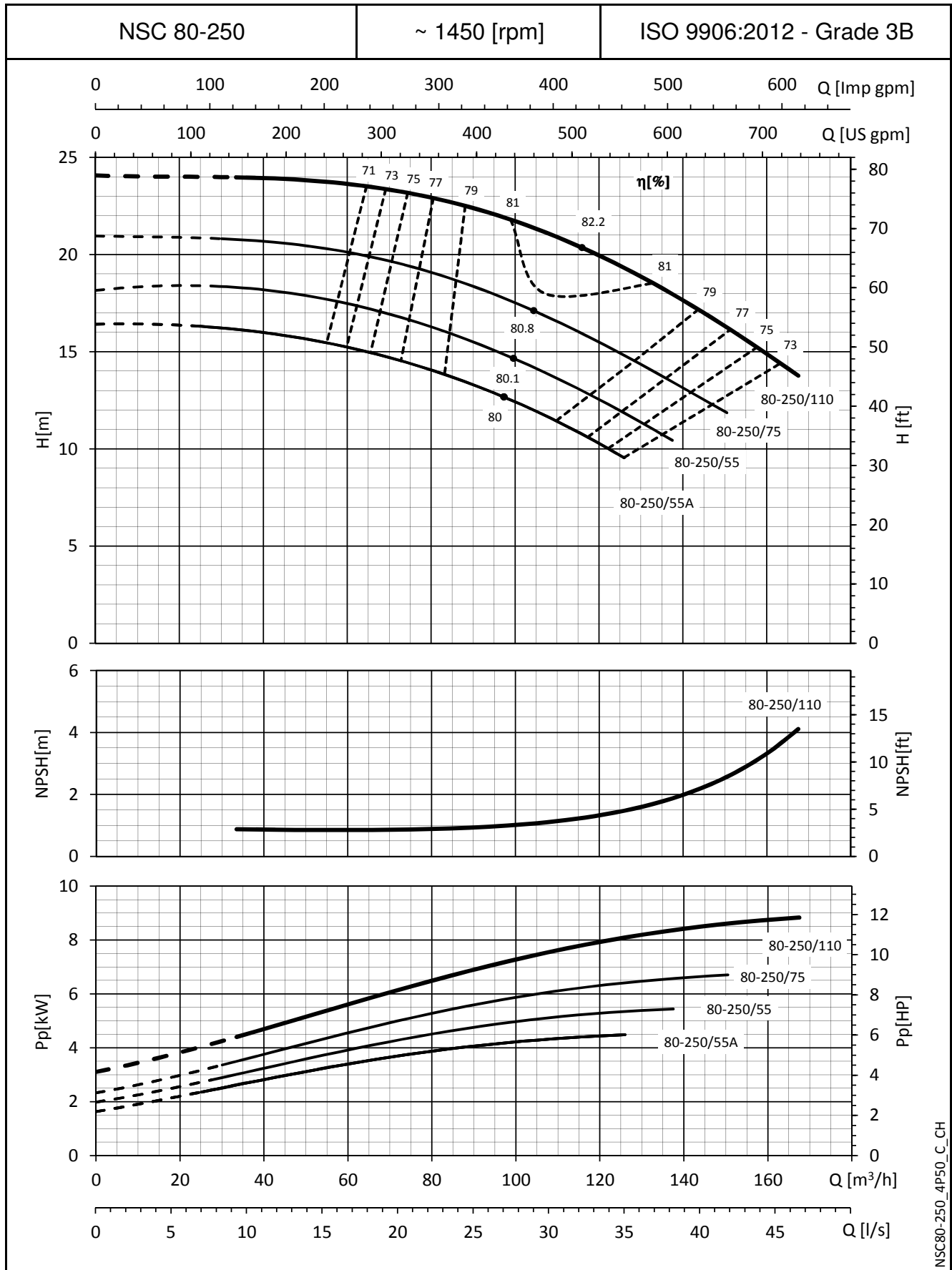


NSC80-200\_4P50\_B\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**

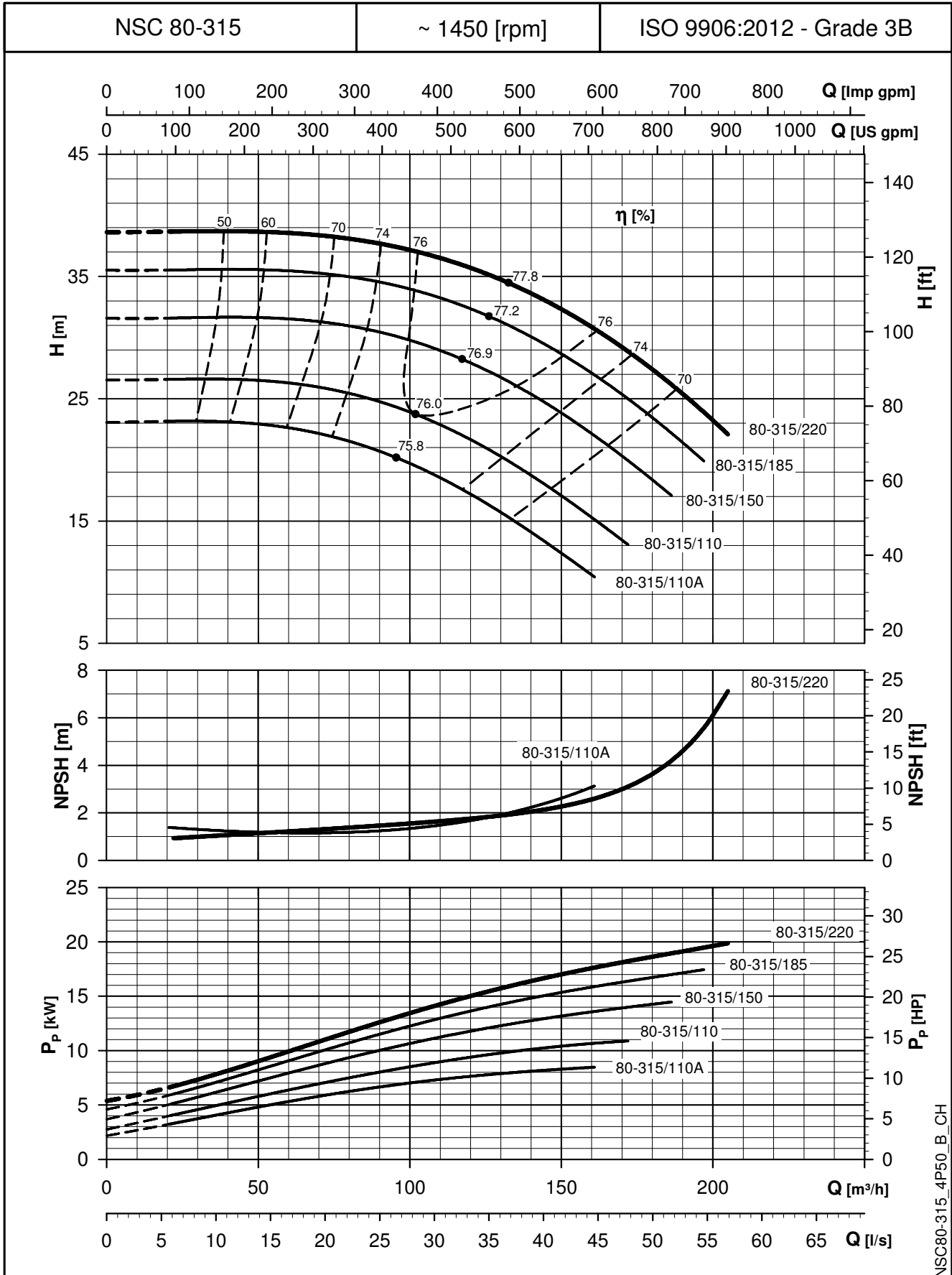


NSC80-250\_4P50\_C\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**

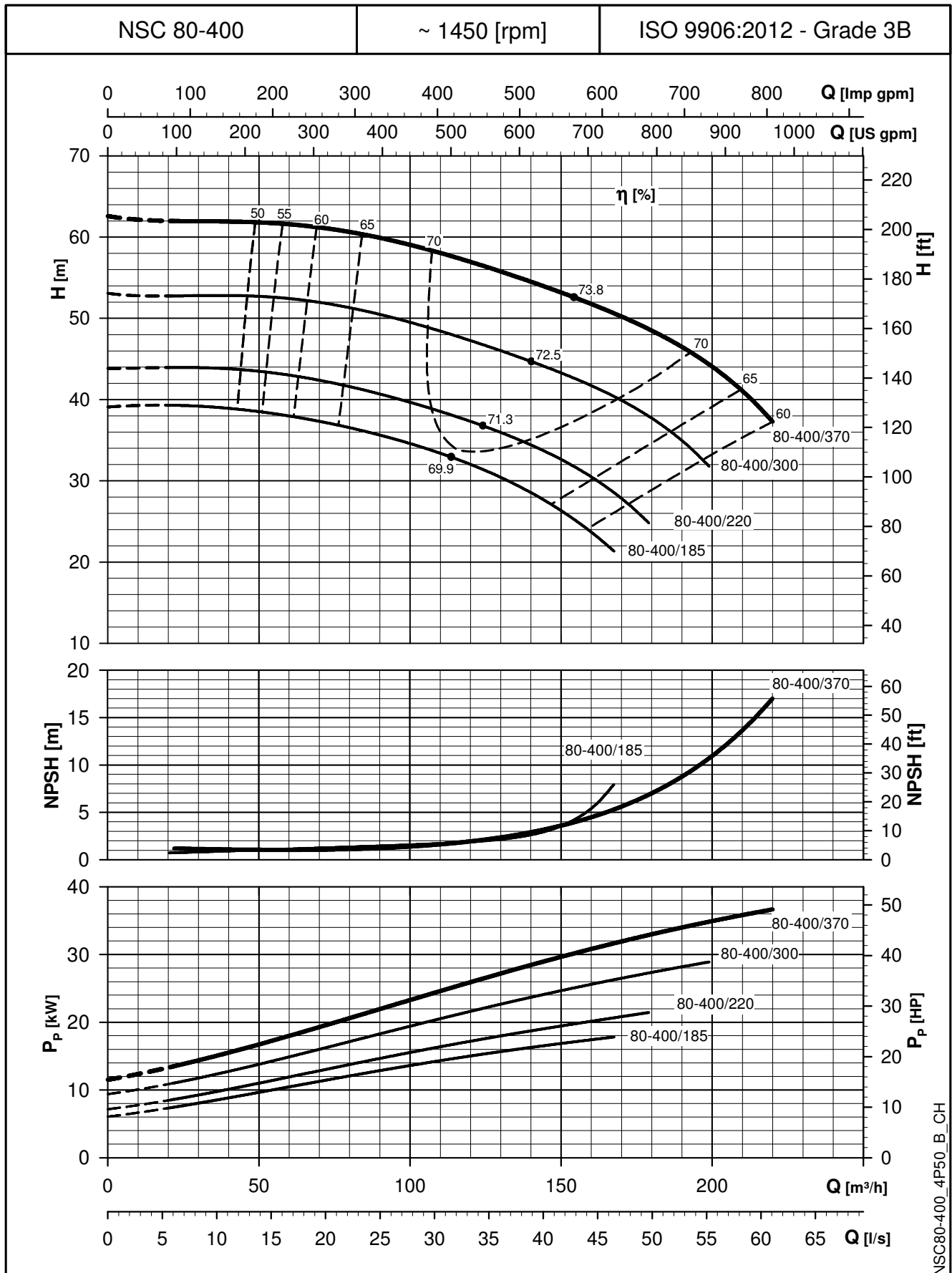


NSC80-315\_4P50\_B\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**

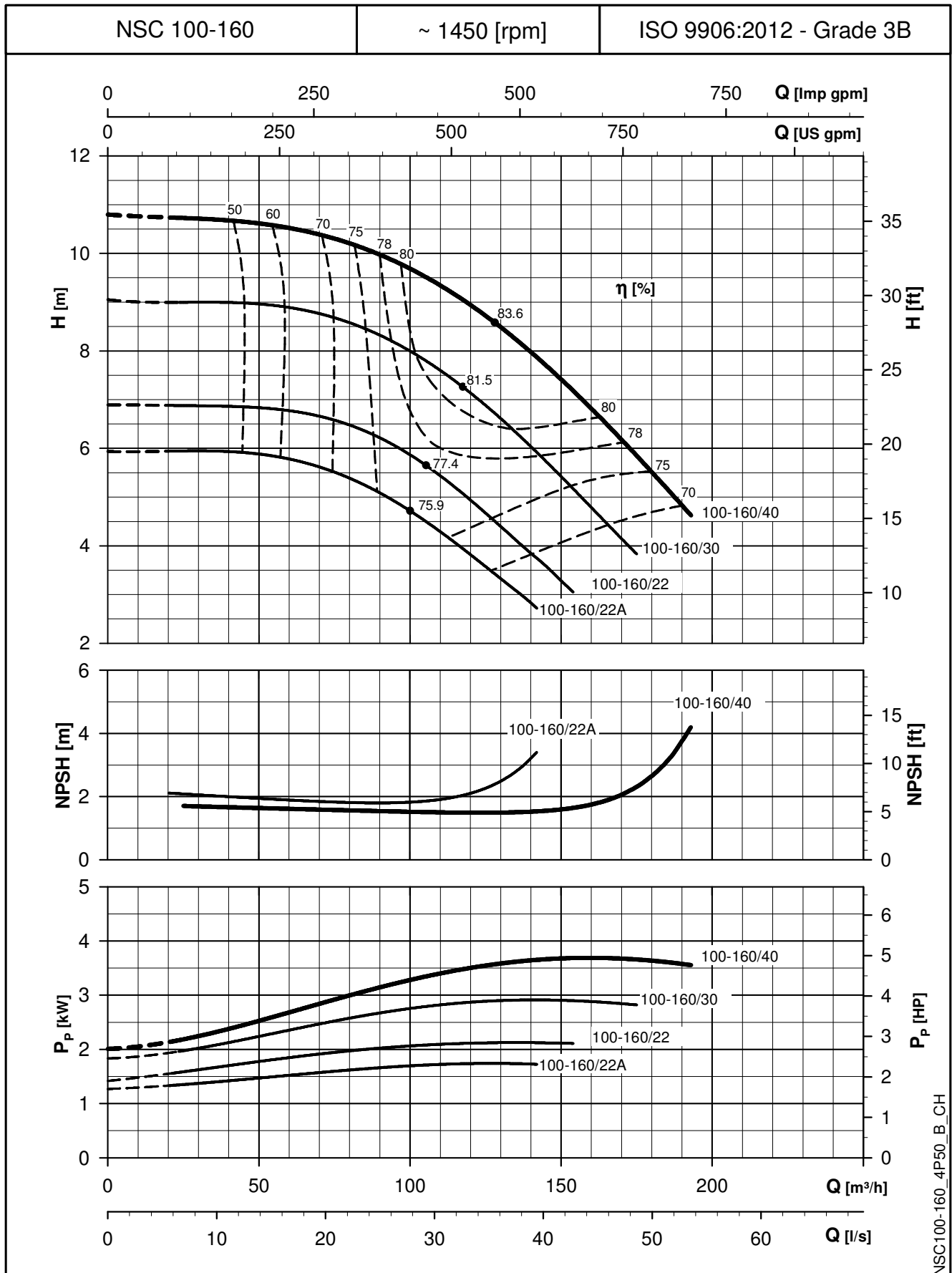


NSC80-400\_4P50\_B\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**



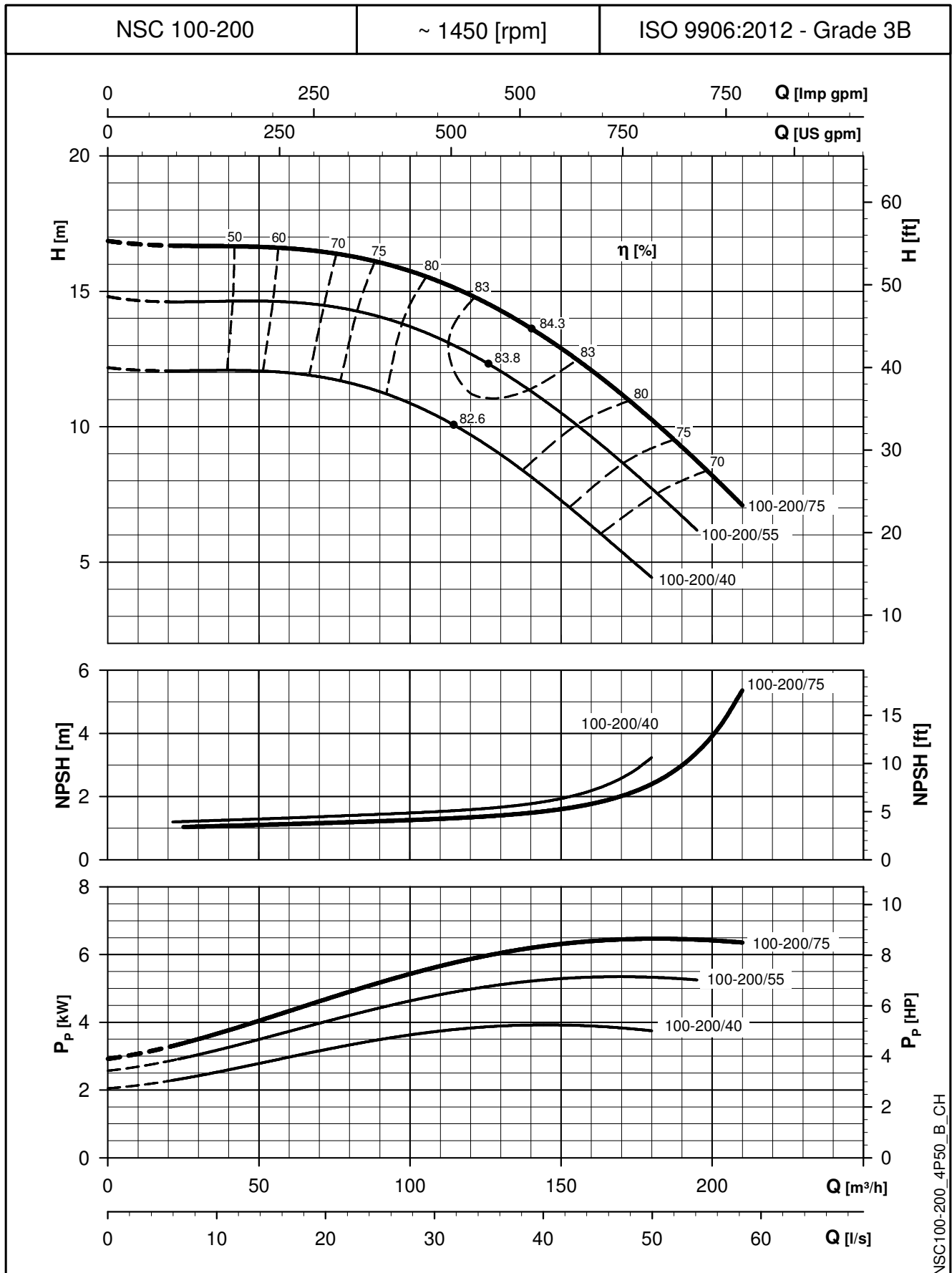
NSC100-160\_4P50\_B\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .



**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**

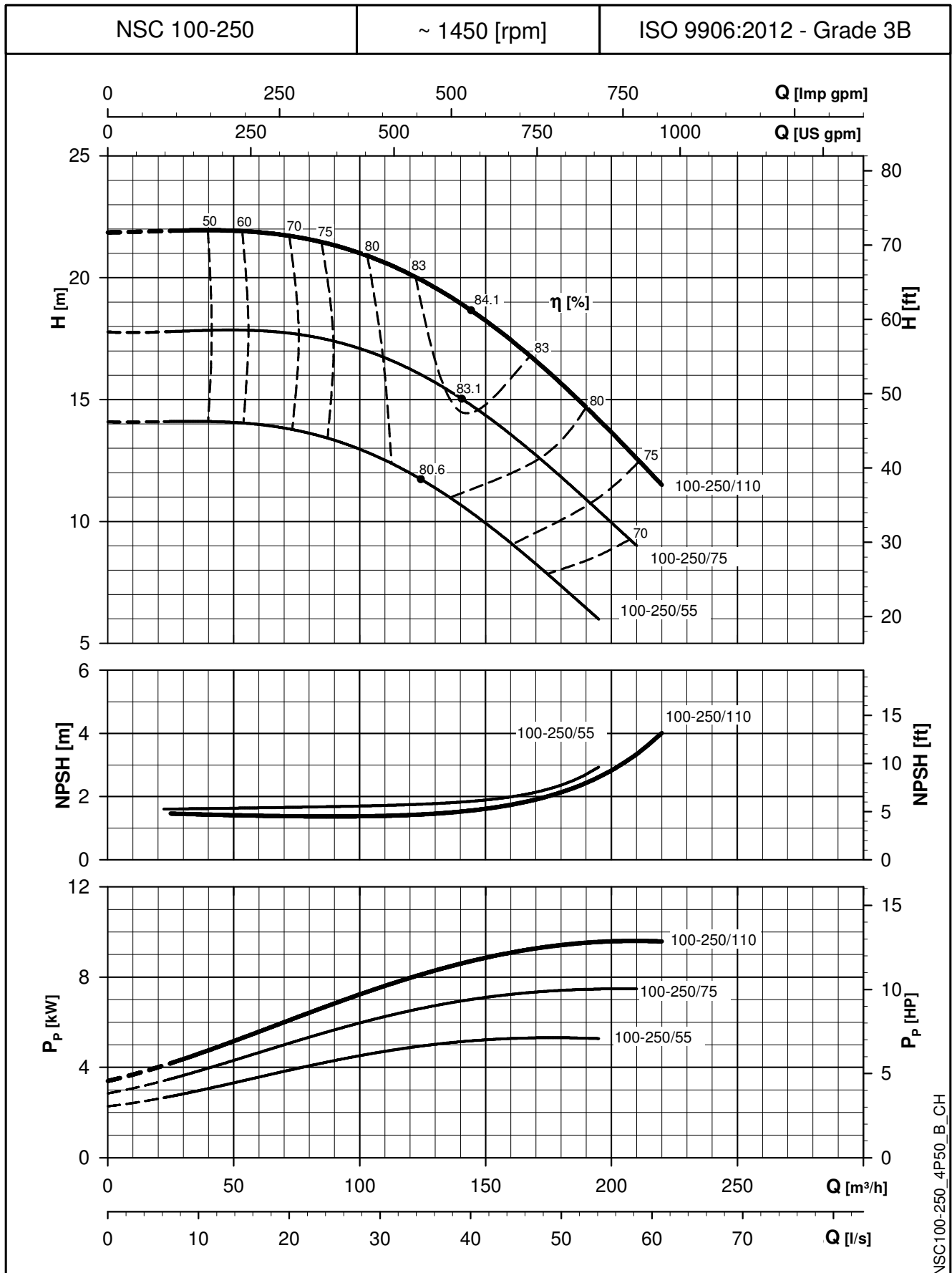


NSC100-200\_4P50\_B\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**

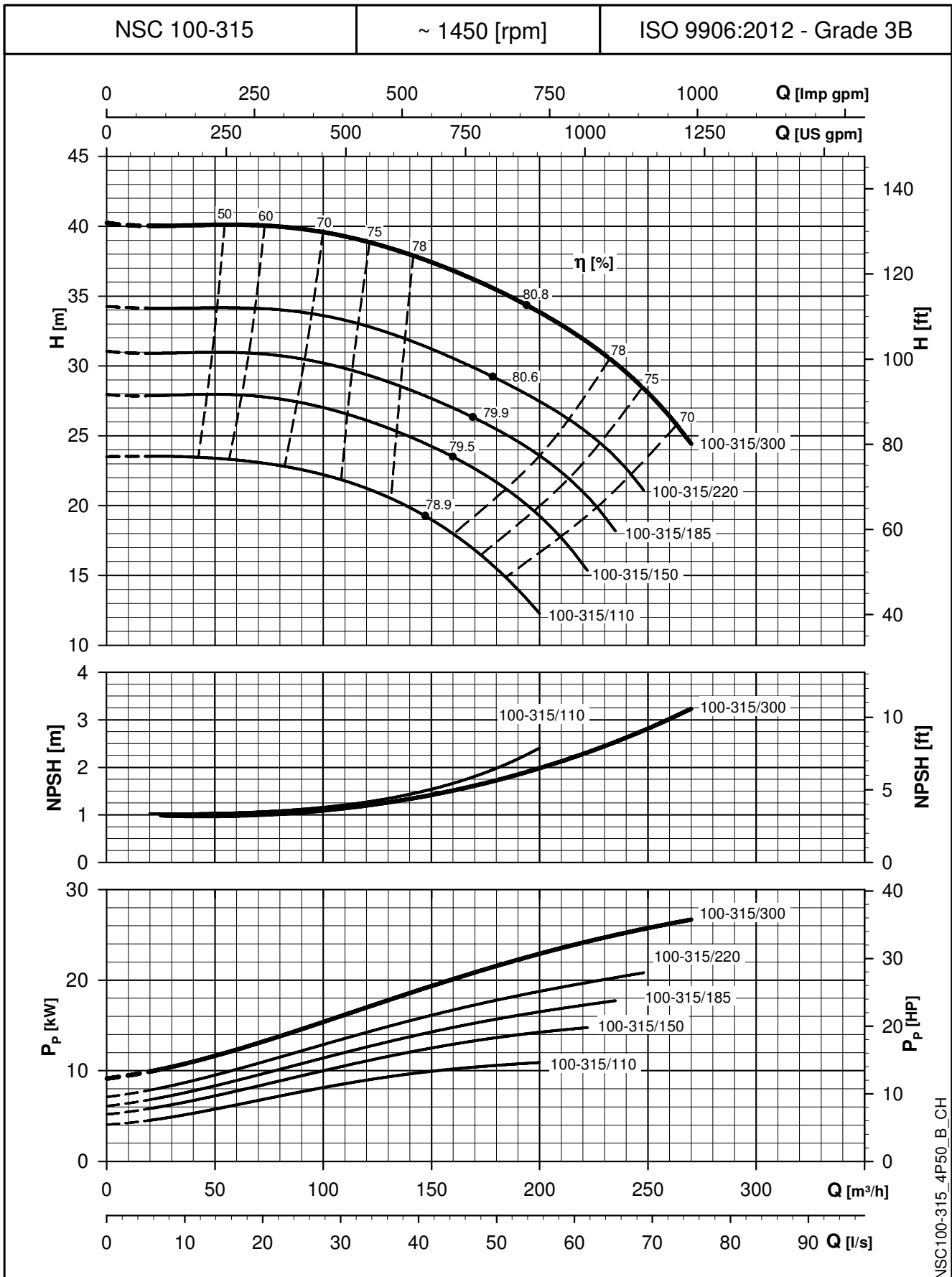


NSC100-250\_4P50\_B\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**

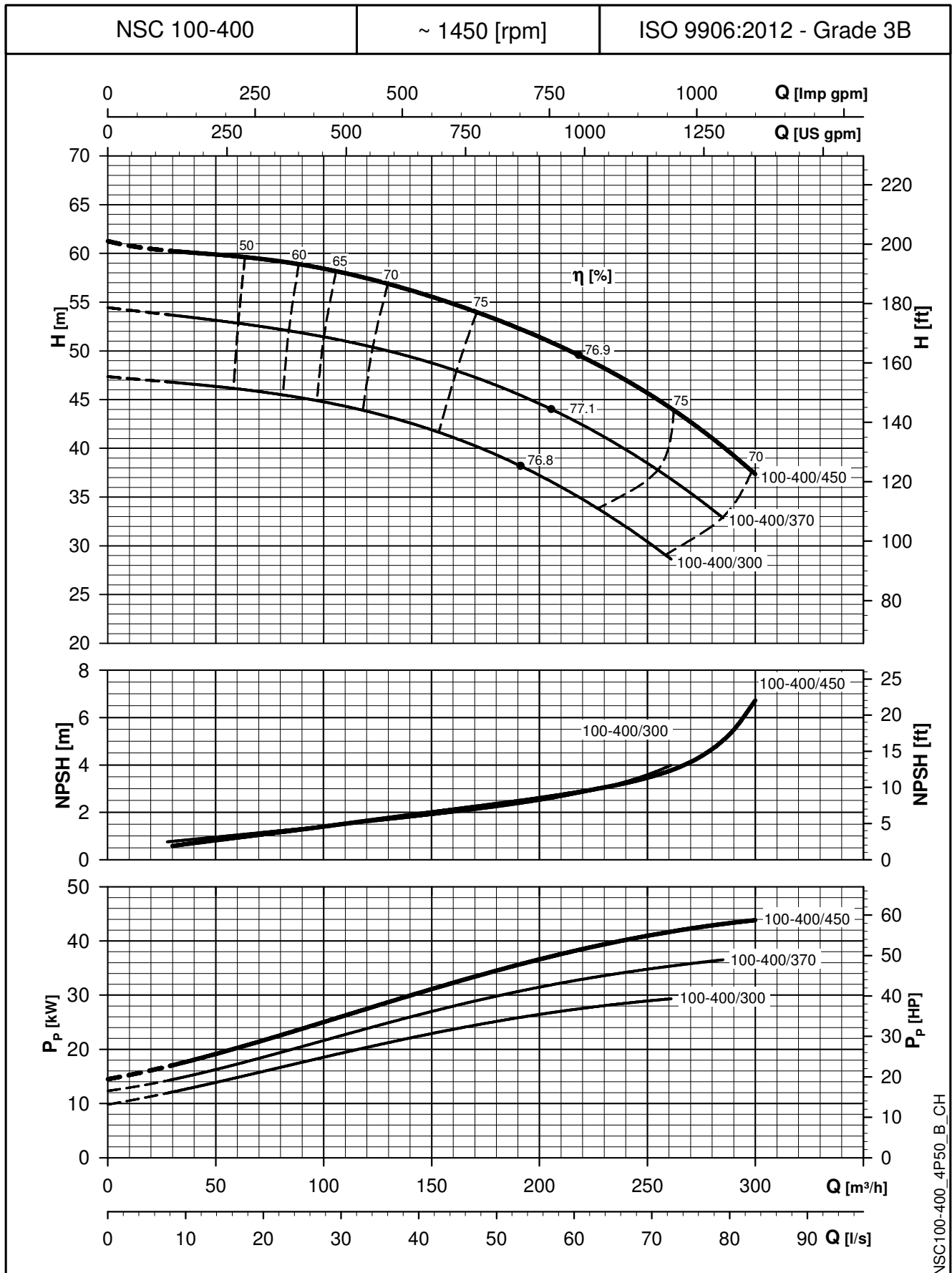


NSC100-315\_4P50\_B\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

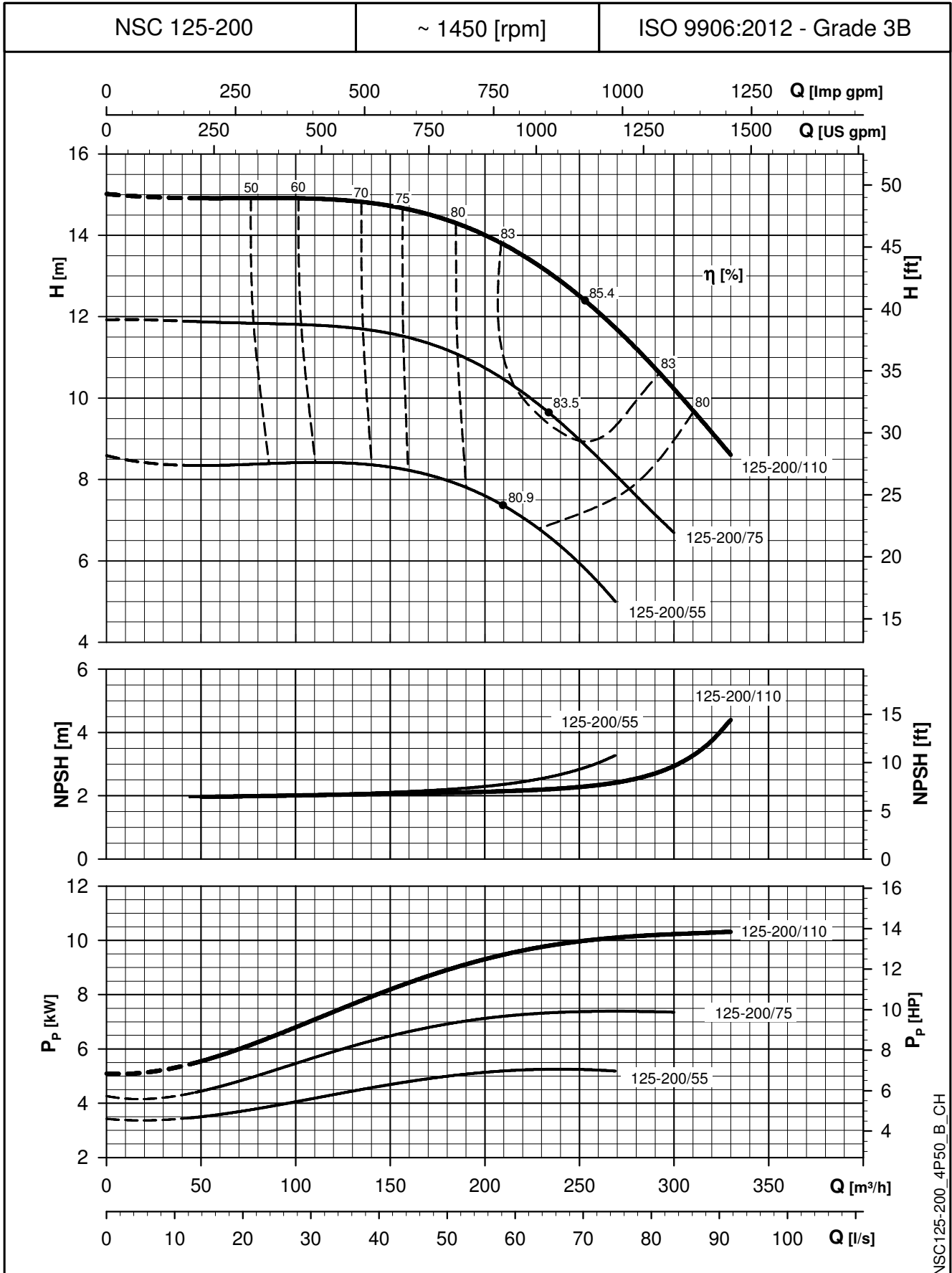
**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**



The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

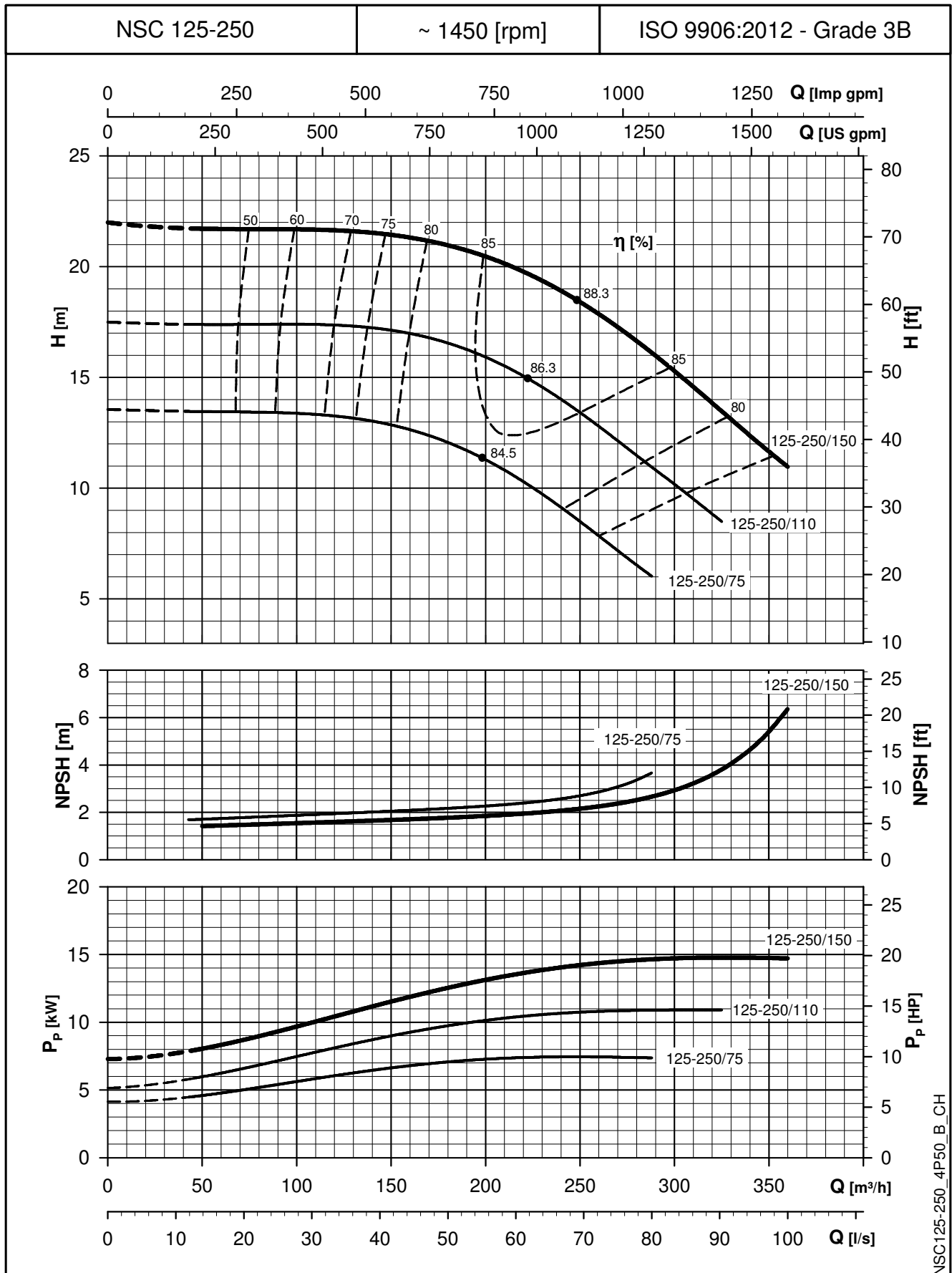
**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**



The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

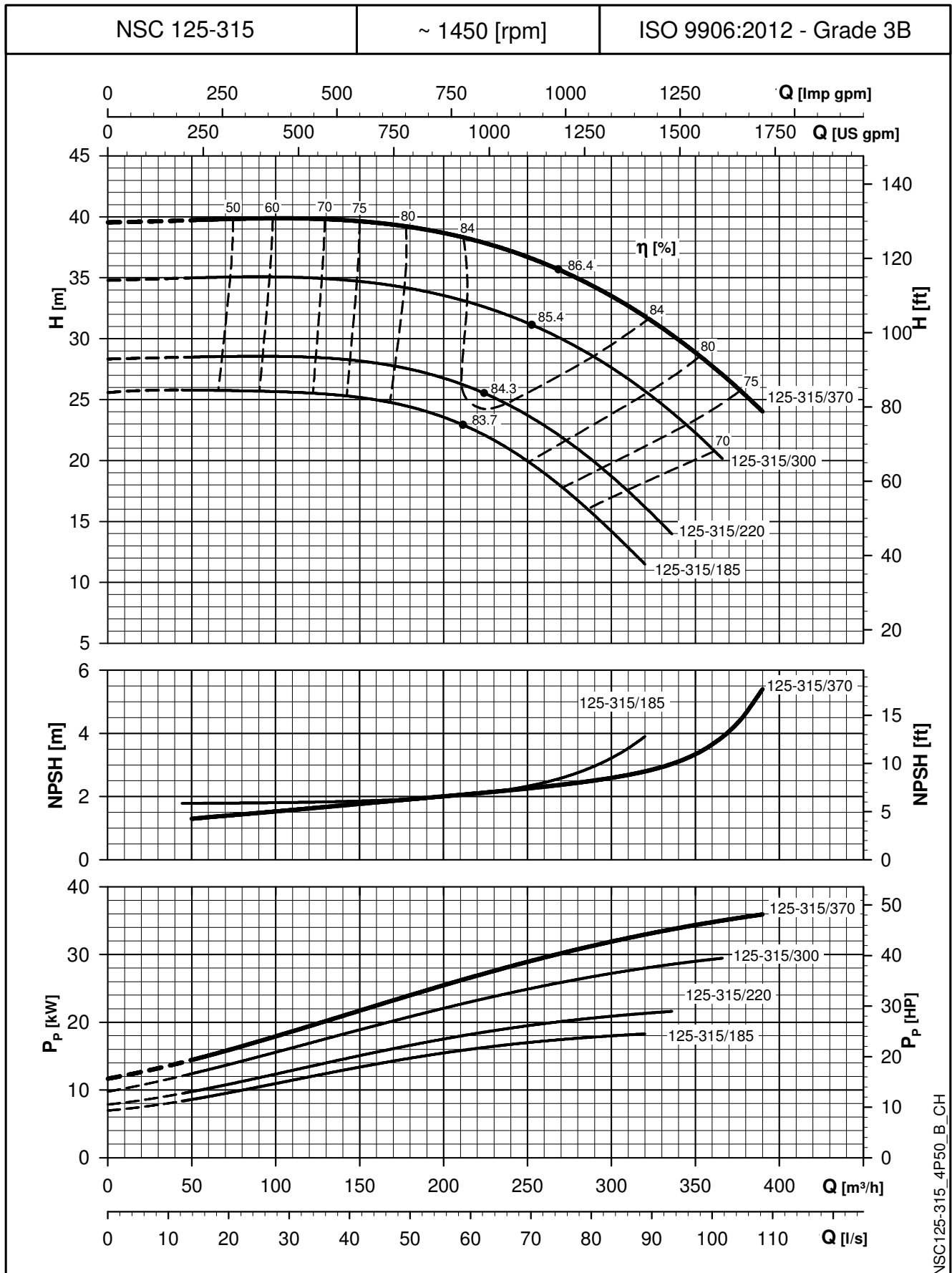
**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**



The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**

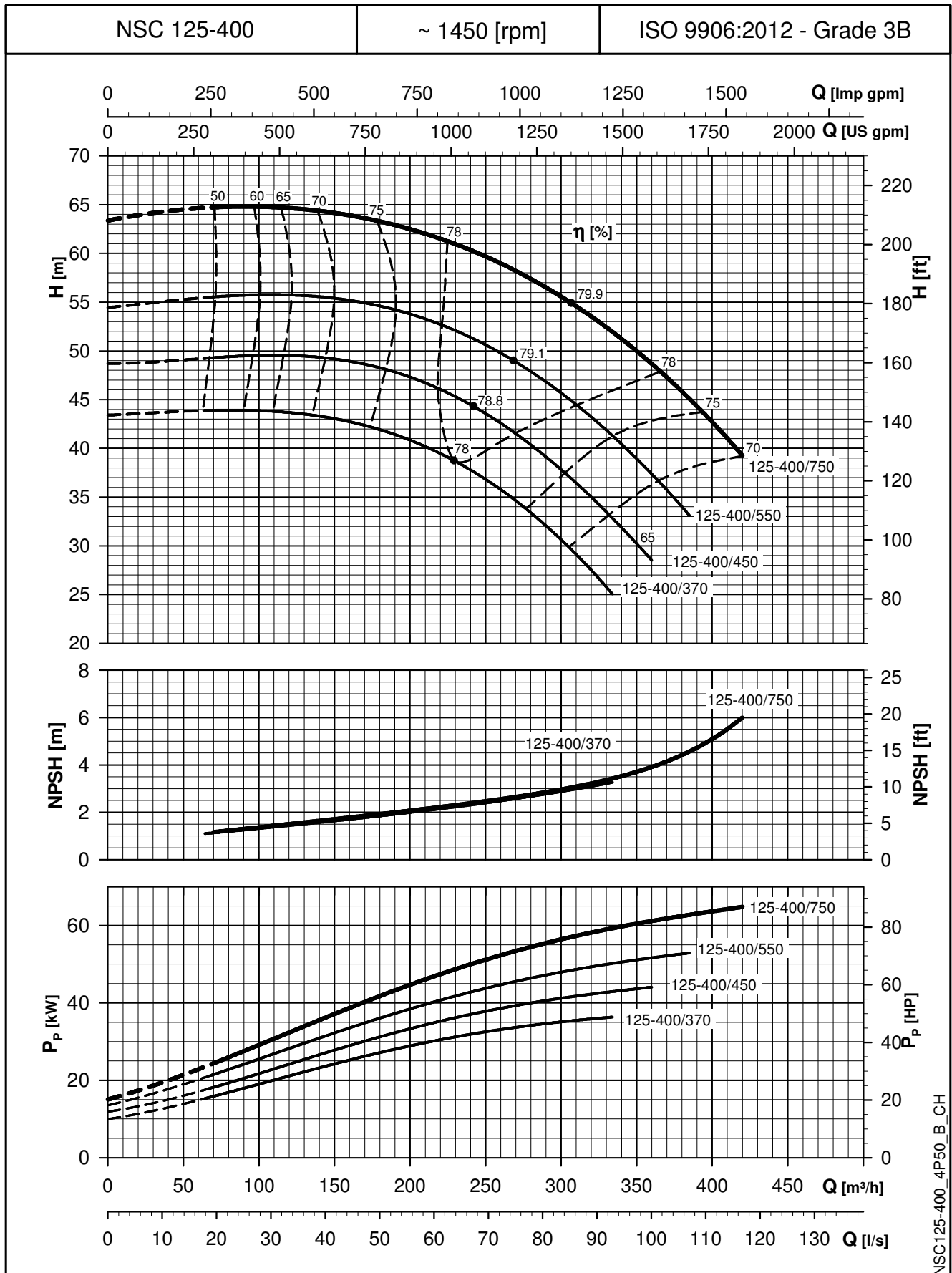


NSC125-315\_4P50\_B\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**



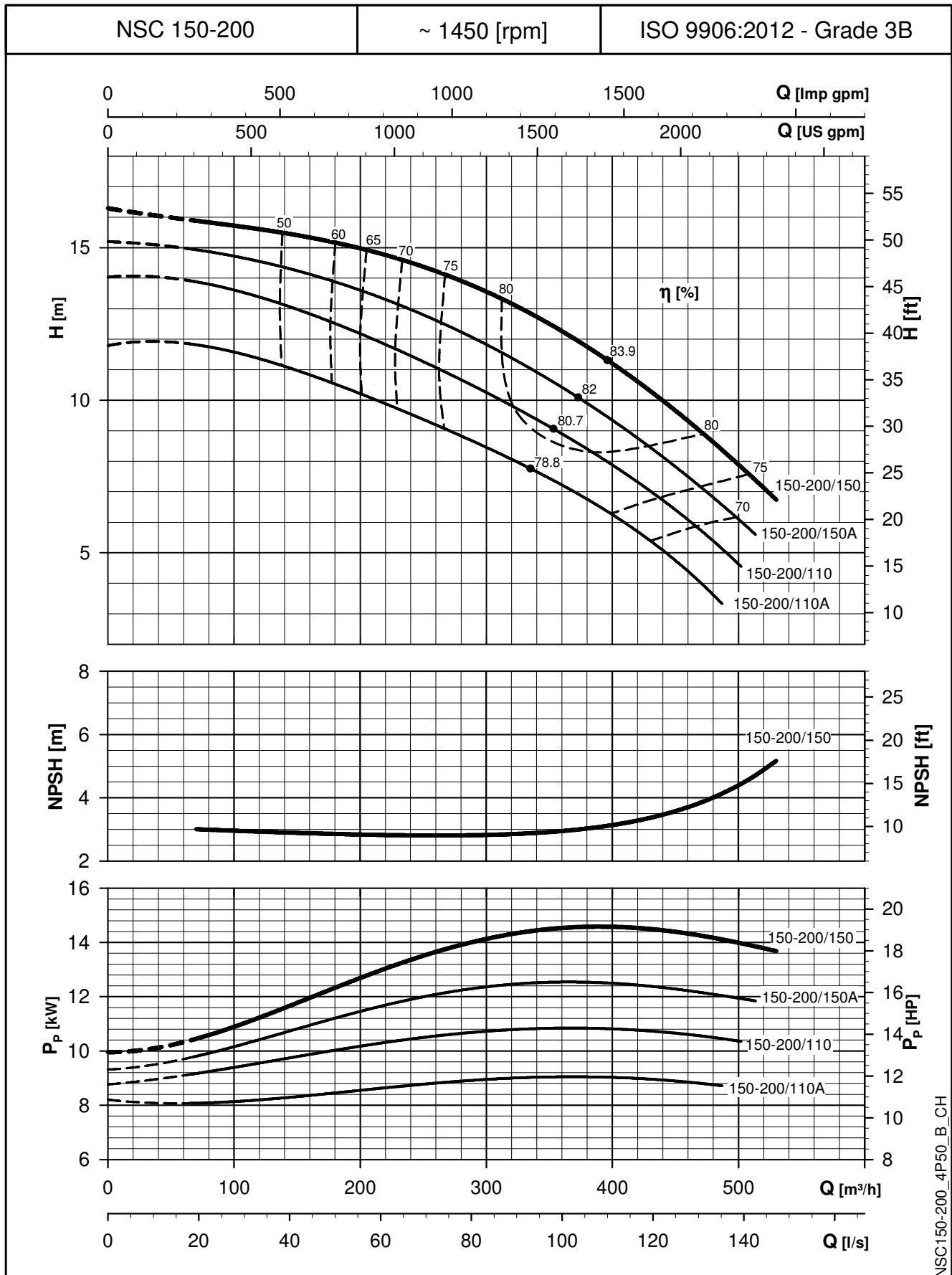
NSC125-400\_4P50\_B\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .



**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**

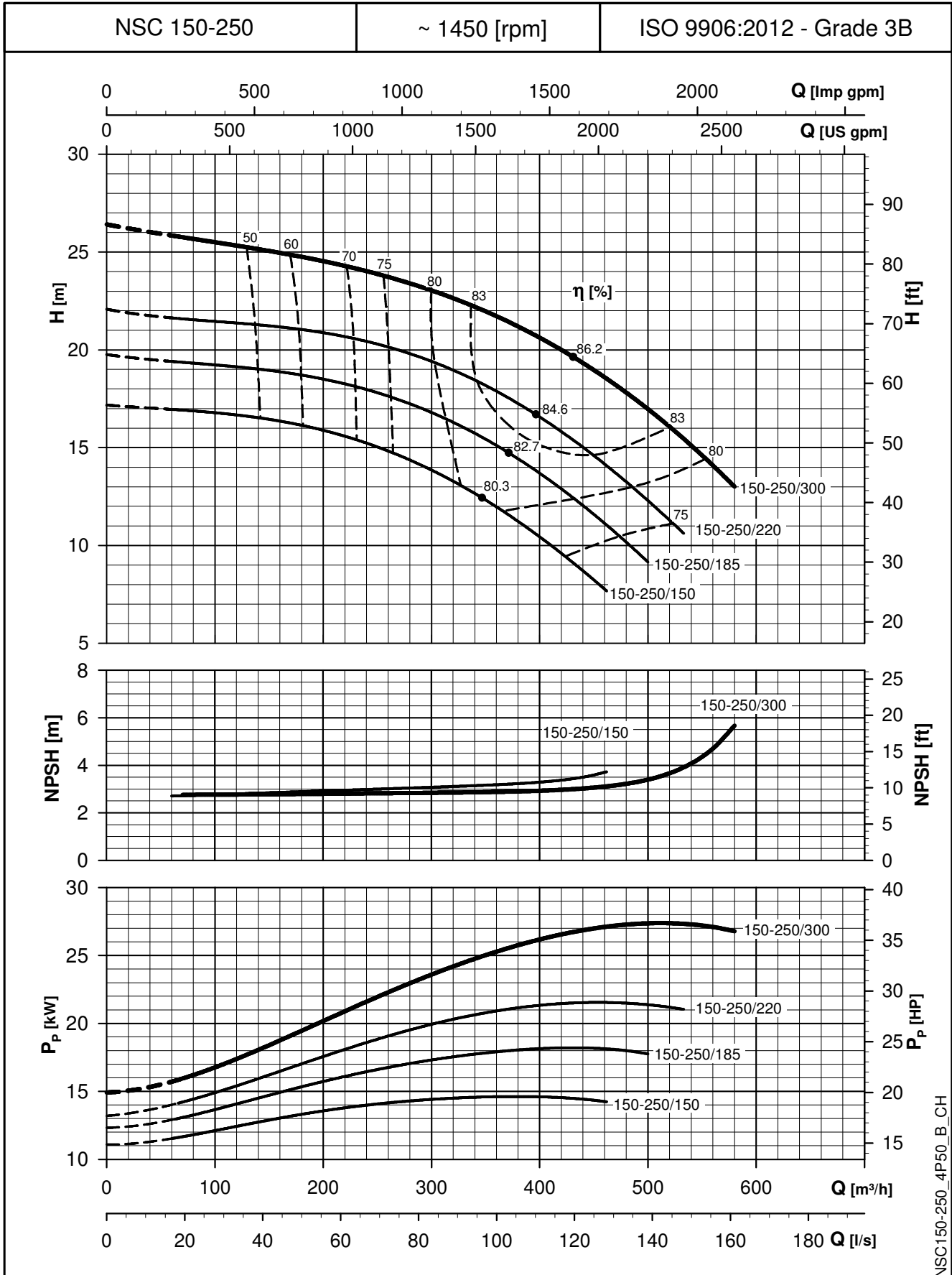


NSC150-200\_4P50\_B\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**

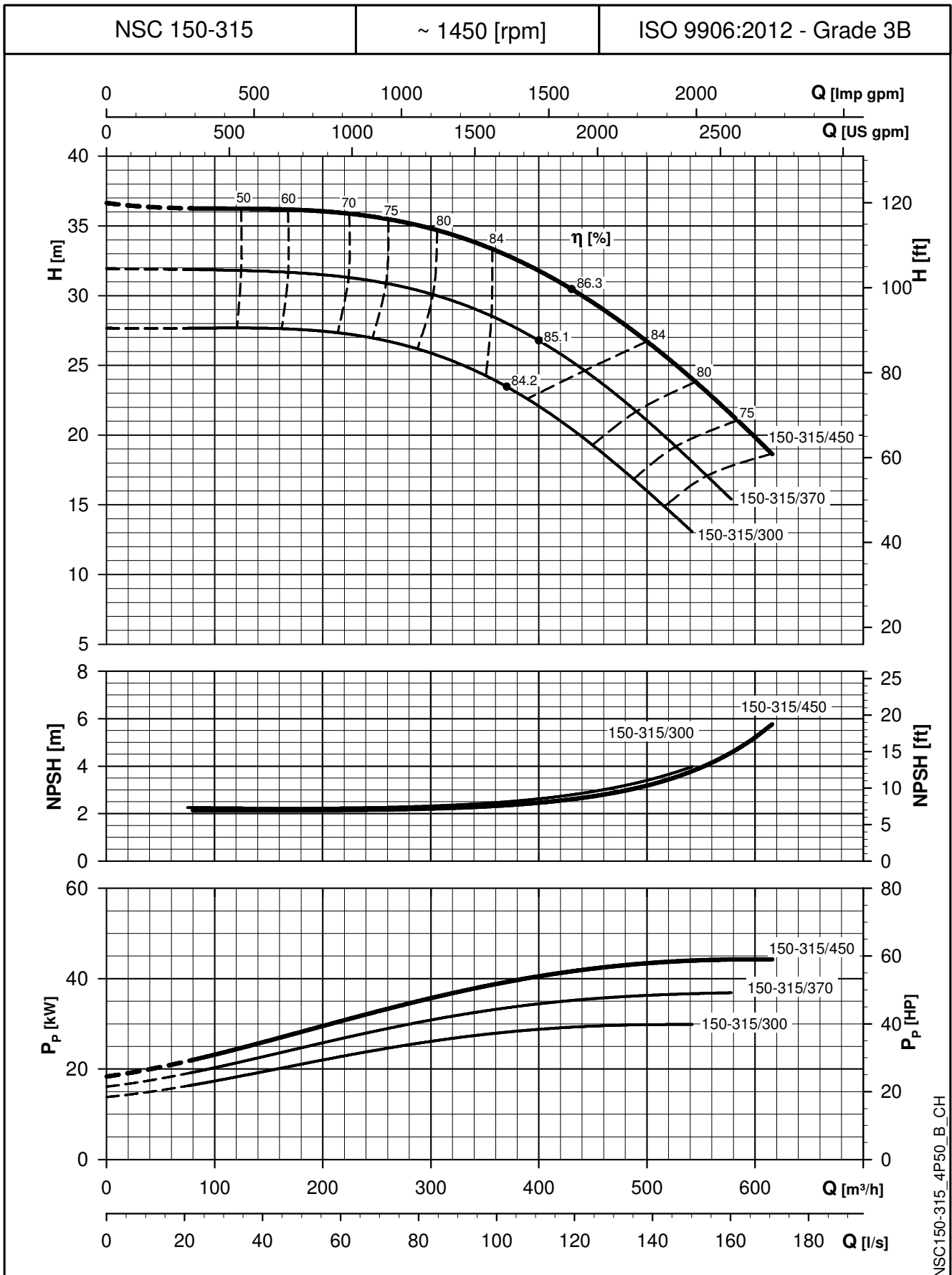


NSC150-250\_4P50\_B\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**

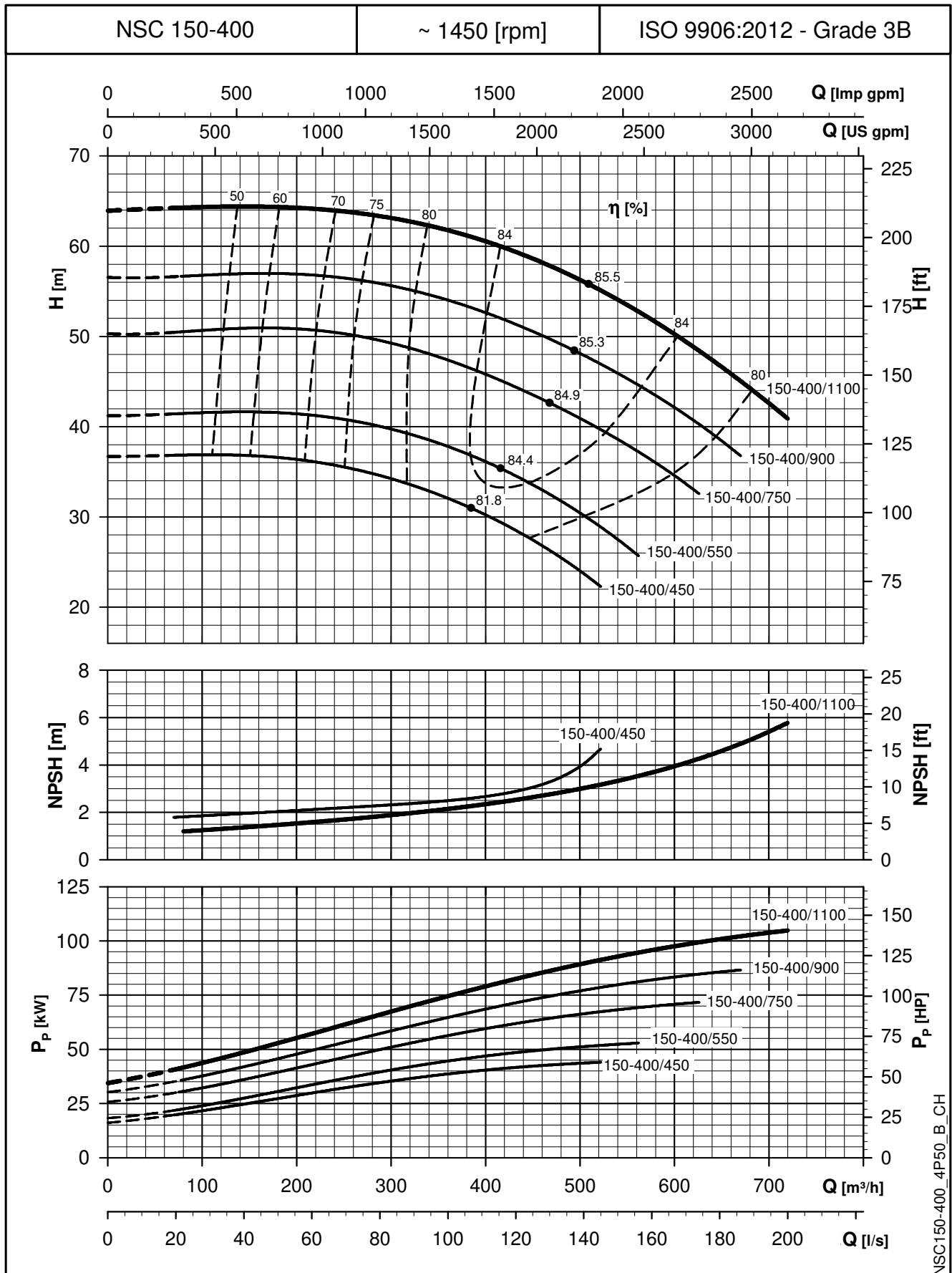


NSC150-315\_4P50\_B\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

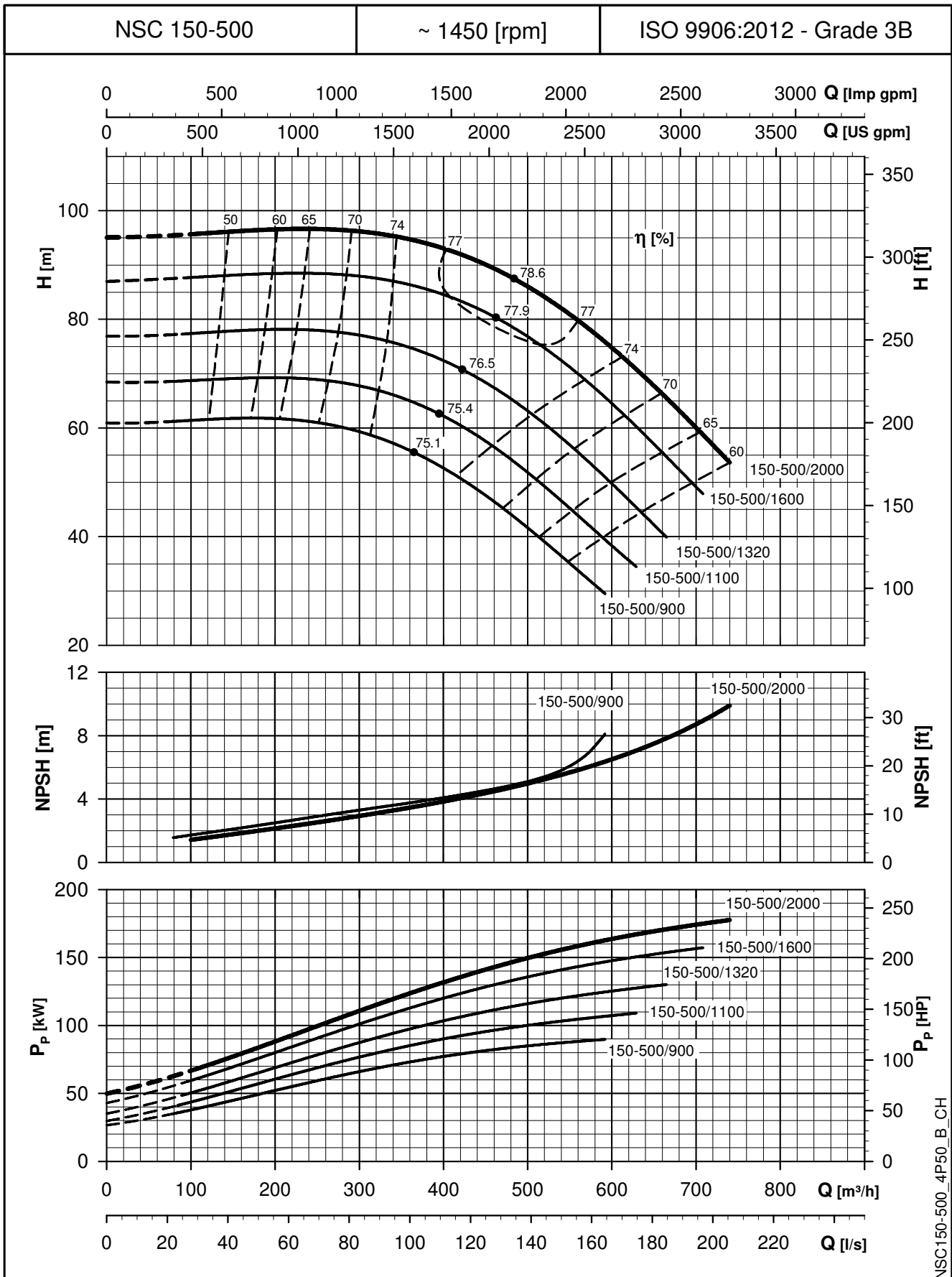
**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**



The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**

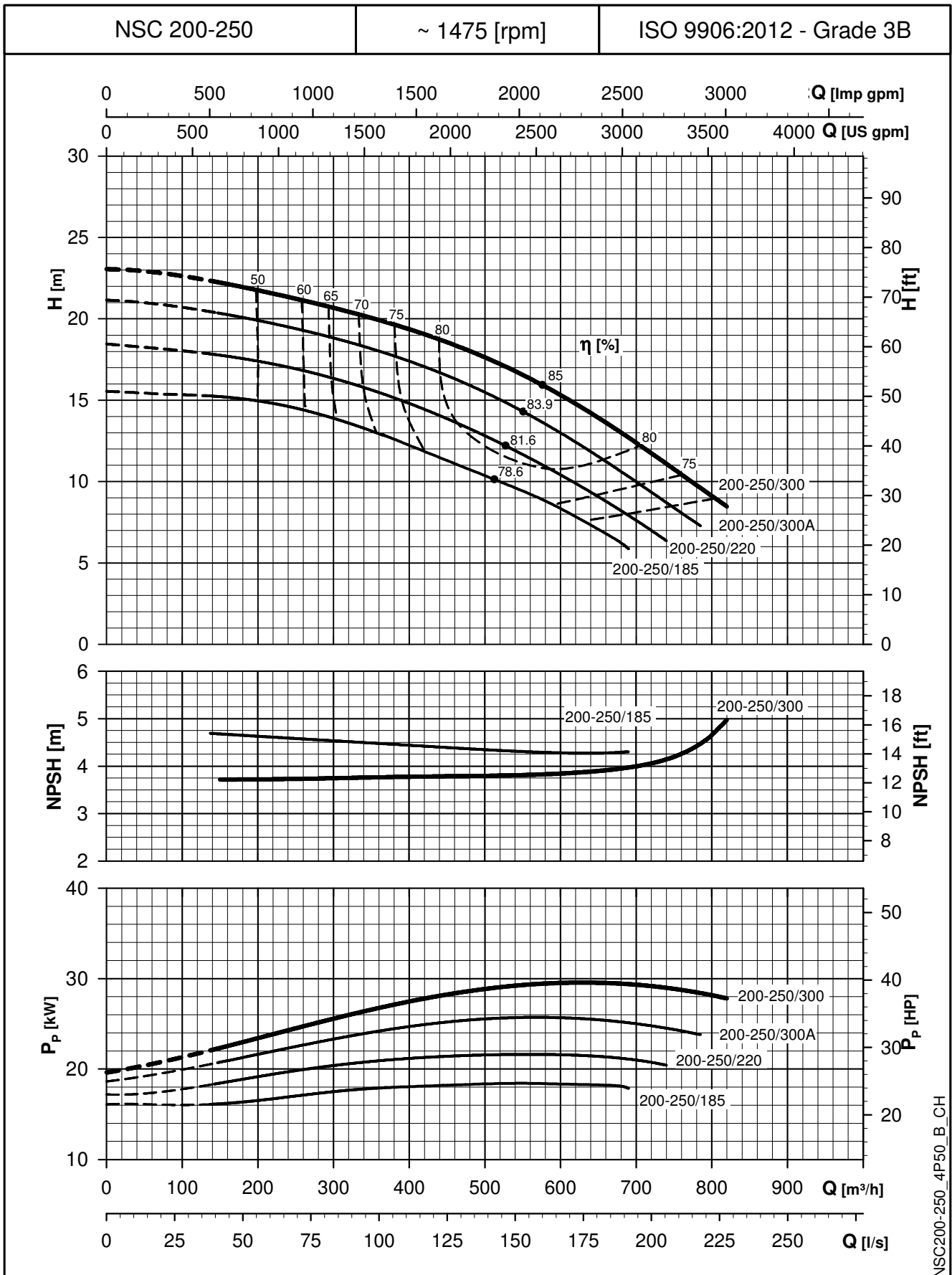


NSC150-500\_4P50\_B\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**

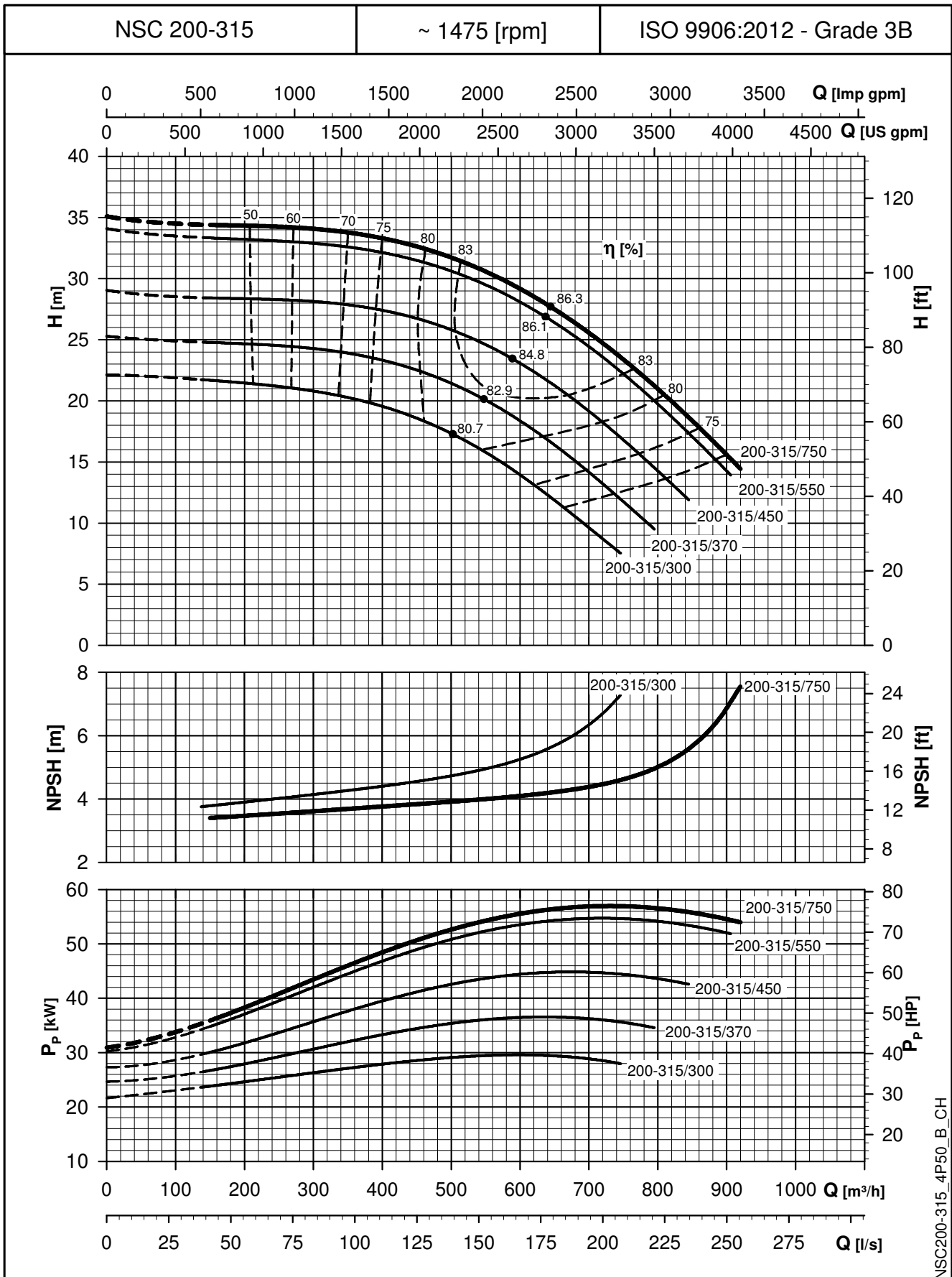


NSC200-250\_4P50\_B\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**

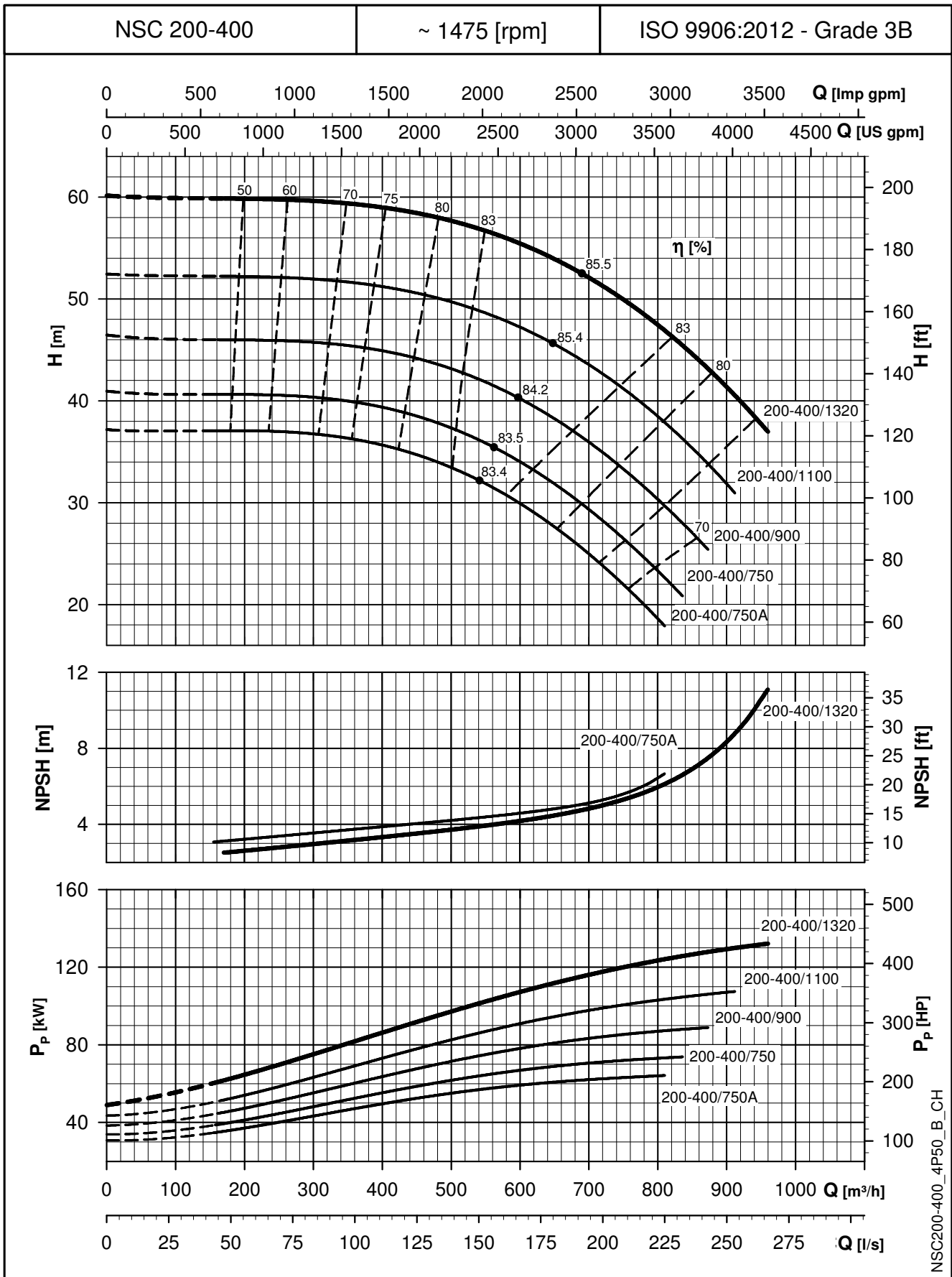


NSC200-315\_4P50\_B\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density ρ = 1,0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**

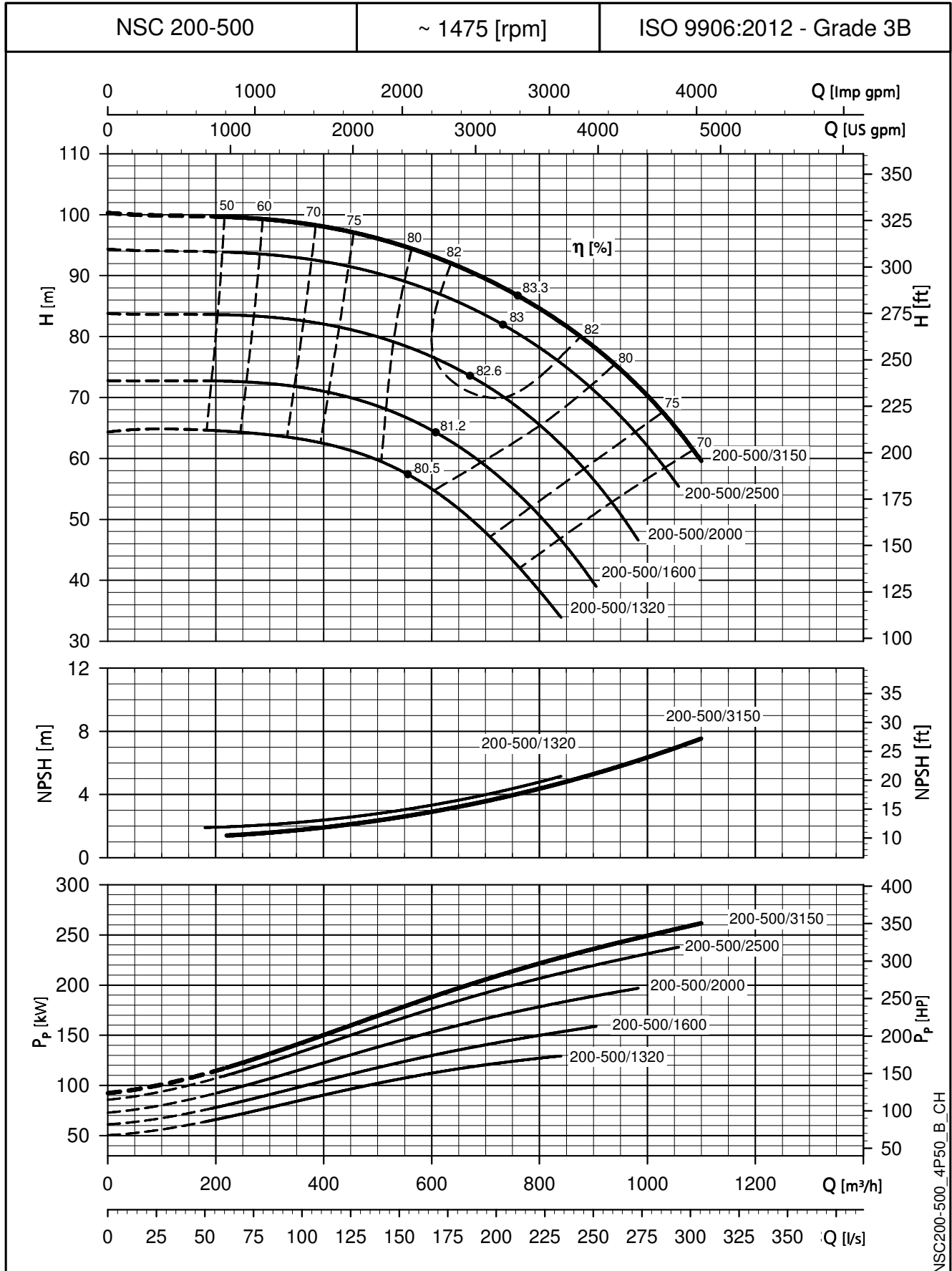


The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .



**e-NSC SERIES**

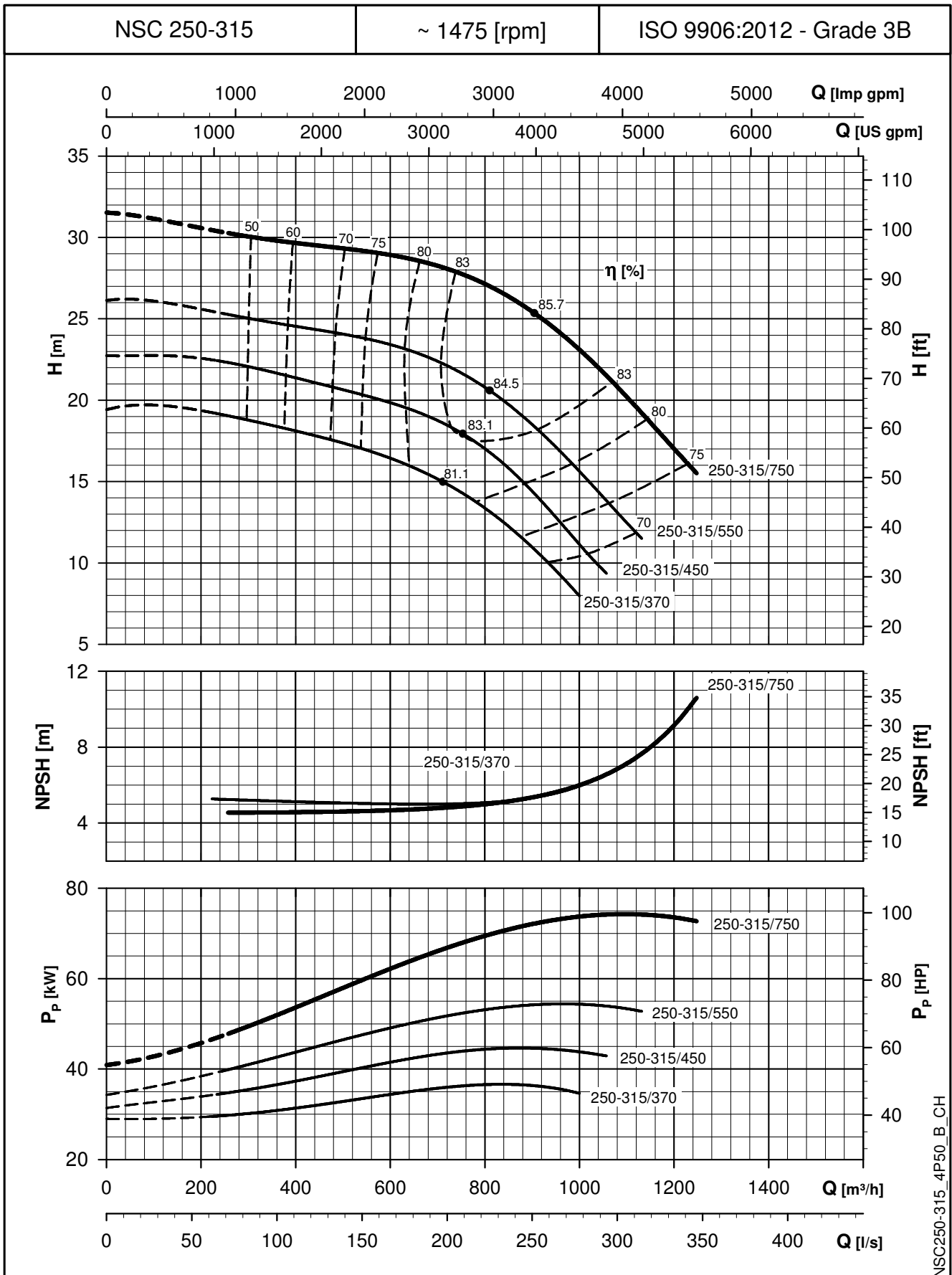
**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**



The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**

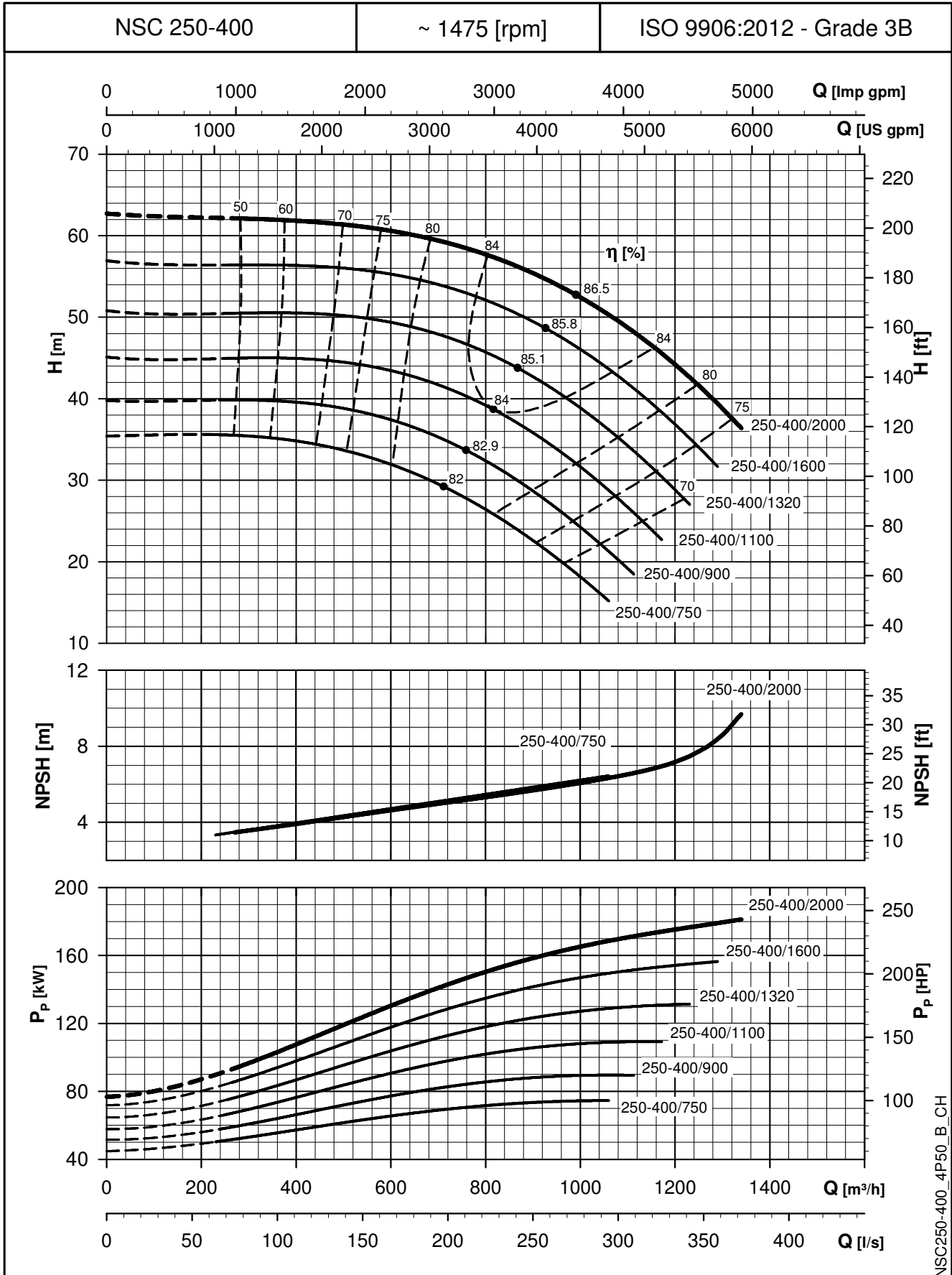


NSC250-315\_4P50\_B\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**

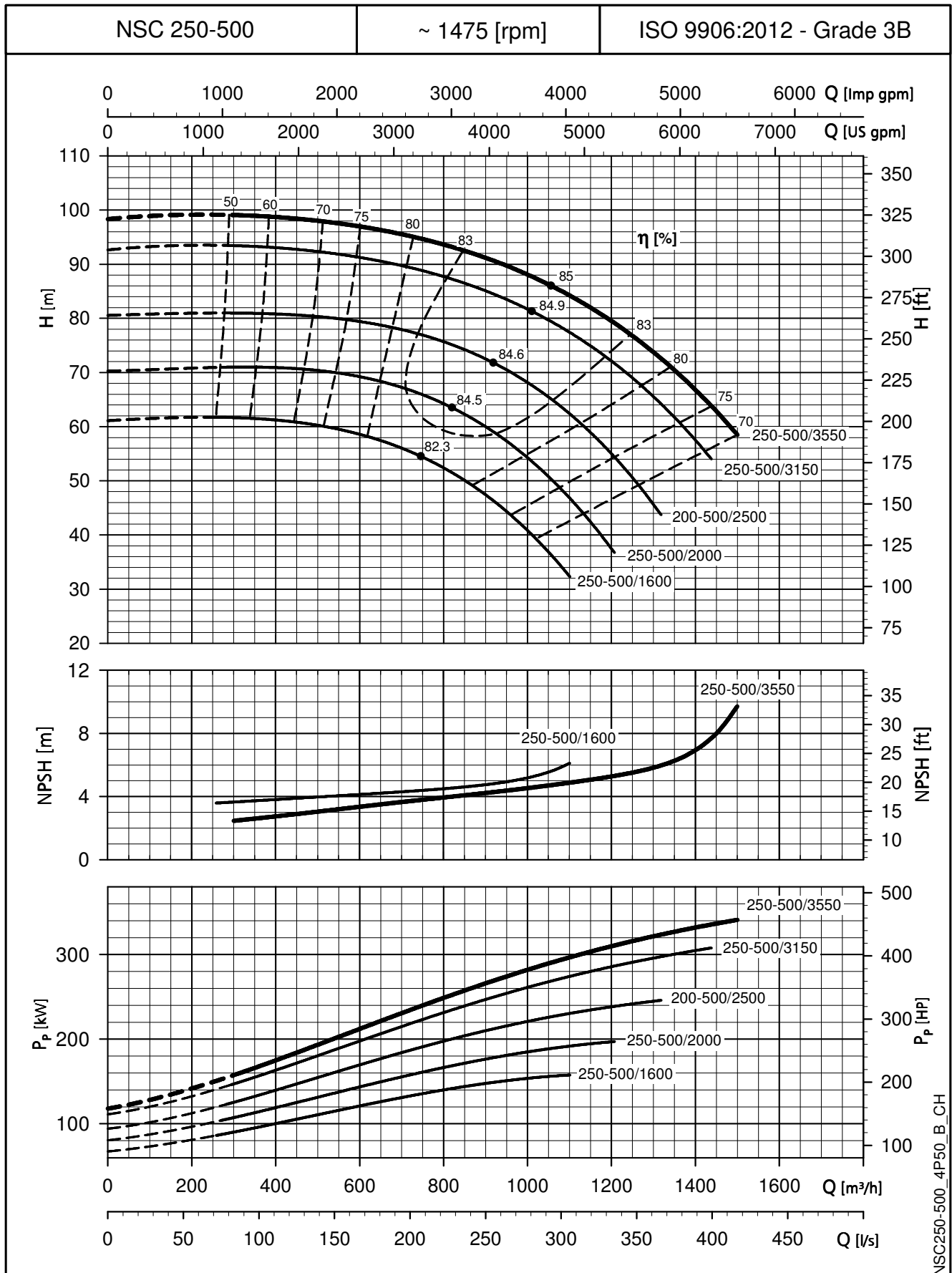


NSC250-400\_4P50\_B\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

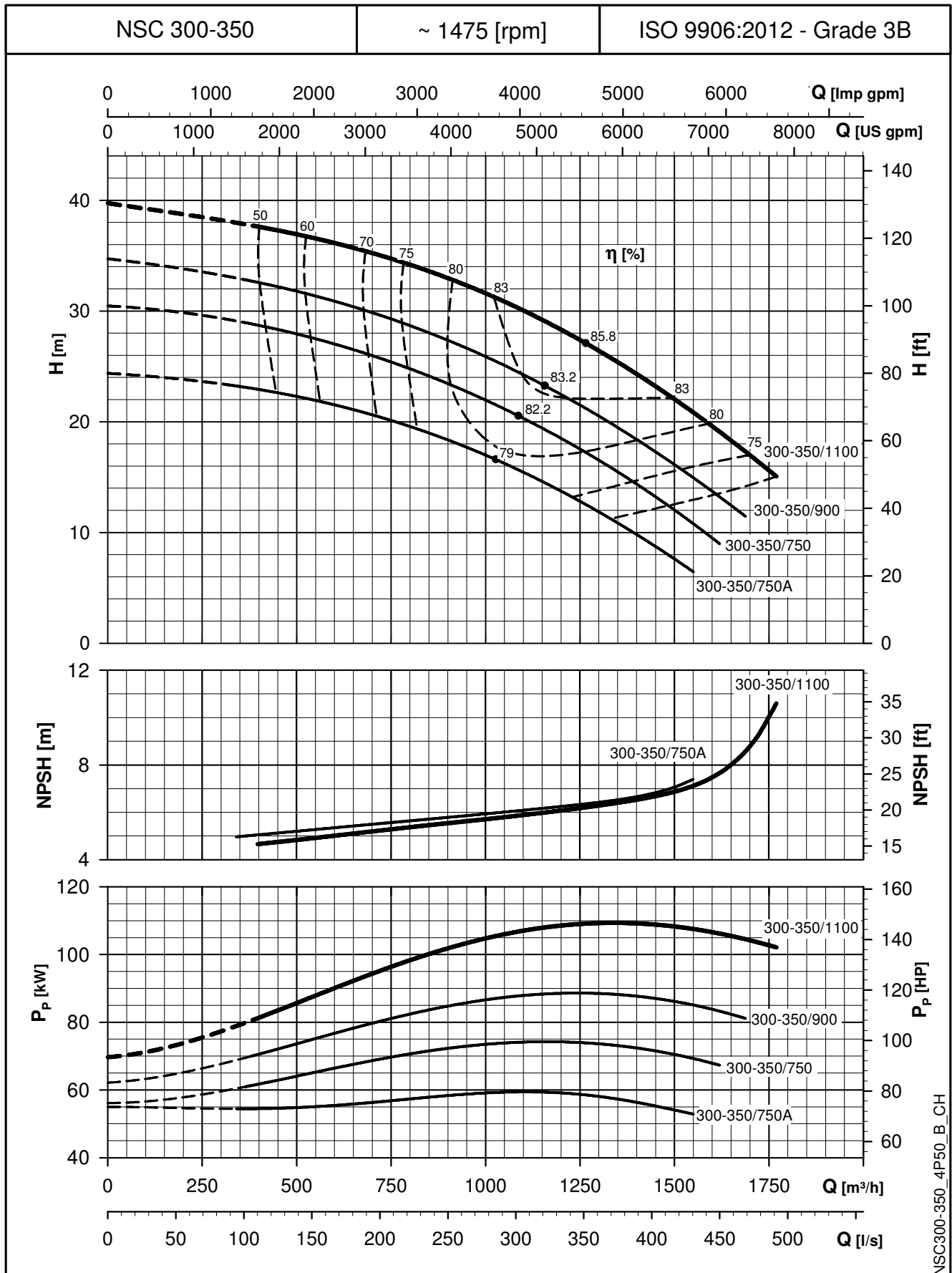
**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**



The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**

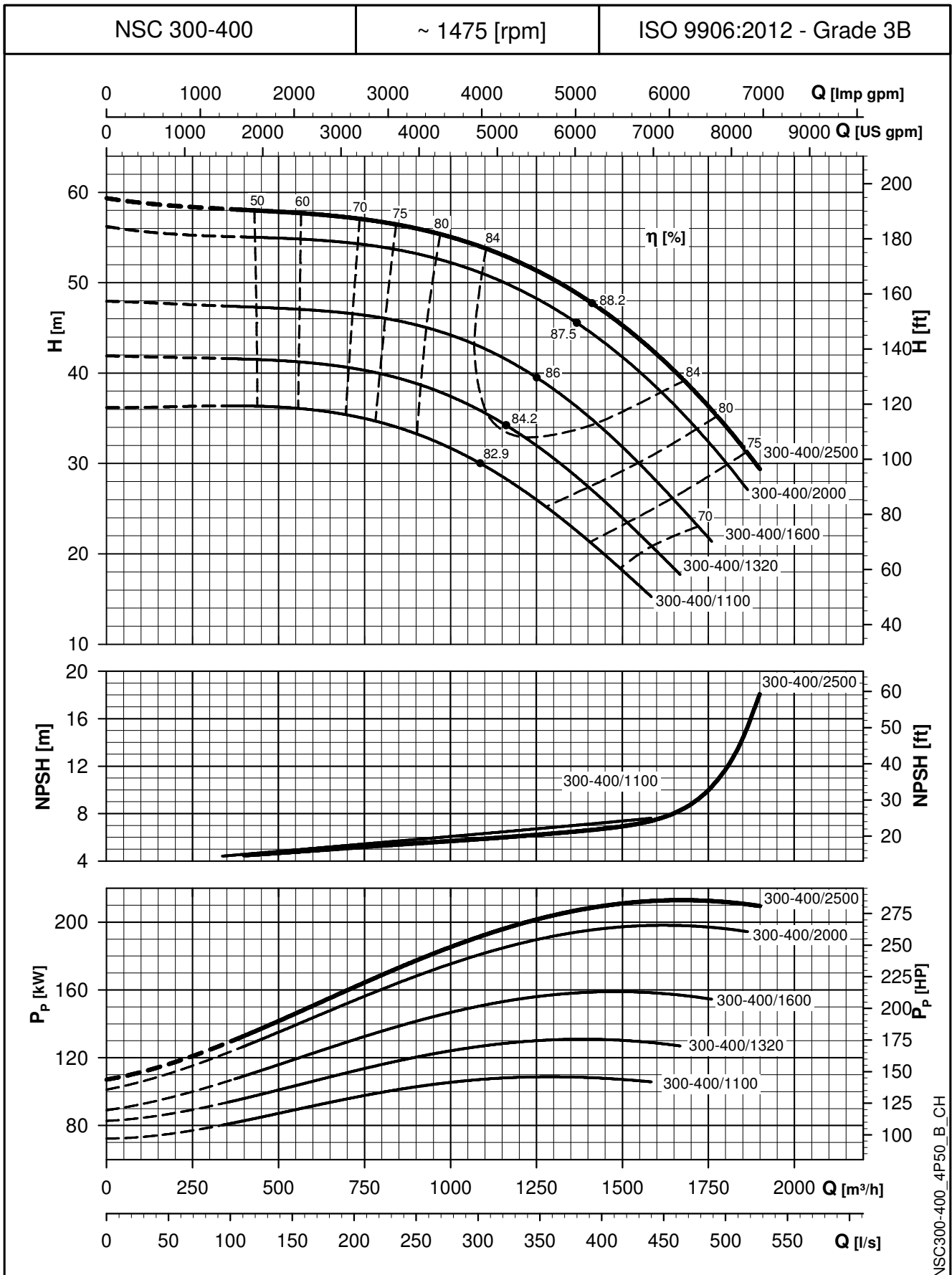


NSC300-350\_4P50\_B\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**

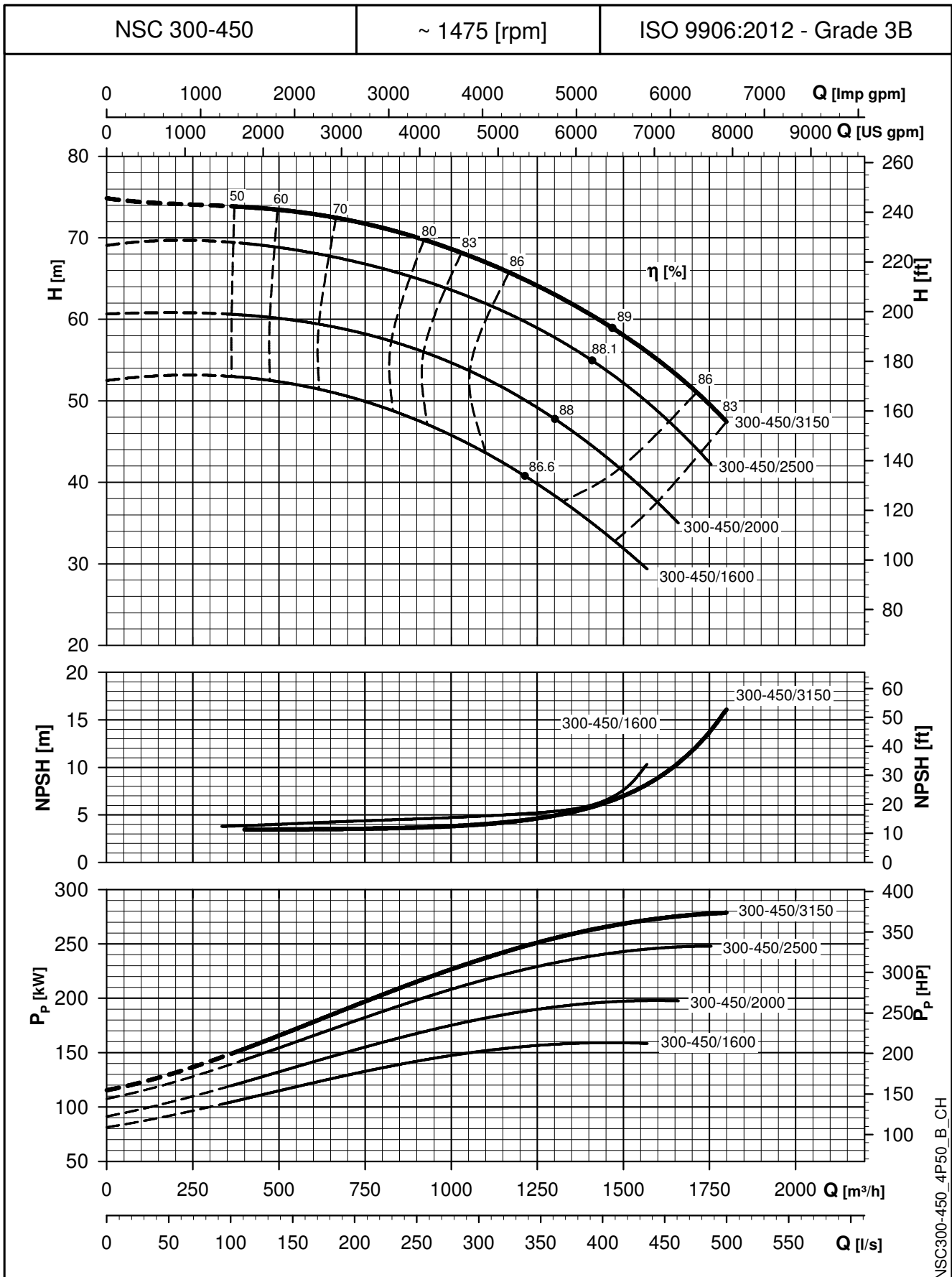


NSC300-400\_4P50\_B\_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .

**e-NSC SERIES**

**OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**



NSC300-450\_4P50\_B\_CH

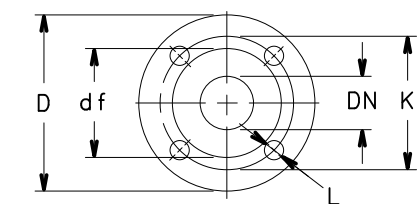
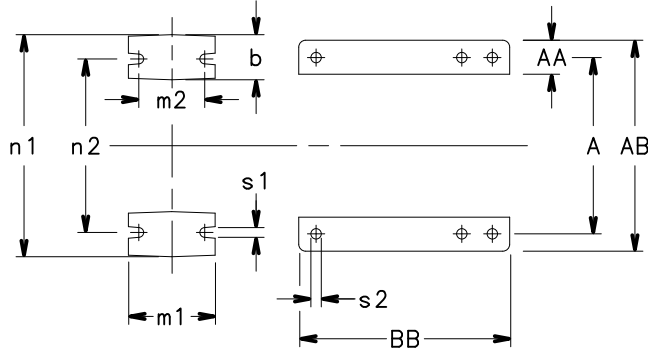
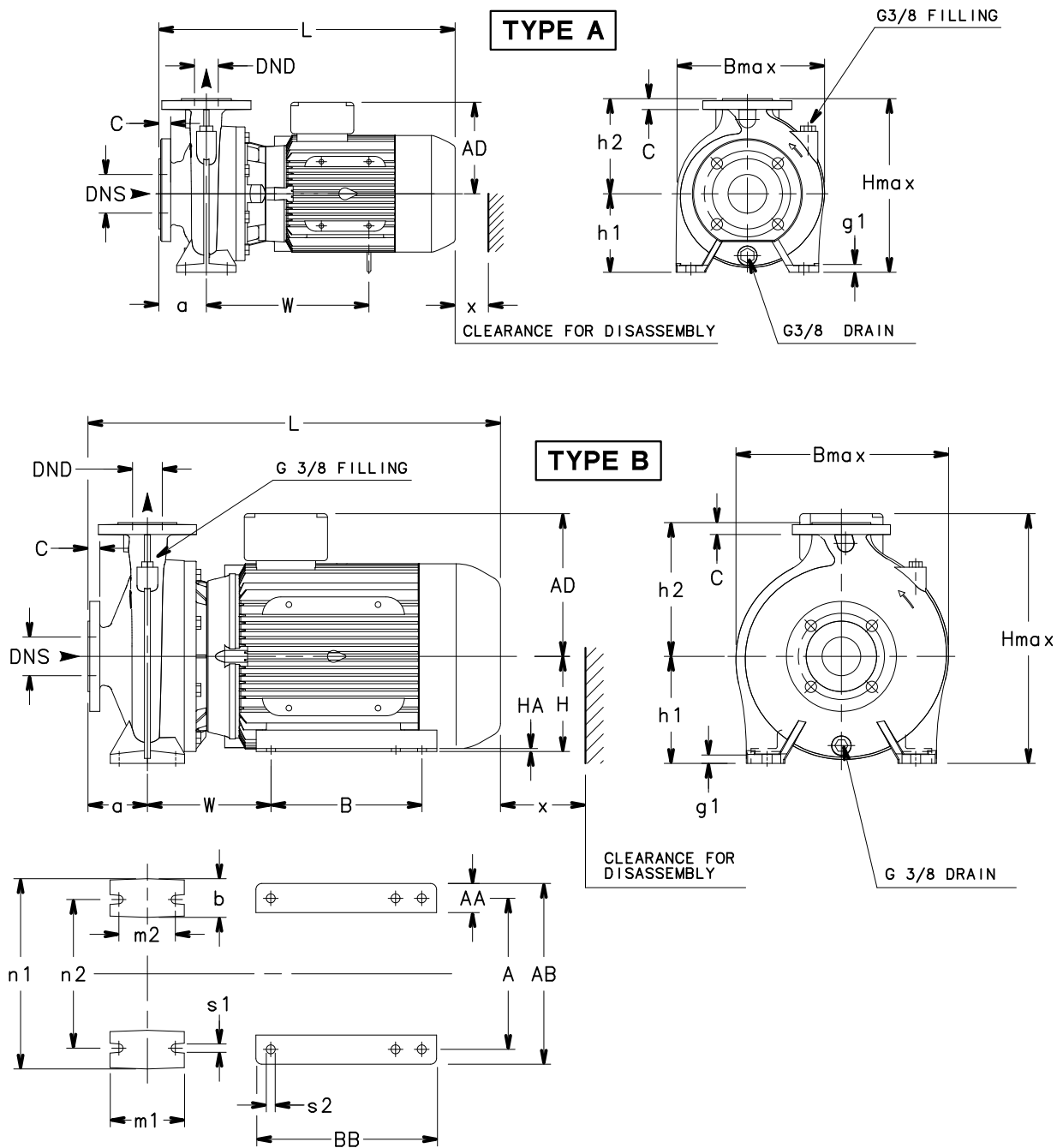
The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.  
 These performances are valid for liquids with density  $\rho = 1,0 \text{ Kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{sec}$ .





# **DIMENSIONS AND WEIGHTS**

**NSCE 32, 40, 50 SERIES**  
**DIMENSIONS AND WEIGHTS AT 50 Hz, 2 POLES**



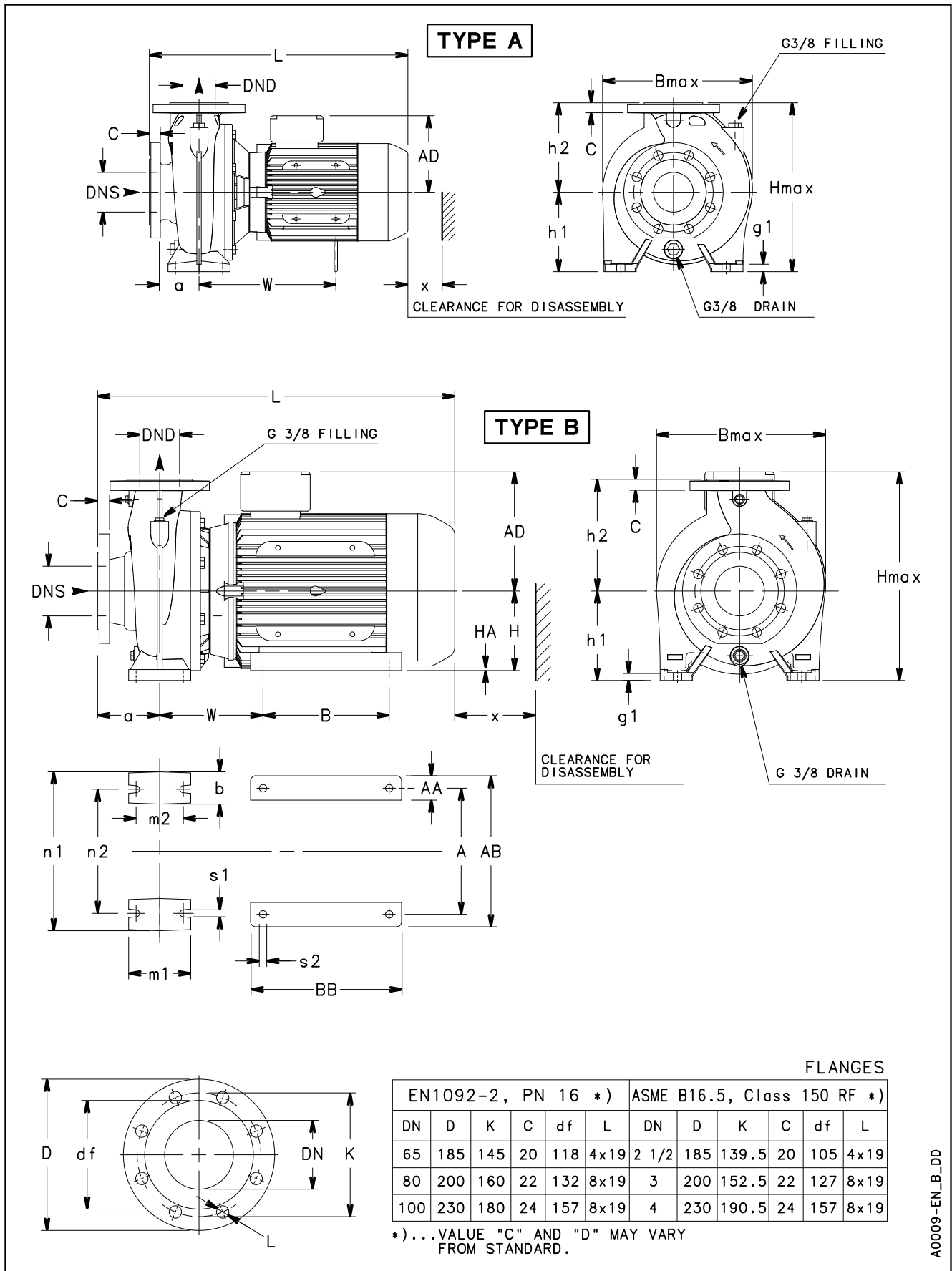
FLANGES

EN1092-2, PN 16 *)						ASME B16.5, Class 150 RF *)					
DN	D	K	C	df	L	DN	D	K	C	df	L
32	140	100	18	76	4x19	1 1/4	140	89	18	63.5	4x19
40	150	110	18	84	4x19	1 1/2	150	98.5	18	73	4x19
50	165	125	20	99	4x19	2	165	120.5	20	92	4x19
65	185	145	20	118	4x19	2 1/2	185	139.5	20	105	4x19

\*)...VALUE "C" AND "D" MAY VARY FROM STANDARD.



**NSCE 65, 80 SERIES  
DIMENSIONS AND WEIGHTS AT 50 Hz, 2 POLES**



A0009-EN\_B\_DD

## NSCE 65, 80 SERIES DIMENSIONS AND WEIGHTS AT 50 Hz, 2 POLES

PUMP TYPE NSCE..2	TYPE	DIMENSIONS (mm)																							WEIGHT kg			
		DNS	DND	a	b	g1	h1	h2	m1	m2	n1	n2	s1	W	A	AA	AB	AD	B	BB	H	HA	s2	B max		H max	L	x
65-125/40/P	A	80	65	100	65	16	160	180	125	95	280	212	14	275	-	-	-	154	-	-	-	-	-	300	340	521	100	56
65-125/55/P	A	80	65	100	65	16	160	180	125	95	280	212	14	287	-	-	-	168	-	-	-	-	-	300	340	555	100	65
65-125/75/P	A	80	65	100	65	16	160	180	125	95	280	212	14	307	-	-	-	191	-	-	-	-	-	300	351	569	100	82
65-125/92/P	A	80	65	100	65	16	160	180	125	95	280	212	14	345	-	-	-	191	-	-	-	-	-	300	351	607	100	88
65-125/110/P	A	80	65	100	65	16	160	180	125	95	280	212	14	345	-	-	-	191	-	-	-	-	-	300	351	607	100	92
65-160/75/P	A	80	65	100	65	16	160	200	125	95	280	212	14	305	-	-	-	191	-	-	-	-	-	335	360	567	108	85
65-160/92/P	A	80	65	100	65	16	160	200	125	95	280	212	14	343	-	-	-	191	-	-	-	-	-	335	360	605	108	91
65-160/110/P	A	80	65	100	65	16	160	200	125	95	280	212	14	343	-	-	-	191	-	-	-	-	-	335	360	605	108	96
65-160/150/P	B	80	65	100	65	16	160	200	125	95	280	212	14	208	254	49	304	240	210	304	160	5	15	335	400	694	108	133
65-160/185/P	B	80	65	100	65	16	160	200	125	95	280	212	14	208	254	49	304	240	254	304	160	5	15	335	400	694	108	143
65-200/110/P	A	80	65	100	65	16	180	225	125	95	320	250	14	343	-	-	-	191	-	-	-	-	-	348	405	605	118	101
65-200/150/P	B	80	65	100	65	16	180	225	125	95	320	250	14	208	254	49	304	240	210	304	160	5	15	348	420	694	118	138
65-200/185/P	B	80	65	100	65	16	180	225	125	95	320	250	14	208	254	49	304	240	254	304	160	5	15	348	420	694	118	148
65-200/220/P	B	80	65	100	65	16	180	225	125	95	320	250	14	208	254	49	304	240	254	304	160	5	15	348	420	694	118	157
80-160/110/P	A	100	80	125	65	16	180	225	125	95	320	250	14	343	-	-	-	191	-	-	-	-	-	340	405	630	122	110
80-160/150/P	B	100	80	125	65	16	180	225	125	95	320	250	14	208	254	49	304	240	210	304	160	5	15	340	420	719	122	147
80-160/185/P	B	100	80	125	65	16	180	225	125	95	320	250	14	208	254	49	304	240	254	304	160	5	15	340	420	719	122	157
80-160/220/P	B	100	80	125	65	16	180	225	125	95	320	250	14	208	254	49	304	240	254	304	160	5	15	340	420	719	122	166

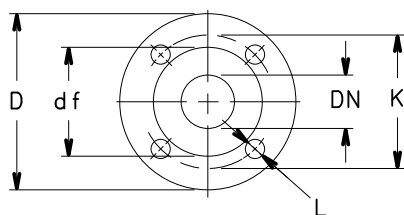
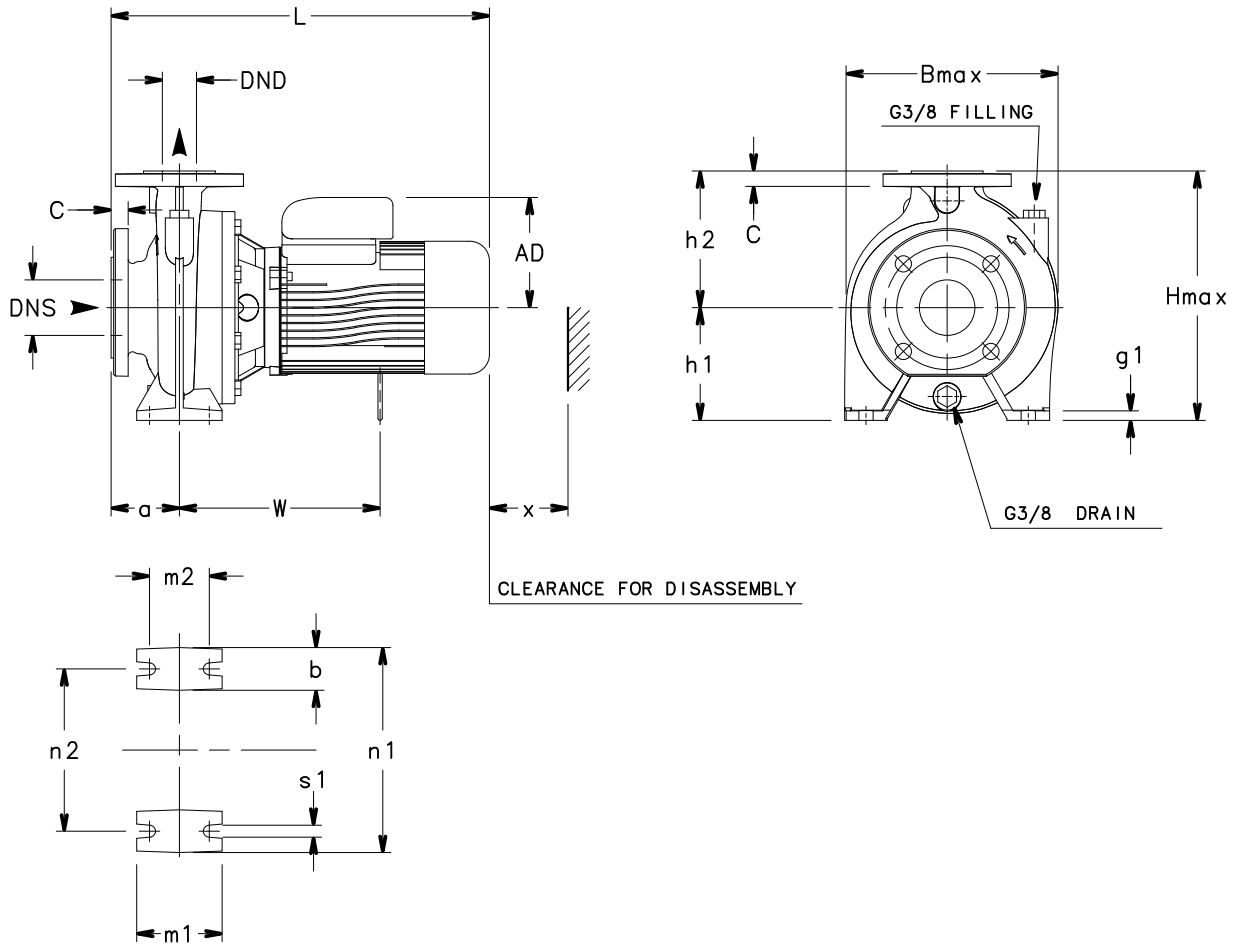
For shims and supports see accessories section.

nsce-65-80\_2p50-en\_c\_1d

NOTE: Pumps with flanges according to EN 1092-2 as standard; available ASME B16.5 version on request.

**NSCE 32, 40, 50 SERIES  
DIMENSIONS AND WEIGHTS AT 50 Hz, 4 POLES**

**TYPE A**



FLANGES

EN1092-2, PN 16 *)						ASME B16.5, Class 150 RF *)					
DN	D	K	C	df	L	DN	D	K	C	df	L
32	140	100	18	76	4x19	1 1/4	140	89	18	63.5	4x19
40	150	110	18	84	4x19	1 1/2	150	98.5	18	73	4x19
50	165	125	20	99	4x19	2	165	120.5	20	92	4x19
65	185	145	20	118	4x19	2 1/2	185	139.5	20	105	4x19

\*)...VALUE "C" AND "D" MAY VARY FROM STANDARD.

## NSCE 32, 40, 50 SERIES DIMENSIONS AND WEIGHTS AT 50 Hz, 4 POLES

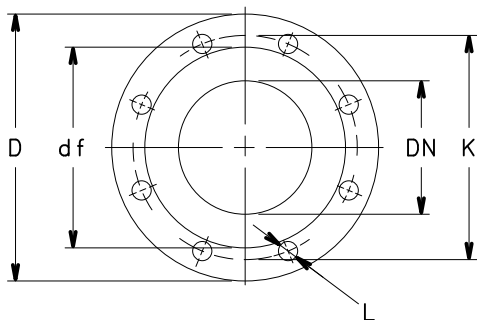
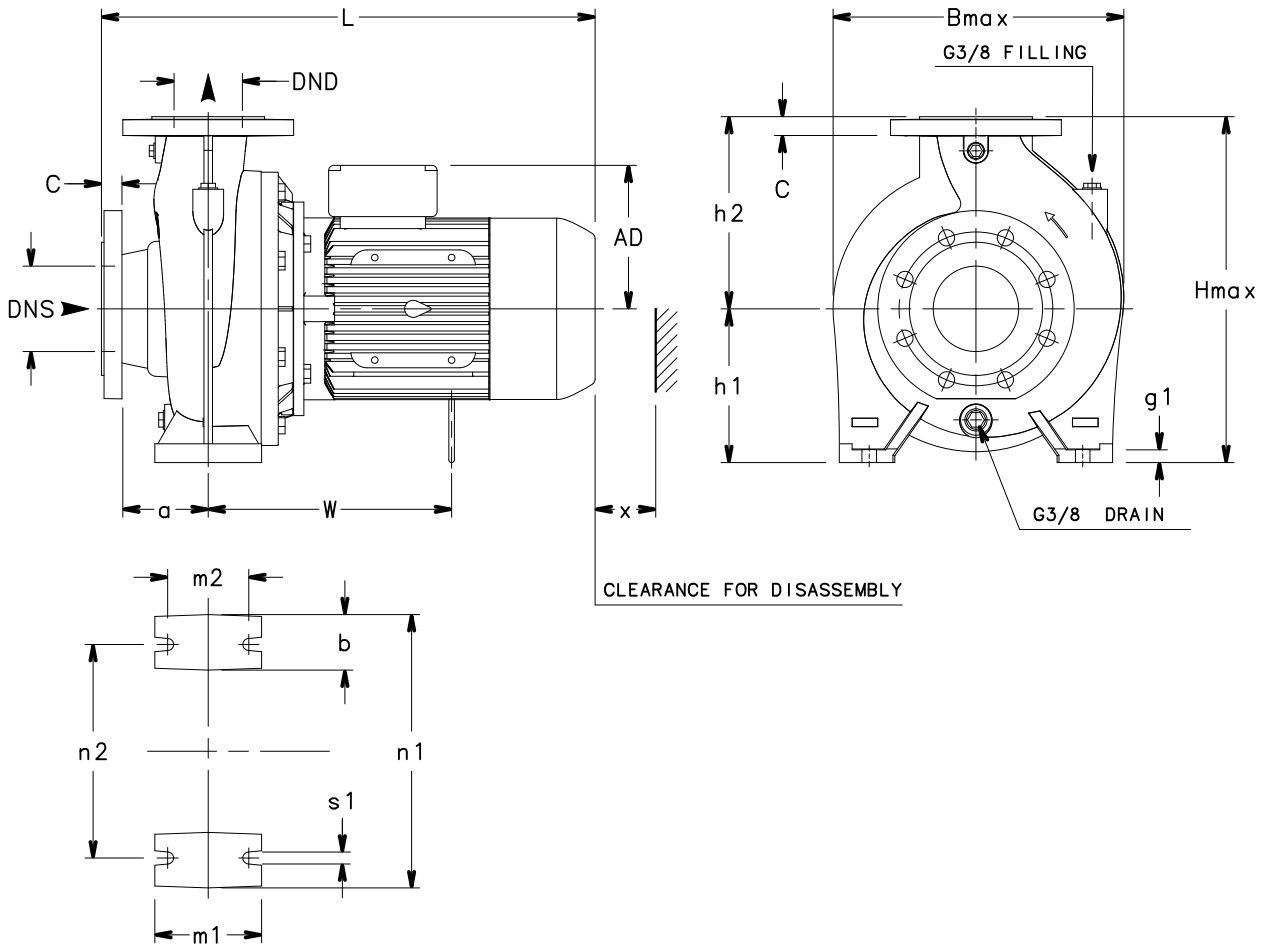
PUMP TYPE NSCE..4	TYPE	DIMENSIONS (mm)																		WEIGHT kg
		DNS	DND	a	AD	b	g1	h1	h2	m1	m2	n1	n2	s1	W	B max	H max	L	x	
32-125/02B/S	A	50	32	80	121	50	14	112	140	100	70	190	140	14	215	242	252	411	86	25
32-125/02A/S	A	50	32	80	121	50	14	112	140	100	70	190	140	14	215	242	252	411	86	25
32-125/02/S	A	50	32	80	121	50	14	112	140	100	70	190	140	14	215	242	252	411	86	25
32-125/03/S	A	50	32	80	121	50	14	112	140	100	70	190	140	14	215	242	252	411	86	25
32-160/02/S	A	50	32	80	121	50	14	132	160	100	70	240	190	14	215	248	292	411	86	26
32-160/03/S	A	50	32	80	121	50	14	132	160	100	70	240	190	14	215	248	292	411	86	26
32-160/05A/S	A	50	32	80	129	50	14	132	160	100	70	240	190	14	235	248	292	443	86	28
32-160/05/S	A	50	32	80	129	50	14	132	160	100	70	240	190	14	235	248	292	443	86	28
32-200/05A/S	A	50	32	80	129	50	14	160	180	100	70	240	190	14	235	286	340	443	86	35
32-200/05/S	A	50	32	80	129	50	14	160	180	100	70	240	190	14	235	286	340	443	86	35
32-200/07/X	A	50	32	80	128	50	14	160	180	100	70	240	190	14	-	286	340	411	86	36
32-200/11/P	A	50	32	80	134	50	14	160	180	100	70	240	190	14	245	286	340	478	86	42
32-250/15B/P	A	50	32	100	134	65	21	180	225	125	95	320	250	14	245	334	405	498	95	51
32-250/15A/P	A	50	32	100	134	65	21	180	225	125	95	320	250	14	245	334	405	498	95	51
32-250/15/P	A	50	32	100	134	65	21	180	225	125	95	320	250	14	245	334	405	498	95	51
32-250/22/P	A	50	32	100	168	65	21	180	225	125	95	320	250	14	285	334	405	522	95	61
40-125/02A/S	A	65	40	80	121	50	14	112	140	100	70	210	160	14	215	237	252	411	96	26
40-125/02/S	A	65	40	80	121	50	14	112	140	100	70	210	160	14	215	237	252	411	96	26
40-125/03/S	A	65	40	80	121	50	14	112	140	100	70	210	160	14	215	237	252	411	96	26
40-125/05/S	A	65	40	80	129	50	14	112	140	100	70	210	160	14	235	237	252	443	96	28
40-160/03/S	A	65	40	80	121	50	14	132	160	100	70	240	190	14	215	250	292	411	92	28
40-160/05/S	A	65	40	80	129	50	14	132	160	100	70	240	190	14	235	250	292	443	92	30
40-160/07/X	A	65	40	80	128	50	14	132	160	100	70	240	190	14	-	250	292	411	92	34
40-160/11/P	A	65	40	80	134	50	14	132	160	100	70	240	190	14	245	250	292	478	92	40
40-200/07/X	A	65	40	100	128	50	14	160	180	100	70	265	212	14	-	290	340	431	90	36
40-200/11/P	A	65	40	100	134	50	14	160	180	100	70	265	212	14	245	290	340	498	90	42
40-200/15A/P	A	65	40	100	134	50	14	160	180	100	70	265	212	14	245	290	340	498	90	42
40-200/15/P	A	65	40	100	134	50	14	160	180	100	70	265	212	14	245	290	340	498	90	45
40-250/15A/P	A	65	40	100	134	65	16	180	225	125	95	320	250	14	245	338	405	498	104	54
40-250/15/P	A	65	40	100	134	65	16	180	225	125	95	320	250	14	245	338	405	498	104	54
40-250/22A/P	A	65	40	100	168	65	16	180	225	125	95	320	250	14	285	338	405	522	104	64
40-250/22/P	A	65	40	100	168	65	16	180	225	125	95	320	250	14	285	338	405	522	104	64
40-250/30/P	A	65	40	100	168	65	16	180	225	125	95	320	250	14	285	338	405	553	104	68
50-125/03/S	A	65	50	100	121	50	14	132	160	100	70	240	190	14	217	255	292	433	107	29
50-125/05/S	A	65	50	100	129	50	14	132	160	100	70	240	190	14	237	255	292	465	107	31
50-125/07/X	A	65	50	100	128	50	14	132	160	100	70	240	190	14	-	255	292	433	107	35
50-125/11/P	A	65	50	100	134	50	14	132	160	100	70	240	190	14	247	255	292	500	107	41
50-160/07/X	A	65	50	100	128	50	14	160	180	100	70	265	212	14	-	289	340	431	103	39
50-160/11A/P	A	65	50	100	134	50	14	160	180	100	70	265	212	14	245	289	340	498	103	45
50-160/11/P	A	65	50	100	134	50	14	160	180	100	70	265	212	14	245	289	340	498	103	45
50-160/15/P	A	65	50	100	134	50	14	160	180	100	70	265	212	14	245	289	340	498	103	48
50-200/15A/P	A	65	50	100	134	50	14	160	200	100	70	265	212	14	247	305	360	498	98	48
50-200/15/P	A	65	50	100	134	50	14	160	200	100	70	265	212	14	247	305	360	498	98	48
50-200/22A/P	A	65	50	100	168	50	14	160	200	100	70	265	212	14	287	305	360	522	98	58
50-200/22/P	A	65	50	100	168	50	14	160	200	100	70	265	212	14	287	305	360	522	98	58
50-250/22A/P	A	65	50	100	168	65	16	180	225	125	95	320	250	14	285	352	405	522	110	65
50-250/22/P	A	65	50	100	168	65	16	180	225	125	95	320	250	14	285	358	405	522	110	65
50-250/30/P	A	65	50	100	168	65	16	180	225	125	95	320	250	14	285	358	405	553	110	69
50-250/40/P	A	65	50	100	168	65	16	180	225	125	95	320	250	14	345	358	405	582	110	88

NOTE: Pumps with flanges according to EN 1092-2 as standard; available ASME B16.5 version on request.

nsce-32-40-50-4p50-en\_d\_td

**NSCE 65, 80 SERIES  
DIMENSIONS AND WEIGHTS AT 50 Hz, 4 POLES**

**TYPE A**



**FLANGES**

EN1092-2, PN 16 *)						ASME B16.5, Class 150 RF *)					
DN	D	K	C	df	L	DN	D	K	C	df	L
65	185	145	20	118	4x19	2 1/2	185	139.5	20	105	4x19
80	200	160	22	132	8x19	3	200	152.5	22	127	8x19
100	230	180	24	157	8x19	4	230	190.5	24	157	8x19

\*)...VALUE "C" AND "D" MAY VARY FROM STANDARD.



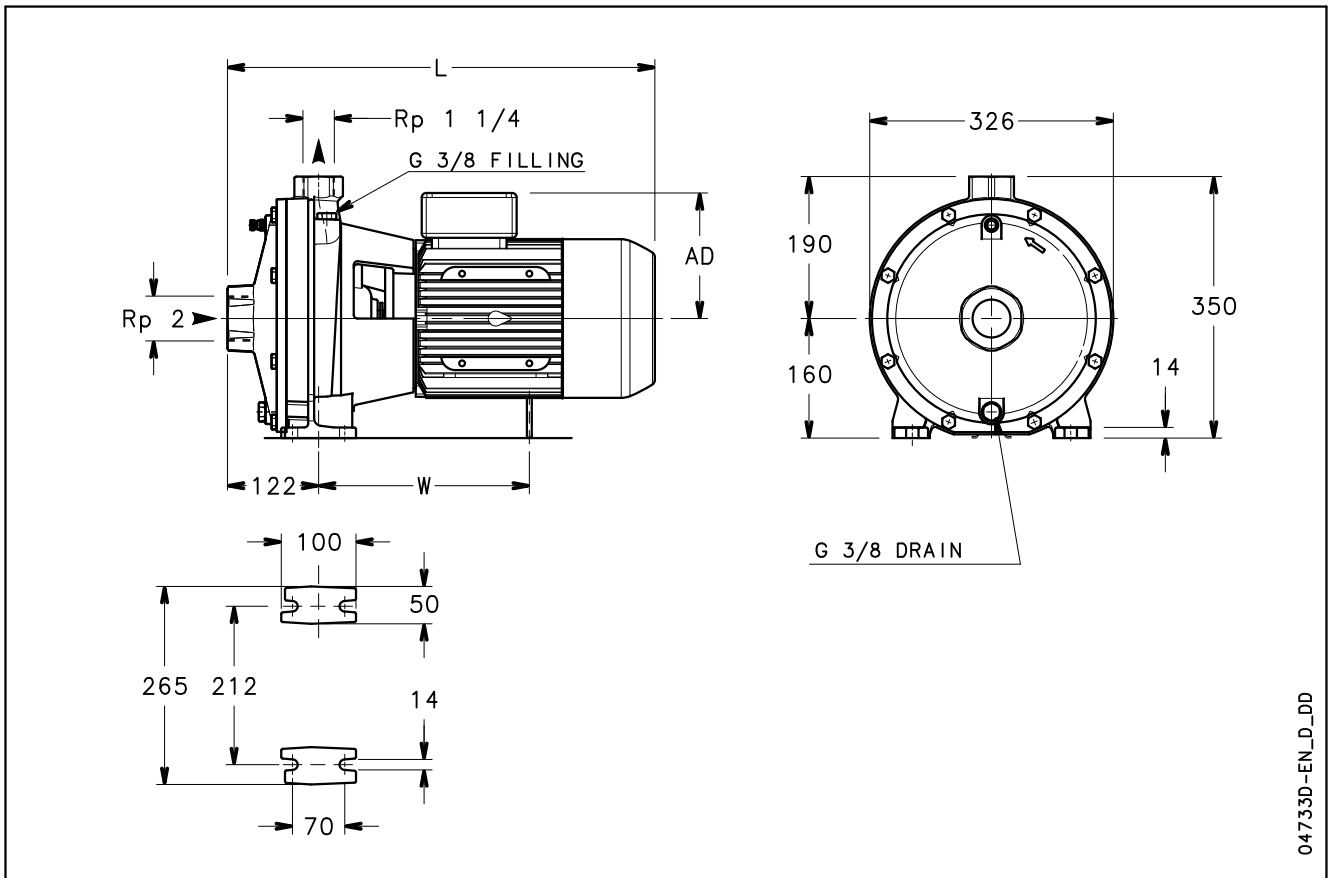
## NSCE 65, 80 SERIES DIMENSIONS AND WEIGHTS AT 50 Hz, 4 POLES

PUMP TYPE NSCE..4	TYPE	DIMENSIONS (mm)																		WEIGHT kg
		DNS	DND	a	AD	b	g1	h1	h2	m1	m2	n1	n2	s1	W	B max	H max	L	x	
65-125/05/S	A	80	65	100	139	65	16	160	180	125	95	280	212	14	237	300	340	465	100	40
65-125/07/X	A	80	65	100	128	65	16	160	180	125	95	280	212	14	-	300	340	433	100	44
65-125/11/P	A	80	65	100	134	65	16	160	180	125	95	280	212	14	247	300	340	500	100	50
65-125/15/P	A	80	65	100	134	65	16	160	180	125	95	280	212	14	247	300	340	500	100	53
65-160/15B/P	A	80	65	100	134	65	16	160	200	125	95	280	212	14	245	335	360	498	108	55
65-160/15A/P	A	80	65	100	134	65	16	160	200	125	95	280	212	14	245	335	360	498	108	55
65-160/15/P	A	80	65	100	134	65	16	160	200	125	95	280	212	14	245	335	360	498	108	55
65-160/22A/P	A	80	65	100	168	65	16	160	200	125	95	280	212	14	285	335	360	522	108	65
65-160/22/P	A	80	65	100	168	65	16	160	200	125	95	280	212	14	285	335	360	522	108	65
65-200/15/P	A	80	65	100	134	65	16	180	225	125	95	320	250	14	245	348	405	498	118	58
65-200/22A/P	A	80	65	100	168	65	16	180	225	125	95	320	250	14	285	348	405	522	118	68
65-200/22/P	A	80	65	100	168	65	16	180	225	125	95	320	250	14	285	348	405	522	118	68
65-200/30/P	A	80	65	100	168	65	16	180	225	125	95	320	250	14	285	348	405	553	118	71
65-200/40/P	A	80	65	100	168	65	16	180	225	125	95	320	250	14	345	348	405	582	118	90
80-160/15/P	A	100	80	125	134	65	16	180	225	125	95	320	250	14	245	340	405	523	122	65
80-160/22A/P	A	100	80	125	168	65	16	180	225	125	95	320	250	14	285	340	405	547	122	75
80-160/22/P	A	100	80	125	168	65	16	180	225	125	95	320	250	14	285	340	405	547	122	75
80-160/30/P	A	100	80	125	168	65	16	180	225	125	95	320	250	14	285	340	405	578	122	78

NOTE: Pumps with flanges according to EN 1092-2 as standard; available ASME B16.5 version on request.

nsce-65-80-4p50-en\_d\_td

**NSC2 SERIES  
DIMENSIONS AND WEIGHTS AT 50 Hz, 2 POLES**

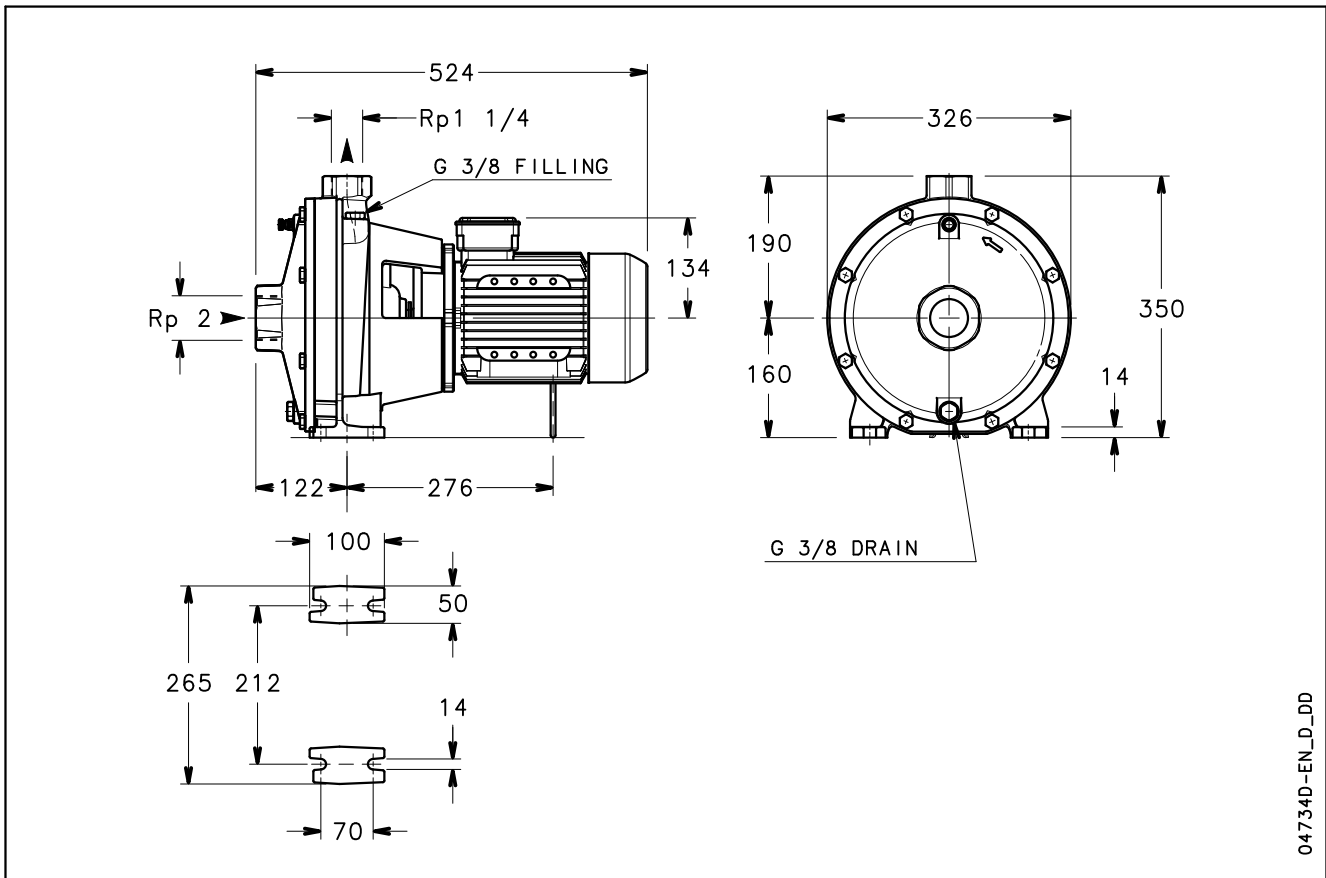


04733D-EN\_D\_DD

PUMP TYPE	DIMENSIONS (mm)			WEIGHT
	L	W	AD	kg
NSC2 32-250/55/P	572	282	168	74
NSC2 32-250/75/P	607	323	191	90

Nsc2-2p50-en\_a\_td

**NSC2 SERIES  
DIMENSIONS AND WEIGHTS AT 50 Hz, 4 POLES**

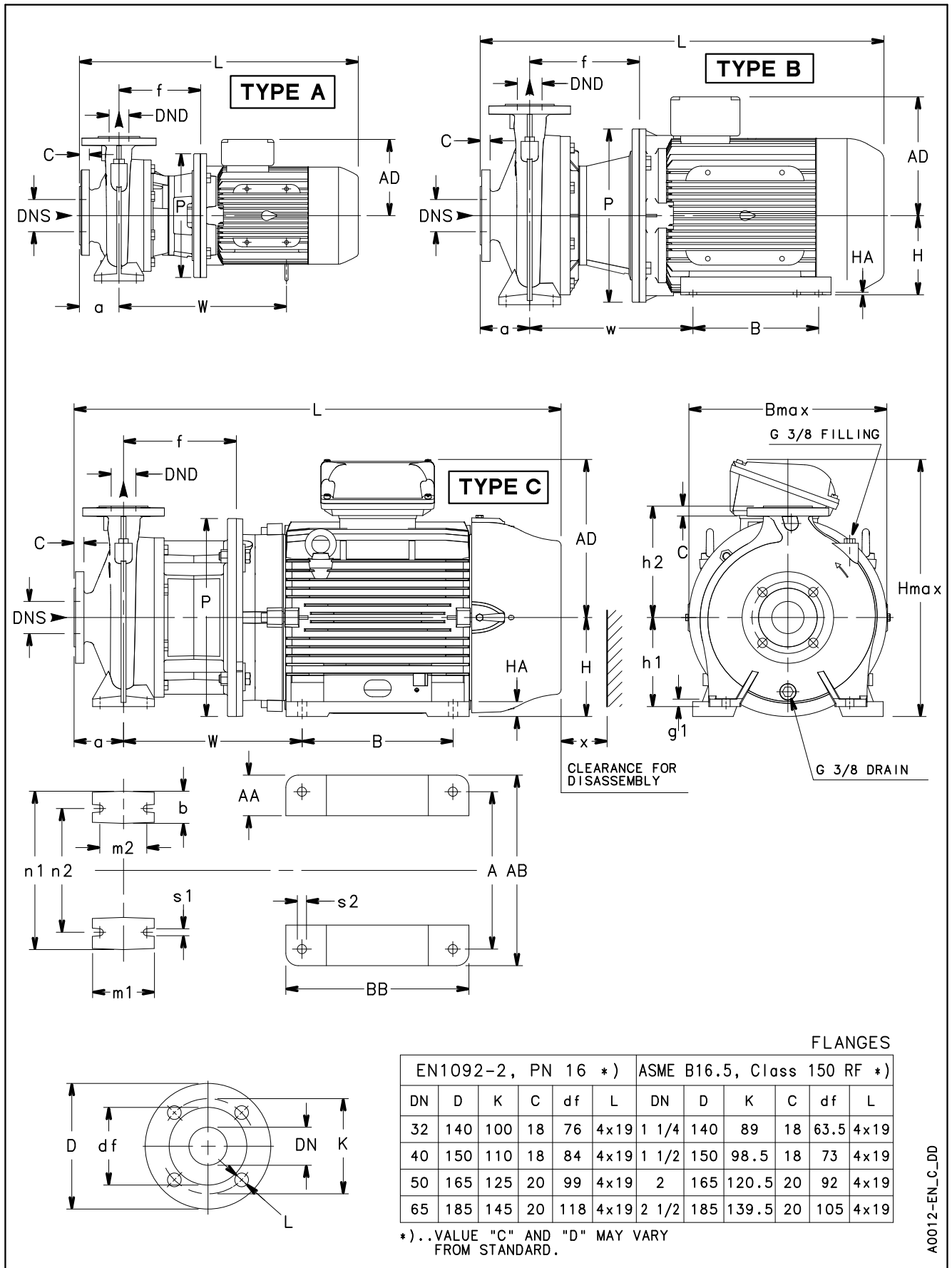


04734D-EN\_DD

PUMP TYPE	WEIGHT kg
NSC2 32-250/11A/P	53
NSC2 32-250/11/P	55

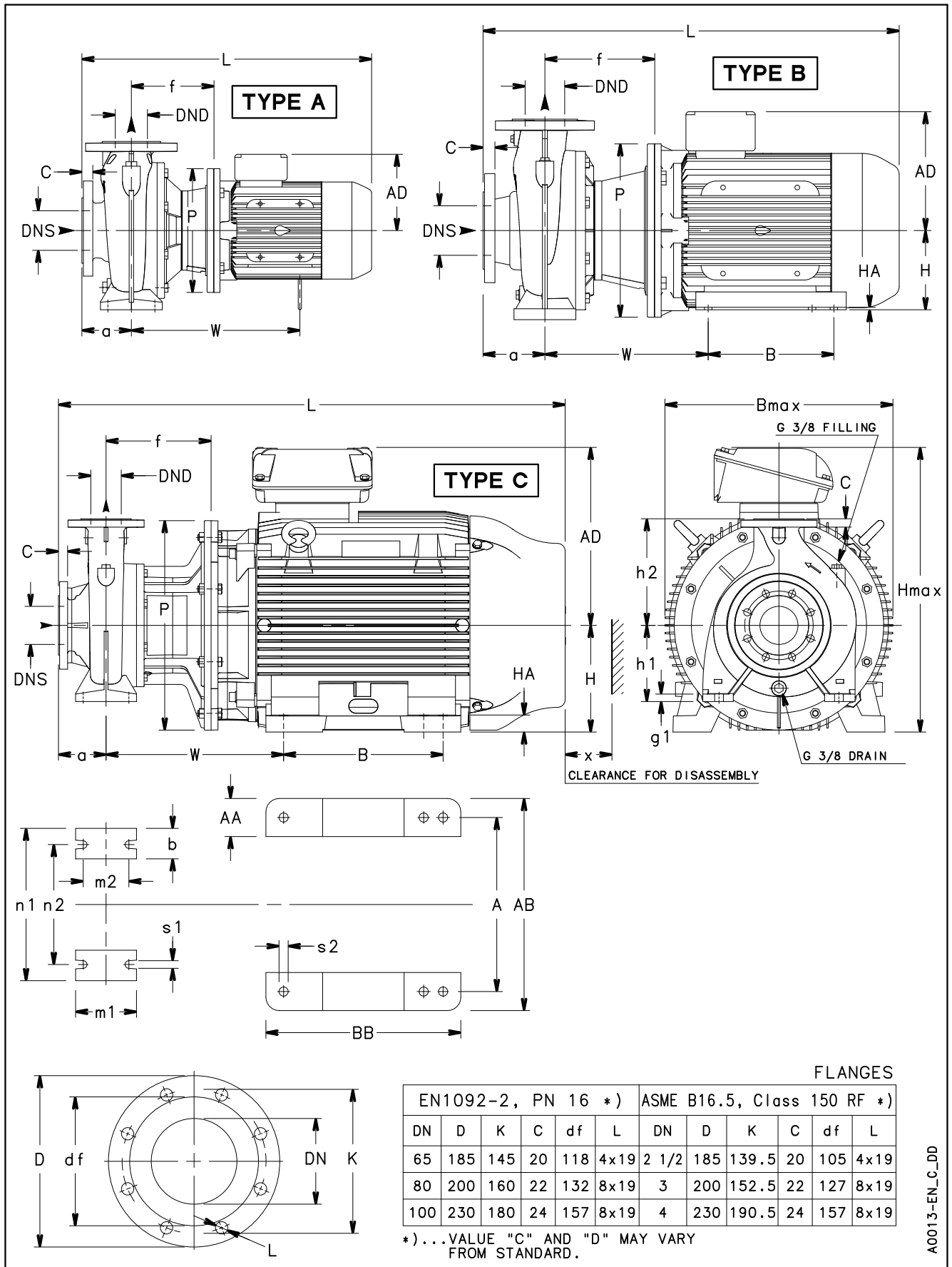
Nsc2-4p50-en\_b\_td

**NSCS 32, 40, 50 SERIES  
DIMENSIONS AND WEIGHTS AT 50 Hz, 2 POLES**





**NSCS 65, 80 SERIES**  
**DIMENSIONS AND WEIGHTS AT 50 Hz, 2 POLES**



## NSCS 65, 80 SERIES

### DIMENSIONS AND WEIGHTS AT 50 Hz, 2 POLES

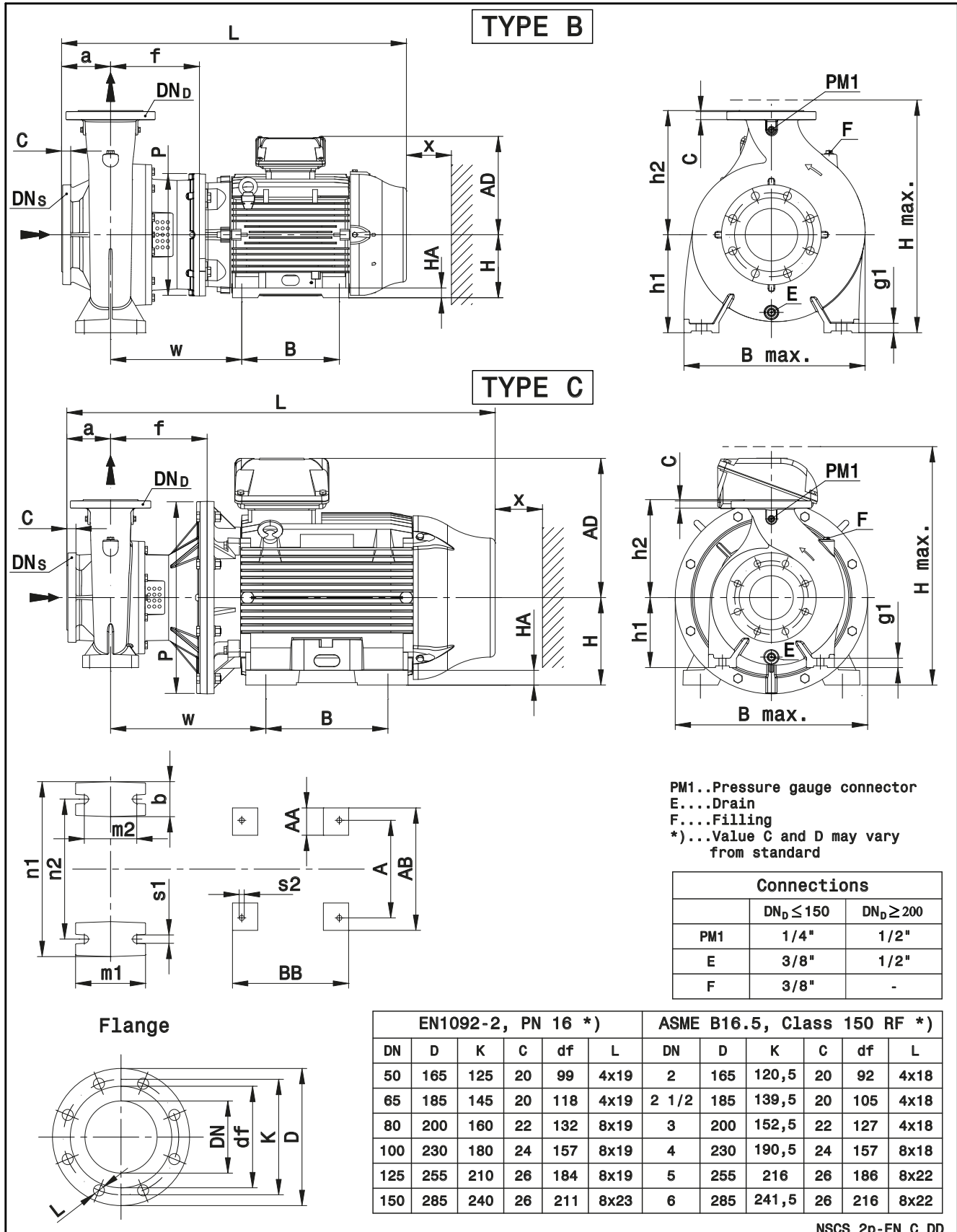
PUMP TYPE NSCS..2	TYPE	DIMENSIONS (mm)																												WEIGHT kg
		PUMP																MOTOR												
		DNS	DND	a	b	f	g1	h1	h2	m1	m2	n1	n2	P	s1	W	A	AA	AB	AD	B	BB	H	HA	s2	B max	H max	L	x	
65-125/40/P	A	80	65	100	65	167	16	160	180	125	95	280	212	250	14	340	-	-	-	154	-	-	-	-	-	300	340	586	100	62
65-125/55/P	A	80	65	100	65	194	16	160	180	125	95	280	212	300	14	401	-	-	-	168	-	-	-	-	-	300	340	669	100	72
65-125/75/P	A	80	65	100	65	194	16	160	180	125	95	280	212	300	14	401	-	-	-	191	-	-	-	-	-	300	351	661	100	90
65-125/110A/P	B	80	65	100	65	224	16	160	180	125	95	280	212	350	14	332	254	49	304	240	210	304	160	5	15	350	420	818	100	95
65-125/110/P	B	80	65	100	65	224	16	160	180	125	95	280	212	350	14	332	254	49	304	240	210	304	160	5	15	350	420	818	100	99
65-160/75/P	A	80	65	100	65	192	16	160	200	125	95	280	212	300	14	399	-	-	-	191	-	-	-	-	-	335	360	659	108	93
65-160/110A/P	B	80	65	100	65	222	16	160	200	125	95	280	212	350	14	330	254	49	304	240	210	304	160	5	15	350	420	816	108	126
65-160/110/P	B	80	65	100	65	222	16	160	200	125	95	280	212	350	14	330	254	49	304	240	210	304	160	5	15	350	420	816	108	131
65-160/150/P	B	80	65	100	65	222	16	160	200	125	95	280	212	350	14	330	254	49	304	240	210	304	160	5	15	350	420	816	108	146
65-160/185/P	B	80	65	100	65	222	16	160	200	125	95	280	212	350	14	330	254	49	304	240	254	304	160	5	15	350	420	816	108	155
65-200/110/P	B	80	65	100	65	222	16	180	225	125	95	320	250	350	14	330	254	49	304	191	210	304	160	5	15	350	405	816	118	136
65-200/150/P	B	80	65	100	65	222	16	180	225	125	95	320	250	350	14	330	254	49	304	240	210	304	160	5	15	350	420	816	118	151
65-200/185/P	B	80	65	100	65	222	16	180	225	125	95	320	250	350	14	330	254	49	304	240	254	304	160	5	15	350	420	816	118	161
65-200/220/P	B	80	65	100	65	222	16	180	225	125	95	320	250	350	14	330	254	49	304	240	254	304	160	5	15	350	420	816	118	172
65-200/300/W	C	80	65	100	65	228	16	180	225	125	95	320	250	400	14	361	318	82	385	317	305	370	200	30	18	400	517	985	118	290
65-250/220/P	B	80	65	100	80	240	21	200	250	160	120	360	280	350	20	348	254	49	304	240	254	304	160	5	15	365	450	834	130	175
65-250/300/W	B	80	65	100	80	246	21	200	250	160	120	360	280	400	20	379	318	82	385	317	305	370	200	30	18	402	517	1003	130	275
65-250/370/W	B	80	65	100	80	246	21	200	250	160	120	360	280	400	20	379	318	82	385	317	305	370	200	30	18	402	517	1003	130	290
65-250/450/W	C	80	65	100	80	246	21	200	250	160	120	360	280	450	20	395	356	80	436	384	311	412	225	34	18	455	609	1092	130	435
65-250/550/W	C	80	65	100	80	276	21	200	250	160	120	360	280	550	20	444	406	100	506	402	349	467	250	43	24	550	682	1201	130	520
65-315/550/W	C	80	65	125	80	276	20	225	280	160	120	400	315	550	19	444	406	100	506	402	349	467	250	43	24	550	682	1226	140	544
65-315/750/W	C	80	65	125	80	276	20	225	280	160	120	400	315	550	19	466	457	100	557	472	368	517	280	42	24	550	752	1332	140	745
65-315/900/W	C	80	65	125	80	276	20	225	280	160	120	400	315	550	19	466	457	100	557	472	419	517	280	42	24	550	752	1332	140	825
80-160/110/P	B	100	80	125	65	222	16	180	225	125	95	320	250	350	14	330	254	49	304	191	210	304	160	5	15	350	405	841	122	145
80-160/150/P	B	100	80	125	65	222	16	180	225	125	95	320	250	350	14	330	254	49	304	240	210	304	160	5	15	350	420	841	122	160
80-160/185/P	B	100	80	125	65	222	16	180	225	125	95	320	250	350	14	330	254	49	304	240	254	304	160	5	15	350	420	841	122	170
80-160/220/P	B	100	80	125	65	222	16	180	225	125	95	320	250	350	14	330	254	49	304	240	254	304	160	5	15	350	420	841	122	181
80-200/220/P	B	100	80	125	65	240	16	180	250	125	95	345	280	350	14	348	254	49	304	240	254	304	160	5	15	358	430	859	151	180
80-200/300/W	C	100	80	125	65	246	16	180	250	125	95	345	280	400	14	379	318	82	385	317	305	370	200	30	18	402	517	1028	151	280
80-200/370/W	C	100	80	125	65	246	16	180	250	125	95	345	280	400	14	379	318	82	385	317	305	370	200	30	18	402	517	1028	151	295
80-200/450/W	C	100	80	125	65	246	16	180	250	125	95	345	280	450	14	395	356	80	436	384	311	412	225	34	18	455	609	1117	151	440
80-250/370/W	B	100	80	125	80	246	21	200	280	160	120	400	315	400	20	379	318	82	385	317	305	370	200	30	18	402	517	1028	152	310
80-250/450/W	C	100	80	125	80	246	21	200	280	160	120	400	315	450	20	379	356	80	436	384	311	412	225	34	18	455	609	1117	152	450
80-250/550/W	C	100	80	125	80	276	21	200	280	160	120	400	315	550	20	444	406	100	506	402	349	467	250	43	24	550	682	1226	152	535
80-250/750/W	C	100	80	125	80	276	21	200	280	160	120	400	315	550	20	466	457	100	557	472	419	517	280	42	24	550	752	1332	152	849

For shims and supports see accessories section.

ns-cs-65-80\_2p50-en\_e\_id

NOTE: Pumps with flanges according to EN 1092-2 as standard; available ASME B16.5 version on request.

**NSCS 100, 125 SERIES**  
**DIMENSIONS AND WEIGHTS AT 50 Hz, 2 POLES**





## NSCS 100, 125 SERIES DIMENSIONS AND WEIGHTS AT 50 Hz, 2 POLES

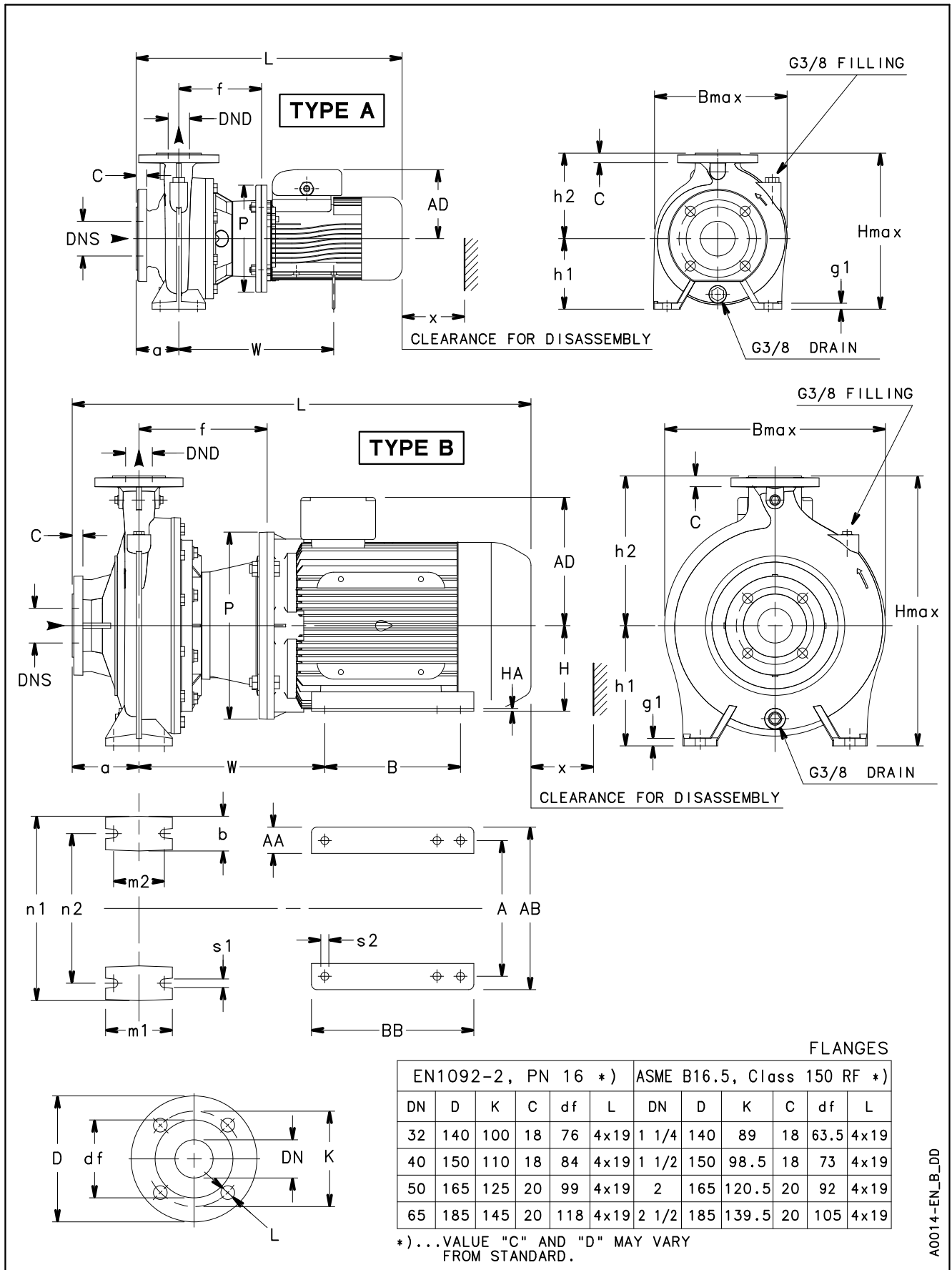
PUMP TYPE NSCS..2	TYPE	DIMENSIONS (mm)																												WEIGHT (kg) G
		DNS	DND	a	b	f	g1	h1	h2	m1	m2	n1	n2	P	s1	W	x	A	AA	AB	AD	B	BB	H	HA	s2	B max	H max	L	
100-160/150/P	B	125	100	125	80	240	26	200	280	160	120	360	280	350	19	348	140	254	49	304	240	210	304	160	5	15	388	480	859	182
100-160/185/P	B	125	100	125	80	240	26	200	280	160	120	360	280	350	19	348	140	254	49	304	240	254	304	160	5	15	388	480	859	197
100-160/220/P	B	125	100	125	80	240	26	200	280	160	120	360	280	350	19	348	140	254	49	304	240	254	304	160	5	15	388	480	859	201
100-160/300/W	B	125	100	125	80	246	26	200	280	160	120	360	280	400	19	379	140	318	82	385	317	305	370	200	30	19	400	517	1028	310
100-200/300/W	B	125	100	125	80	246	26	200	280	160	120	360	280	400	19	379	140	318	82	385	317	305	370	200	30	19	400	517	1028	308
100-200/370/W	B	125	100	125	80	246	26	200	280	160	120	360	280	400	19	379	140	318	82	385	317	305	370	200	30	19	400	517	1028	333
100-200/450/W	C	125	100	125	80	246	26	200	280	160	120	360	280	450	19	395	140	356	80	436	384	311	412	225	34	19	450	609	1117	468
100-200/550/W	C	125	100	125	80	276	26	200	280	160	120	360	280	550	19	444	140	406	100	506	402	349	467	250	43	24	550	682	1226	531
100-250/750/W	C	125	100	140	80	276	26	225	280	160	120	400	315	550	19	466	140	457	100	557	472	368	517	280	42	24	550	752	1347	742
100-250/900/W	C	125	100	140	80	276	26	225	280	160	120	400	315	550	19	466	140	457	100	557	472	419	517	280	42	24	550	752	1347	822
125-200/450/W	B	150	125	140	80	246	26	250	315	160	120	400	315	450	19	395	140	356	80	436	384	311	412	225	34	19	468	634	1132	495
125-200/550/W	C	150	125	140	80	276	26	250	315	160	120	400	315	550	19	444	140	406	100	506	402	349	467	250	43	24	550	682	1241	557
125-200/750/W	C	150	125	140	80	276	26	250	315	160	120	400	315	550	19	466	140	457	100	557	472	368	517	280	42	24	550	752	1347	758
125-200/900/W	C	150	125	140	80	276	26	250	315	160	120	400	315	550	19	466	140	457	100	557	472	419	517	280	42	24	550	752	1347	838

For shims and supports see accessories section.

Nscs-100-125\_2p50-en\_e\_td

NOTE: Pumps with flanges according to EN 1092-2 as standard; available ASME B16.5 version on request.

**NSCS 32, 40, 50 SERIES**  
**DIMENSIONS AND WEIGHTS AT 50 Hz, 4 POLES**



**NSCS 32, 40, 50 SERIES**  
**DIMENSIONS AND WEIGHTS AT 50 Hz, 4 POLES**

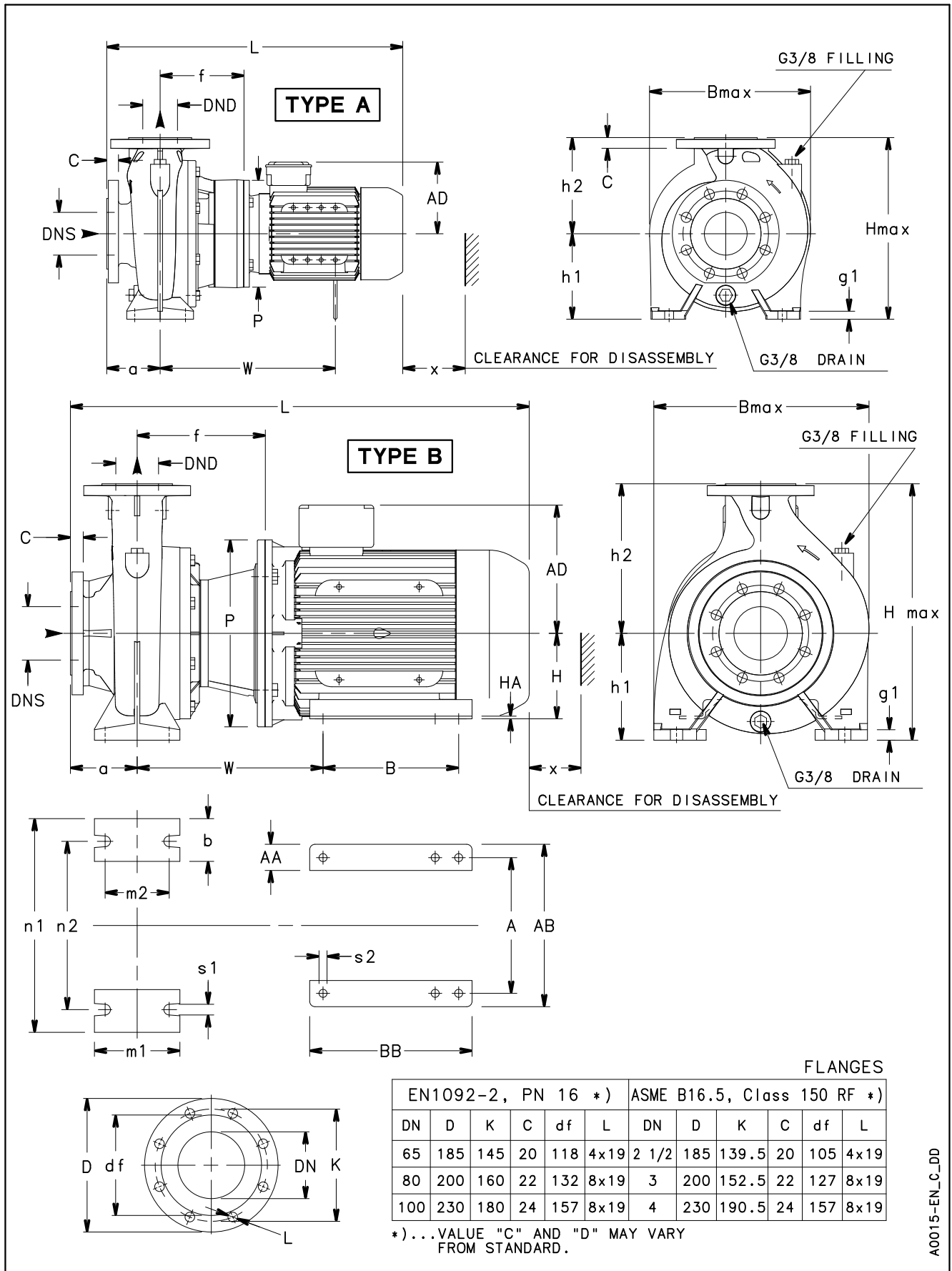
PUMP TYPE NSCS..4	TYPE	DIMENSIONS (mm)																				WEIGHT kg								
		PUMP												MOTOR																
		DNS	DND	a	b	f	g1	h1	h2	m1	m2	n1	n2	P	s1	W	A	AA	AB	AD	B		BB	H	HA	s2	B max	H max	L	x
32-160/05A/S	A	50	32	80	50	155	14	132	160	100	70	240	190	200	14	290	-	-	-	129	-	-	-	-	-	248	292	498	86	32
32-160/05/S	A	50	32	80	50	155	14	132	160	100	70	240	190	200	14	290	-	-	-	129	-	-	-	-	-	248	292	498	86	32
32-200/05A/S	A	50	32	80	50	155	14	160	180	100	70	240	190	200	14	290	-	-	-	129	-	-	-	-	-	286	340	498	86	42
32-200/05/S	A	50	32	80	50	155	14	160	180	100	70	240	190	200	14	290	-	-	-	129	-	-	-	-	-	286	340	498	86	42
32-200/07/X	A	50	32	80	50	155	14	160	180	100	70	240	190	200	14	-	-	-	-	128	-	-	-	-	-	286	340	466	86	43
32-200/11/P	A	50	32	80	50	155	14	160	180	100	70	240	190	200	14	300	-	-	-	134	-	-	-	-	-	286	340	533	86	50
32-250/11A/P	A	50	32	100	65	155	21	180	225	125	95	320	250	200	14	245	-	-	-	134	-	-	-	-	-	334	405	553	95	48
32-250/11/P	A	50	32	100	65	155	21	180	225	125	95	320	250	200	14	245	-	-	-	134	-	-	-	-	-	334	405	553	95	48
32-250/15/P	A	50	32	100	65	155	21	180	225	125	95	320	250	200	14	245	-	-	-	134	-	-	-	-	-	334	405	553	95	51
32-250/22/P	A	50	32	100	65	165	21	180	225	125	95	320	250	250	14	285	-	-	-	168	-	-	-	-	-	334	405	587	95	61
40-125/05/S	A	65	40	80	50	155	14	112	140	100	70	210	160	200	14	290	-	-	-	129	-	-	-	-	-	237	252	498	96	32
40-160/05/S	A	65	40	80	50	155	14	132	160	100	70	240	190	200	14	290	-	-	-	129	-	-	-	-	-	250	292	498	92	34
40-160/07/X	A	65	40	80	50	155	14	132	160	100	70	240	190	200	14	-	-	-	-	128	-	-	-	-	-	250	292	466	92	38
40-160/11/P	A	65	40	80	50	155	14	132	160	100	70	240	190	200	14	300	-	-	-	134	-	-	-	-	-	250	292	533	92	44
40-200/07/X	A	65	40	100	50	155	14	160	180	100	70	265	212	200	14	-	-	-	-	128	-	-	-	-	-	290	340	486	90	43
40-200/11/P	A	65	40	100	50	155	14	160	180	100	70	265	212	200	14	300	-	-	-	134	-	-	-	-	-	290	340	553	90	49
40-200/15A/P	A	65	40	100	50	155	14	160	180	100	70	265	212	200	14	300	-	-	-	134	-	-	-	-	-	290	340	553	90	49
40-200/15/P	A	65	40	100	50	155	14	160	180	100	70	265	212	200	14	300	-	-	-	134	-	-	-	-	-	290	340	553	90	52
40-250/11/P	A	65	40	100	65	155	16	180	225	125	95	320	250	200	14	300	-	-	-	134	-	-	-	-	-	338	405	553	104	58
40-250/15/P	A	65	40	100	65	155	16	180	225	125	95	320	250	200	14	300	-	-	-	134	-	-	-	-	-	338	405	553	104	63
40-250/22A/P	A	65	40	100	65	165	16	180	225	125	95	320	250	250	14	350	-	-	-	168	-	-	-	-	-	338	405	587	104	71
40-250/22/P	A	65	40	100	65	165	16	180	225	125	95	320	250	250	14	350	-	-	-	168	-	-	-	-	-	338	405	587	104	71
40-250/30/P	A	65	40	100	65	165	16	180	225	125	95	320	250	250	14	350	-	-	-	168	-	-	-	-	-	338	405	618	104	75
50-125/05/S	A	65	50	100	50	157	14	132	160	100	70	240	190	200	14	292	-	-	-	129	-	-	-	-	-	255	292	520	107	35
50-125/07/X	A	65	50	100	50	157	14	132	160	100	70	240	190	200	14	-	-	-	-	128	-	-	-	-	-	255	292	488	107	39
50-125/11/P	A	65	50	100	50	157	14	132	160	100	70	240	190	200	14	302	-	-	-	134	-	-	-	-	-	255	292	555	107	45
50-160/07/X	A	65	50	100	50	155	14	160	180	100	70	265	212	200	14	-	-	-	-	128	-	-	-	-	-	289	340	486	103	46
50-160/11A/P	A	65	50	100	50	155	14	160	180	100	70	265	212	200	14	300	-	-	-	134	-	-	-	-	-	289	340	553	103	52
50-160/11/P	A	65	50	100	50	155	14	160	180	100	70	265	212	200	14	300	-	-	-	134	-	-	-	-	-	289	340	553	103	52
50-160/15/P	A	65	50	100	50	155	14	160	180	100	70	265	212	200	14	300	-	-	-	134	-	-	-	-	-	289	340	553	103	55
50-200/11/P	A	65	50	100	50	155	14	160	200	100	70	265	212	200	14	247	-	-	-	134	-	-	-	-	-	305	360	553	98	52
50-200/15/P	A	65	50	100	50	155	14	160	200	100	70	265	212	200	14	247	-	-	-	134	-	-	-	-	-	305	360	553	98	55
50-200/22A/P	A	65	50	100	50	165	14	160	200	100	70	265	212	250	14	287	-	-	-	168	-	-	-	-	-	305	360	587	98	65
50-200/22/P	A	65	50	100	50	165	14	160	200	100	70	265	212	250	14	287	-	-	-	168	-	-	-	-	-	305	360	587	98	65
50-250/22A/P	A	65	50	100	65	165	16	180	225	125	95	320	250	250	14	285	-	-	-	168	-	-	-	-	-	352	405	587	110	72
50-250/22/P	A	65	50	100	65	165	16	180	225	125	95	320	250	250	14	285	-	-	-	168	-	-	-	-	-	358	405	587	110	72
50-250/30/P	A	65	50	100	65	165	16	180	225	125	95	320	250	250	14	285	-	-	-	168	-	-	-	-	-	358	405	618	110	76
50-250/40/P	A	65	50	100	65	165	16	180	225	125	95	320	250	250	14	410	-	-	-	168	-	-	-	-	-	358	405	647	110	95
50-315/40/P	A	65	50	125	65	183	14	225	280	125	95	345	280	250	15	428	-	-	-	168	-	-	-	-	-	413	505	706	140	136
50-315/55/P	A	65	50	125	65	210	14	225	280	125	95	345	280	300	15	452	-	-	-	191	-	-	-	-	-	413	505	740	140	141
50-315/75/P	A	65	50	125	65	210	14	225	280	125	95	345	280	300	15	452	-	-	-	191	-	-	-	-	-	413	505	740	140	146
50-315/110/P	B	65	50	125	65	240	14	225	280	125	95	345	280	350	15	348	254	49	304	240	210	304	160	5	15	413	505	859	140	210

For shims and supports see accessories section.

nscs-32-40-50-4p50-en\_e\_id

NOTE: Pumps with flanges according to EN 1092-2 as standard; available ASME B16.5 version on request.

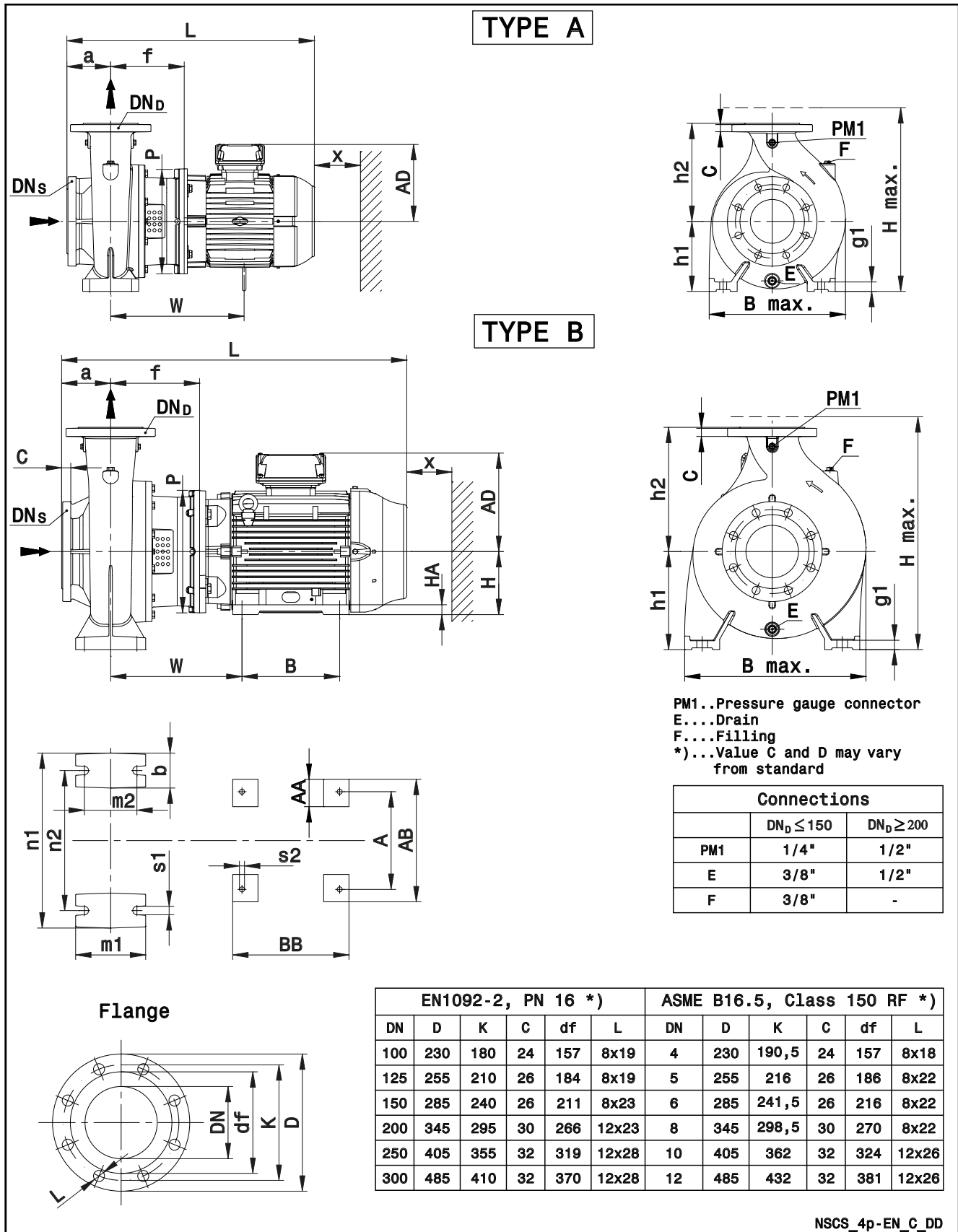
**NSCS 65, 80 SERIES**  
**DIMENSIONS AND WEIGHTS AT 50 Hz, 4 POLES**



A0015-EN\_C-DD

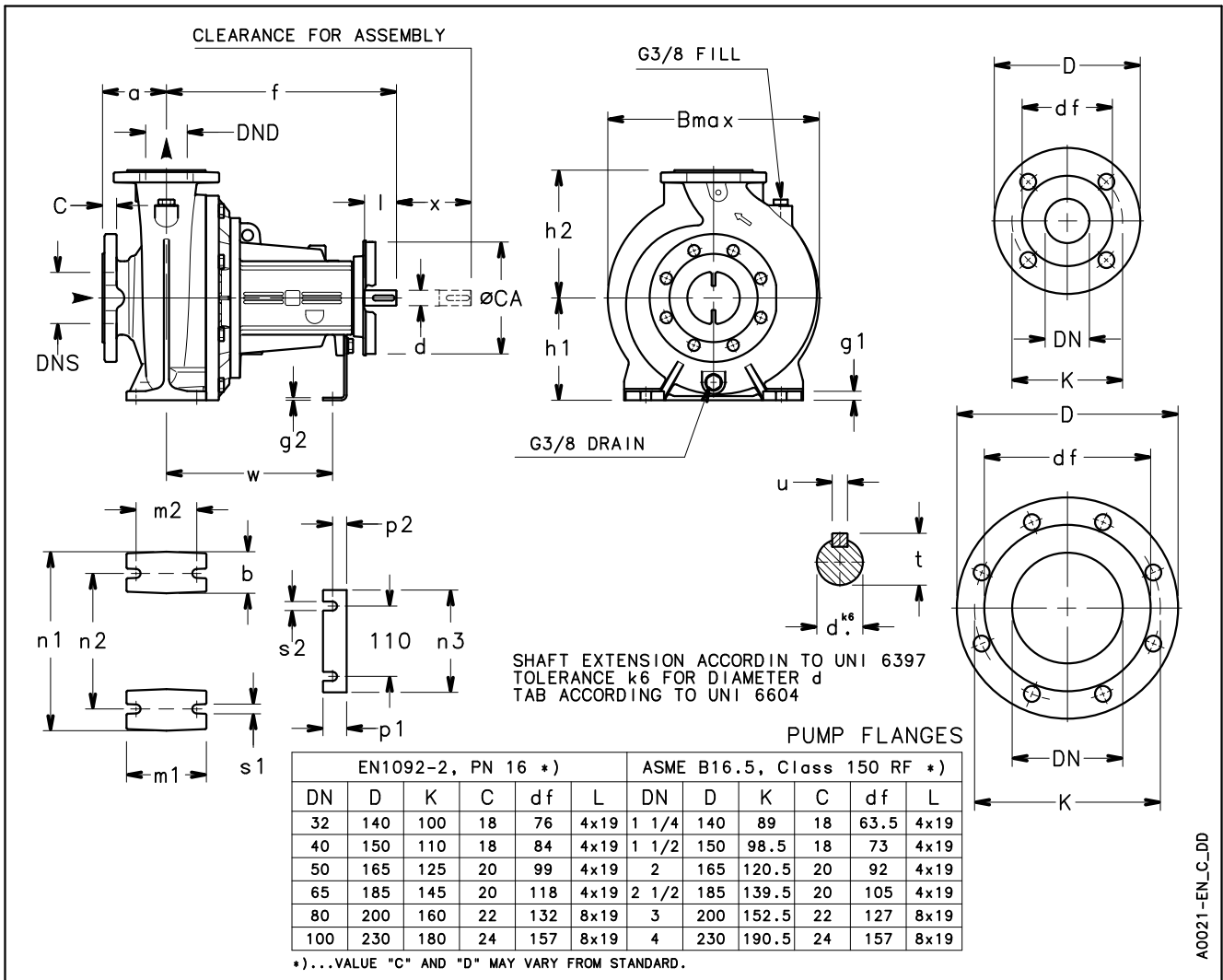


**NSCS 100, 125, 150, 200, 250 SERIES  
DIMENSIONS AND WEIGHTS AT 50 Hz, 4 POLES**





### NSC 32, 40, 50, 65, 80 SERIES DIMENSIONS AND WEIGHTS (BARE SHAFT)





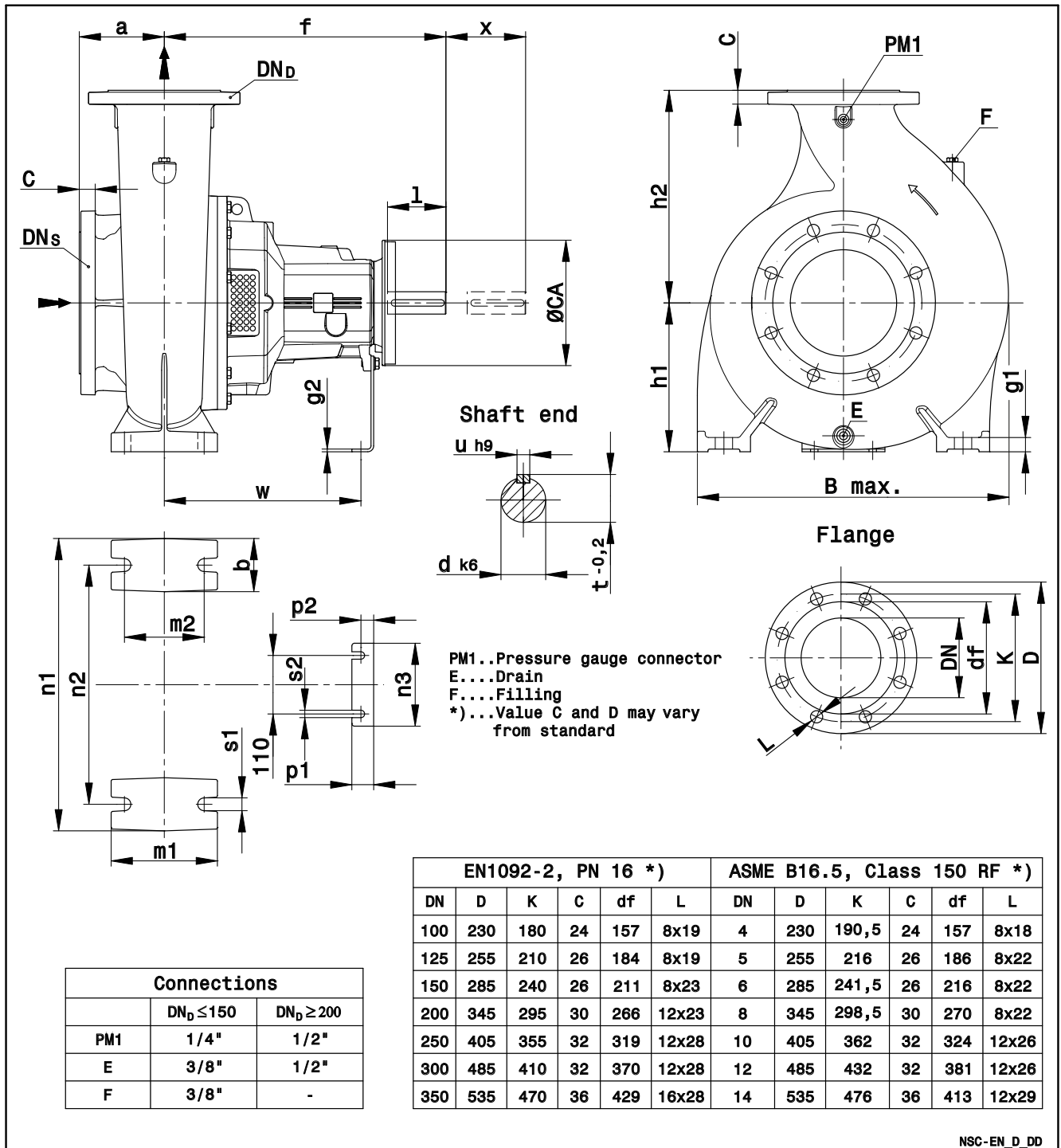
## NSC 32, 40, 50, 65, 80 SERIES DIMENSIONS AND WEIGHTS (BARE SHAFT)

PUMP TYPE NSC (BARE SHAFT)	DIMENSIONS (mm)																												WEIGHT kg
	PUMP																			SHAFT				B		x			
	DNS	DND	a	b	f	g1	g2	h1	h2	m1	m2	n1	n2	n3	p1	p2	s1	s2	W	ØCA	d	l	t	u	max				
32-125	50	32	80	50	360	12	4	112	140	100	70	190	140	160	37	22	14	14	260	160	24	50	27	8	239	100	30		
32-160	50	32	80	50	360	12	4	132	160	100	70	240	190	160	37	22	14	14	260	160	24	50	27	8	250	100	31		
32-200	50	32	80	50	360	12	4	160	180	100	70	240	190	160	37	22	14	14	260	160	24	50	27	8	286	100	38		
32-250	50	32	100	65	360	16	4	180	225	125	95	320	250	160	37	22	14	14	260	175	24	50	27	8	343	100	59		
40-125	65	40	80	50	360	12	4	112	140	100	70	210	160	160	37	22	14	14	260	160	24	50	27	8	240	100	31		
40-160	65	40	80	50	360	12	4	132	160	100	70	240	190	160	37	22	14	14	260	160	24	50	27	8	253	100	32		
40-200	65	40	100	50	360	12	4	160	180	100	70	265	212	160	37	22	14	14	260	160	24	50	27	8	294	100	40		
40-250	65	40	100	65	360	16	4	180	225	125	95	320	250	160	37	22	14	14	260	175	24	50	27	8	343	100	60		
50-125	65	50	100	50	360	12	4	132	160	100	70	240	190	160	37	22	14	14	260	160	24	50	27	8	258	100	34		
50-160	65	50	100	50	360	12	4	160	180	100	70	265	212	160	37	22	14	14	260	160	24	50	27	8	290	100	41		
50-200	65	50	100	50	360	12	4	160	200	100	70	265	212	160	37	22	14	14	260	160	24	50	27	8	303	100	42		
50-250	65	50	100	65	360	16	4	180	225	125	95	320	250	160	37	22	14	14	260	175	24	50	27	8	361	100	61		
50-315	65	50	125	65	470	14	5	225	280	125	95	345	280	156	41	24	15	14	340	190	32	80	35	10	414	140	94		
65-125	80	65	100	65	360	16	4	160	180	125	95	280	212	160	37	22	14	14	260	160	24	50	27	8	305	100	45		
65-160	80	65	100	65	360	16	4	160	200	125	95	280	212	160	37	22	14	14	260	175	24	50	27	8	338	100	60		
65-200	80	65	100	65	360	16	4	180	225	125	95	320	250	160	37	22	14	14	260	175	24	50	27	8	350	140	63		
65-250	80	65	100	80	470	21	4	200	250	160	120	360	280	160	37	22	20	14	340	190	32	80	35	10	375	140	81		
65-315	80	65	125	80	470	20	5	225	280	160	120	400	315	156	41	24	19	14	340	190	32	80	35	10	437	140	102		
80-160	100	80	125	65	360	16	4	180	225	125	95	320	250	160	37	22	14	14	260	160	24	50	27	8	343	140	66		
80-200	100	80	125	65	470	16	4	180	250	125	95	345	280	160	37	22	14	14	340	190	32	80	35	10	365	140	83		
80-250	100	80	125	80	470	21	4	200	280	160	120	400	315	160	37	22	20	14	340	190	32	80	35	10	405	140	86		
80-315	100	80	125	80	470	26	5	250	315	160	120	400	315	156	41	24	19	14	340	190	32	80	35	10	478	140	118		
80-316	100	80	125	80	530	26	5	250	315	160	120	400	315	156	41	24	19	14	370	230	42	110	45	12	478	140	140		
80-400	100	80	125	80	530	26	5	280	355	160	120	435	355	156	41	24	19	14	370	230	42	110	45	12	540	140	154		

NOTE: Pumps with flanges according to EN 1092-2 as standard; available ASME B16.5 version on request.

Nsc32-80bs-en\_b\_ld

**NSC 100, 125, 150, 200, 250, 300 SERIES  
DIMENSIONS AND WEIGHTS (BARE SHAFT)**



NSC-EN\_D\_DD

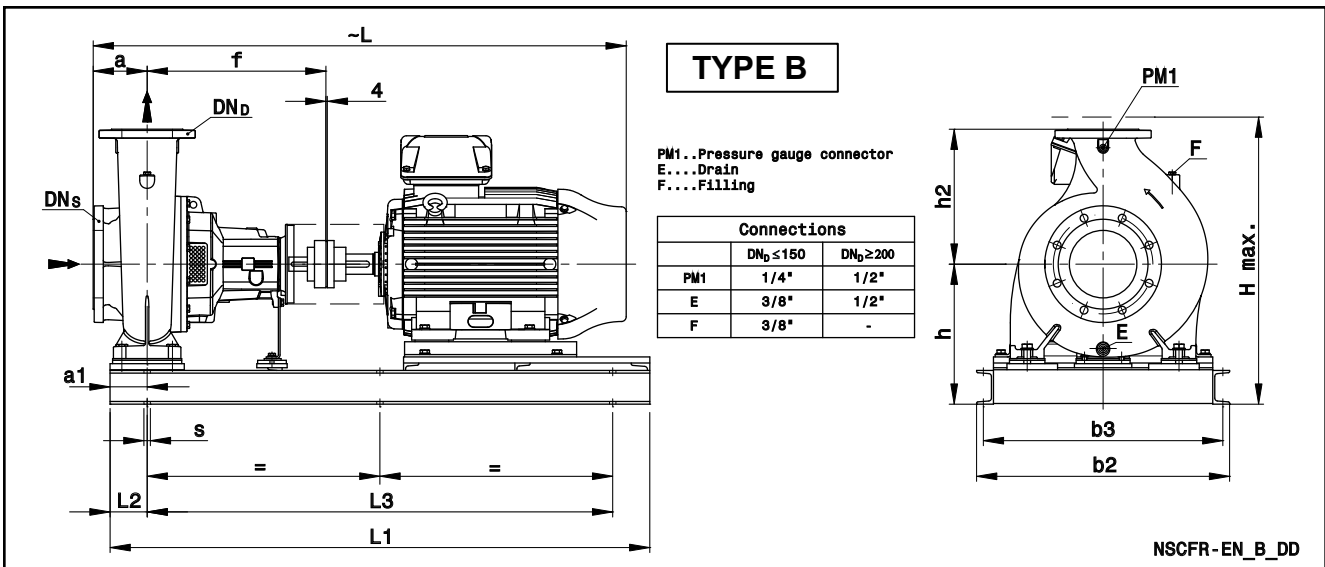
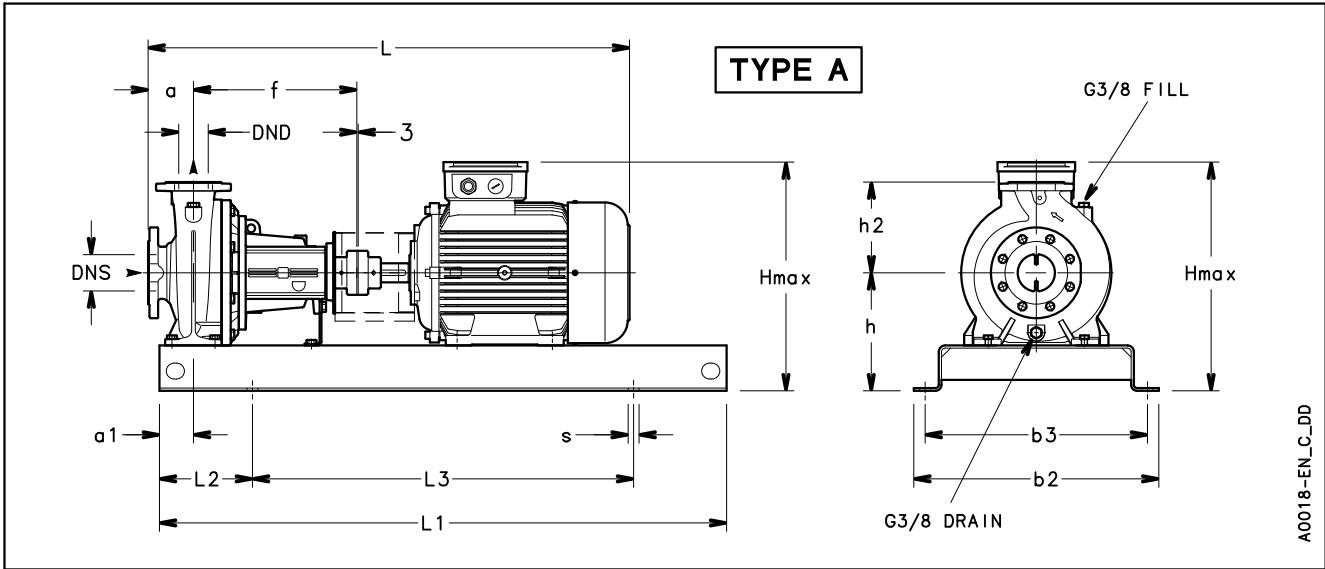
## NSC 100, 125, 150, 200, 250, 300 SERIES DIMENSIONS AND WEIGHTS (BARE SHAFT)

PUMP TYPE NSC (BARE SHAFT)	DIMENSIONS (mm)																										WEIGHT (kg) G
	DNS	DND	a	b	f	g1	g2	h1	h2	m1	m2	n1	n2	n3	p1	p2	s1	s2	W	ØCA	d	l	t	u	B max	x	
100-160	125	100	125	80	470	26	5	200	280	160	120	360	280	156	41	24	19	14	340	190	32	80	35	10	388	140	82
100-200	125	100	125	80	470	26	5	200	280	160	120	360	280	156	41	24	19	14	340	190	32	80	35	10	390	140	90
100-250	125	100	140	80	470	26	5	225	280	160	120	400	315	156	41	24	19	14	340	190	32	80	35	10	431	140	100
100-315	125	100	140	80	470	26	5	250	315	160	120	400	315	156	41	24	19	14	340	190	32	80	35	10	482	140	116
100-316	125	100	140	80	530	26	5	250	315	160	120	400	315	156	41	24	19	14	370	230	42	110	45	12	482	140	143
100-400	125	100	140	100	530	26	5	280	355	200	150	500	400	156	41	24	23	14	370	230	42	110	45	12	569	140	178
125-200	150	125	140	80	470	26	5	250	315	160	120	400	315	156	41	24	19	14	340	190	32	80	35	10	468	140	112
125-250	150	125	140	80	470	26	5	250	355	160	120	400	315	156	41	24	19	14	340	190	32	80	35	10	470	140	112
125-315	150	125	140	100	530	26	5	280	355	200	150	500	400	156	41	24	23	14	370	230	42	110	45	12	518	140	152
125-400	150	125	140	100	530	26	5	315	400	200	150	500	400	156	41	24	23	14	370	230	42	110	45	12	607	140	200
150-200	200	150	160	100	470	26	5	280	400	200	150	550	450	156	41	24	23	14	340	190	32	80	35	10	603	140	166
150-250	200	150	160	100	530	26	5	280	400	200	150	500	400	156	41	24	23	14	370	230	42	110	45	12	569	140	180
150-315	200	150	160	100	530	26	5	280	400	200	150	550	450	156	41	24	23	14	370	230	42	110	45	12	586	140	186
150-400	200	150	160	100	530	26	5	315	450	200	150	550	450	156	41	24	23	14	370	230	42	110	45	12	621	140	228
150-500	200	150	180	110	770	35	8	400	500	300	250	710	600	170	58	33	28	18	525	310	60	140	64	18	751	250	408
200-250	250	200	180	100	530	26	5	355	475	200	150	550	450	156	41	24	23	14	370	230	42	110	45	12	655	200	230
200-315	250	200	180	100	530	26	5	355	450	200	150	550	450	156	41	24	23	14	370	230	42	110	45	12	645	200	234
200-400	250	200	180	110	770	35	8	400	500	300	250	710	600	170	58	33	28	18	525	310	60	140	64	18	735	250	363
200-500	250	200	200	110	770	35	8	450	560	300	250	710	600	170	58	33	28	18	525	310	60	140	64	18	761	250	400
250-315	300	250	250	110	530	35	5	400	500	300	250	710	600	156	41	24	28	14	370	230	42	110	45	12	767	200	316
250-400	300	250	200	110	770	35	8	400	560	300	250	710	600	170	58	33	28	18	525	310	60	140	64	18	754	250	400
250-500	300	250	200	110	770	35	8	450	670	300	250	710	600	170	58	33	28	18	525	310	60	140	64	18	776	250	451
300-350	350	300	250	130	800	41	8	450	600	350	290	800	670	170	58	33	32	18	555	310	60	140	64	18	895	300	544
300-400	350	300	250	130	800	41	8	450	600	350	290	800	670	170	58	33	32	18	555	310	60	140	64	18	854	300	548
300-450	350	300	250	130	800	41	8	475	630	350	290	800	670	170	58	33	32	18	555	310	60	140	64	18	873	300	578

NOTE: Pumps with flanges according to EN 1092-2 as standard; available ASME B16.5 version on request.

Nsc100-300bs-en\_b\_td

### NSCF 32 SERIES (MOUNTED ON BASE) DIMENSIONS AND WEIGHTS AT 50 Hz, 2 POLES



PUMP TYPE NSCF..2	TYPE	DIMENSIONS (mm)													H max	s FOR SCREWS	WEIGHT kg	COUPLING TYPE
		DNS	DND	a	a1	b2	b3	f	h	h2	L	L1	L2	L3				
32-125/11/S	A	50	32	80	60	360	320	360	212	140	746	800	130	540	352	4xØ19 (M16)	65	B68B
32-125/15/P	A	50	32	80	60	390	350	360	212	140	791	900	150	600	352	4xØ19 (M16)	75	B68C
32-125/22/P	A	50	32	80	60	390	350	360	212	140	791	900	150	600	352	4xØ19 (M16)	77	B68C
32-125/30/P	A	50	32	80	60	390	350	360	212	140	822	900	150	600	366	4xØ19 (M16)	84	B80A
32-160/22/P	A	50	32	80	60	390	350	360	232	160	791	900	150	600	392	4xØ19 (M16)	78	B68C
32-160/30/P	A	50	32	80	60	390	350	360	232	160	822	900	150	600	392	4xØ19 (M16)	85	B80A
32-160/40/P	A	50	32	80	60	390	350	360	232	160	825	900	150	600	400	4xØ19 (M16)	90	B80A
32-160/55/P	A	50	32	80	60	450	400	360	232	160	890	1000	170	660	423	4xØ24 (M20)	119	B95A
32-200/30/P	A	50	32	80	60	390	350	360	260	180	822	900	150	600	440	4xØ19 (M16)	92	B80A
32-200/40/P	A	50	32	80	60	390	350	360	260	180	825	900	150	600	440	4xØ19 (M16)	97	B80A
32-200/55/P	A	50	32	80	60	450	400	360	260	180	890	1000	170	660	451	4xØ24 (M20)	126	B95A
32-200/75/P	A	50	32	80	60	450	400	360	260	180	890	1000	170	660	451	4xØ24 (M20)	130	B95A
32-250/75/P	A	50	32	100	75	490	440	360	280	225	910	1120	190	740	505	4xØ24 (M20)	157	B95A
32-250/110A/P	A	50	32	100	75	540	490	360	280	225	1067	1250	205	840	520	4xØ24 (M20)	187	B95B
32-250/110/P	A	50	32	100	75	540	490	360	280	225	1067	1250	205	840	520	4xØ24 (M20)	187	B95B
32-250/150/P	A	50	32	100	75	540	490	360	280	225	1067	1250	205	840	520	4xØ24 (M20)	204	B95B

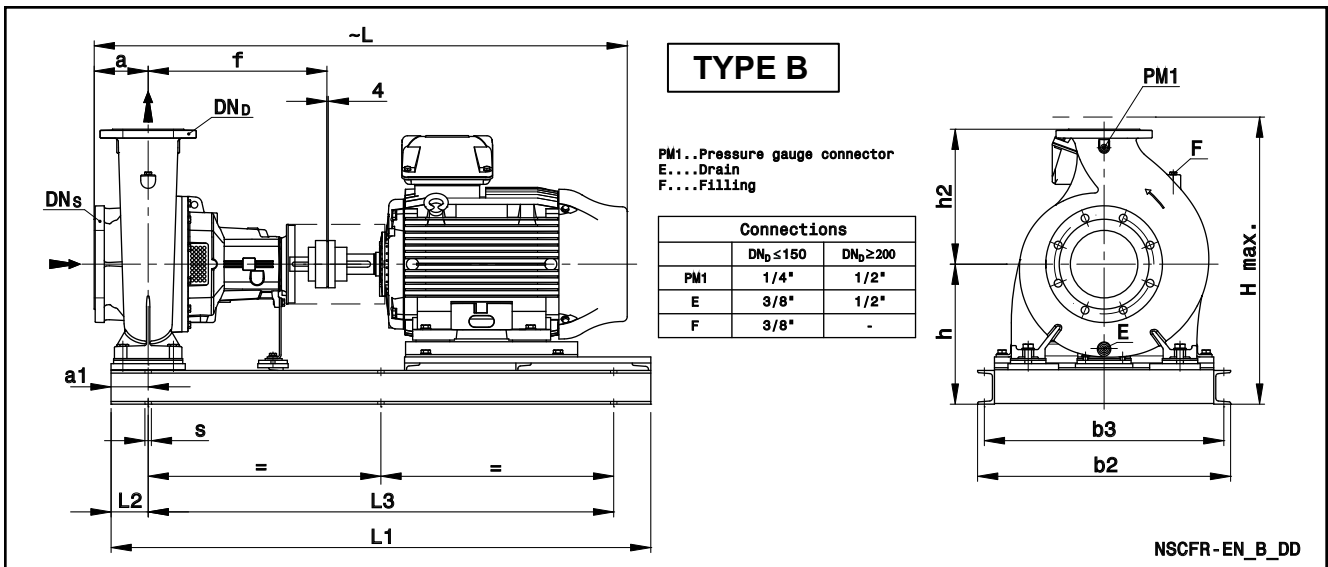
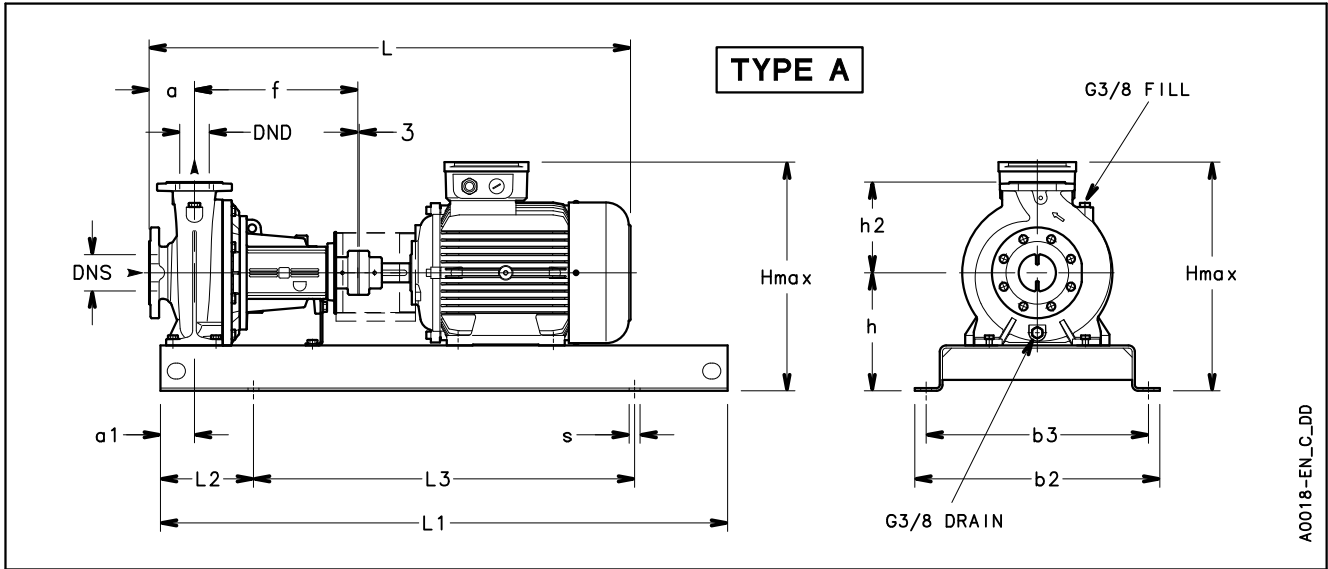
NOTE: Pumps with flanges according to EN 1092-2 as standard.

Nscf32\_2p50-en\_d\_td

Available ASME B16.5 version on request. For flanges dimensions see drawing.



**NSCF 80, 100, 125 SERIES (MOUNTED ON BASE)  
DIMENSIONS AND WEIGHTS AT 50 Hz, 2 POLES**



## NSCF 80, 100, 125 SERIES (MOUNTED ON BASE) DIMENSIONS AND WEIGHTS AT 50 Hz, 2 POLES

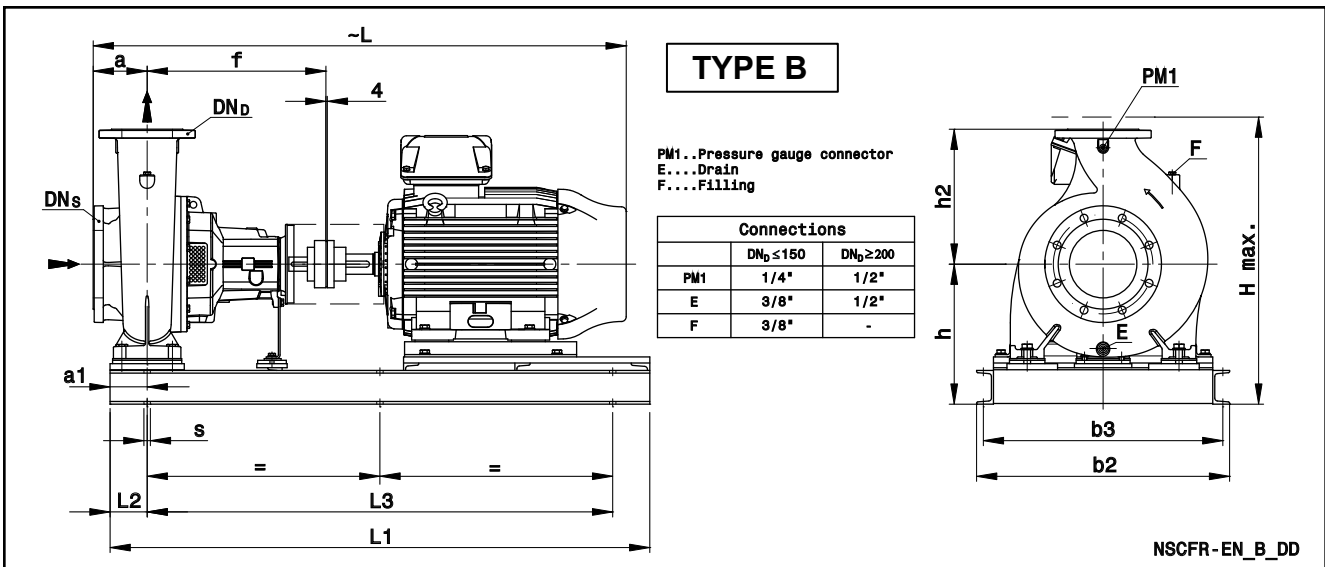
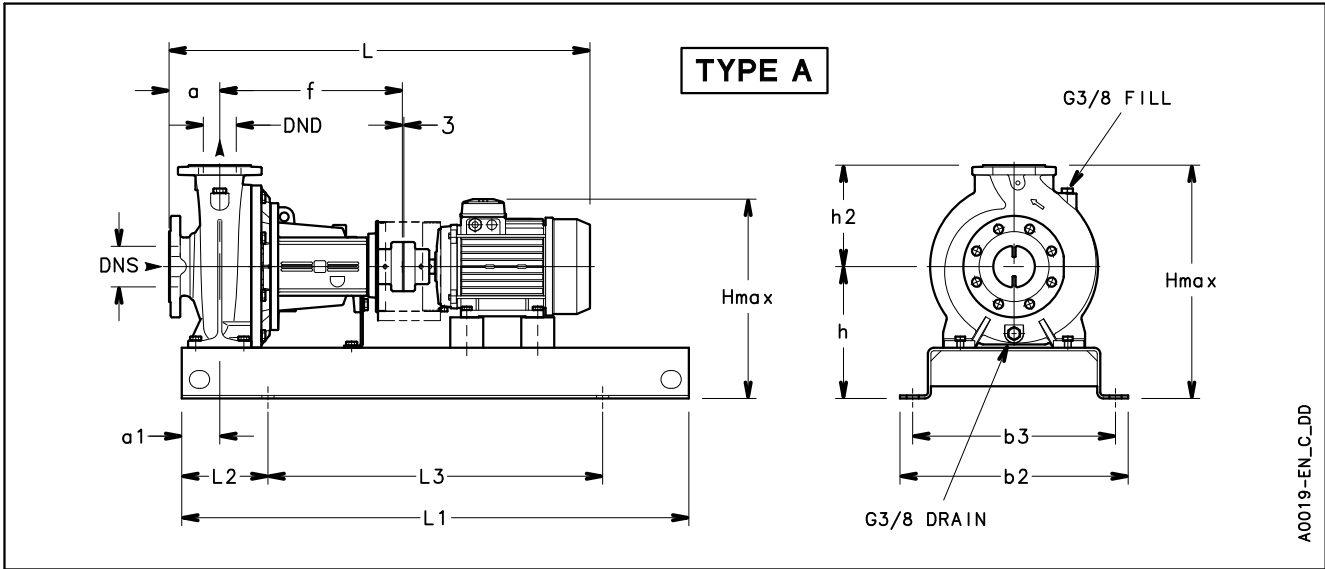
PUMP TYPE NSCF..2	TYPE	DIMENSIONS (mm)														H max	s FOR SCREWS	WEIGHT (kg) G	COUPLING TYPE
		DNS	DND	a	a1	b2	b3	f	h	h2	L	L1	L2	L3					
80-160/110/P	A	100	80	125	75	540	490	360	280	225	1092	1250	205	840	520	4xØ24 (M20)	194	B95B	
80-160/150/P	A	100	80	125	75	540	490	360	280	225	1092	1250	205	840	520	4xØ24 (M20)	211	B95B	
80-160/185/P	A	100	80	125	75	540	490	360	280	225	1092	1250	205	840	520	4xØ24 (M20)	224	B95B	
80-160/220/W	A	100	80	125	75	540	490	360	280	225	1152	1250	205	840	559	4xØ24 (M20)	291	B110A	
80-200/220/W	A	100	80	125	75	540	490	470	280	250	1262	1250	205	840	559	4xØ24 (M20)	308	B110B	
80-200/300/W	A	100	80	125	75	610	550	470	310	250	1365	1400	230	940	627	4xØ28 (M24)	390	B125B	
80-200/370/W	A	100	80	125	75	610	550	470	310	250	1365	1400	230	940	627	4xØ28 (M24)	411	B125B	
80-200/450/W	A	100	80	125	75	610	550	470	365	250	1454	1400	230	940	749	4xØ28 (M24)	562	B125B	
80-250/370/W	A	100	80	125	90	610	550	470	310	280	1365	1400	230	940	627	4xØ28 (M24)	414	B125B	
80-250/450/W	A	100	80	125	90	610	550	470	365	280	1454	1400	230	940	749	4xØ28 (M24)	565	B125B	
80-250/550/W	A	100	80	125	90	660	600	470	390	280	1563	1600	270	1060	792	4xØ28 (M24)	674	B140A	
80-250/750/W	A	100	80	125	90	730	670	470	420	280	1669	1800	300	1200	892	4xØ28 (M24)	942	B160A	
80-316/900/W	B	100	80	125	110	750	710	530	440	315	1730	1600	110	1380	912	6xØ19 (M16)	1061	B160B	
80-316/1100/W	B	100	80	125	110	860	810	530	505	315	1903	1850	110	1630	1035	6xØ26 (M20)	1340	B160B	
80-316/1320/W	B	100	80	125	110	860	810	530	505	315	1903	1850	110	1630	1035	6xØ26 (M20)	1426	B160B	
80-316/1600/W	B	100	80	125	110	860	810	530	505	315	1903	1850	110	1630	1035	6xØ26 (M20)	1507	B160B	
100-160/150/P	B	125	100	125	110	670	630	470	365	280	1203	1330	110	1110	645	6xØ19 (M16)	304	B95E	
100-160/185/P	B	125	100	125	110	670	630	470	365	280	1203	1330	110	1110	645	6xØ19 (M16)	312	B95E	
100-160/220/W	B	125	100	125	110	670	630	470	385	280	1263	1330	110	1110	665	6xØ19 (M16)	385	B110B	
100-160/300/W	B	125	100	125	110	560	520	470	330	280	1366	1350	110	1130	647	6xØ19 (M16)	422	B125B	
100-200/300/W	B	125	100	125	110	560	520	470	330	280	1366	1350	110	1130	647	6xØ19 (M16)	430	B125B	
100-200/370/W	B	125	100	125	110	560	520	470	330	280	1366	1350	110	1130	647	6xØ19 (M16)	451	B125B	
100-200/450/W	B	125	100	125	110	560	520	470	355	280	1455	1350	110	1130	739	6xØ19 (M16)	610	B125B	
100-200/550/W	B	125	100	125	110	750	710	470	405	280	1564	1550	110	1330	807	6xØ19 (M16)	735	B140A	
100-250/450/W	B	125	100	140	110	560	520	470	355	280	1470	1350	110	1130	739	6xØ19 (M16)	612	B125B	
100-250/550/W	B	125	100	140	110	750	710	470	405	280	1579	1550	110	1330	807	6xØ19 (M16)	738	B140A	
100-250/750/W	B	125	100	140	110	750	710	470	390	280	1685	1550	110	1330	862	6xØ19 (M16)	956	B160A	
100-250/900/W	B	125	100	140	110	750	710	470	390	280	1685	1550	110	1330	862	6xØ19 (M16)	991	B160A	
100-316/1100/W	B	125	100	140	110	860	810	530	505	315	1918	1850	110	1630	1035	6xØ26 (M20)	1343	B160B	
100-316/1320/W	B	125	100	140	110	860	810	530	505	315	1918	1850	110	1630	1035	6xØ26 (M20)	1429	B160B	
100-316/1600/W	B	125	100	140	110	860	810	530	505	315	1918	1850	110	1630	1035	6xØ26 (M20)	1510	B160B	
125-200/450/W	B	150	125	140	110	560	520	470	355	315	1470	1350	110	1130	739	6xØ19 (M16)	617	B125B	
125-200/550/W	B	150	125	140	110	750	710	470	405	315	1579	1550	110	1330	807	6xØ19 (M16)	743	B140A	
125-200/750/W	B	150	125	140	110	750	710	470	405	315	1685	1550	110	1330	877	6xØ19 (M16)	970	B160A	
125-200/900/W	B	150	125	140	110	750	710	470	405	315	1685	1550	110	1330	877	6xØ19 (M16)	1005	B160A	
125-315/1100/W	B	150	125	140	110	860	810	530	505	355	1918	1850	110	1630	1035	6xØ26 (M20)	1344	B160B	
125-315/1320/W	B	150	125	140	110	860	810	530	505	355	1918	1850	110	1630	1035	6xØ26 (M20)	1430	B160B	
125-315/1600/W	B	150	125	140	110	860	810	530	505	355	1918	1850	110	1630	1035	6xØ26 (M20)	1511	B160B	
125-315/2000/W	B	150	125	140	110	860	810	530	505	355	2027	1850	110	1630	1080	6xØ26 (M20)	1692	B180A	

NOTE: Pumps with flanges according to EN 1092-2 as standard.

Nscf80-125-2p50-en\_c\_td

Available ASME B16.5 version on request. For flanges dimensions see drawing.

## NSCF 32 SERIES (MOUNTED ON BASE) DIMENSIONS AND WEIGHTS AT 50 Hz, 4 POLES



PUMP TYPE NSCF..4	TYPE	DIMENSIONS (mm)														H max	s FOR SCREWS	WEIGHT kg	COUPLING TYPE
		DN <sub>S</sub>	DN <sub>D</sub>	a	a1	b2	b3	f	h	h2	L	L1	L2	L3					
32-125/02B/S	A	50	32	80	60	360	320	360	212	140	704	800	130	540	352	4xØ19 (M16)	61	B68A	
32-125/02A/S	A	50	32	80	60	360	320	360	212	140	704	800	130	540	352	4xØ19 (M16)	61	B68A	
32-125/02/S	A	50	32	80	60	360	320	360	212	140	704	800	130	540	352	4xØ19 (M16)	61	B68A	
32-125/03/S	A	50	32	80	60	360	320	360	212	140	704	800	130	540	352	4xØ19 (M16)	62	B68A	
32-160/02/S	A	50	32	80	60	360	320	360	232	160	704	800	130	540	392	4xØ19 (M16)	62	B68A	
32-160/03/S	A	50	32	80	60	360	320	360	232	160	704	800	130	540	392	4xØ19 (M16)	63	B68A	
32-160/05A/S	A	50	32	80	60	360	320	360	232	160	746	800	130	540	392	4xØ19 (M16)	66	B68B	
32-160/05/S	A	50	32	80	60	360	320	360	232	160	746	800	130	540	392	4xØ19 (M16)	66	B68B	
32-200/05A/S	A	50	32	80	60	360	320	360	260	180	746	800	130	540	440	4xØ19 (M16)	73	B68B	
32-200/05/S	A	50	32	80	60	360	320	360	260	180	746	800	130	540	440	4xØ19 (M16)	73	B68B	
32-200/07/X	A	50	32	80	60	360	320	360	260	180	714	800	130	540	440	4xØ19 (M16)	76	B68B	
32-200/11/P	A	50	32	80	60	390	350	360	260	180	791	900	150	600	440	4xØ19 (M16)	85	B68C	
32-250/11A/P	A	50	32	100	75	450	400	360	280	225	811	1000	170	660	505	4xØ24 (M20)	112	B68C	
32-250/11/P	A	50	32	100	75	450	400	360	280	225	811	1000	170	660	505	4xØ24 (M20)	112	B68C	
32-250/15/P	A	50	32	100	75	450	400	360	280	225	811	1000	170	660	505	4xØ24 (M20)	117	B68C	
32-250/22/P	A	50	32	100	75	450	400	360	280	225	888	1000	170	660	505	4xØ24 (M20)	127	B80A	

NOTE: Pumps with flanges according to EN 1092-2 as standard.

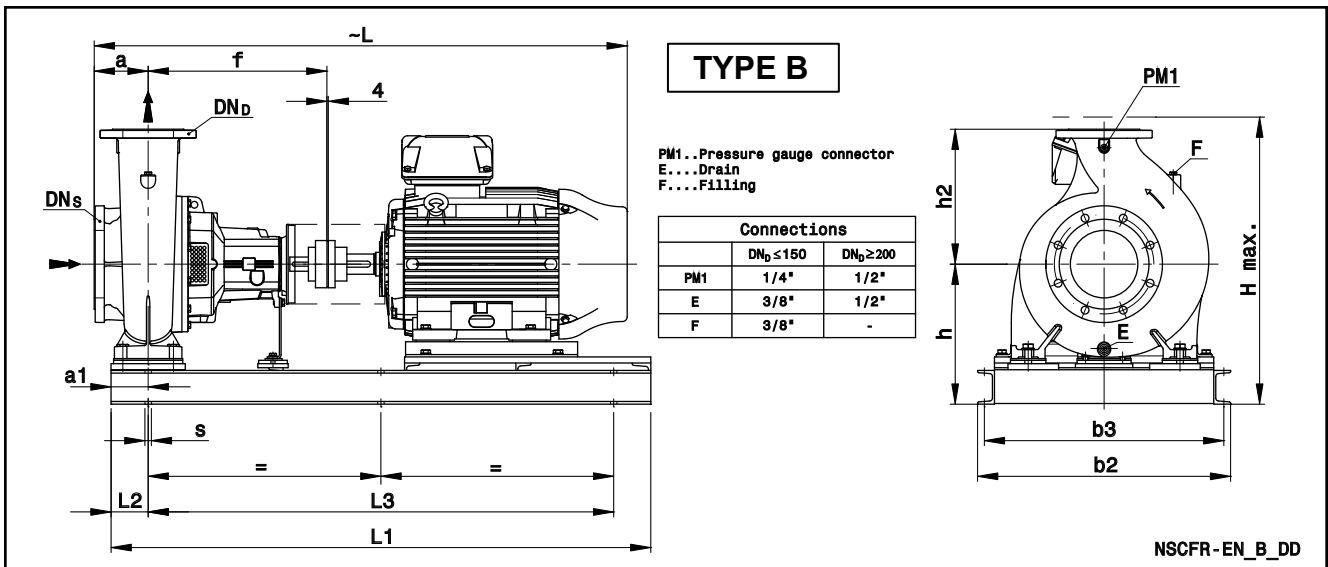
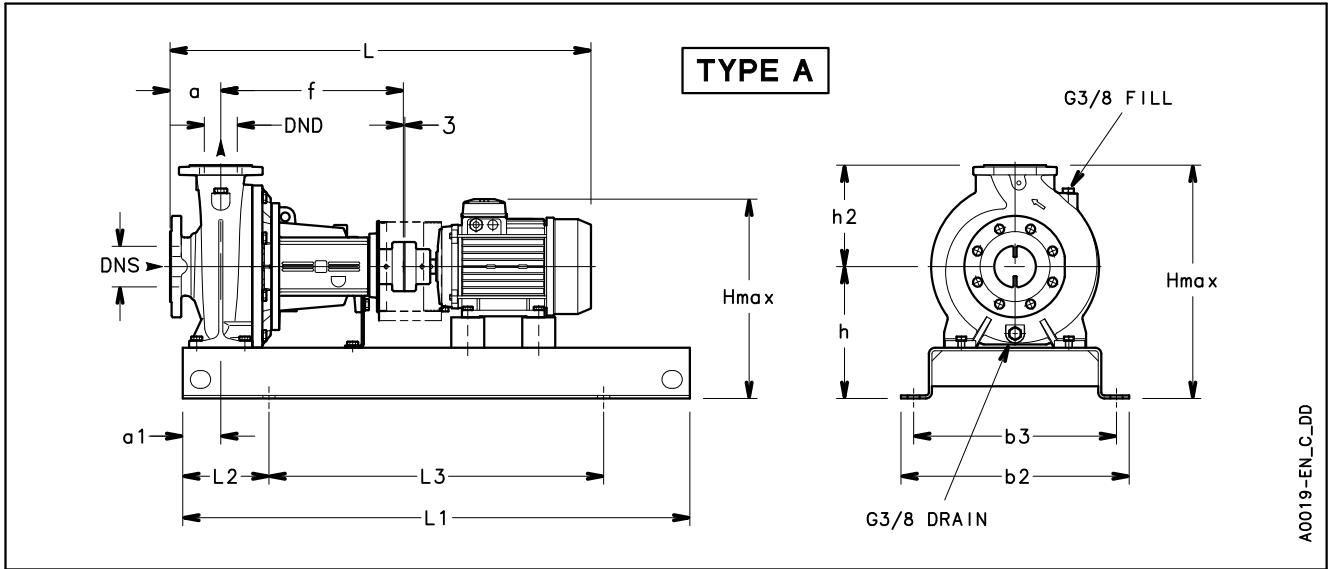
Nscf32\_4p50-en\_c\_td

Available ASME B16.5 version on request. For flanges dimensions see drawing.





**NSCF 80, 100, 125 SERIES (MOUNTED ON BASE)  
DIMENSIONS AND WEIGHTS AT 50 Hz, 4 POLES**



## NSCF 80, 100, 125 SERIES (MOUNTED ON BASE) DIMENSIONS AND WEIGHTS AT 50 Hz, 4 POLES

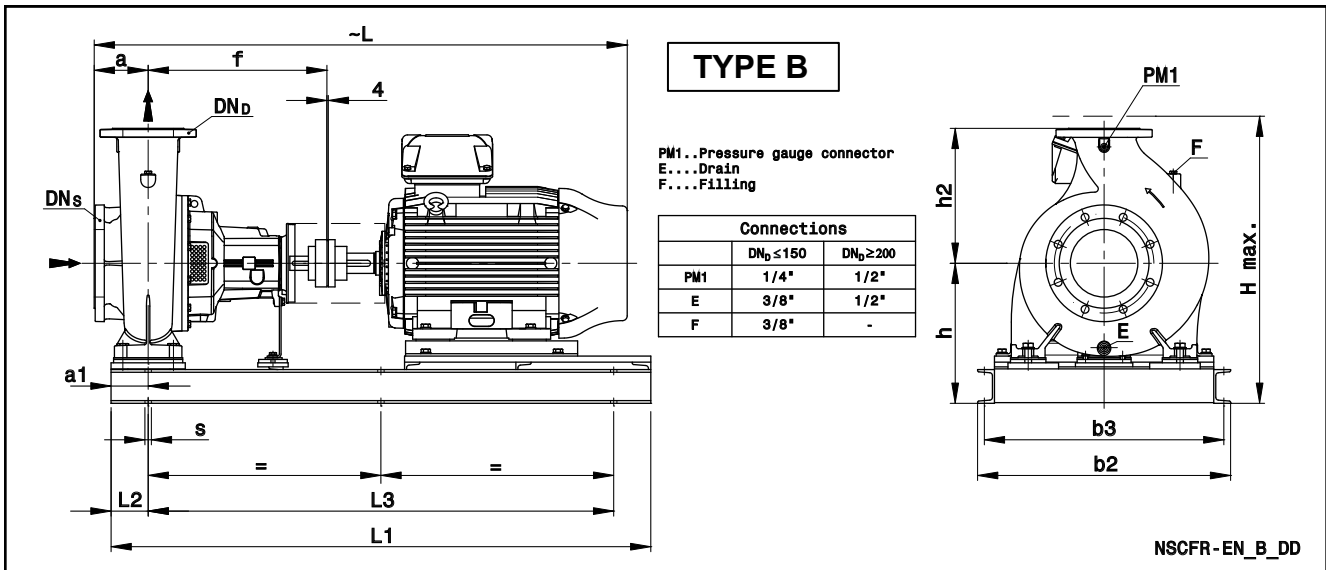
PUMP TYPE NSCF..4	TYPE	DIMENSIONS (mm)															WEIGHT (kg) G	COUPLING TYPE
		DNS	DND	a	a1	b2	b3	f	h	h2	L	L1	L3	L2	H max	s FOR SCREWS		
80-160/15/P	A	100	80	125	75	450	400	360	280	225	836	1000	660	170	505	4xØ24 (M20)	124	B68C
80-160/22A/P	A	100	80	125	75	490	440	360	280	225	913	1120	740	190	505	4xØ24 (M20)	140	B80A
80-160/22/P	A	100	80	125	75	490	440	360	280	225	913	1120	740	190	505	4xØ24 (M20)	140	B80A
80-160/30/P	A	100	80	125	75	490	440	360	280	225	931	1120	740	190	505	4xØ24 (M20)	145	B80A
80-200/30/P	A	100	80	125	75	490	440	470	280	250	1041	1120	740	190	530	4xØ24 (M20)	162	B95C
80-200/40/P	A	100	80	125	75	490	440	470	280	250	1041	1120	740	190	530	4xØ24 (M20)	182	B95C
80-200/55A/P	A	100	80	125	75	490	440	470	280	250	1083	1120	740	190	530	4xØ24 (M20)	191	B95D
80-200/55/P	A	100	80	125	75	490	440	470	280	250	1083	1120	740	190	530	4xØ24 (M20)	191	B95D
80-250/55A/P	A	100	80	125	90	540	490	470	310	280	1083	1250	840	205	590	4xØ24 (M20)	200	B95D
80-250/55/P	A	100	80	125	90	540	490	470	310	280	1083	1250	840	205	590	4xØ24 (M20)	200	B95D
80-250/75/P	A	100	80	125	90	540	490	470	310	280	1083	1250	840	205	590	4xØ24 (M20)	204	B95D
80-250/110/P	A	100	80	125	90	540	490	470	310	280	1202	1250	840	205	590	4xØ24 (M20)	259	B95E
80-315/110A/P	B	100	80	125	110	670	630	470	365	315	1203	1330	1110	110	680	6xØ19 (M16)	306	B95E
80-315/110/P	B	100	80	125	110	670	630	470	365	315	1203	1330	1110	110	680	6xØ19 (M16)	306	B95E
80-315/150/P	B	100	80	125	110	670	630	470	365	315	1203	1330	1110	110	680	6xØ19 (M16)	351	B110E
80-315/185/W	B	100	80	125	110	670	630	470	385	315	1263	1330	1110	110	700	6xØ19 (M16)	410	B110B
80-315/220/W	B	100	80	125	110	670	630	470	385	315	1301	1330	1110	110	700	6xØ19 (M16)	428	B110B
80-400/185/W	B	100	80	125	110	670	630	530	400	355	1323	1430	1210	110	755	6xØ19 (M16)	443	B110D
80-400/220/W	B	100	80	125	110	670	630	530	400	355	1361	1430	1210	110	755	6xØ19 (M16)	461	B110D
80-400/300/W	B	100	80	125	110	670	630	530	420	355	1426	1430	1210	110	775	6xØ19 (M16)	514	B125C
80-400/370/W	B	100	80	125	110	750	710	530	415	355	1545	1600	1380	110	799	6xØ19 (M16)	703	B140B
100-160/22A/P	B	125	100	125	110	670	630	470	355	280	1024	1100	880	110	635	6xØ19 (M16)	217	B95C
100-160/22/P	B	125	100	125	110	670	630	470	355	280	1024	1100	880	110	635	6xØ19 (M16)	217	B95C
100-160/30/P	B	125	100	125	110	670	630	470	355	280	1041	1100	880	110	635	6xØ19 (M16)	220	B95C
100-160/40/P	B	125	100	125	110	670	630	470	365	280	1041	1100	880	110	645	6xØ19 (M16)	241	B95C
100-200/40/P	B	125	100	125	110	670	630	470	365	280	1041	1100	880	110	645	6xØ19 (M16)	249	B95C
100-200/55/P	B	125	100	125	110	670	630	470	385	280	1084	1100	880	110	665	6xØ19 (M16)	261	B95D
100-200/75/P	B	125	100	125	110	670	630	470	385	280	1084	1100	880	110	665	6xØ19 (M16)	261	B95D
100-250/55/P	B	125	100	140	110	670	630	470	385	280	1099	1100	880	110	665	6xØ19 (M16)	263	B95D
100-250/75/P	B	125	100	140	110	670	630	470	385	280	1099	1100	880	110	665	6xØ19 (M16)	263	B95D
100-250/110/P	B	125	100	140	110	670	630	470	365	280	1218	1330	1110	110	645	6xØ19 (M16)	296	B95E
100-315/110/P	B	125	100	140	110	670	630	470	365	315	1218	1330	1110	110	680	6xØ19 (M16)	304	B95E
100-315/150/P	B	125	100	140	110	670	630	470	365	315	1218	1330	1110	110	680	6xØ19 (M16)	349	B110E
100-315/185/W	B	125	100	140	110	670	630	470	385	315	1278	1330	1110	110	700	6xØ19 (M16)	408	B110B
100-315/220/W	B	125	100	140	110	670	630	470	385	315	1316	1330	1110	110	700	6xØ19 (M16)	426	B110B
100-315/300/W	B	125	100	140	110	560	520	470	355	315	1381	1350	1130	110	672	6xØ19 (M16)	454	B125B
100-400/300/W	B	125	100	140	110	670	630	530	420	355	1441	1430	1210	110	775	6xØ19 (M16)	543	B125C
100-400/370/W	B	125	100	140	110	750	710	530	415	355	1560	1600	1380	110	799	6xØ19 (M16)	729	B140B
100-400/450/W	B	125	100	140	110	750	710	530	415	355	1560	1600	1380	110	799	6xØ19 (M16)	757	B140B
125-200/55/P	B	150	125	140	110	670	630	470	385	315	1099	1100	880	110	700	6xØ19 (M16)	268	B95D
125-200/75/P	B	150	125	140	110	670	630	470	385	315	1099	1100	880	110	700	6xØ19 (M16)	268	B95D
125-200/110/P	B	150	125	140	110	670	630	470	365	315	1218	1330	1110	110	680	6xØ19 (M16)	300	B95E
125-250/75/P	B	150	125	140	110	670	630	470	385	355	1099	1100	880	110	740	6xØ19 (M16)	268	B95D
125-250/110/P	B	150	125	140	110	670	630	470	365	355	1218	1330	1110	110	720	6xØ19 (M16)	300	B95E
125-250/150/P	B	150	125	140	110	670	630	470	365	355	1218	1330	1110	110	720	6xØ19 (M16)	345	B110E
125-315/185/W	B	150	125	140	110	670	630	530	400	355	1338	1430	1210	110	755	6xØ19 (M16)	444	B110D
125-315/220/W	B	150	125	140	110	670	630	530	400	355	1376	1430	1210	110	755	6xØ19 (M16)	462	B110D
125-315/300/W	B	150	125	140	110	670	630	530	420	355	1441	1430	1210	110	775	6xØ19 (M16)	517	B125C
125-315/370/W	B	150	125	140	110	750	710	530	415	355	1560	1600	1380	110	799	6xØ19 (M16)	703	B140B
125-400/370/W	B	150	125	140	110	750	710	530	440	400	1560	1600	1380	110	840	6xØ19 (M16)	753	B140B
125-400/450/W	B	150	125	140	110	750	710	530	440	400	1560	1600	1380	110	840	6xØ19 (M16)	781	B140B
125-400/550/W	B	150	125	140	110	750	710	530	440	400	1639	1600	1380	110	842	6xØ19 (M16)	865	B160B
125-400/750/W	B	150	125	140	110	750	710	530	440	400	1745	1600	1380	110	912	6xØ19 (M16)	1075	B180B

NOTE: Pumps with flanges according to EN 1092-2 as standard.

Nscf80-125\_4p50-en\_d\_td

Available ASME B16.5 version on request. For flanges dimensions see drawing.

## NSCF 150 SERIES (MOUNTED ON BASE) DIMENSIONS AND WEIGHTS AT 50 Hz, 4 POLES



PUMP TYPE NSCF..4	TYPE	DIMENSIONS (mm)														H max	s FOR SCREWS	WEIGHT (kg) G	COUPLING TYPE
		DN <sub>S</sub>	DN <sub>D</sub>	a	a1	b2	b3	f	h	h2	L	L1	L2	L3					
150-200/110A/P	B	200	150	160	110	670	630	470	385	400	1238	1330	110	1110	785	6xØ19 (M16)	357	B95E	
150-200/110/P	B	200	150	160	110	670	630	470	385	400	1238	1330	110	1110	785	6xØ19 (M16)	357	B95E	
150-200/150A/P	B	200	150	160	110	670	630	470	385	400	1238	1330	110	1110	785	6xØ19 (M16)	402	B110E	
150-200/150/P	B	200	150	160	110	670	630	470	385	400	1238	1330	110	1110	785	6xØ19 (M16)	402	B110E	
150-250/150/P	B	200	150	160	110	670	630	530	385	400	1298	1430	110	1210	785	6xØ19 (M16)	413	B110C	
150-250/185/W	B	200	150	160	110	670	630	530	400	400	1358	1430	110	1210	800	6xØ19 (M16)	472	B110D	
150-250/220/W	B	200	150	160	110	670	630	530	400	400	1396	1430	110	1210	800	6xØ19 (M16)	490	B110D	
150-250/300/W	B	200	150	160	110	670	630	530	420	400	1461	1430	110	1210	820	6xØ19 (M16)	545	B125C	
150-315/300/W	B	200	150	160	110	670	630	530	420	400	1461	1430	110	1210	820	6xØ19 (M16)	551	B125C	
150-315/370/W	B	200	150	160	110	750	710	530	415	400	1580	1600	110	1380	815	6xØ19 (M16)	737	B140B	
150-315/450/W	B	200	150	160	110	750	710	530	415	400	1580	1600	110	1380	815	6xØ19 (M16)	765	B140B	
150-400/450/W	B	200	150	160	110	750	710	530	440	450	1580	1600	110	1380	890	6xØ19 (M16)	809	B140B	
150-400/550/W	B	200	150	160	110	750	710	530	440	450	1659	1600	110	1380	890	6xØ19 (M16)	893	B160B	
150-400/750/W	B	200	150	160	110	750	710	530	440	450	1765	1600	110	1380	912	6xØ19 (M16)	1103	B180B	
150-400/900/W	B	200	150	160	110	750	710	530	440	450	1765	1600	110	1380	912	6xØ19 (M16)	1151	B180B	
150-400/1100/W	B	200	150	160	110	750	710	530	440	450	1765	1600	110	1380	912	6xØ19 (M16)	1258	B180B	
150-500/900/W	B	200	150	180	165	860	810	770	565	500	2025	1750	165	1420	1065	6xØ26 (M20)	1384	B180C	
150-500/1100/W	B	200	150	180	165	860	810	770	585	500	2228	2000	165	1670	1115	6xØ26 (M20)	1678	B200A	
150-500/1320/W	B	200	150	180	165	860	810	770	585	500	2228	2000	165	1670	1115	6xØ26 (M20)	1763	B200A	
150-500/1600/W	B	200	150	180	165	860	810	770	585	500	2228	2000	165	1670	1115	6xØ26 (M20)	1820	B200A	
150-500/2000/W	B	200	150	180	165	860	810	770	585	500	2337	2000	165	1670	1160	6xØ26 (M20)	2005	B225A	

NOTE: Pumps with flanges according to EN 1092-2 as standard.

Nscf150\_4p50-en\_d\_td

Available ASME B16.5 version on request. For flanges dimensions see drawing.

## NSCF 200, 250, 300 SERIES (MOUNTED ON BASE) DIMENSIONS AND WEIGHTS AT 50 Hz, 4 POLES

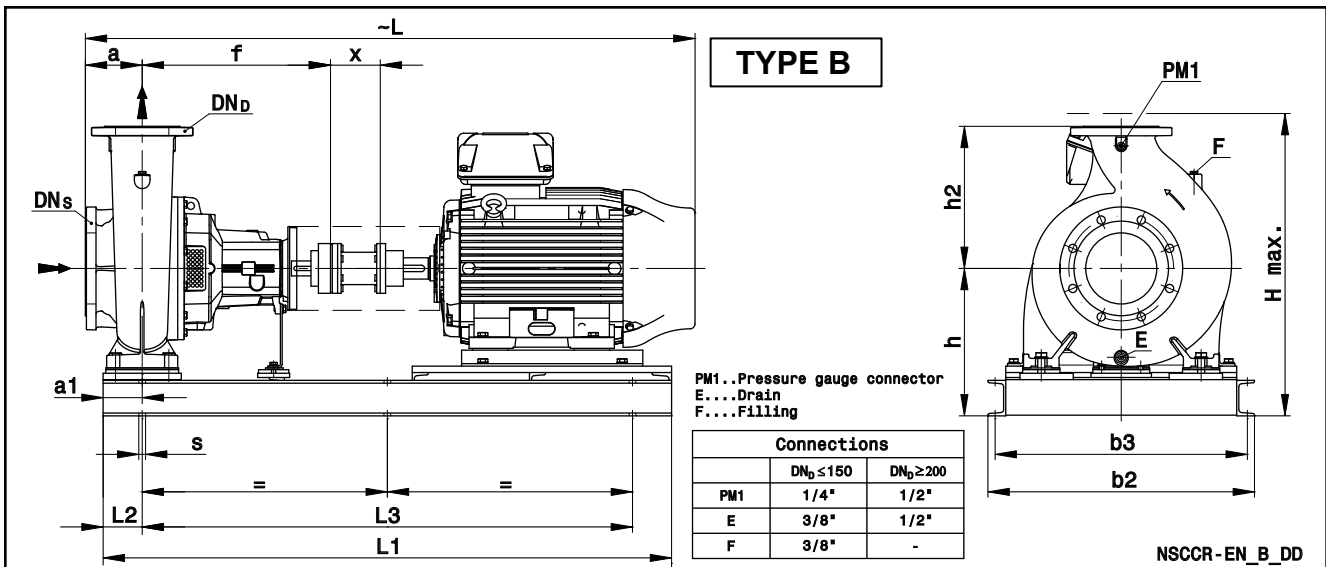
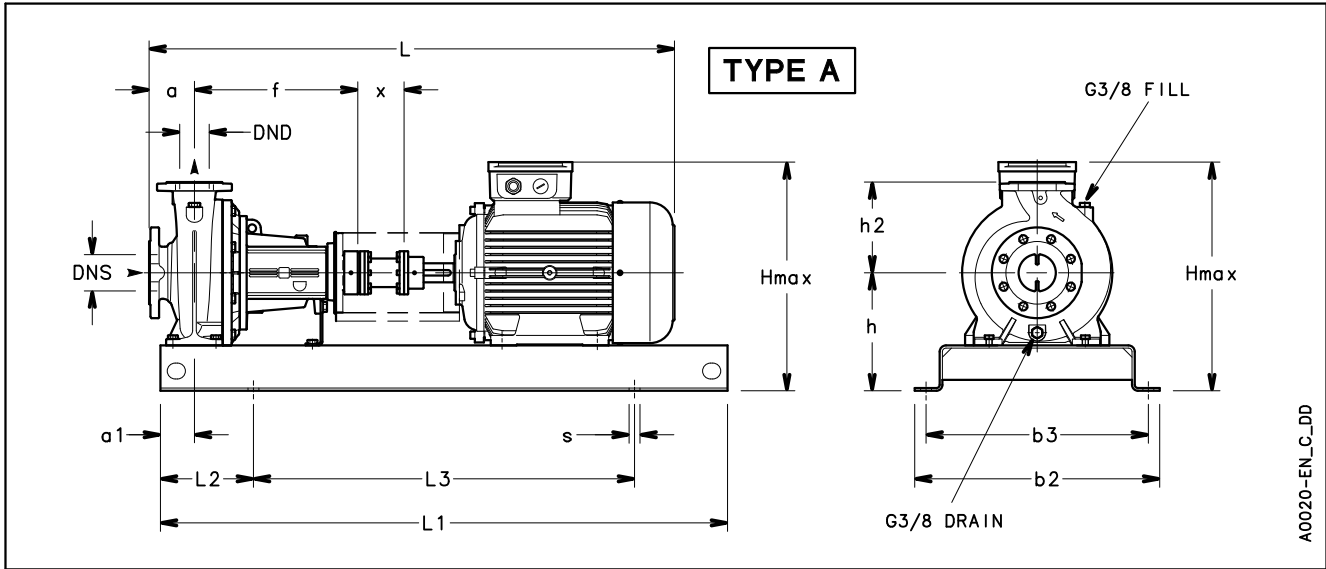
PUMP TYPE NSCF..4	TYPE	DIMENSIONS (mm)															WEIGHT (kg) G	COUPLING TYPE
		DNS	DND	a	a1	b2	b3	f	h	h2	L	L1	L2	L3	H max	s FOR SCREWS		
200-250/185/W	B	250	200	180	110	670	630	530	460	475	1378	1450	110	1230	935	6xØ19 (M16)	527	B110D
200-250/220/W	B	250	200	180	110	670	630	530	460	475	1416	1450	110	1230	935	6xØ19 (M16)	545	B110D
200-250/300A/W	B	250	200	180	110	670	630	530	460	475	1481	1450	110	1230	935	6xØ19 (M16)	588	B125C
200-250/300/W	B	250	200	180	110	670	630	530	460	475	1481	1450	110	1230	935	6xØ19 (M16)	588	B125C
200-315/300/W	B	250	200	180	110	670	630	530	460	450	1481	1450	110	1230	910	6xØ19 (M16)	592	B125C
200-315/370/W	B	250	200	180	110	750	710	530	480	450	1600	1660	110	1440	930	6xØ19 (M16)	791	B140B
200-315/450/W	B	250	200	180	110	750	710	530	480	450	1600	1660	110	1440	930	6xØ19 (M16)	819	B140B
200-315/550/W	B	250	200	180	110	750	710	530	480	450	1679	1660	110	1440	930	6xØ19 (M16)	904	B160B
200-315/750/W	B	250	200	180	110	750	710	530	480	450	1785	1660	110	1440	952	6xØ19 (M16)	1113	B180B
200-400/750A/W	B	250	200	180	165	860	810	770	565	500	2025	1750	165	1420	1065	6xØ26 (M20)	1291	B180C
200-400/750/W	B	250	200	180	165	860	810	770	565	500	2025	1750	165	1420	1065	6xØ26 (M20)	1291	B180C
200-400/900/W	B	250	200	180	165	860	810	770	565	500	2025	1750	165	1420	1065	6xØ26 (M20)	1339	B180C
200-400/1100/W	B	250	200	180	165	860	810	770	585	500	2228	2000	165	1670	1115	6xØ26 (M20)	1633	B200A
200-400/1320/W	B	250	200	180	165	860	810	770	585	500	2228	2000	165	1670	1115	6xØ26 (M20)	1718	B200A
200-500/1320/W	B	250	200	200	165	860	810	770	635	560	2248	2000	165	1670	1195	6xØ26 (M20)	1778	B200A
200-500/1600/W	B	250	200	200	165	860	810	770	635	560	2248	2000	165	1670	1195	6xØ26 (M20)	1835	B200A
200-500/2000/W	B	250	200	200	165	860	810	770	635	560	2357	2000	165	1670	1210	6xØ26 (M20)	2019	B225A
200-500/2500/W	B	250	200	200	165	860	810	770	635	560	2357	2000	165	1670	1210	6xØ26 (M20)	2214	B225A
200-500/3150/W	B	250	200	200	165	1000	930	770	675	560	2456	2200	165	1870	1300	6xØ29 (M24)	2553	B250A
250-315/370/W	B	300	250	250	165	850	810	530	525	500	1670	1700	165	1370	1025	6xØ19 (M16)	905	B140B
250-315/450/W	B	300	250	250	165	850	810	530	525	500	1670	1700	165	1370	1025	6xØ19 (M16)	933	B140B
250-315/550/W	B	300	250	250	165	850	810	530	525	500	1749	1700	165	1370	1025	6xØ19 (M16)	1017	B160B
250-315/750/W	B	300	250	250	165	850	810	530	525	500	1855	1700	165	1370	1025	6xØ19 (M16)	1227	B180B
250-400/750/W	B	300	250	200	165	860	810	770	565	560	2045	1750	165	1420	1125	6xØ26 (M20)	1328	B180C
250-400/900/W	B	300	250	200	165	860	810	770	565	560	2045	1750	165	1420	1125	6xØ26 (M20)	1376	B180C
250-400/1100/W	B	300	250	200	165	860	810	770	585	560	2248	2000	165	1670	1145	6xØ26 (M20)	1670	B200A
250-400/1320/W	B	300	250	200	165	860	810	770	585	560	2248	2000	165	1670	1145	6xØ26 (M20)	1755	B200A
250-400/1600/W	B	300	250	200	165	860	810	770	585	560	2248	2000	165	1670	1145	6xØ26 (M20)	1812	B200A
250-400/2000/W	B	300	250	200	165	860	810	770	585	560	2357	2000	165	1670	1160	6xØ26 (M20)	1997	B225A
250-500/1600/W	B	300	250	200	165	860	810	770	635	670	2248	2000	165	1670	1305	6xØ26 (M20)	1886	B200A
250-500/2000/W	B	300	250	200	165	860	810	770	635	670	2357	2000	165	1670	1305	6xØ26 (M20)	2070	B225A
250-500/2500/W	B	300	250	200	165	860	810	770	635	670	2357	2000	165	1670	1305	6xØ26 (M20)	2265	B225A
250-500/3150/W	B	300	250	200	165	1000	930	770	675	670	2456	2200	165	1870	1345	6xØ29 (M24)	2604	B250A
250-500/3550/W	B	300	250	200	165	1000	930	770	675	670	2456	2200	165	1870	1345	6xØ29 (M24)	2710	B250A
300-350/750A/W	B	350	300	250	200	960	910	800	620	600	2125	1850	200	1450	1220	6xØ26 (M20)	1514	B180C
300-350/750/W	B	350	300	250	200	960	910	800	620	600	2125	1850	200	1450	1220	6xØ26 (M20)	1514	B180C
300-350/900/W	B	350	300	250	200	960	910	800	620	600	2125	1850	200	1450	1220	6xØ26 (M20)	1562	B180C
300-350/1100/W	B	350	300	250	200	960	910	800	640	600	2328	2100	200	1700	1240	6xØ26 (M20)	1871	B200A
300-400/1100/W	B	350	300	250	200	960	910	800	640	600	2328	2100	200	1700	1240	6xØ26 (M20)	1875	B200A
300-400/1320/W	B	350	300	250	200	960	910	800	640	600	2328	2100	200	1700	1240	6xØ26 (M20)	1960	B200A
300-400/1600/W	B	350	300	250	200	960	910	800	640	600	2328	2100	200	1700	1240	6xØ26 (M20)	2017	B200A
300-400/2000/W	B	350	300	250	200	960	910	800	640	600	2437	2100	200	1700	1240	6xØ26 (M20)	2201	B225A
300-400/2500/W	B	350	300	250	200	960	910	800	640	600	2437	2100	200	1700	1240	6xØ26 (M20)	2396	B225A
300-450/1600/W	B	350	300	250	200	960	910	800	665	630	2328	2100	200	1700	1295	6xØ26 (M20)	2058	B200A
300-450/2000/W	B	350	300	250	200	960	910	800	665	630	2437	2100	200	1700	1295	6xØ26 (M20)	2243	B225A
300-450/2500/W	B	350	300	250	200	960	910	800	665	630	2437	2100	200	1700	1295	6xØ26 (M20)	2438	B225A
300-450/3150/W	B	350	300	250	200	1000	930	800	705	630	2536	2250	200	1850	1335	6xØ29 (M24)	2754	B250A

NOTE: Pumps with flanges according to EN 1092-2 as standard.

Nscf200-300\_4p50-en\_d\_td

Available ASME B16.5 version on request. For flanges dimensions see drawing.

## NSCC 32 SERIES (SPACER COUPLING) DIMENSIONS AND WEIGHTS AT 50 Hz, 2 POLES



PUMP TYPE NSCC..2	TYPE	DIMENSIONS (mm)															WEIGHT kg	COUPLING TYPE	
		DN <sub>S</sub>	DN <sub>D</sub>	a	a1	b2	b3	f	h	h2	L	L1	L2	L3	x	H max			s FOR SCREWS
32-125/11/S	A	50	32	80	60	360	320	360	212	140	843	800	130	540	100	352	4xØ19 (M16)	68	H80A
32-125/15/P	A	50	32	80	60	390	350	360	212	140	888	900	150	600	100	352	4xØ19 (M16)	78	H80B
32-125/22/P	A	50	32	80	60	390	350	360	212	140	888	900	150	600	100	352	4xØ19 (M16)	80	H80B
32-125/30/P	A	50	32	80	60	390	350	360	212	140	919	900	150	600	100	366	4xØ19 (M16)	87	H80C
32-160/22/P	A	50	32	80	60	390	350	360	232	160	888	900	150	600	100	392	4xØ19 (M16)	81	H80B
32-160/30/P	A	50	32	80	60	390	350	360	232	160	919	900	150	600	100	392	4xØ19 (M16)	88	H80C
32-160/40/P	A	50	32	80	60	390	350	360	232	160	922	900	150	600	100	400	4xØ19 (M16)	93	H80C
32-160/55/P	A	50	32	80	60	450	400	360	232	160	987	1000	170	660	100	423	4xØ24 (M20)	122	H95A
32-200/30/P	A	50	32	80	60	390	350	360	260	180	919	900	150	600	100	440	4xØ19 (M16)	95	H80C
32-200/40/P	A	50	32	80	60	390	350	360	260	180	922	900	150	600	100	440	4xØ19 (M16)	100	H80C
32-200/55/P	A	50	32	80	60	450	400	360	260	180	987	1000	170	660	100	451	4xØ24 (M20)	129	H95A
32-200/75/P	A	50	32	80	60	450	400	360	260	180	987	1000	170	660	100	451	4xØ24 (M20)	133	H95A
32-250/75/P	A	50	32	100	75	490	440	360	280	225	1007	1120	190	740	100	505	4xØ24 (M20)	160	H95A
32-250/110A/P	A	50	32	100	75	540	490	360	280	225	1164	1250	205	840	100	520	4xØ24 (M20)	190	H95B
32-250/110/P	A	50	32	100	75	540	490	360	280	225	1164	1250	205	840	100	520	4xØ24 (M20)	190	H95B
32-250/150/P	A	50	32	100	75	540	490	360	280	225	1164	1250	205	840	100	520	4xØ24 (M20)	207	H95B

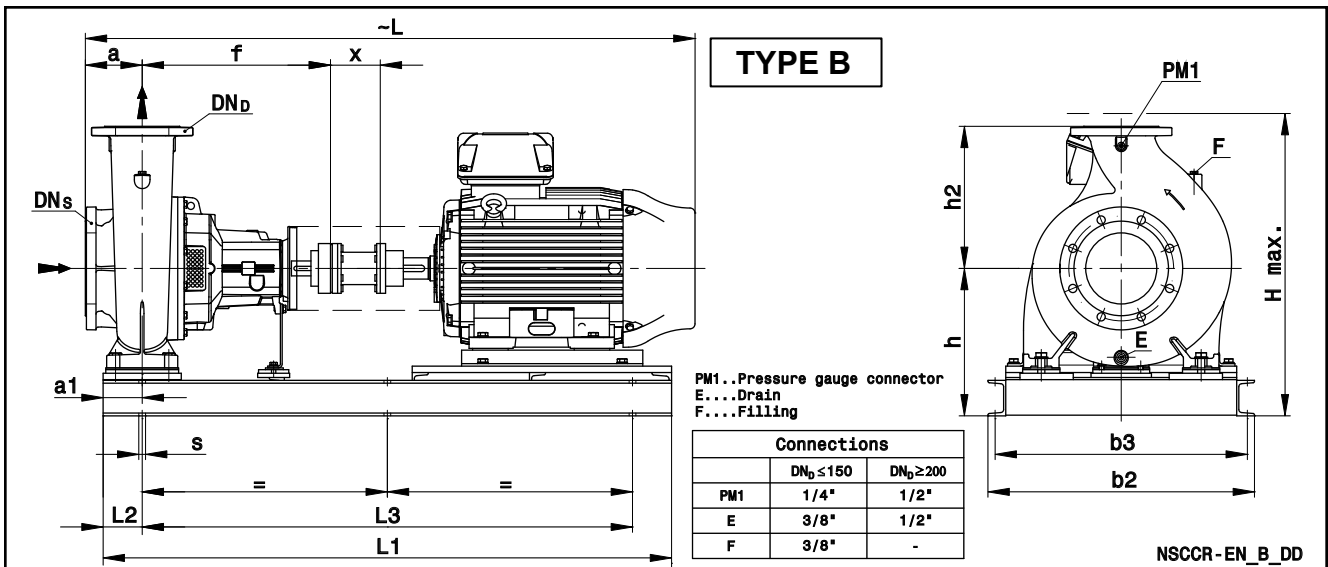
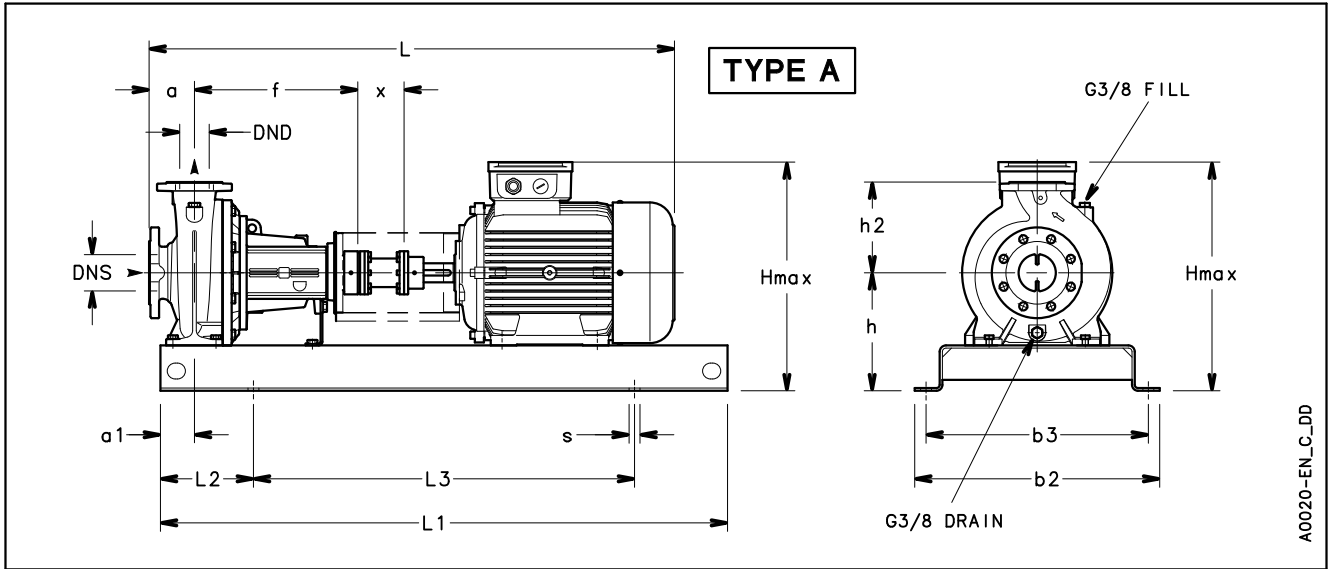
NOTA: Pompe con flange in accordo alle norme EN 1092-2.

Disponibile la versione ASME B16.5 su richiesta. Per dimensioni flange vedere disegno.

Nscc32\_2p50-en\_c\_td



**NSCC 80, 100, 125 SERIES (SPACER COUPLING)  
DIMENSIONS AND WEIGHTS AT 50 Hz, 2 POLES**





## NSCC 80, 100, 125 SERIES (SPACER COUPLING) DIMENSIONS AND WEIGHTS AT 50 Hz, 2 POLES

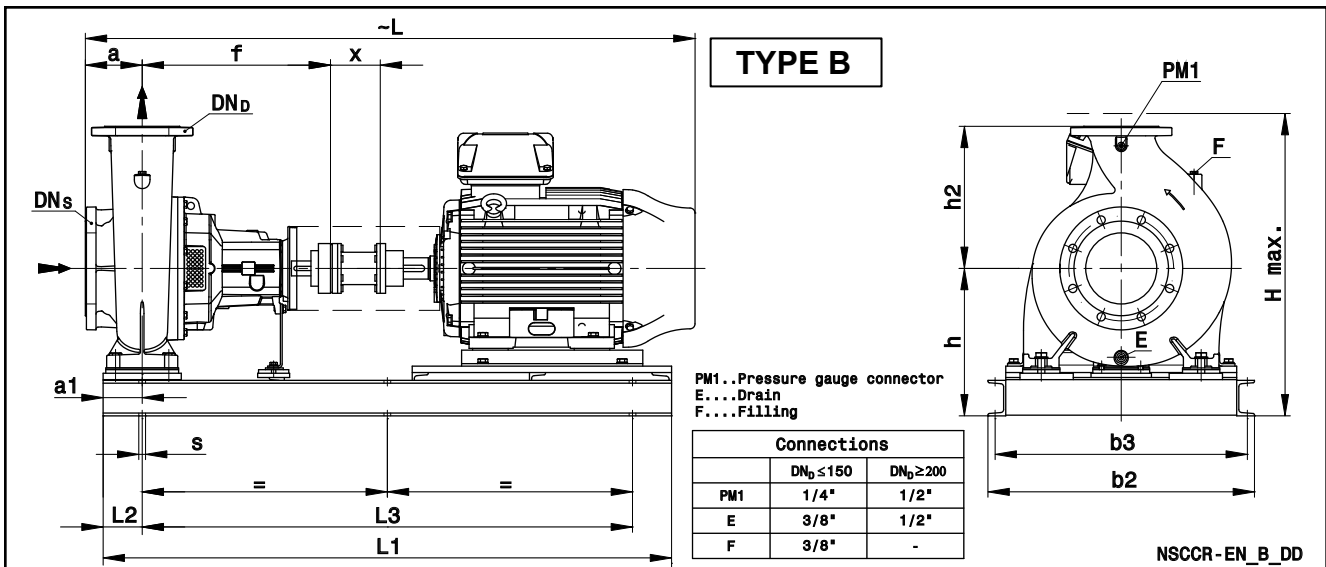
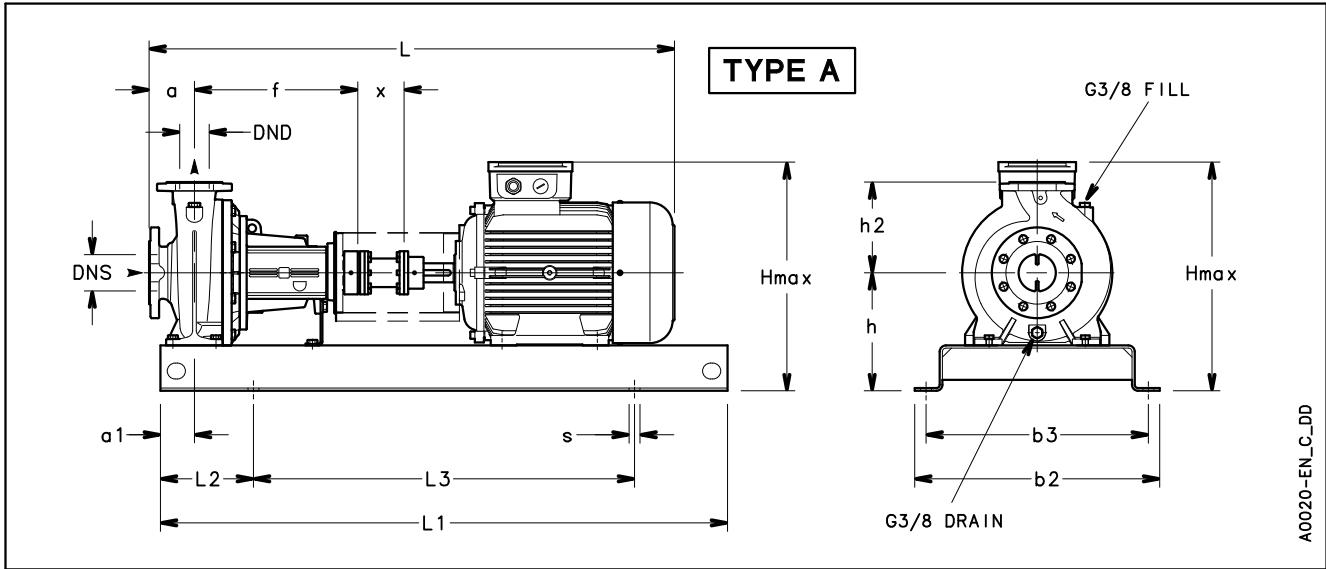
PUMP TYPE NSCC...2	TYPE	DIMENSIONS (mm)															WEIGHT (kg) G	COUPLING TYPE	
		DNS	DND	a	a1	b2	b3	f	h	h2	L	L1	L2	L3	x	H max			s FOR SCREWS
80-160/110/P	A	100	80	125	75	540	490	360	280	225	1229	1250	205	840	140	520	4xØ24 (M20)	197	H95F
80-160/150/P	A	100	80	125	75	540	490	360	280	225	1229	1250	205	840	140	520	4xØ24 (M20)	214	H95F
80-160/185/P	A	100	80	125	75	540	490	360	280	225	1229	1250	205	840	140	520	4xØ24 (M20)	227	H95F
80-160/220/W	A	100	80	125	75	540	490	360	280	225	1289	1250	205	840	140	559	4xØ24 (M20)	294	H110E
80-200/220/W	A	100	80	125	75	540	490	470	280	250	1399	1250	205	840	140	559	4xØ24 (M20)	311	H110B
80-200/300/W	A	100	80	125	75	610	550	470	310	250	1502	1400	230	940	140	627	4xØ28 (M24)	393	H125C
80-200/370/W	A	100	80	125	75	610	550	470	310	250	1502	1400	230	940	140	627	4xØ28 (M24)	414	H125C
80-200/450/W	A	100	80	125	75	610	550	470	365	250	1591	1400	230	940	140	749	4xØ28 (M24)	565	H125C
80-250/370/W	A	100	80	125	90	610	550	470	310	280	1502	1400	230	940	140	627	4xØ28 (M24)	417	H125C
80-250/450/W	A	100	80	125	90	610	550	470	365	280	1591	1400	230	940	140	749	4xØ28 (M24)	568	H125C
80-250/550/W	A	100	80	125	90	660	600	470	390	280	1700	1600	270	1060	140	792	4xØ28 (M24)	677	H140A
80-250/750/W	A	100	80	125	90	730	670	470	420	280	1806	1800	300	1200	140	892	4xØ28 (M24)	945	H160A
80-316/900/W	B	100	80	125	110	750	710	530	440	315	1866	1600	110	1380	140	912	6xØ19 (M16)	1068	H160B
80-316/1100/W	B	100	80	125	110	860	810	530	505	315	2039	1850	110	1630	140	1035	6xØ26 (M20)	1346	H160B
80-316/1320/W	B	100	80	125	110	860	810	530	505	315	2039	1850	110	1630	140	1035	6xØ26 (M20)	1432	H160B
80-316/1600/W	B	100	80	125	110	860	810	530	505	315	2039	1850	110	1630	140	1035	6xØ26 (M20)	1513	H160B
100-160/150/P	B	125	100	125	110	670	630	470	365	280	1339	1330	110	1110	140	645	6xØ19 (M16)	307	H95E
100-160/185/P	B	125	100	125	110	670	630	470	365	280	1339	1330	110	1110	140	645	6xØ19 (M16)	314	H95E
100-160/220/W	B	125	100	125	110	670	630	470	385	280	1399	1330	110	1110	140	665	6xØ19 (M16)	388	H110B
100-160/300/W	B	125	100	125	110	560	520	470	330	280	1502	1350	110	1130	140	647	6xØ19 (M16)	426	H125C
100-200/300/W	B	125	100	125	110	560	520	470	330	280	1502	1350	110	1130	140	647	6xØ19 (M16)	434	H125C
100-200/370/W	B	125	100	125	110	560	520	470	330	280	1502	1350	110	1130	140	647	6xØ19 (M16)	455	H125C
100-200/450/W	B	125	100	125	110	560	520	470	355	280	1591	1350	110	1130	140	739	6xØ19 (M16)	613	H125C
100-200/550/W	B	125	100	125	110	750	710	470	405	280	1700	1550	110	1330	140	807	6xØ19 (M16)	741	H140A
100-250/450/W	B	125	100	140	110	560	520	470	355	280	1606	1350	110	1130	140	739	6xØ19 (M16)	616	H125C
100-250/550/W	B	125	100	140	110	750	710	470	405	280	1715	1550	110	1330	140	807	6xØ19 (M16)	744	H140A
100-250/750/W	B	125	100	140	110	750	710	470	390	280	1821	1550	110	1330	140	862	6xØ19 (M16)	962	H160A
100-250/900/W	B	125	100	140	110	750	710	470	390	280	1821	1550	110	1330	140	862	6xØ19 (M16)	997	H160A
100-316/1100/W	B	125	100	140	110	860	810	530	505	315	2054	1850	110	1630	140	1035	6xØ26 (M20)	1349	H160B
100-316/1320/W	B	125	100	140	110	860	810	530	505	315	2054	1850	110	1630	140	1035	6xØ26 (M20)	1435	H160B
100-316/1600/W	B	125	100	140	110	860	810	530	505	315	2054	1850	110	1630	140	1035	6xØ26 (M20)	1516	H160B
125-200/450/W	B	150	125	140	110	560	520	470	355	315	1606	1350	110	1130	140	739	6xØ19 (M16)	621	H125C
125-200/550/W	B	150	125	140	110	750	710	470	405	315	1715	1550	110	1330	140	807	6xØ19 (M16)	748	H140A
125-200/750/W	B	150	125	140	110	750	710	470	405	315	1821	1550	110	1330	140	877	6xØ19 (M16)	977	H160A
125-200/900/W	B	150	125	140	110	750	710	470	405	315	1821	1550	110	1330	140	877	6xØ19 (M16)	1012	H160A
125-315/1100/W	B	150	125	140	110	860	810	530	505	355	2054	1850	110	1630	140	1035	6xØ26 (M20)	1351	H160B
125-315/1320/W	B	150	125	140	110	860	810	530	505	355	2054	1850	110	1630	140	1035	6xØ26 (M20)	1437	H160B
125-315/1600/W	B	150	125	140	110	860	810	530	505	355	2054	1850	110	1630	140	1035	6xØ26 (M20)	1518	H160B
125-315/2000/W	B	150	125	140	110	860	810	530	505	355	2163	1850	110	1630	140	1080	6xØ26 (M20)	1699	H180A

NOTE: Pumps with flanges according to EN 1092-2 as standard.

Nscc80-125\_2p50-en\_c\_td

Available ASME B16.5 version on request. For flanges dimensions see drawing.

### NSCC 32 SERIES (SPACER COUPLING) DIMENSIONS AND WEIGHTS AT 50 Hz, 4 POLES



PUMP TYPE NSCC..4	TYPE	DIMENSIONS (mm)															WEIGHT kg	COUPLING TYPE	
		DN <sub>S</sub>	DN <sub>D</sub>	a	a1	b2	b3	f	h	h2	L	L1	L2	L3	x	H max			s FOR SCREWS
32-125/02B/S	A	50	32	80	60	360	320	360	212	140	801	800	130	540	100	352	4xØ19 (M16)	64	H80D
32-125/02A/S	A	50	32	80	60	360	320	360	212	140	801	800	130	540	100	352	4xØ19 (M16)	64	H80D
32-125/02/S	A	50	32	80	60	360	320	360	212	140	801	800	130	540	100	352	4xØ19 (M16)	64	H80D
32-125/03/S	A	50	32	80	60	360	320	360	212	140	801	800	130	540	100	352	4xØ19 (M16)	65	H80D
32-160/02/S	A	50	32	80	60	360	320	360	232	160	801	800	130	540	100	392	4xØ19 (M16)	65	H80D
32-160/03/S	A	50	32	80	60	360	320	360	232	160	801	800	130	540	100	392	4xØ19 (M16)	66	H80D
32-160/05A/S	A	50	32	80	60	360	320	360	232	160	843	800	130	540	100	392	4xØ19 (M16)	69	H80A
32-160/05/S	A	50	32	80	60	360	320	360	232	160	843	800	130	540	100	392	4xØ19 (M16)	69	H80A
32-200/05A/S	A	50	32	80	60	360	320	360	260	180	843	800	130	540	100	440	4xØ19 (M16)	76	H80A
32-200/05/S	A	50	32	80	60	360	320	360	260	180	843	800	130	540	100	440	4xØ19 (M16)	76	H80A
32-200/07/X	A	50	32	80	60	360	320	360	260	180	811	800	130	540	100	440	4xØ19 (M16)	79	H80A
32-200/11/P	A	50	32	80	60	390	350	360	260	180	888	900	150	600	100	440	4xØ19 (M16)	88	H80B
32-250/11A/P	A	50	32	100	75	450	400	360	280	225	908	1000	170	660	100	505	4xØ24 (M20)	115	H80B
32-250/11/P	A	50	32	100	75	450	400	360	280	225	908	1000	170	660	100	505	4xØ24 (M20)	115	H80B
32-250/15/P	A	50	32	100	75	450	400	360	280	225	908	1000	170	660	100	505	4xØ24 (M20)	120	H80B
32-250/22/P	A	50	32	100	75	450	400	360	280	225	985	1000	170	660	100	505	4xØ24 (M20)	130	H80C

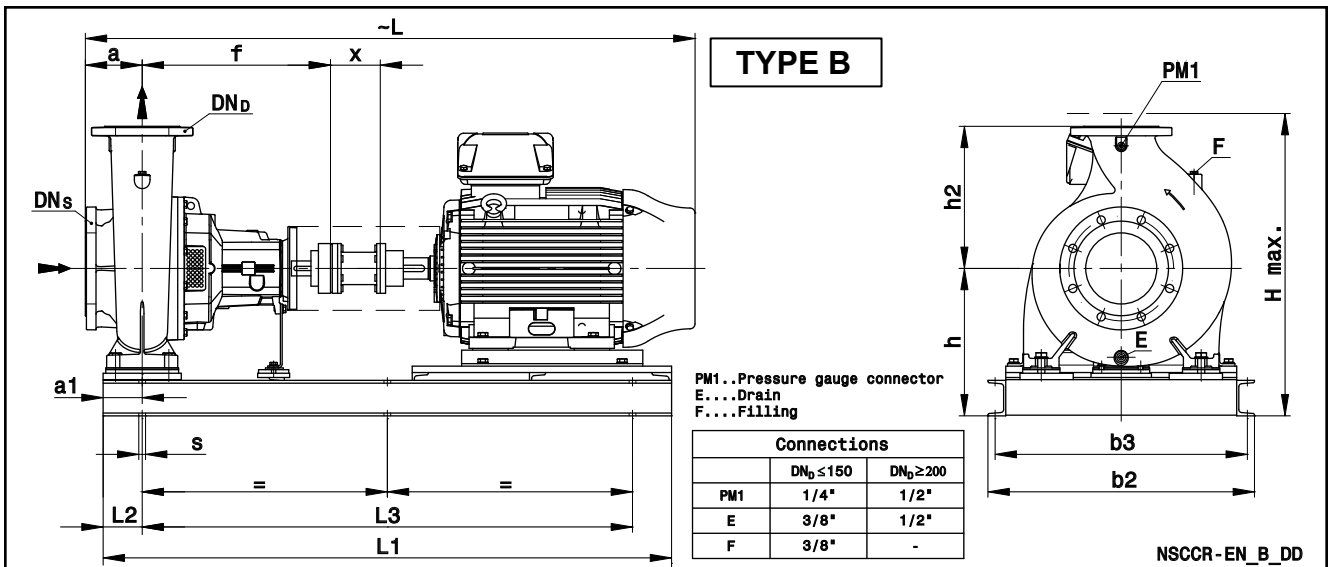
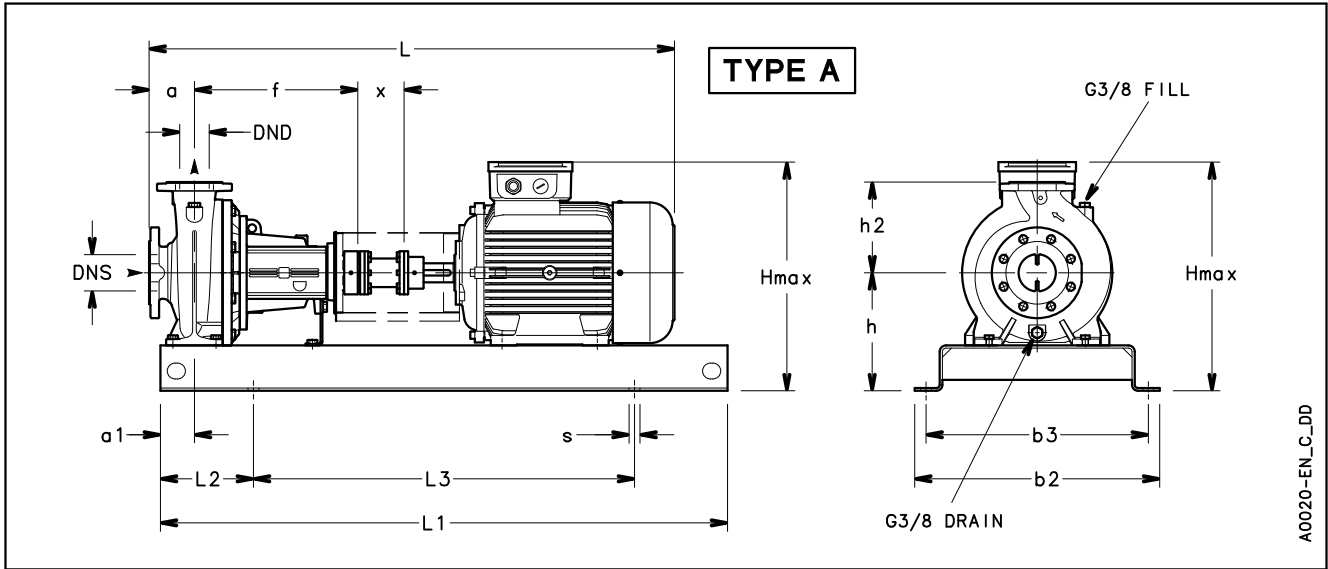
NOTE: Pumps with flanges according to EN 1092-2 as standard.

Available ASME B16.5 version on request. For flanges dimensions see drawing.

Nscc32\_4p50-en\_c\_ttd



**NSCC 80, 100, 125 SERIES (SPACER COUPLING)  
DIMENSIONS AND WEIGHTS AT 50 Hz, 4 POLES**



## NSCC 80, 100, 125 SERIES (SPACER COUPLING) DIMENSIONS AND WEIGHTS AT 50 Hz, 4 POLES

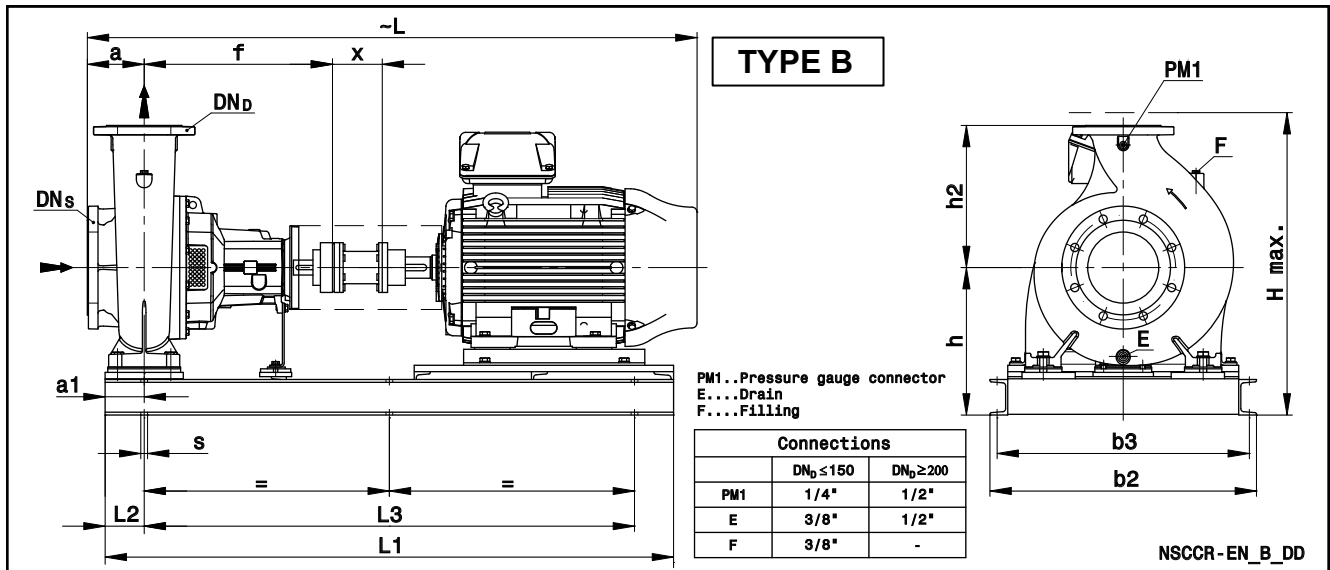
PUMP TYPE NSCC...4	TYPE	DIMENSIONS (mm)																WEIGHT (kg) G	COUPLING TYPE
		DNS	DND	a	a1	b2	b3	f	h	h2	L	L1	L3	L2	x	H max	s FOR SCREWS		
80-160/15/P	A	100	80	125	75	450	400	360	280	225	973	1000	170	660	140	505	4xØ24 (M20)	127	H80E
80-160/22A/P	A	100	80	125	75	490	440	360	280	225	1050	1120	190	740	140	505	4xØ24 (M20)	143	H80F
80-160/22/P	A	100	80	125	75	490	440	360	280	225	1050	1120	190	740	140	505	4xØ24 (M20)	143	H80F
80-160/30/P	A	100	80	125	75	490	440	360	280	225	1067	1120	190	740	140	505	4xØ24 (M20)	148	H80F
80-200/30/P	A	100	80	125	75	490	440	470	280	250	1177	1120	190	740	140	530	4xØ24 (M20)	165	H80G
80-200/40/P	A	100	80	125	75	490	440	470	280	250	1177	1120	190	740	140	530	4xØ24 (M20)	185	H80G
80-200/55A/P	A	100	80	125	75	490	440	470	280	250	1220	1120	190	740	140	530	4xØ24 (M20)	194	H95C
80-200/55/P	A	100	80	125	75	490	440	470	280	250	1220	1120	190	740	140	530	4xØ24 (M20)	194	H95C
80-250/55A/P	A	100	80	125	90	540	490	470	310	280	1220	1250	205	840	140	590	4xØ24 (M20)	203	H95C
80-250/55/P	A	100	80	125	90	540	490	470	310	280	1220	1250	205	840	140	590	4xØ24 (M20)	203	H95C
80-250/75/P	A	100	80	125	90	540	490	470	310	280	1220	1250	205	840	140	590	4xØ24 (M20)	207	H95C
80-250/110/P	A	100	80	125	90	540	490	470	310	280	1339	1250	205	840	140	590	4xØ24 (M20)	262	H95E
80-315/110A/P	B	100	80	125	110	670	630	470	365	315	1339	1330	1110	110	140	680	6xØ19 (M16)	308,8	H95E
80-315/110/P	B	100	80	125	110	670	630	470	365	315	1339	1330	1110	110	140	680	6xØ19 (M16)	308,8	H95E
80-315/150/P	B	100	80	125	110	670	630	470	365	315	1339	1330	1110	110	140	680	6xØ19 (M16)	354,4	H110E
80-315/185/W	B	100	80	125	110	670	630	470	385	315	1399	1330	1110	110	140	700	6xØ19 (M16)	413,3	H110B
80-315/220/W	B	100	80	125	110	670	630	470	385	315	1437	1330	1110	110	140	700	6xØ19 (M16)	431,3	H110B
80-400/185/W	B	100	80	125	110	670	630	530	400	355	1459	1430	1210	110	140	755	6xØ19 (M16)	445,9	H110C
80-400/220/W	B	100	80	125	110	670	630	530	400	355	1497	1430	1210	110	140	755	6xØ19 (M16)	463,9	H110C
80-400/300/W	B	100	80	125	110	670	630	530	420	355	1562	1430	1210	110	140	775	6xØ19 (M16)	517,5	H125D
80-400/370/W	B	100	80	125	110	750	710	530	415	355	1681	1600	1380	110	140	799	6xØ19 (M16)	708,4	H140B
100-160/22A/P	B	125	100	125	110	670	630	470	355	280	1160	1100	880	110	140	635	6xØ19 (M16)	219	H95C
100-160/22/P	B	125	100	125	110	670	630	470	355	280	1160	1100	880	110	140	635	6xØ19 (M16)	219	H95C
100-160/30/P	B	125	100	125	110	670	630	470	355	280	1177	1100	880	110	140	635	6xØ19 (M16)	222	H95C
100-160/40/P	B	125	100	125	110	670	630	470	365	280	1177	1100	880	110	140	645	6xØ19 (M16)	243	H95C
100-200/40/P	B	125	100	125	110	670	630	470	365	280	1177	1100	880	110	140	645	6xØ19 (M16)	251	H95C
100-200/55/P	B	125	100	125	110	670	630	470	385	280	1220	1100	880	110	140	665	6xØ19 (M16)	262	H95D
100-200/75/P	B	125	100	125	110	670	630	470	385	280	1220	1100	880	110	140	665	6xØ19 (M16)	262	H95D
100-250/55/P	B	125	100	140	110	670	630	470	385	280	1235	1100	880	110	140	665	6xØ19 (M16)	265	H95D
100-250/75/P	B	125	100	140	110	670	630	470	385	280	1235	1100	880	110	140	665	6xØ19 (M16)	265	H95D
100-250/110/P	B	125	100	140	110	670	630	470	365	280	1354	1330	1110	110	140	645	6xØ19 (M16)	298	H95E
100-315/110/P	B	125	100	140	110	670	630	470	365	315	1354	1330	1110	110	140	680	6xØ19 (M16)	307	H95E
100-315/150/P	B	125	100	140	110	670	630	470	365	315	1354	1330	1110	110	140	680	6xØ19 (M16)	352	H110E
100-315/185/W	B	125	100	140	110	670	630	470	385	315	1414	1330	1110	110	140	700	6xØ19 (M16)	411	H110B
100-315/220/W	B	125	100	140	110	670	630	470	385	315	1452	1330	1110	110	140	700	6xØ19 (M16)	429	H110B
100-315/300/W	B	125	100	140	110	560	520	470	355	315	1517	1350	1130	110	140	672	6xØ19 (M16)	458	H125C
100-400/300/W	B	125	100	140	110	670	630	530	420	355	1577	1430	1210	110	140	775	6xØ19 (M16)	547	H125D
100-400/370/W	B	125	100	140	110	750	710	530	415	355	1696	1600	1380	110	140	799	6xØ19 (M16)	734	H140B
100-400/450/W	B	125	100	140	110	750	710	530	415	355	1696	1600	1380	110	140	799	6xØ19 (M16)	762	H140B
125-200/55/P	B	150	125	140	110	670	630	470	385	315	1235	1100	880	110	140	700	6xØ19 (M16)	270	H95D
125-200/75/P	B	150	125	140	110	670	630	470	385	315	1235	1100	880	110	140	700	6xØ19 (M16)	270	H95D
125-200/110/P	B	150	125	140	110	670	630	470	365	315	1354	1330	1110	110	140	680	6xØ19 (M16)	303	H95E
125-250/75/P	B	150	125	140	110	670	630	470	385	355	1235	1100	880	110	140	740	6xØ19 (M16)	270	H95D
125-250/110/P	B	150	125	140	110	670	630	470	365	355	1354	1330	1110	110	140	720	6xØ19 (M16)	303	H95E
125-250/150/P	B	150	125	140	110	670	630	470	365	355	1354	1330	1110	110	140	720	6xØ19 (M16)	348	H110E
125-315/185/W	B	150	125	140	110	670	630	530	400	355	1474	1430	1210	110	140	755	6xØ19 (M16)	447	H110C
125-315/220/W	B	150	125	140	110	670	630	530	400	355	1512	1430	1210	110	140	755	6xØ19 (M16)	465	H110C
125-315/300/W	B	150	125	140	110	670	630	530	420	355	1577	1430	1210	110	140	775	6xØ19 (M16)	521	H125D
125-315/370/W	B	150	125	140	110	750	710	530	415	355	1696	1600	1380	110	140	799	6xØ19 (M16)	708	H140B
125-400/370/W	B	150	125	140	110	750	710	530	440	400	1696	1600	1380	110	140	840	6xØ19 (M16)	759	H140B
125-400/450/W	B	150	125	140	110	750	710	530	440	400	1696	1600	1380	110	140	840	6xØ19 (M16)	787	H140B
125-400/550/W	B	150	125	140	110	750	710	530	440	400	1775	1600	1380	110	140	842	6xØ19 (M16)	872	H160B
125-400/750/W	B	150	125	140	110	750	710	530	440	400	1881	1600	1380	110	140	912	6xØ19 (M16)	1083	H180B

NOTE: Pumps with flanges according to EN 1092-2 as standard.

Nsc80-125\_4p50-en\_c\_ttd

Available ASME B16.5 version on request. For flanges dimensions see drawing.

## NSCC 150 SERIES (SPACER COUPLING) DIMENSIONS AND WEIGHTS AT 50 Hz, 4 POLES



PUMP TYPE NSCC..4	TYPE	DIMENSIONS (mm)															H max	s FOR SCREWS	WEIGHT (kg) G	COUPLING TYPE
		DN <sub>s</sub>	DN <sub>D</sub>	a	a1	b2	b3	f	h	h2	L	L1	L3	L2	x					
150-200/110A/P	B	200	150	160	110	670	630	470	385	400	1374	1330	1110	110	140	785	6xØ19 (M16)	360	H95E	
150-200/110/P	B	200	150	160	110	670	630	470	385	400	1374	1330	1110	110	140	785	6xØ19 (M16)	360	H95E	
150-200/150A/P	B	200	150	160	110	670	630	470	385	400	1374	1330	1110	110	140	785	6xØ19 (M16)	405	H110E	
150-200/150/P	B	200	150	160	110	670	630	470	385	400	1374	1330	1110	110	140	785	6xØ19 (M16)	405	H110E	
150-250/150/P	B	200	150	160	110	670	630	530	385	400	1434	1430	1210	110	140	785	6xØ19 (M16)	416	H110F	
150-250/185/W	B	200	150	160	110	670	630	530	400	400	1494	1430	1210	110	140	800	6xØ19 (M16)	475	H110C	
150-250/220/W	B	200	150	160	110	670	630	530	400	400	1532	1430	1210	110	140	800	6xØ19 (M16)	493	H110C	
150-250/300/W	B	200	150	160	110	670	630	530	420	400	1597	1430	1210	110	140	820	6xØ19 (M16)	549	H125D	
150-315/300/W	B	200	150	160	110	670	630	530	420	400	1597	1430	1210	110	140	820	6xØ19 (M16)	555	H125D	
150-315/370/W	B	200	150	160	110	750	710	530	415	400	1716	1600	1380	110	140	815	6xØ19 (M16)	742	H140B	
150-315/450/W	B	200	150	160	110	750	710	530	415	400	1716	1600	1380	110	140	815	6xØ19 (M16)	770	H140B	
150-400/450/W	B	200	150	160	110	750	710	530	440	450	1716	1600	1380	110	140	890	6xØ19 (M16)	815	H140B	
150-400/550/W	B	200	150	160	110	750	710	530	440	450	1795	1600	1380	110	140	890	6xØ19 (M16)	900	H160B	
150-400/750/W	B	200	150	160	110	750	710	530	440	450	1901	1600	1380	110	140	912	6xØ19 (M16)	1111	H180B	
150-400/900/W	B	200	150	160	110	750	710	530	440	450	1901	1600	1380	110	140	912	6xØ19 (M16)	1159	H180B	
150-400/1100/W	B	200	150	160	110	750	710	530	440	450	1901	1600	1380	110	140	912	6xØ19 (M16)	1266	H180B	
150-500/900/W	B	200	150	180	165	860	810	770	565	500	2271	2000	1670	165	250	1065	6xØ26 (M20)	1403	H180D	
150-500/1100/W	B	200	150	180	165	860	810	770	585	500	2474	2250	1920	165	250	1115	6xØ26 (M20)	1702	H200A	
150-500/1320/W	B	200	150	180	165	860	810	770	585	500	2474	2250	1920	165	250	1115	6xØ26 (M20)	1787	H200A	
150-500/1600/W	B	200	150	180	165	860	810	770	585	500	2474	2250	1920	165	250	1115	6xØ26 (M20)	1844	H200A	
150-500/2000/W	B	200	150	180	165	860	810	770	585	500	2583	2250	1920	165	250	1160	6xØ26 (M20)	2033	H225A	

NOTE: Pumps with flanges according to EN 1092-2 as standard.

Nscc150\_4p50-en\_d\_td

Available ASME B16.5 version on request. For flanges dimensions see drawing.

## NSCC 200, 250, 300 SERIES (SPACER COUPLING) DIMENSIONS AND WEIGHTS AT 50 Hz, 4 POLES

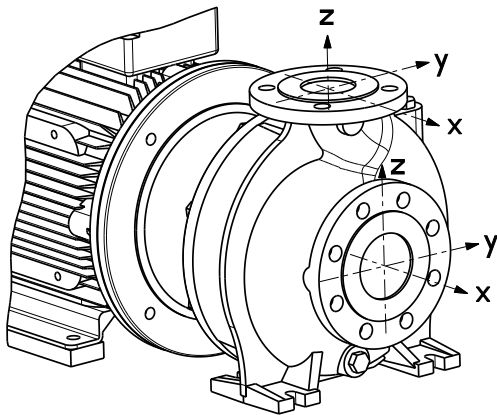
PUMP TYPE NSCC..4	TYPE	DIMENSIONS (mm)																WEIGHT (kg) G	COUPLING TYPE
		DNS	DND	a	a1	b2	b3	f	h	h2	L	L1	L3	L2	x	H max	s FOR SCREWS		
200-250/185/W	B	250	200	180	110	670	630	530	460	475	1574	1450	1230	110	200	935	6xØ19 (M16)	534	H125E
200-250/220/W	B	250	200	180	110	670	630	530	460	475	1612	1450	1230	110	200	935	6xØ19 (M16)	552	H125E
200-250/300A/W	B	250	200	180	110	670	630	530	460	475	1677	1450	1230	110	200	935	6xØ19 (M16)	592	H125F
200-250/300/W	B	250	200	180	110	670	630	530	460	475	1677	1450	1230	110	200	935	6xØ19 (M16)	592	H125F
200-315/300/W	B	250	200	180	110	670	630	530	460	450	1677	1450	1230	110	200	910	6xØ19 (M16)	596	H125F
200-315/370/W	B	250	200	180	110	750	710	530	480	450	1796	1660	1440	110	200	930	6xØ19 (M16)	798	H140C
200-315/450/W	B	250	200	180	110	750	710	530	480	450	1796	1660	1440	110	200	930	6xØ19 (M16)	826	H140C
200-315/550/W	B	250	200	180	110	750	710	530	480	450	1875	1660	1440	110	200	930	6xØ19 (M16)	912	H160C
200-315/750/W	B	250	200	180	110	750	710	530	480	450	1981	1660	1440	110	200	952	6xØ19 (M16)	1123	H180C
200-400/750A/W	B	250	200	180	165	860	810	770	565	500	2271	2000	1670	165	250	1065	6xØ26 (M20)	1310	H180D
200-400/750/W	B	250	200	180	165	860	810	770	565	500	2271	2000	1670	165	250	1065	6xØ26 (M20)	1310	H180D
200-400/900/W	B	250	200	180	165	860	810	770	565	500	2271	2000	1670	165	250	1065	6xØ26 (M20)	1358	H180D
200-400/1100/W	B	250	200	180	165	860	810	770	585	500	2474	2250	1920	165	250	1115	6xØ26 (M20)	1657	H200A
200-400/1320/W	B	250	200	180	165	860	810	770	585	500	2474	2250	1920	165	250	1115	6xØ26 (M20)	1742	H200A
200-500/1320/W	B	250	200	200	165	860	810	770	635	560	2494	2250	1920	165	250	1195	6xØ26 (M20)	1802	H200A
200-500/1600/W	B	250	200	200	165	860	810	770	635	560	2494	2250	1920	165	250	1195	6xØ26 (M20)	1859	H200A
200-500/2000/W	B	250	200	200	165	860	810	770	635	560	2603	2250	1920	165	250	1210	6xØ26 (M20)	2048	H225A
200-500/2500/W	B	250	200	200	165	860	810	770	635	560	2603	2250	1920	165	250	1210	6xØ26 (M20)	2243	H225A
200-500/3150/W	B	250	200	200	165	1000	930	770	675	560	2702	2450	2120	165	250	1300	6xØ29 (M24)	2590	H250A
250-315/370/W	B	300	250	250	165	850	810	530	525	500	1866	1700	1370	165	200	1025	6xØ19 (M16)	911	H140C
250-315/450/W	B	300	250	250	165	850	810	530	525	500	1866	1700	1370	165	200	1025	6xØ19 (M16)	939	H140C
250-315/550/W	B	300	250	250	165	850	810	530	525	500	1945	1700	1370	165	200	1025	6xØ19 (M16)	1025	H160C
250-315/750/W	B	300	250	250	165	850	810	530	525	500	2051	1700	1370	165	200	1025	6xØ19 (M16)	1236	H180C
250-400/750/W	B	300	250	200	165	860	810	770	565	560	2291	2000	1670	165	250	1125	6xØ26 (M20)	1347	H180D
250-400/900/W	B	300	250	200	165	860	810	770	565	560	2291	2000	1670	165	250	1125	6xØ26 (M20)	1395	H180D
250-400/1100/W	B	300	250	200	165	860	810	770	585	560	2494	2250	1920	165	250	1145	6xØ26 (M20)	1694	H200A
250-400/1320/W	B	300	250	200	165	860	810	770	585	560	2494	2250	1920	165	250	1145	6xØ26 (M20)	1779	H200A
250-400/1600/W	B	300	250	200	165	860	810	770	585	560	2494	2250	1920	165	250	1145	6xØ26 (M20)	1836	H200A
250-400/2000/W	B	300	250	200	165	860	810	770	585	560	2603	2250	1920	165	250	1160	6xØ26 (M20)	2025	H225A
250-500/1600/W	B	300	250	200	165	860	810	770	635	670	2494	2250	1920	165	250	1305	6xØ26 (M20)	1910	H200A
250-500/2000/W	B	300	250	200	165	860	810	770	635	670	2603	2250	1920	165	250	1305	6xØ26 (M20)	2099	H225A
250-500/2500/W	B	300	250	200	165	860	810	770	635	670	2603	2250	1920	165	250	1305	6xØ26 (M20)	2294	H225A
250-500/3150/W	B	300	250	200	165	1000	930	770	675	670	2702	2450	2120	165	250	1345	6xØ29 (M24)	2641	H250A
250-500/3550/W	B	300	250	200	165	1000	930	770	675	670	2702	2450	2120	165	250	1345	6xØ29 (M24)	2747	H250A
300-350/750A/W	B	350	300	250	200	960	910	800	620	600	2421	2150	1750	200	300	1220	6xØ26 (M20)	1524	N150A
300-350/750/W	B	350	300	250	200	960	910	800	620	600	2421	2150	1750	200	300	1220	6xØ26 (M20)	1524	N150A
300-350/900/W	B	350	300	250	200	960	910	800	620	600	2421	2150	1750	200	300	1220	6xØ26 (M20)	1572	N150A
300-350/1100/W	B	350	300	250	200	960	910	800	640	600	2624	2400	2000	200	300	1240	6xØ26 (M20)	1877	N176A
300-400/1100/W	B	350	300	250	200	960	910	800	640	600	2624	2400	2000	200	300	1240	6xØ26 (M20)	1881	N176A
300-400/1320/W	B	350	300	250	200	960	910	800	640	600	2624	2400	2000	200	300	1240	6xØ26 (M20)	1966	N176A
300-400/1600/W	B	350	300	250	200	960	910	800	640	600	2624	2400	2000	200	300	1240	6xØ26 (M20)	2023	N176A
300-400/2000/W	B	350	300	250	200	960	910	800	640	600	2733	2400	2000	200	300	1240	6xØ26 (M20)	2206	N185A
300-400/2500/W	B	350	300	250	200	960	910	800	640	600	2733	2400	2000	200	300	1240	6xØ26 (M20)	2401	N185A
300-450/1600/W	B	350	300	250	200	960	910	800	665	630	2624	2400	2000	200	300	1295	6xØ26 (M20)	2065	N176A
300-450/2000/W	B	350	300	250	200	960	910	800	665	630	2733	2400	2000	200	300	1295	6xØ26 (M20)	2247	N185A
300-450/2500/W	B	350	300	250	200	960	910	800	665	630	2733	2400	2000	200	300	1295	6xØ26 (M20)	2442	N185A
300-450/3150/W	B	350	300	250	200	1000	930	800	705	630	2832	2550	2150	200	300	1335	6xØ29 (M24)	2757	N212A

NOTE: Pumps with flanges according to EN 1092-2 as standard.

Nscc200-300\_4p50-en\_d\_id

Available ASME B16.5 version on request. For flanges dimensions see drawing.

## e-NSC SERIES FORCES AND MOMENTS AT PUMP FLANGES



Forces at the pump flanges calculated according to EN ISO 5199:2002.

When the applied loads do not all attain the maximum values allowed, one of these loads may exceed the normal limit, provided that the following supplementary conditions are satisfied:

- any component of a force or of a moment shall be limited to 1,4 times the maximum allowable value;
- the actual forces and moments acting on each flange are governed by the following formula:

$$\left(\frac{\sum |F_{x,y,z}|}{\sum |F_{max}|}\right)^2 + \left(\frac{\sum |M_{x,y,z}|}{\sum |M_{max}|}\right)^2 \leq 2$$

### Cast iron casing EN-GJL-250 / EN-GJS-400

Size	Suction									Discharge								
	DNS	F <sub>xmax</sub> [N]	F <sub>ymax</sub> [N]	F <sub>zmax</sub> [N]	ΣF <sub>max</sub> [N]	M <sub>xmax</sub> [Nm]	M <sub>ymax</sub> [Nm]	M <sub>zmax</sub> [Nm]	ΣM <sub>max</sub> [Nm]	DNS	F <sub>xmax</sub> [N]	F <sub>ymax</sub> [N]	F <sub>zmax</sub> [N]	ΣF <sub>max</sub> [N]	M <sub>xmax</sub> [Nm]	M <sub>ymax</sub> [Nm]	M <sub>zmax</sub> [Nm]	ΣM <sub>max</sub> [Nm]
32-...	50	580	530	480	925	490	350	405	730	32	320	300	370	575	385	265	300	560
40-...	65	740	650	600	1155	525	385	420	775	40	390	350	440	685	455	315	370	670
50-...	65	740	650	600	1155	525	385	420	775	50	530	480	580	925	490	350	405	730
65-...	80	880	790	720	1385	560	405	455	830	65	650	600	740	1155	525	385	420	775
80-...	100	1180	1050	950	1845	615	440	510	915	80	790	720	880	1385	560	405	455	830
100-...	125	1390	1250	1120	2180	735	525	665	1125	100	1050	950	1180	1845	615	440	510	915
125-...	150	1750	1580	1420	2755	875	615	720	1290	125	1250	1120	1390	2180	735	525	665	1125
150-...	200	2350	2100	1890	3675	1140	805	930	1680	150	1580	1420	1750	2755	875	615	720	1290
200-...	250	3340	2980	2700	5230	1780	1260	1460	2625	200	2100	1890	2350	3675	1140	805	930	1680
250-...	300	4000	3580	3220	6260	2420	1720	1980	3570	250	2980	2700	3340	5230	1780	1260	1460	2625
300-...	350	4660	4180	3760	7305	3100	2200	2540	4575	300	3580	3220	4000	6260	2420	1720	1980	3570

NSC\_load-en\_a\_td

### Stainless steel casing (1.4408) - Duplex (1.4517)

Size	Suction									Discharge								
	DNS	F <sub>xmax</sub> [N]	F <sub>ymax</sub> [N]	F <sub>zmax</sub> [N]	ΣF <sub>max</sub> [N]	M <sub>xmax</sub> [Nm]	M <sub>ymax</sub> [Nm]	M <sub>zmax</sub> [Nm]	ΣM <sub>max</sub> [Nm]	DNS	F <sub>xmax</sub> [N]	F <sub>ymax</sub> [N]	F <sub>zmax</sub> [N]	ΣF <sub>max</sub> [N]	M <sub>xmax</sub> [Nm]	M <sub>ymax</sub> [Nm]	M <sub>zmax</sub> [Nm]	ΣM <sub>max</sub> [Nm]
50-315	65	1470	1300	1190	2295	1050	770	840	1550	50	1050	950	1160	1835	980	700	805	1450
65-...	80	1750	1580	1440	2765	1120	805	910	1655	65	1300	1190	1470	2295	1050	770	840	1550
80-...	100	2350	2100	1890	3675	1225	875	1015	1820	80	1580	1440	1750	2765	1120	805	910	1655
100-...	125	2770	2490	2240	4350	1470	1050	1330	2245	100	2100	1890	2350	3675	1230	880	1020	1830
125-...	150	3500	3150	2840	5500	1750	1225	1435	2575	125	2490	2240	2770	4350	1470	1050	1330	2245
150-...	200	4690	4200	3780	7345	2275	1610	1855	3350	150	3150	2840	3500	5500	1750	1225	1435	2575
200-...	250	5850	5220	4730	9160	3115	2205	2555	4595	200	4200	3780	4690	7345	2275	1610	1855	3350
250-...	300	7000	6270	5640	10965	4235	3010	3465	6250	250	5220	4730	5850	9160	3115	2205	2555	4595
300-...	350	8160	7320	6580	12790	5425	3850	4445	8005	300	6270	5640	7000	10965	4235	3010	3465	6250

NSC\_load\_ss-en\_a\_td



# **NSC with VARIABLE FREQUENCY DRIVE**

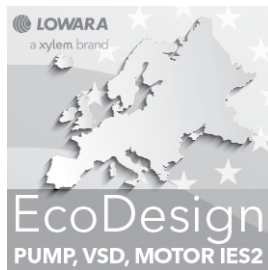
## ECODESIGN DIRECTIVE (ErP)

The Ecodesign directive was put in place in 2011 and introduced minimum requirements for the efficiency of **AC motors and pumps**. Over the last few years, these requirements have been gradually intensified.

In 2014, with the standard EN 50598, there was a switch in the definition of efficiency class from an individual component approach towards an overall system one; which is the basic point for the "Extended product approach" (EPA).

Taking this concept further, the EN50598-2 introduced IES efficiency classes for frequency converters + motor systems (known as power drive systems-PDS) with power rating **from 0.12 kW to 1000kW and from 100V to 1000V**. For Power Drive System (PDS) the defined efficiency classes are IES0, IES1, IES2. If a PDS has 20% greater losses than the reference value of IES1 then it is classified as IES0; if it has 20% lower losses than the reference value of IES1 then it is classified as IES2.

- **With the HYDROVAR connected to a Lowara IE3 motor, the system achieves the highest IES class – IES2.**



**The e-NSC pump series is therefore already ready for the 2020 EU Ecodesign energy efficiency objectives.**

# **NSC..H**

## **e-NSC WITH HYDROVAR**

## NSC..H SERIES NSC WITH HYDROVAR

### Background and context

For all pumping needs in commercial or residential building and in industry applications, the demand for intelligent pumping systems is constantly growing. Controlled systems offer many advantages: reduced operating costs for the lifetime of the pump, lower environmental impact, longer lifetime of piping systems and networks.

For this reason, Lowara has developed the NSC..H: an intelligent pumping system which assures high level performance with energy consumption tailored to the system's demand.

According to the EN 50598-2 standard the NSC..H is an IES2 power drive system, the highest efficiency class defined for this category.

### Benefits of e-NSC with HYDROVAR

**Saving:** NSC..H transforms the NSC pumps into variable speed intelligent pumping systems. Thanks to the HYDROVAR, the speed of each pump varies so as to maintain a constant flow, a constant pressure, or a differential pressure. In doing so, at any point in time, the pump only receives the energy required. This in turns allows for considerable savings, especially for systems that have varying loads throughout the day.

**Easy installation and space-saving:** NSC..H saves time and space during installation. The Hydrovar is delivered already mounted on the motor (for models up to 22kW). The hydrovar is kept cool by the motor fan and does not require a control panel. In order to function, only fuses on the supply line are needed (Check your local electrical installation regulations).

**Standard motors:** NSC..H models are fitted with three-phase standard TEFC motors with insulation class 155 (F).

### Identification code:

NSC..H models are identified by the letter "H" and the last two characters.

Examples:

NSCE**H**80-160/22/P45RCC4 /**2**

NSCE**H**50-250/22/P45RCS4 /**3**

NSCS**H**50-200/185/P25VCSZ /**4**

**H** = with integrated HYDROVAR

**/2** = HYDROVAR HVL**2**.022 1~ 208-240 V (50/60 Hz)

**/3** = HYDROVAR HVL**3**.022 3~ 208-240 V (50/60 Hz)

**/4** = HYDROVAR HVL**4**.022 3~ 380-460 V (50/60 Hz)

### Key Features of the HYDROVAR

- **No need for additional pressure sensors:**

The NSC..H is fitted with a pressure transmitter or differential pressure transmitters, depending on the application.

- **No need for special pumps or motors.**

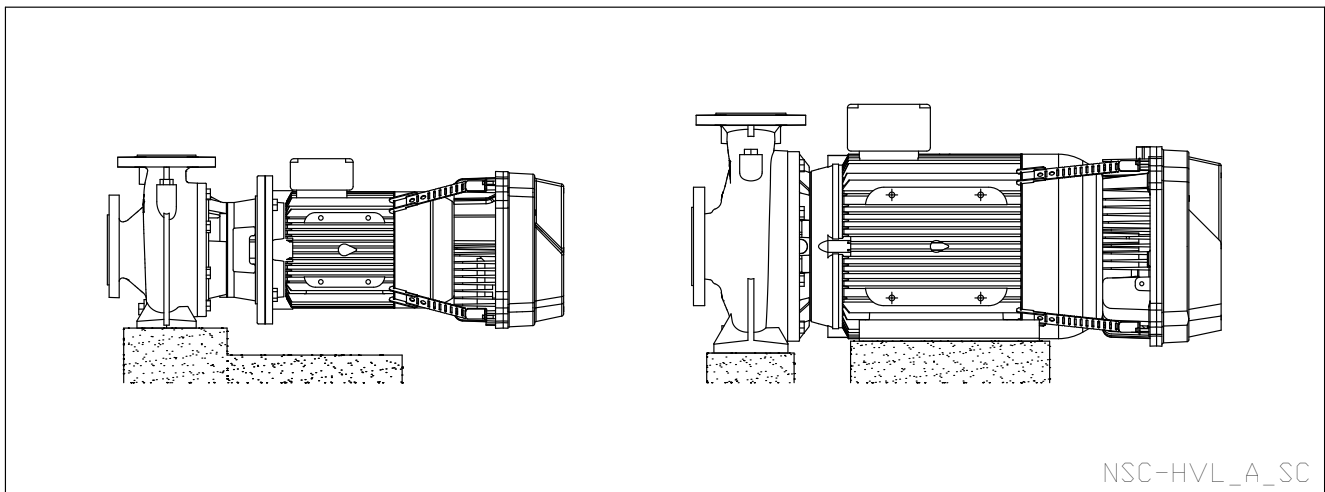
- **NSC..H is already pre-wired.**

- **No need for bypass or safety systems:**

The NSC..H will immediately switch off when demand drops to zero or when it exceeds maximum pump capacity; thus making installation of additional safety devices unnecessary.

- **Anti-condensation device:**

The HYDROVAR is fitted with anti-condensation devices which switch on when the pump is in standby in order to prevent condensation forming in the unit.



## NSC..H SERIES (e-NSC WITH HYDROVAR)

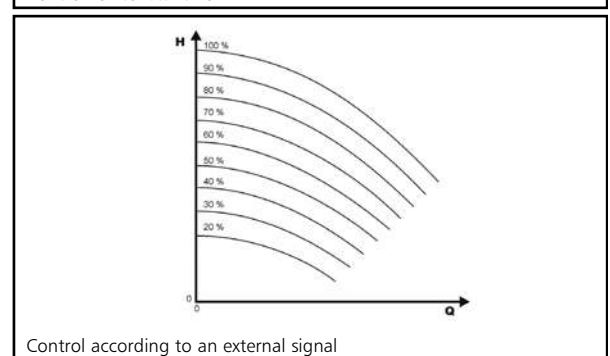
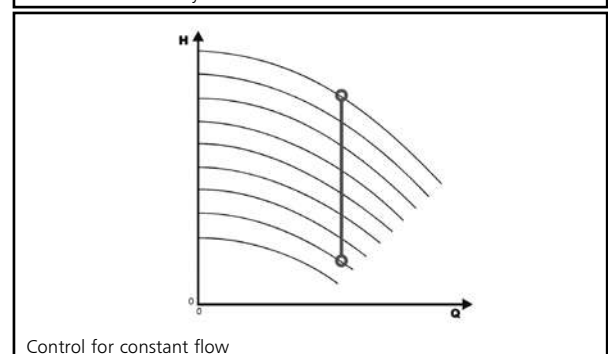
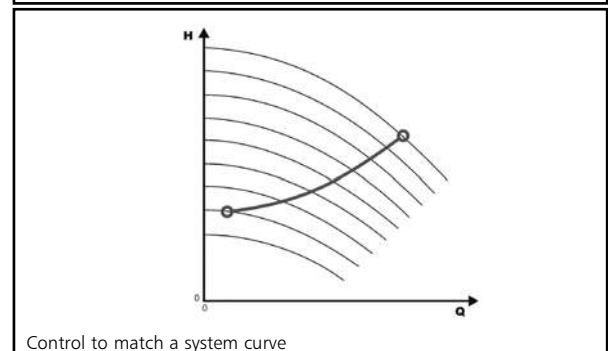
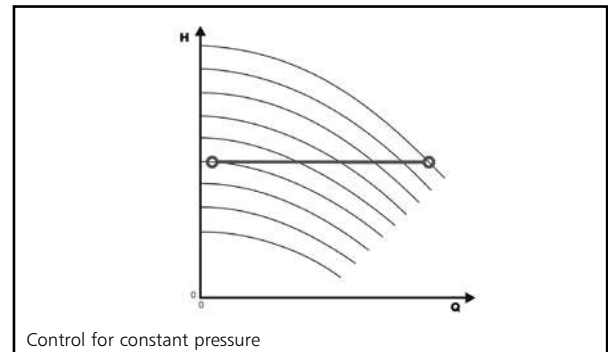
The basic function of the HYDROVAR device is to control the pump to meet the system demands.

### HYDROVAR performs these functions by:

- 1) Measuring the system pressure or flow via a transmitter mounted on the pump's delivery side.
- 2) Calculating the motor speed to maintain the correct flow or pressure.
- 3) Sending out a signal to the pump to start the motor, increase speed, decrease speed or stop.
- 4) In the case of multiple pump installations, HYDROVAR will automatically provide for the cyclic changeover of the pumps' starting sequence.

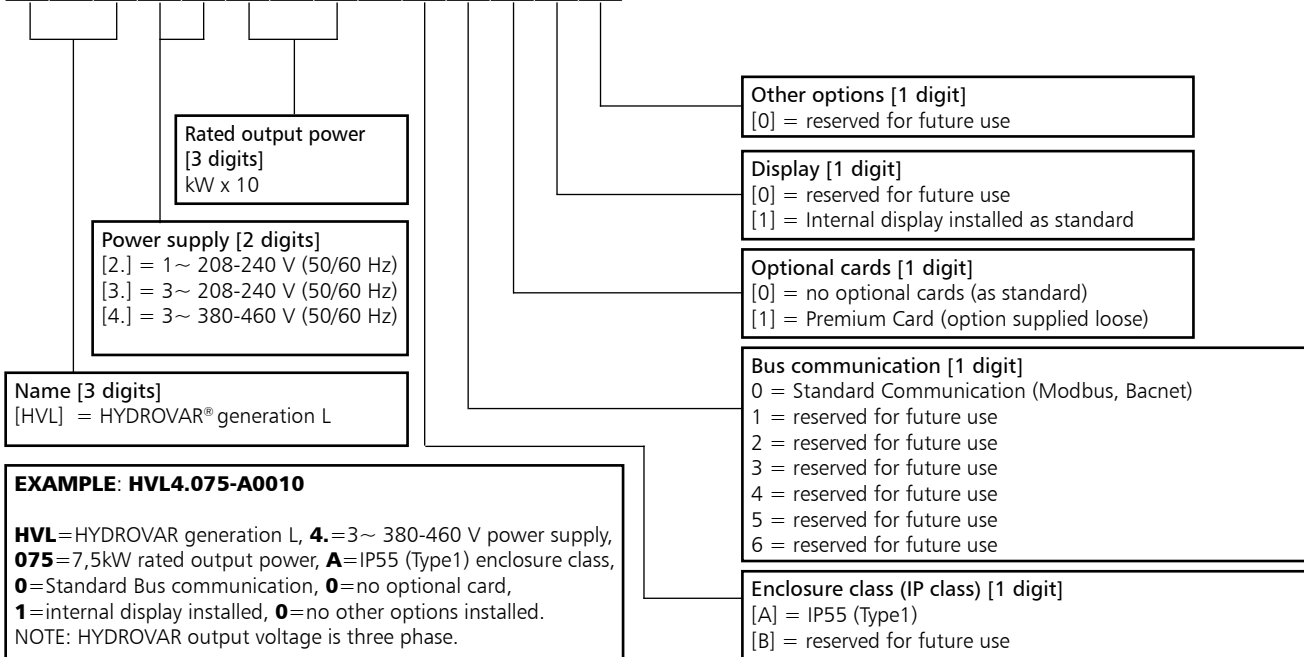
In addition to these basic functions, HYDROVAR can perform controls only manageable by the most advanced computerized control systems. Some examples are:

- Stop the pump(s) at zero demand.
- Stop the pump(s) in case of water failure on the suction side (protection against dry running).
- Stop the pump if the required delivery exceeds the pump's capacity (protection against cavitation caused by excessive demand), or automatically switch on the next pump in a multiple series.
- Protect the pump and motor from over-voltage, under-voltage, overload, and earth fault.
- Vary the pump speed: acceleration and deceleration time.
- Compensate for increased flow resistance at high flow rates.
- Conduct automatic tests at set intervals.
- Monitor the converter and motor operating hours.
- Display the energy consumption (kWh).
- Display all functions on an LCD in different languages (Italian, English, French, German, Spanish, Portuguese, Dutch, etc...).
- Send a signal to a remote control system which is proportional to the pressure and frequency.
- Communicate with external control system via Modbus (RS 485 interface) and Bacnet as standard.



## HYDROVAR HVL IDENTIFICATION CODE

**H V L 4 . 0 7 5 - A 0 0 1 0**



## DIMENSIONS AND WEIGHTS



TYPE	MODELS			DIMENSIONS (mm)				WEIGHT Kg
	/2	/3	/4	L	B	H	X	
SIZE A	HVL2.015 ÷ 2.022	HVL3.015 ÷ 3.022	HVL4.015 ÷ 4.040	216	205	170	243	5,6
SIZE B	HVL2.030 ÷ 2.040	HVL3.030 ÷ 3.055	HVL4.055 ÷ 4.110	276	265	185	305	10,5
SIZE C	-	HVL3.075 ÷ 3.110	HVL4.150 ÷ 4.220	366	337	200	407	15,6

HVL\_dim-en\_b\_td

## HYDROVAR HVL EMC COMPATIBILITY

### EMC requirements

HYDROVAR fulfills the product standard EN61800-3:2004 + A1:2012, which defines categories (C1 to C4) for device application areas.

Depending on the motor cable length, a classification of HYDROVAR by category (based on EN61800-3) is reported in the following tables:

HVL	HYDROVAR classification by categories based on EN61800-3
2.015 ÷ 2.040	C1 (*)
3.015 ÷ 3.110	C2 (*)
4.015 ÷ 4.220	C2 (*)

(\*) 0,75 motor cable length; contact Xylem for further information

En-Rev\_A

## CARD

### Premium Card HYDROVAR

For the NSC..H the Premium Card comes fitted as standard on the standalone HYDROVAR.

This allows to control up to five fix speed pumps via an external panel.

The Premium Card will allow additional features listed below:

- 2 additional Analog Inputs
- 2 Analog Outputs
- 1 additional digital input
- 5 relays.



## OPTIONAL COMPONENTS

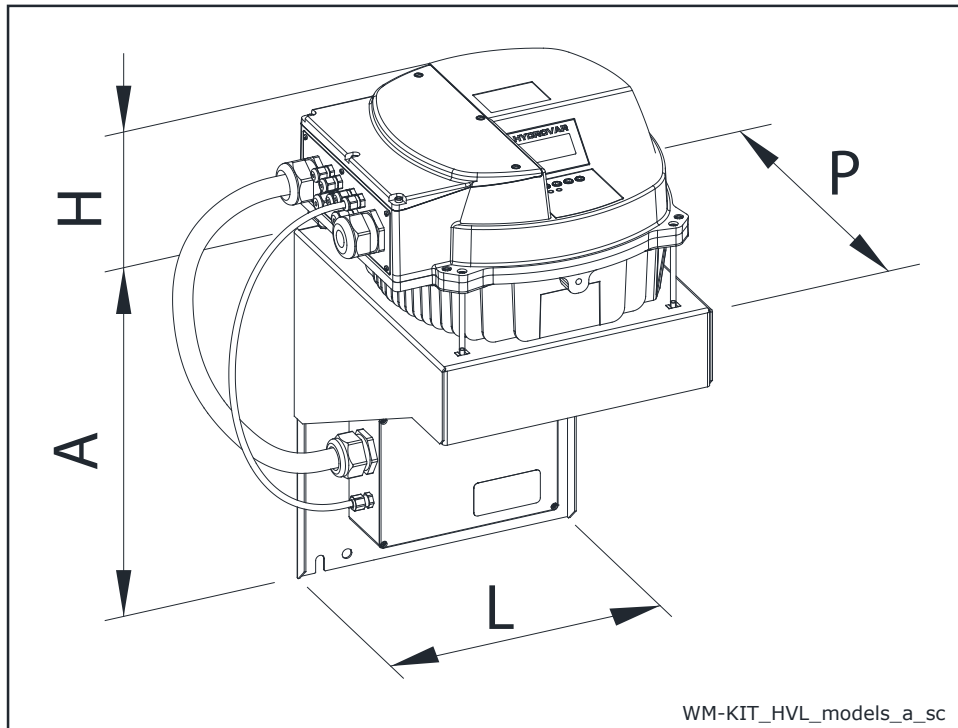
### Sensors

The following sensors are available for HYDROVAR:

- a. Pressure-transducer
- b. Differential pressure-transducer
- c. Temperature-sensor
- d. Flow indicator (orifice plate, inductive flow meter)
- e. Level-sensor.

## HYDROVAR HVL (WALL MOUNTING KIT) DIMENSIONS AND WEIGHTS

As an option a HYDROVAR wall mounting kit is also available, this is used where mounting on the pump unit is impossible or where you would like the controls in another location, these are available for the new generation HYDROVAR HVL 2.015-4.220 (22 kW). The speed of the cooling fan modulates with the HYDROVAR usage which optimizes energy consumption and also reduces noise.



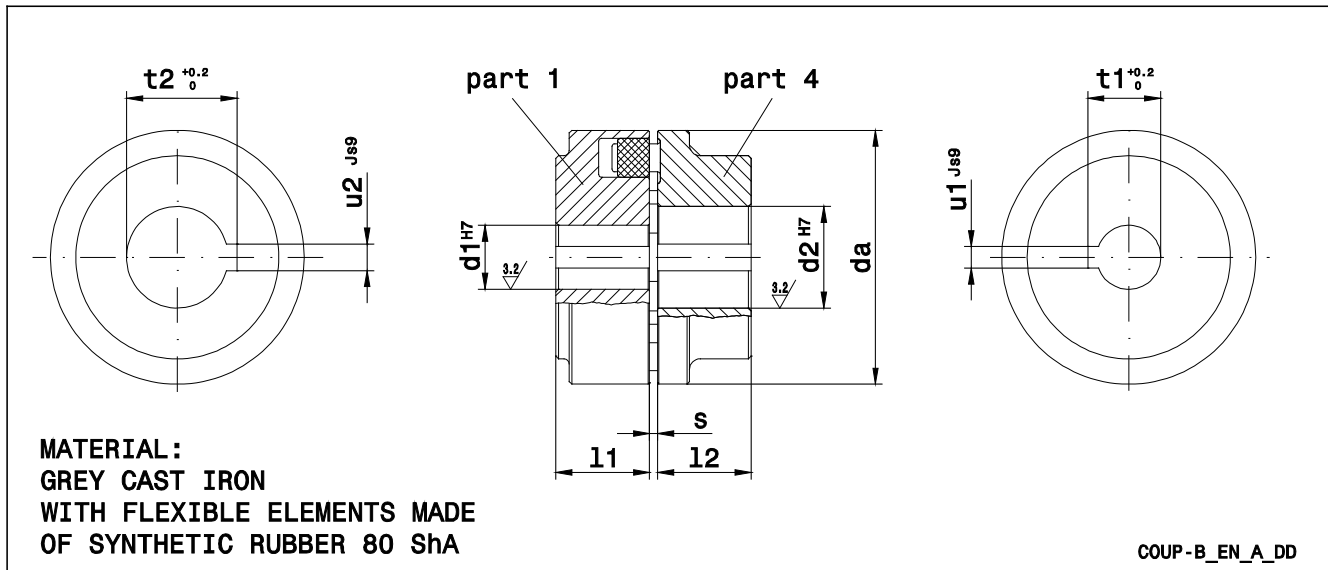
WM KIT TYPE	kW	WM KIT POWER SUPPLY	HVL SIZE	DIMENSIONS (mm)				WEIGHT (kg)	
				A	H	L	P	HVL	WM KIT
WM KIT HVL 2.015	1,5	1~ 230V	A	220	170	202	232	5,6	2,6
WM KIT HVL 2.022	2,2			220	170	202	232	5,6	2,6
WM KIT HVL 2.030	3		B	240	175	258	290	10,5	8,2
WM KIT HVL 2.040	4			320	175	288	305	10,5	5,4
WM KIT HVL 3.015	1,5	3~ 230V	A	220	170	202	232	5,6	2,6
WM KIT HVL 3.022	2,2			220	170	202	232	5,6	2,6
WM KIT HVL 3.030	3		B	240	175	258	290	10,5	8,2
WM KIT HVL 3.040	4			240	175	258	290	10,5	8,2
WM KIT HVL 3.055	5,5		C	240	175	258	290	10,5	8,2
WM KIT HVL 3.075	7,5			400	200	325	365	15,6	11,6
WM KIT HVL 3.110	11		400	200	325	365	15,6	11,6	
WM KIT HVL 4.015	1,5		3~ 400V	A	240	170	258	290	5,6
WM KIT HVL 4.022	2,2	240			170	258	290	5,6	8,2
WM KIT HVL 4.030	3	240			170	258	290	5,6	8,2
WM KIT HVL 4.040	4	240			170	258	290	5,6	8,2
WM KIT HVL 4.055	5,5	B		240	175	258	290	10,5	8,2
WM KIT HVL 4.075	7,5			240	175	258	290	10,5	8,2
WM KIT HVL 4.110	11	C		320	175	288	305	10,5	5,4
WM KIT HVL 4.150	15			400	200	325	365	15,6	11,6
WM KIT HVL 4.185	18,5			400	200	325	365	15,6	11,6
WM KIT HVL 4.220	22			400	200	325	365	15,6	11,6

WM-KIT\_HVL\_models-EN\_b\_td



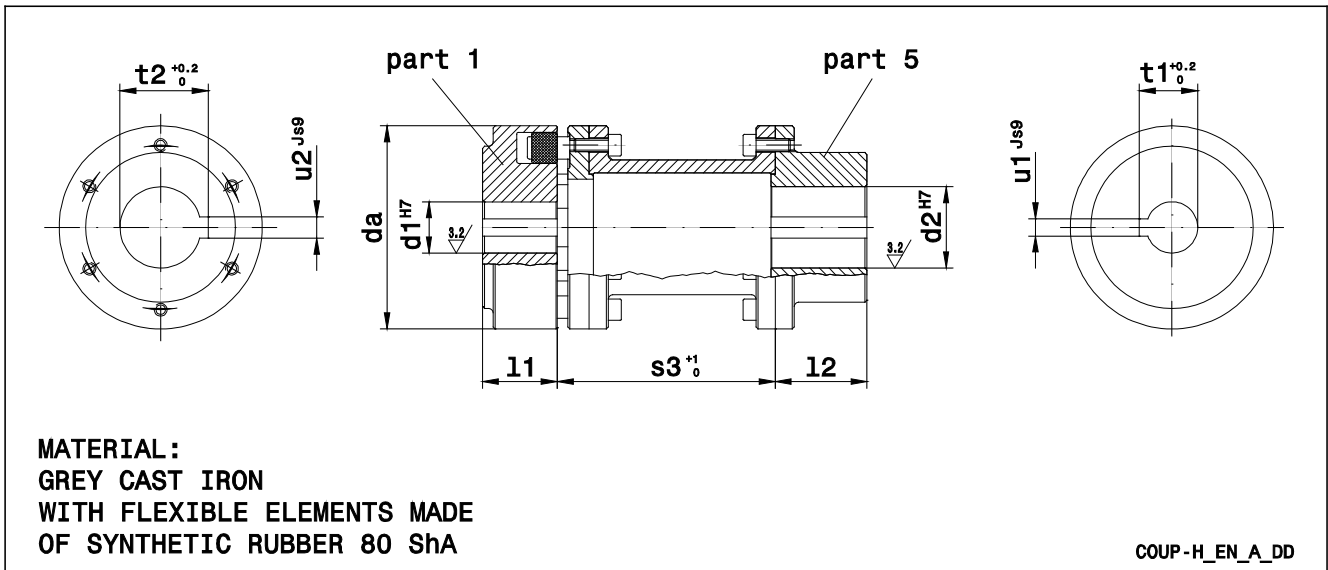
# ACCESSORIES

## FLEXIBLE COUPLING DIMENSIONS



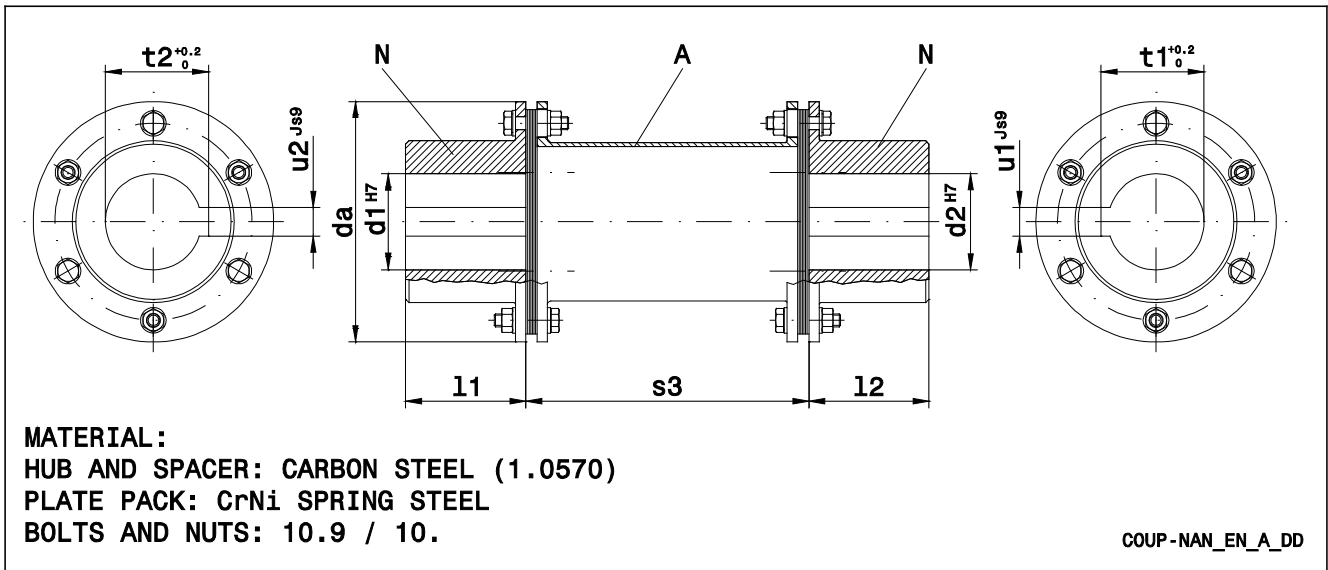
REF.	DENOMINATION	DIMENSIONS (mm)									
		d <sub>a</sub>	PART 1 PUMP-SIDE HALF COUPLING				PART 4 MOTOR-SIDE HALF COUPLING				
			d <sub>1</sub> <sup>H7</sup>	l <sub>1</sub>	u <sub>1</sub> <sup>js9</sup>	t <sub>1 0</sub> <sup>+0.2</sup>	s	d <sub>2</sub> <sup>H7</sup>	l <sub>2</sub>	u <sub>2</sub> <sup>js9</sup>	t <sub>2 0</sub> <sup>+0.2</sup>
SIZE x d <sub>1</sub> x d <sub>2</sub>											
B68A	B 68 x 24 x 14	68	24	20	8	27,3	2÷4	14	20	5	16,3
B68B	B 68 x 24 x 19	68	24	20	8	27,3	2÷4	19	20	6	21,8
B68C	B 68 x 24 x 24	68	24	20	8	27,3	2÷4	24	20	8	27,3
B80A	B 80 x 24 x 28	80	24	30	8	27,3	2÷4	28	30	8	31,3
B95A	B 95 x 24 x 38	95	24	35	8	27,3	2÷4	38	35	10	41,3
B95B	B 95 x 24 x 42	95	24	35	8	27,3	2÷4	42	35	12	45,3
B95C	B 95 x 32 x 28	95	32	35	10	35,3	2÷4	28	35	8	31,3
B95D	B 95 x 32 x 38	95	32	35	10	35,3	2÷4	38	35	10	41,3
B95E	B 95 x 32 x 42	95	32	35	10	35,3	2÷4	42	35	12	45,3
B95F	B 95 x 42 x 42	95	42	35	12	45,3	2÷4	42	35	12	45,3
B110A	B 110 x 24 x 48	110	24	40	8	27,3	2÷4	48	40	14	51,8
B110B	B 110 x 32 x 48	110	32	40	10	35,3	2÷4	48	40	14	51,8
B110C	B 110 x 42 x 42	110	42	40	12	45,3	2÷4	42	40	12	45,3
B110D	B 110 x 42 x 48	110	42	40	12	45,3	2÷4	48	40	14	51,8
B110E	B 110 x 32 x 42	110	32	35	10	35,3	2÷4	42	35	12	45,3
B125A	B 125 x 32 x 48	125	32	50	10	35,3	2÷4	48	50	14	51,8
B125B	B 125 x 32 x 55	125	32	50	10	35,3	2÷4	55	50	16	59,3
B125C	B 125 x 42 x 55	125	42	50	12	45,3	2÷4	55	50	16	59,3
B125D	B 125 x 24 x 55	125	24	50	8	27,3	2÷4	55	50	16	59,3
B140A	B 140 x 32 x 60	140	32	55	10	35,3	2÷4	60	55	18	64,4
B140B	B 140 x 42 x 60	140	42	55	12	45,3	2÷4	60	55	18	64,4
B140C	B 140 x 60 x 55	140	60	70	18	64,4	2÷4	55	50	16	59,3
B140D	B 140 x 60 x 60	140	60	70	18	64,4	2÷4	60	55	18	64,4
B160A	B 160 x 32 x 65	160	32	60	10	35,3	2÷6	65	60	18	69,4
B160B	B 160 x 42 x 65	160	42	60	12	45,3	2÷6	65	60	18	69,4
B160C	B 160 x 60 x 65	160	60	60	18	64,4	2÷6	65	60	18	69,4
B180A	B 180 x 42 x 65	180	42	70	12	45,3	2÷6	65	60	18	69,4
B180B	B 180 x 42 x 75	180	42	70	12	45,3	2÷6	75	70	20	79,9
B180C	B 180 x 60 x 75	180	60	70	18	64,4	2÷6	75	70	20	79,9
B200A	B 200 x 60 x 80	200	60	80	18	64,4	2÷6	80	80	22	85,4
B225A	B 225 x 60 x 80	225	60	90	18	64,4	2÷6	80	90	22	85,4
B250A	B 250 x 60 x 100	250	60	100	18	64,4	3÷8	100	100	28	106,4

## SPACER COUPLING DIMENSIONS



REF.	DENOMINATION	DIMENSIONS (mm)									
		PART 1						PART 5			
		SIZE x l x d <sub>1</sub> x d <sub>2</sub>	da	s <sub>3</sub> 0 <sup>+1</sup>	d <sub>1</sub> H7	l <sub>1</sub>	u <sub>1</sub> JS9	t <sub>1</sub> 0 <sup>+0.2</sup>	d <sub>2</sub> H7	l <sub>2</sub>	u <sub>2</sub> JS9
H80A	H 80-100 x 24 x 19	80	100	24	30	8	27,3	19	45	6	21,8
H80B	H 80-100 x 24 x 24	80	100	24	30	8	27,3	24	45	8	27,3
H80C	H 80-100 x 24 x 28	80	100	24	30	8	27,3	28	45	8	31,3
H80D	H 80-100 x 24 x 14	80	100	24	30	8	27,3	14	45	5	16,3
H80E	H 80-140 x 24 x 24	80	140	24	30	8	27,3	24	45	8	27,3
H80F	H 80-140 x 24 x 28	80	140	24	30	8	27,3	28	45	8	31,3
H80G	H 80-140 x 32 x 28	80	140	32	30	10	35,3	28	45	8	31,3
H95A	H 95-100 x 24 x 38	95	100	24	35	8	27,3	38	45	10	41,3
H95B	H 95-100 x 24 x 42	95	100	24	35	8	27,3	42	45	12	45,3
H95C	H 95-140 x 32 x 28	95	140	32	35	10	35,3	28	45	8	31,3
H95D	H 95-140 x 32 x 38	95	140	32	35	10	35,3	38	45	10	41,3
H95E	H 95-140 x 32 x 42	95	140	32	35	10	35,3	42	45	12	45,3
H95F	H 95-140 x 42 x 42	95	140	42	35	12	45,3	42	45	12	45,3
H95G	H 95-140 x 24 x 42	95	140	24	35	8	27,3	42	45	12	45,3
H95H	H 95-140 x 24 x 38	95	140	24	35	8	27,3	38	45	10	41,3
H110A	H 110-100 x 24 x 48	110	100	24	40	8	27,3	48	50	14	51,8
H110B	H 110-140 x 32 x 48	110	140	32	40	10	35,3	48	50	14	51,8
H110C	H 110-140 x 42 x 48	110	140	42	40	12	45,3	48	50	14	51,8
H110D	H 110-140 x 24 x 48	110	140	24	40	8	27,3	48	50	14	51,8
H110E	H 110-140 x 32 x 42	110	140	32	40	10	35,3	42	45	12	45,3
H110F	H 110-140 x 42 x 42	110	140	42	40	12	45,3	42	45	12	45,3
H125A	H 125-100 x 24 x 55	125	100	24	50	8	27,3	55	50	16	59,3
H125B	H 125-140 x 32 x 48	125	140	32	50	10	35,3	48	50	14	51,8
H125C	H 125-140 x 32 x 55	125	140	32	50	10	35,3	55	50	16	59,3
H125D	H 125-140 x 42 x 55	125	140	42	50	12	45,3	55	50	16	59,3
H125E	H 125-200 x 42 x 48	125	200	42	50	12	45,3	48	70	14	51,8
H125F	H 125-200 x 42 x 55	125	200	42	50	12	45,3	55	70	16	59,3
H125G	H 125-140 x 24 x 55	125	140	24	50	8	27,3	55	50	16	59,3
H125H	H 125-200 x 42 x 42	125	200	42	50	12	45,3	42	45	12	45,3
H140A	H 140-140 x 32 x 60	140	140	32	55	10	35,3	60	65	18	64,4
H140B	H 140-140 x 42 x 60	140	140	42	55	12	45,3	60	65	18	64,4
H140C	H 140-200 x 42 x 60	140	200	42	55	12	45,3	60	65	18	64,4
H140D	H 140-250 x 60 x 60	140	250	60	60	18	64,4	60	65	18	64,4
H160A	H 160-140 x 32 x 65	160	140	32	60	10	35,3	65	70	18	69,4
H160B	H 160-140 x 42 x 65	160	140	42	60	12	45,3	65	70	18	69,4
H160C	H 160-200 x 42 x 65	160	200	42	60	12	45,3	65	70	18	69,4
H160D	H 160-250 x 60 x 65	160	250	60	60	18	64,4	65	80	18	69,4
H180A	H 180-140 x 42 x 65	180	140	42	70	12	45,3	65	80	18	69,4
H180B	H 180-140 x 42 x 75	180	140	42	70	12	45,3	75	80	20	79,9
H180C	H 180-200 x 42 x 75	180	200	42	70	12	45,3	75	80	20	79,9
H180D	H 180-250 x 60 x 75	180	250	60	70	18	64,4	75	80	20	79,9
H200A	H 200-250 x 60 x 80	200	250	60	80	18	64,4	80	90	22	85,4
H225A	H 225-250 x 60 x 80	225	250	60	90	18	64,4	80	100	22	85,4
H250A	H 250-250 x 60 x 100	250	250	60	100	18	64,4	100	110	28	106,4

## SPACER COUPLING DIMENSIONS



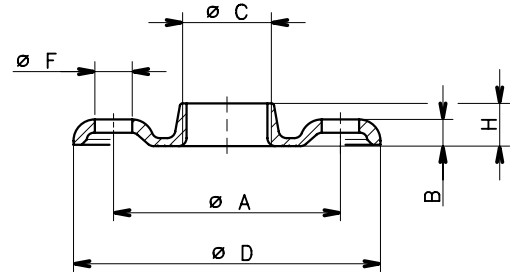
REF.	DENOMINATION	DIMENSIONS (mm)									
		da	s <sub>3</sub>	N				N			
				PUMP-SIDE HALF COUPLING				MOTOR-SIDE HALF COUPLING			
SIZE x l x d <sub>1</sub> x d <sub>2</sub>	d <sub>1</sub> <sup>H7</sup>	l <sub>1</sub>	u <sub>1</sub> <sup>js9</sup>	t <sub>1 0</sub> <sup>+0.2</sup>	d <sub>2</sub> <sup>H7</sup>	l <sub>2</sub>	u <sub>2</sub> <sup>js9</sup>	t <sub>2 0</sub> <sup>+0.2</sup>			
N135A	NAN 135-6 x 300 x 60 x 55	135	300	60	65	18	64,4	55	65	16	59,3
N135B	NAN 135-6 x 300 x 60 x 60	135	300	60	65	18	64,4	60	65	18	64,4
N135C	NAN 135-6 x 300 x 60 x 65	135	300	60	65	18	64,4	65	65	18	69,4
N150A	NAN 150-6 x 300 x 60 x 75	150	300	60	75	18	64,4	75	75	20	79,9
N176A	NAN 176-6 x 300 x 60 x 80	176	300	60	85	18	64,4	80	85	22	85,4
N185A	NAN 185-6 x 300 x 60 x 80	185	300	60	90	18	64,4	80	90	22	85,4
N212A	NAN 212-6 x 300 x 60 x 100	212	300	60	100	18	64,4	100	100	28	106,4

Coup-nan-en\_b\_td

### e-NSC SERIES (DIMENSIONS OF ROUND THREADED COUNTERFLANGES ACCORDING TO EN 1092-1)

DN	DIMENSIONS (mm)					HOLES		PN
	ø C	ø A	B	ø D	H	ø F	N°	
32	Rp 1¼	100	13	140	16	18	4	16
40	Rp 1½	110	14	150	19	18	4	16
50	Rp 2	125	16	165	24	18	4	16
65	Rp 2½	145	16	185	23	18	4	16
80	Rp 3	160	17	200	27	18	8	16
100	Rp 4	180	18	220	31	18	8	16

Nsc-ctf-tonde-f-en\_a\_td

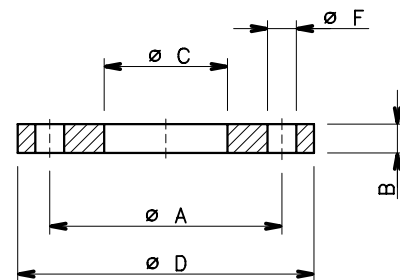


04430\_B\_DD

### e-NSC SERIES (DIMENSIONS OF ROUND WELD COUNTERFLANGES ACCORDING TO EN 1092-1)

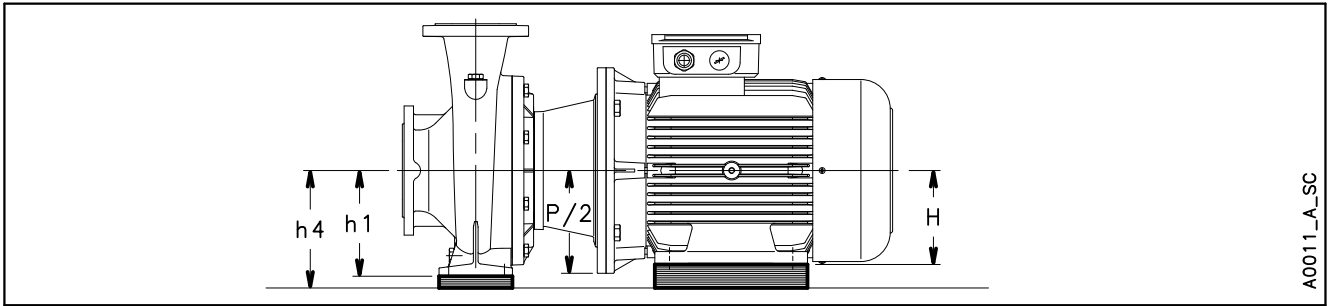
DN	DIMENSIONS (mm)				HOLES		PN
	ø C	ø A	B	ø D	ø F	N°	
65	77,5	145	20	185	18	4	16
80	90,5	160	20	200	18	8	16
100	116	180	22	220	18	8	16
125	141,5	210	22	250	18	8	16
150	170,5	240	24	285	22	8	16
200	221,5	295	24	340	22	12	16
250	276,5	355	26	405	26	12	16
300	327,5	410	28	460	26	12	16
350	359,5	470	30	520	26	16	16

Nsc-ctf-tonde-s-en\_b\_td



04431\_A\_DD

## NSCE 32 ÷ 80 SERIES, 2 POLES SHIM FOR PUMP AND MOTOR FEET



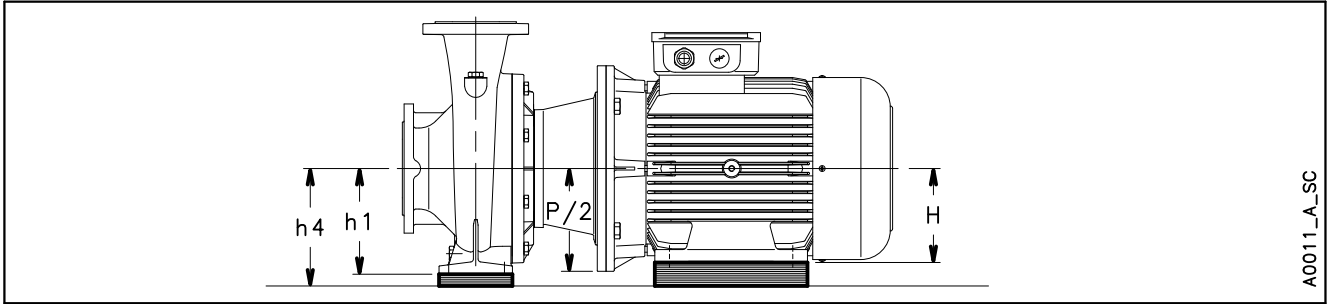
A0011\_A\_SC

PUMP TYPE NSCE..2	DIMENSIONS (mm)				SHIM* CODE	
	PUMP h1	MOTOR P/2	MOTOR H	h4	Pump	Motor
32-125/11/S	112	-	-	112	-	-
32-125/15/S	112	-	-	112	-	-
32-125/22/P	112	-	-	112	-	-
32-125/30/P	112	-	-	112	-	-
32-160/22/P	132	-	-	132	-	-
32-160/30/P	132	-	-	132	-	-
32-160/40/P	132	-	-	132	-	-
32-160/55/P	132	-	-	132	-	-
32-200/30/P	160	-	-	160	-	-
32-200/40/P	160	-	-	160	-	-
32-200/55/P	160	-	-	160	-	-
32-200/75/P	160	-	-	160	-	-
32-250/75/P	180	-	-	180	-	-
32-250/92/P	180	-	-	180	-	-
32-250/110/P	180	-	-	180	-	-
32-250/150/P	180	-	160	180	-	2 x 161407670
40-125/15/S	112	-	-	112	-	-
40-125/22/P	112	-	-	112	-	-
40-125/30/P	112	-	-	112	-	-
40-125/40/P	112	-	-	112	-	-
40-160/30/P	132	-	-	132	-	-
40-160/40/P	132	-	-	132	-	-
40-160/55/P	132	-	-	132	-	-
40-160/75/P	132	-	-	132	-	-
40-200/55/P	160	-	-	160	-	-
40-200/75/P	160	-	-	160	-	-
40-200/92/P	160	-	-	160	-	-
40-200/110/P	160	-	-	160	-	-
40-250/92/P	180	-	-	180	-	-
40-250/110/P	180	-	-	180	-	-
40-250/150/P	180	-	160	180	-	2 x 161407670
40-250/185/P	180	-	160	180	-	2 x 161407670
40-250/220/P	180	-	160	180	-	2 x 161407670
50-125/30/P	132	-	-	132	-	-
50-125/40/P	132	-	-	132	-	-
50-125/55/P	132	-	-	132	-	-
50-125/75/P	132	-	-	132	-	-
50-160/55/P	160	-	-	160	-	-
50-160/75/P	160	-	-	160	-	-
50-160/92/P	160	-	-	160	-	-
50-160/110/P	160	-	-	160	-	-

PUMP TYPE NSCE..2	DIMENSIONS (mm)				SHIM* CODE	
	PUMP h1	MOTOR P/2	MOTOR H	h4	Pump	Motor
50-200/92/P	160	-	-	160	-	-
50-200/110/P	160	-	-	160	-	-
50-200/150/P	160	-	160	160	-	-
50-200/185/P	160	-	160	160	-	-
50-250/150/P	180	-	160	180	-	2 x 161407670
50-250/185/P	180	-	160	180	-	2 x 161407670
50-250/220/P	180	-	160	180	-	2 x 161407670
65-125/40/P	160	-	-	160	-	-
65-125/55/P	160	-	-	160	-	-
65-125/75/P	160	-	-	160	-	-
65-125/92/P	160	-	-	160	-	-
65-125/110/P	160	-	-	160	-	-
65-160/75/P	160	-	-	160	-	-
65-160/92/P	160	-	-	160	-	-
65-160/110/P	160	-	-	160	-	-
65-160/150/P	160	-	160	160	-	-
65-160/185/P	160	-	160	160	-	-
65-200/110/P	180	-	-	180	-	-
65-200/150/P	180	-	160	180	-	2 x 161407670
65-200/185/P	180	-	160	180	-	2 x 161407670
65-200/220/P	180	-	160	180	-	2 x 161407670
80-160/110/P	180	-	-	180	-	-
80-160/150/P	180	-	160	180	-	2 x 161407670
80-160/185/P	180	-	160	180	-	2 x 161407670
80-160/220/P	180	-	160	180	-	2 x 161407670

\* On request.

## NSCE 32 ÷ 80 SERIES, 4 POLES SHIM FOR PUMP AND MOTOR FEET



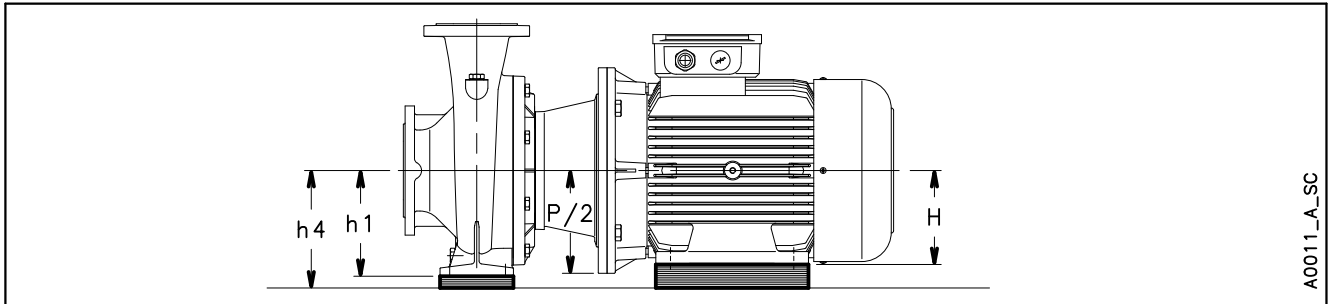
A0011\_A\_SC

PUMP TYPE NSCE..4	DIMENSIONS (mm)				SHIM* CODE	
	PUMP h1	MOTOR P/2	H	h4	Pump	Motor
32-125/02B/S	112	-	-	112	-	-
32-125/02A/S	112	-	-	112	-	-
32-125/02/S	112	-	-	112	-	-
32-125/03/S	112	-	-	112	-	-
32-160/02/S	132	-	-	132	-	-
32-160/03/S	132	-	-	132	-	-
32-160/05A/S	132	-	-	132	-	-
32-160/05/S	132	-	-	132	-	-
32-200/05A/S	160	-	-	160	-	-
32-200/05/S	160	-	-	160	-	-
32-200/07/X	160	-	-	160	-	-
32-200/11/P	160	-	-	160	-	-
32-250/15B/P	180	-	-	180	-	-
32-250/15A/P	180	-	-	180	-	-
32-250/15/P	180	-	-	180	-	-
32-250/22/P	180	-	-	180	-	-
40-125/02A/S	112	-	-	112	-	-
40-125/02/S	112	-	-	112	-	-
40-125/03/S	112	-	-	112	-	-
40-125/05/S	112	-	-	112	-	-
40-160/03/S	132	-	-	132	-	-
40-160/05/S	132	-	-	132	-	-
40-160/07/X	132	-	-	132	-	-
40-160/11/P	132	-	-	132	-	-
40-200/07/X	160	-	-	160	-	-
40-200/11/P	160	-	-	160	-	-
40-200/15A/P	160	-	-	160	-	-
40-200/15/P	160	-	-	160	-	-
40-250/15A/P	180	-	-	180	-	-
40-250/15/P	180	-	-	180	-	-
40-250/22A/P	180	-	-	180	-	-
40-250/22/P	180	-	-	180	-	-
40-250/30/P	180	-	-	180	-	-
50-125/03/S	132	-	-	132	-	-
50-125/05/S	132	-	-	132	-	-
50-125/07/X	132	-	-	132	-	-
50-125/11/P	132	-	-	132	-	-
50-160/07/X	160	-	-	160	-	-
50-160/11A/P	160	-	-	160	-	-
50-160/11/P	160	-	-	160	-	-
50-160/15/P	160	-	-	160	-	-

PUMP TYPE NSCE..4	DIMENSIONS (mm)				SHIM* CODE	
	PUMP h1	MOTOR P/2	H	h4	Pump	Motor
50-200/15A/P	160	-	-	160	-	-
50-200/15/P	160	-	-	160	-	-
50-200/22A/P	160	-	-	160	-	-
50-200/22/P	160	-	-	160	-	-
50-250/22A/P	180	-	-	180	-	-
50-250/22/P	180	-	-	180	-	-
50-250/30/P	180	-	-	180	-	-
50-250/40/P	180	-	-	180	-	-
65-125/05/S	160	-	-	160	-	-
65-125/07/X	160	-	-	160	-	-
65-125/11/P	160	-	-	160	-	-
65-125/15/P	160	-	-	160	-	-
65-160/15B/P	160	-	-	160	-	-
65-160/15A/P	160	-	-	160	-	-
65-160/15/P	160	-	-	160	-	-
65-160/22A/P	160	-	-	160	-	-
65-160/22/P	160	-	-	160	-	-
65-200/15/P	180	-	-	180	-	-
65-200/22A/P	180	-	-	180	-	-
65-200/22/P	180	-	-	180	-	-
65-200/30/P	180	-	-	180	-	-
65-200/40/P	180	-	-	180	-	-
80-160/15/P	180	-	-	180	-	-
80-160/22A/P	180	-	-	180	-	-
80-160/22/P	180	-	-	180	-	-
80-160/30/P	180	-	-	180	-	-

\* On request.

## NSCS 32 ÷ 80 SERIES, 2 POLES SHIM FOR PUMP AND MOTOR FEET



A0011\_A\_SC

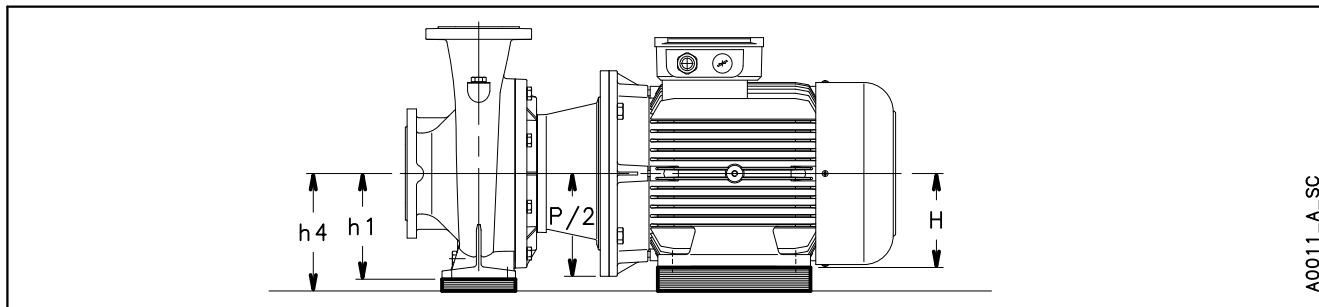
PUMP TYPE NSCS..2	DIMENSIONS (mm)				SHIM*	
	PUMP h1	MOTOR P/2	H	h4	Pump CODE	Motor CODE
32-125/11/S	112	100	-	112	-	-
32-125/15/S	112	100	-	112	-	-
32-125/22/P	112	100	-	112	-	-
32-125/30/P	112	125	-	132	2 x 161403210	-
32-160/22/P	132	100	-	100	-	-
32-160/30/P	132	125	-	125	-	-
32-160/40/P	132	125	-	125	-	-
32-160/55/P	132	150	-	160	2 x 161403210 2 x 161407550	-
32-200/30/P	160	125	-	160	-	-
32-200/40/P	160	125	-	160	-	-
32-200/55/P	160	150	-	160	-	-
32-200/75/P	160	150	-	160	-	-
32-250/75/P	180	150	-	180	-	-
32-250/110A/P	180	175	160	180	-	2 x 161407670
32-250/110/P	180	175	160	180	-	2 x 161407670
32-250/150/P	180	175	160	180	-	2 x 161407670
40-125/15/S	112	100	-	112	-	-
40-125/22/P	112	100	-	112	-	-
40-125/30/P	112	125	-	132	2 x 161403210	-
40-125/40/P	112	125	-	132	2 x 161403210	-
40-160/30/P	132	125	-	132	-	-
40-160/40/P	132	125	-	132	-	-
40-160/55/P	132	150	-	160	2 x 161403210 2 x 161407550	-
40-160/75/P	132	150	-	160	2 x 161403210 2 x 161407550	-
40-200/55/P	160	150	-	160	-	-
40-200/75/P	160	150	-	160	-	-
40-200/110A/P	160	175	160	180	2 x 161403210	2 x 161407670
40-200/110/P	160	175	160	180	2 x 161403210	2 x 161407670
40-250/110A/P	180	175	160	180	-	2 x 161407670
40-250/110/P	180	175	160	180	-	2 x 161407670
40-250/150/P	180	175	160	180	-	2 x 161407670
40-250/185/P	180	175	160	180	-	2 x 161407670
40-250/220/P	180	175	160	180	-	2 x 161407670
50-125/30/P	132	125	-	132	-	-
50-125/40/P	132	125	-	132	-	-
50-125/55/P	132	150	-	160	2 x 161403210 2 x 161407550	-
50-125/75/P	132	150	-	160	2 x 161403210 2 x 161407550	-
50-160/55/P	160	150	-	160	-	-
50-160/75/P	160	150	-	160	-	-
50-160/110A/P	160	175	160	180	2 x 161403210	2 x 161407670
50-160/110/P	160	175	160	180	2 x 161403210	2 x 161407670
50-200/110A/P	160	175	160	180	2 x 161403210	2 x 161407670
50-200/110/P	160	175	160	180	2 x 161403210	2 x 161407670
50-200/150/P	160	175	160	180	2 x 161403210	2 x 161407670
50-200/185/P	160	175	160	180	2 x 161403210	2 x 161407670

PUMP TYPE NSCS..2	DIMENSIONS (mm)				SHIM*	
	PUMP h1	MOTOR P/2	H	h4	Pump CODE	Motor CODE
50-250/150/P	180	175	160	180	-	2 x 161407670
50-250/185/P	180	175	160	180	-	2 x 161407670
50-250/220/P	180	175	160	180	-	2 x 161407670
50-250/300/W	180	200	200	200	2 x 161403230	-
50-315/370/W	225	200	200	225	-	2 x 768082110
50-315/450/W	225	225	225	225	-	-
50-315/550/W	225	275	250	280	2 x 768003140 2 x 768003180	2 x 161407990
50-315/750/W	225	275	280	280	2 x 768003140 2 x 768003180	-
65-125/40/P	160	125	-	160	-	-
65-125/55/P	160	150	-	160	-	-
65-125/75/P	160	150	-	160	-	-
65-125/110A/P	160	175	160	180	2 x 161403230	2 x 161407670
65-125/110/P	160	175	160	180	2 x 161403230	2 x 161407670
65-160/75/P	160	150	-	160	-	-
65-160/110A/P	160	175	160	180	2 x 161403230	2 x 161407670
65-160/110/P	160	175	160	180	2 x 161403230	2 x 161407670
65-160/150/P	160	175	160	180	2 x 161403230	2 x 161407670
65-160/185/P	160	175	160	180	2 x 161403230	2 x 161407670
65-200/110/P	180	175	160	180	-	2 x 161407670
65-200/150/P	180	175	160	180	-	2 x 161407670
65-200/185/P	180	175	160	180	-	2 x 161407670
65-200/220/P	180	175	160	180	-	2 x 161407670
65-200/300/W	180	200	200	200	2 x 161403230	-
65-250/220/P	200	175	160	200	-	4 x 161407670
65-250/300/W	200	200	200	200	-	-
65-250/370/W	200	200	200	200	-	-
65-250/450/W	200	225	225	225	2 x 161404380	-
65-250/550/W	200	275	250	280	4 x 161404380 2 x 161407800	2 x 161407990
65-315/550/W	225	275	250	280	2 x 768003140 2 x 768003180	2 x 161407990
65-315/750/W	225	275	280	280	2 x 768003140 2 x 768003180	-
65-315/900/W	225	275	280	280	2 x 768003140 2 x 768003180	-
80-160/110/P	180	175	160	180	-	2 x 161407670
80-160/150/P	180	175	160	180	-	2 x 161407670
80-160/185/P	180	175	160	180	-	2 x 161407670
80-160/220/P	180	175	160	180	-	2 x 161407670
80-200/220/P	180	175	160	180	-	2 x 161407670
80-200/300/W	180	200	200	200	2 x 161403230	-
80-200/370/W	180	200	200	200	2 x 161403230	-
80-200/450/W	180	225	225	225	2 x 161403230 2 x 161407570	-
80-250/370/W	200	200	200	200	-	-
80-250/450/W	200	225	225	225	2 x 161404380	-
80-250/550/W	200	275	250	280	4 x 161404380 2 x 161407800	2 x 161407990
80-250/750/W	200	275	280	280	4 x 161404380 2 x 161407800	-

\* On request.



**NSCS 100 ÷ 125 SERIES, 2 POLES  
SHIM FOR PUMP AND MOTOR FEET**

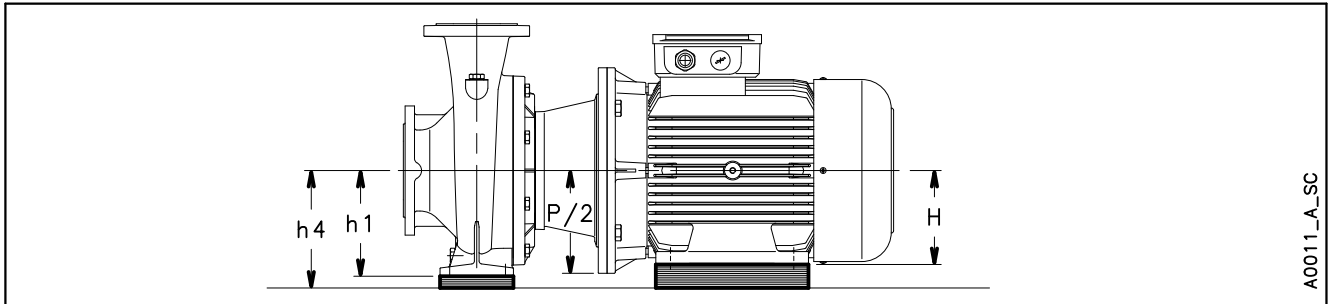


PUMP TYPE NSCS..2	DIMENSIONS (mm)				SHIM* CODE	
	PUMP h1	MOTOR P/2	MOTOR H	MOTOR h4	Pump	Motor
100-160/150/P	200	175	160	200	-	4 x 161407670
100-160/185/P	200	175	160	200	-	4 x 161407670
100-160/220/P	200	175	160	200	-	4 x 161407670
100-160/300/W	200	200	200	200	-	-
100-200/300/W	200	200	200	200	-	-
100-200/370/W	200	200	200	200	-	-
100-200/450/W	200	225	225	225	2 x 161404380	-
100-200/550/W	200	275	250	280	2 x 768003170 2 x 768003190	2 x 161407990
100-250/750/W	225	275	280	280	2 x 768003140 2 x 768003180	-
100-250/900/W	225	275	280	280	2 x 768003140 2 x 768003180	-
125-200/450/W	250	225	225	250	-	2 x 768082120
125-200/550/W	250	275	250	280	2 x 768003170	2 x 161407990
125-200/750/W	250	275	280	280	2 x 768003170	-
125-200/900/W	250	275	280	280	2 x 768003170	-

PUMP TYPE NSCS..2	DIMENSIONS (mm)				SHIM* CODE	
	PUMP h1	MOTOR P/2	MOTOR H	MOTOR h4	Pump	Motor

\* On request.

## NSCS 32 ÷ 80 SERIES, 4 POLES SHIM FOR PUMP AND MOTOR FEET



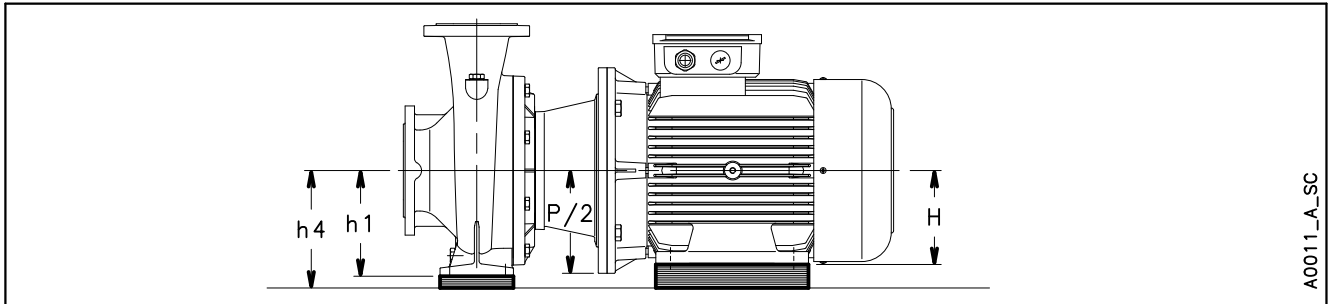
A0011\_A\_SC

PUMP TYPE NSCS..4	DIMENSIONS (mm)				SHIM* CODE	
	PUMP	MOTOR		h4	Pump	Motor
	h1	P/2	H			
32-160/05A/S	132	100	-	132	-	-
32-160/05/S	132	100	-	132	-	-
32-200/05A/S	160	100	-	160	-	-
32-200/05/S	160	100	-	160	-	-
32-200/07/X	160	100	-	160	-	-
32-200/11/P	160	100	-	160	-	-
32-250/11A/P	180	100	-	180	-	-
32-250/11/P	180	100	-	180	-	-
32-250/15/P	180	100	-	180	-	-
32-250/22/P	180	125	-	180	-	-
40-125/05/S	112	100	-	112	-	-
40-160/03/S	132	100	-	132	-	-
40-160/05/S	132	100	-	132	-	-
40-160/07/X	132	100	-	132	-	-
40-160/11/P	132	100	-	132	-	-
40-200/07/X	160	100	-	160	-	-
40-200/11/P	160	100	-	160	-	-
40-200/15A/P	160	100	-	160	-	-
40-200/15/P	160	100	-	160	-	-
40-250/11/P	180	100	-	180	-	-
40-250/15/P	180	100	-	180	-	-
40-250/22A/P	180	125	-	180	-	-
40-250/22/P	180	125	-	180	-	-
40-250/30/P	180	125	-	180	-	-
50-125/05/S	132	100	-	132	-	-
50-125/07/X	132	100	-	132	-	-
50-125/11/P	132	100	-	132	-	-
50-160/07/X	132	100	-	132	-	-
50-160/11A/P	160	100	-	160	-	-
50-160/11/P	160	100	-	160	-	-
50-160/15/P	160	100	-	160	-	-
50-200/11/P	160	100	-	160	-	-
50-200/15/P	160	100	-	160	-	-
50-200/22A/P	160	125	-	160	-	-
50-200/22/P	160	125	-	160	-	-
50-250/22A/P	180	125	-	180	-	-
50-250/22/P	180	125	-	180	-	-
50-250/30/P	180	125	-	180	-	-
50-250/40/P	180	125	-	180	-	-
50-315/40/P	225	125	-	225	-	-
50-315/55/P	225	150	-	225	-	-
50-315/75/P	225	150	-	225	-	-
50-315/110/P	225	175	160	225	-	1 x 743760350▲

PUMP TYPE NSCS..4	DIMENSIONS (mm)				SHIM* CODE	
	PUMP	MOTOR		h4	Pump	Motor
	h1	P/2	H			
65-125/05/S	160	100	-	160	-	-
65-125/07/X	160	100	-	160	-	-
65-125/11/P	160	100	-	160	-	-
65-125/15/P	160	100	-	160	-	-
65-160/11A/P	160	100	-	160	-	-
65-160/11/P	160	100	-	160	-	-
65-160/15/P	160	100	-	160	-	-
65-160/22A/P	160	125	-	160	-	-
65-160/22/P	160	125	-	160	-	-
65-200/15/P	180	100	-	180	-	-
65-200/22A/P	180	125	-	180	-	-
65-200/22/P	180	125	-	180	-	-
65-200/30/P	180	125	-	180	-	-
65-200/40/P	180	125	-	180	-	-
65-250/30/P	200	125	-	200	-	-
65-250/40/P	200	125	-	200	-	-
65-250/55A/P	200	150	-	200	-	-
65-250/55/P	200	150	-	200	-	-
65-250/75/P	200	150	-	200	-	-
65-315/55/P	225	150	-	225	-	-
65-315/75/P	225	150	-	225	-	-
65-315/110/P	225	175	160	225	-	1 x 743760350▲
65-315/150/P	225	175	160	225	-	1 x 743760350▲
80-160/15/P	180	100	-	180	-	-
80-160/22A/P	180	125	-	180	-	-
80-160/22/P	180	125	-	180	-	-
80-160/30/P	180	125	-	180	-	-
80-200/30/P	180	125	-	180	-	-
80-200/40/P	180	125	-	180	-	-
80-200/55A/P	180	150	-	180	-	-
80-200/55/P	180	150	-	180	-	-
80-250/55A/P	200	150	-	200	-	-
80-250/55/P	200	150	-	200	-	-
80-250/75/P	200	150	-	200	-	-
80-250/110/P	200	175	160	200	-	4 x 161407670
80-315/110A/P	250	175	160	250	-	1 x 743760360▲
80-315/110/P	250	175	160	250	-	1 x 743760360▲
80-315/150/P	250	175	160	250	-	1 x 743760360▲
80-315/185/W	250	175	180	250	-	1 x 743760290▲
80-315/220/W	250	175	180	250	-	1 x 743760290▲
80-400/185/W	280	175	180	280	-	1 x 743760300▲
80-400/220/W	280	175	180	280	-	1 x 743760300▲
80-400/300/W	280	200	200	280	-	1 x 743760230▲
80-400/370/W	280	225	225	280	-	1 x 743760170▲

\* On request. ▲ Support base kit.

## NSCS 100 ÷ 250 SERIES, 4 POLES SHIM FOR PUMP AND MOTOR FEET



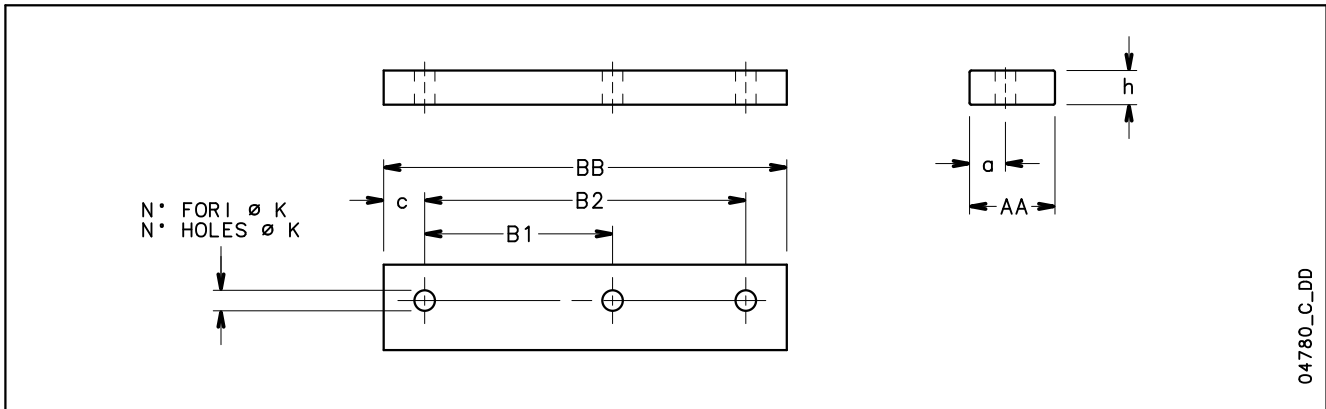
A0011\_A\_SC

PUMP TYPE NSCS..4	DIMENSIONS (mm)				SHIM* CODE	
	PUMP h1	MOTOR		h4	Pump	Motor
		P/2	H			
100-160/22A/P	200	125	-	200	-	-
100-160/22/P	200	125	-	200	-	-
100-160/30/P	200	125	-	200	-	-
100-160/40/P	200	125	-	200	-	-
100-200/40/P	200	125	-	200	-	-
100-200/55/P	200	150	-	200	-	-
100-200/75/P	200	150	-	200	-	-
100-250/75/P	225	150	-	225	-	-
100-250/110/P	225	175	160	225	-	1 x 743760350▲
100-315/110/P	250	175	160	250	-	1 x 743760360▲
100-315/150/P	250	175	160	250	-	1 x 743760360▲
100-315/185/W	250	175	180	250	-	1 x 743760290▲
100-315/220/W	250	175	180	250	-	1 x 743760290▲
100-315/300/W	250	200	200	250	-	1 x 743760220▲
100-400/300/W	280	200	200	280	-	1 x 743760230▲
100-400/370/W	280	225	225	280	-	1 x 743760170▲
100-400/450/W	280	225	225	280	-	1 x 743760170▲
125-200/55/P	250	150	-	250	-	-
125-200/75/P	250	150	-	250	-	-
125-200/110/P	250	175	160	250	-	1 x 743760360▲
125-250/110/P	250	175	160	250	-	1 x 743760360▲
125-250/150/P	250	175	160	250	-	1 x 743760360▲
125-315/185/W	280	175	180	280	-	1 x 743760300▲
125-315/220/W	280	175	180	280	-	1 x 743760300▲
125-315/300/W	280	200	200	280	-	1 x 743760230▲
125-315/370/W	280	225	225	280	-	1 x 743760170▲
125-400/370/W	315	225	225	315	-	1 x 743760180▲
125-400/450/W	315	225	225	315	-	1 x 743760180▲
125-400/550/W	315	275	250	315	-	1 x 743760130▲
125-400/750/W	315	275	280	315	-	2 x 768082130
150-200/110A/P	280	175	160	280	-	1 x 743760370▲
150-200/110/P	280	175	160	280	-	1 x 743760370▲
150-200/150A/P	280	175	160	280	-	1 x 743760370▲
150-200/150/P	280	175	160	280	-	1 x 743760370▲
150-250/150/P	280	175	160	280	-	1 x 743760370▲
150-250/185/W	280	175	180	280	-	1 x 743760300▲
150-250/220/W	280	175	180	280	-	1 x 743760300▲
150-250/300/W	280	200	200	280	-	1 x 743760230▲
150-315/300/W	280	200	200	280	-	1 x 743760230▲
150-315/370/W	280	225	225	280	-	1 x 743760170▲
150-315/450/W	280	225	225	280	-	1 x 743760170▲

PUMP TYPE NSCS..4	DIMENSIONS (mm)				SHIM* CODE	
	PUMP h1	MOTOR		h4	Pump	Motor
		P/2	H			
150-400/450/W	315	225	225	315	-	1 x 743760180▲
150-400/550/W	315	275	250	315	-	1 x 743760130▲
150-400/750/W	315	275	280	315	-	2 x 768082130
150-400/900/W	315	275	280	315	-	2 x 768082130
200-250/185/W	355	175	180	355	-	1 x 743760320▲
200-250/220/W	355	175	180	355	-	1 x 743760320▲
200-250/300A/W	355	200	200	355	-	1 x 743760250▲
200-250/300/W	355	200	200	355	-	1 x 743760250▲
200-315/370/W	355	225	225	355	-	1 x 743760190▲
200-315/450/W	355	225	225	355	-	1 x 743760190▲
200-315/550/W	355	275	250	355	-	1 x 743760140▲
200-315/750/W	355	275	280	355	-	1 x 743760100▲
250-315/370/W	400	225	225	400	-	1 x 743760200▲
250-315/450/W	400	225	225	400	-	1 x 743760200▲
250-315/550/W	400	275	250	400	-	1 x 743760150▲
250-315/750/W	400	275	280	400	-	1 x 743760110▲

\* On request. ▲ Support base kit.

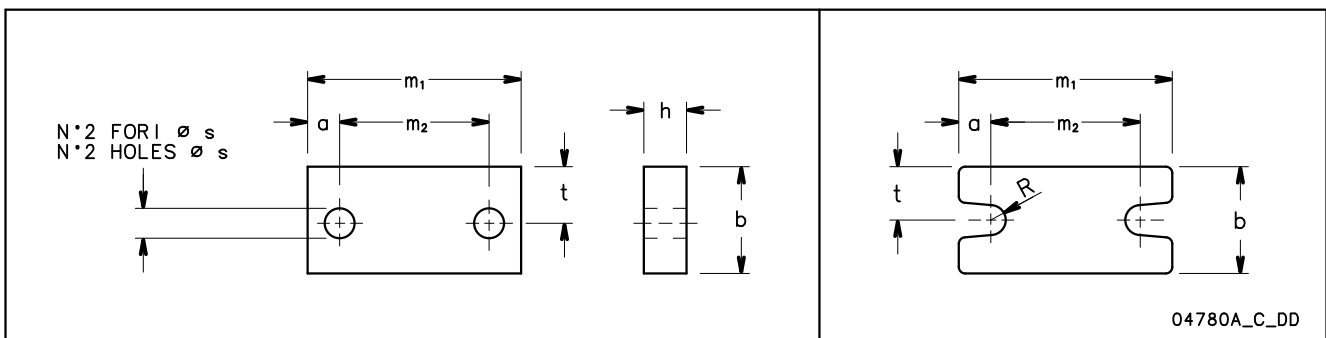
### SHIM FOR MOTOR FEET



CODE	DENOMINATION					DIMENSIONS (mm)				HOLES	
	AA	x	h	x	BB	a	B1	B2	c	N°	ø K
161402570	35		20		125	17	100	-	12,5	2	10
161402320	40		10		155	20	100	125	15	3	10
161402340	40		12		155	20	100	125	15	3	10
161402360	40		12		180	17	140	-	20	2	14
161402380	40		20		180	17	140	-	20	2	14
161402400	40		30		155	20	100	125	15	3	10
161402420	40		40		180	17	140	-	20	2	14
161402440	50		8		226	21	140	178	24	3	14
161402460	50		20		226	21	140	178	24	3	14
161407670	50		20		304	25	210	254	25	3	14
161407690	50		30		304	25	210	254	25	3	14
768082180	80		5		332	35,5	241	279	26,5	3	14
768082190	80		10		332	35,5	241	279	26,5	3	14
161407590	80		20		332	35,5	241	279	26,5	3	14
768082110	80		25		370	33,5	305	-	32,5	2	19
768082120	80		25		412	40	286	311	50,5	3	19
161407990	100		30		467	50	311	349	59	3	22
768082130	100		35		517	50	368	419	49	3	24

### SHIM FOR PUMP FEET

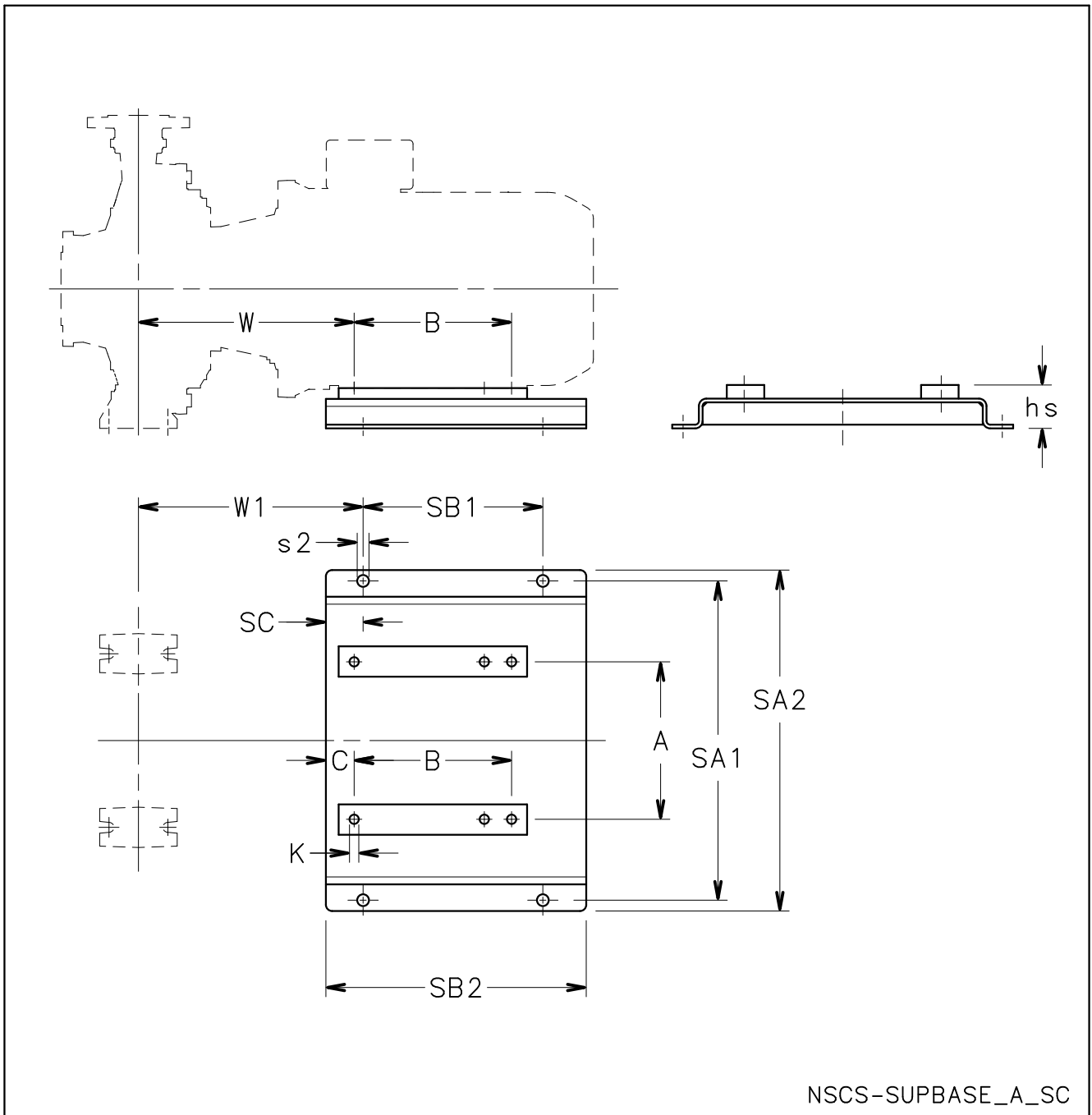
sp-mot-nscs-nscf-en\_d\_td



CODE	DENOMINATION					DIMENSIONS (mm)				
	b	x	h	x	m <sub>1</sub>	a	m <sub>2</sub>	ø s	R	t
161407770	40		10		160	25	110	14	-	16,5
161403250	40		20		160	25	110	14	-	16,5
161404360	40		25		160	25	110	14	-	16,5
161407780	40		30		160	25	110	14	-	16,5
161407550	50		8		100	15	70	14	-	26,5
161403210	50		20		100	15	70	14	-	26,5
161403230	70		20		125	15	95	14	-	37,5
161407570	70		25		125	15	95	14	-	37,5
161407790	80		10		160	20	120	18	-	42,5
161404380	80		25		160	20	120	18	-	42,5
161407800	80		30		160	20	120	18	-	42,5
768003140	85		10		160	32,5	95 / 120	-	9	42,5
768003150	85		15		160	32,5	95 / 120	-	9	42,5
768003170	85		30		160	32,5	95 / 120	-	9	42,5
768003180	85		45		160	32,5	95 / 120	-	9	42,5
768003190	85		50		160	32,5	95 / 120	-	9	42,5

sp-pompa-nscf-en\_d\_td

**NSCS SUPPORT BASE KIT**



## NSCS SUPPORT BASE KIT

CODE KIT	PUMP TYPE NSCS..4	DIMENSIONS (mm)												
		A	B	C	hs	K	W	W1	SA1	SA2	SB1	SB2	SC	s2
743760350	50-315/110/P	254	210	33	65	15	348	376	515	550	290	420	60	19
743760350	65-315/110/P	254	210	33	65	15	348	376	515	550	290	420	60	19
743760350	65-315/150/P	254	254	33	65	15	348	376	515	550	290	420	60	19
743760360	80-315/110A/P	254	210	33	90	15	348	376	515	550	290	420	60	19
743760360	80-315/110/P	254	210	33	90	15	348	376	515	550	290	420	60	19
743760360	80-315/150/P	254	254	33	90	15	348	376	515	550	290	420	60	19
743760290	80-315/185/W	279	241	46	70	15	361	376	515	550	290	420	60	19
743760290	80-315/220/W	279	279	46	70	15	361	376	515	550	290	420	60	19
743760300	80-400/185/W	279	241	46	100	15	375	390	515	550	290	420	60	19
743760300	80-400/220/W	279	279	46	100	15	375	390	515	550	290	420	60	19
743760230	80-400/300/W	318	305	58	80	19	387	390	515	550	290	420	60	19
743760170	80-400/370/W	356	286/311	60	55	19	433	433	605	640	392	510	60	19
743760350	100-250/110/P	254	210	33	65	15	348	376	515	550	290	420	60	19
743760360	100-315/110/P	254	210	33	90	15	348	376	515	550	290	420	60	19
743760360	100-315/150/P	254	254	33	90	15	348	376	515	550	290	420	60	19
743760290	100-315/185/W	279	241	46	70	15	361	376	515	550	290	420	60	19
743760290	100-315/220/W	279	279	46	70	15	361	376	515	550	290	420	60	19
743760220	100-315/300/W	318	305	58	50	19	379	382	515	550	290	420	60	19
743760230	100-400/300/W	318	305	58	80	19	387	390	515	550	290	420	60	19
743760170	100-400/370/W	356	286/311	60	55	19	433	433	605	640	392	510	60	19
743760170	100-400/450/W	356	286/311	60	55	19	433	433	605	640	392	510	60	19
743760360	125-200/110/P	254	210	33	90	15	348	376	515	550	290	420	60	19
743760360	125-250/110/P	254	210	33	90	15	348	376	515	550	290	420	60	19
743760360	125-250/150/P	254	254	33	90	15	348	376	515	550	290	420	60	19
743760300	125-315/185/W	279	241	46	100	15	375	390	515	550	290	420	60	19
743760300	125-315/220/W	279	279	46	100	15	375	390	515	550	290	420	60	19
743760230	125-315/300/W	318	305	58	80	19	387	390	515	550	290	420	60	19
743760170	125-315/370/W	356	286/311	60	55	19	433	433	605	640	392	510	60	19
743760180	125-400/370/W	356	286/311	60	90	19	433	433	605	640	392	510	60	19
743760180	125-400/450/W	356	286/311	60	90	19	433	433	605	640	392	510	60	19
743760130	125-400/550/W	406	349	79	65	24	452	433	605	640	392	510	60	19
743760370	150-200/110A/P	254	210	33	120	15	348	376	515	550	290	420	60	19
743760370	150-200/110/P	254	210	33	120	15	348	376	515	550	290	420	60	19
743760370	150-200/150A/P	254	254	33	120	15	348	376	515	550	290	420	60	19
743760370	150-200/150/P	254	254	33	120	15	348	376	515	550	290	420	60	19
743760370	150-250/150/P	254	254	33	120	15	362	390	515	550	290	420	60	19
743760300	150-250/185/W	279	241	46	100	15	375	390	515	550	290	420	60	19
743760300	150-250/220/W	279	279	46	100	15	375	390	515	550	290	420	60	19
743760230	150-250/300/W	318	305	58	80	19	387	390	515	550	290	420	60	19
743760230	150-315/300/W	318	305	58	80	19	387	390	515	550	290	420	60	19
743760170	150-315/370/W	356	286/311	60	55	19	433	433	605	640	392	510	60	19
743760170	150-315/450/W	356	286/311	60	55	19	433	433	605	640	392	510	60	19
743760180	150-400/450/W	356	286/311	60	90	19	433	433	605	640	392	510	60	19
743760130	150-400/550/W	406	349	79	65	24	452	433	605	640	392	510	60	19
743760320	200-250/185/W	279	241	46	175	15	375	390	515	550	290	420	60	19
743760320	200-250/220/W	279	279	46	175	15	375	390	515	550	290	420	60	19
743760250	200-250/300A/W	318	305	58	155	19	387	390	515	550	290	420	60	19
743760250	200-250/300/W	318	305	58	155	19	387	390	515	550	290	420	60	19
743760190	200-315/370/W	356	286/311	60	130	19	433	433	605	640	392	510	60	19
743760190	200-315/450/W	356	286/311	60	130	19	433	433	605	640	392	510	60	19
743760140	200-315/550/W	406	349	79	105	24	452	433	605	640	392	510	60	19
743760100	200-315/750/W	457	368/419	71	75	24	474	474	655	690	420	560	70	19
743760200	250-315/370/W	356	286/311	60	175	19	433	433	605	640	392	510	60	19
743760200	250-315/450/W	356	286/311	60	175	19	433	433	605	640	392	510	60	19
743760150	250-315/550/W	406	349	79	150	24	452	433	605	640	392	510	60	19
743760110	250-315/750/W	457	368/419	71	120	24	474	474	655	690	420	560	70	19

# **REPORTS AND DECLARATIONS**

## REPORTS AND DECLARATIONS

### i) Test reports

#### a) Factory Test Report

- Test report compiled at the end of the assembly line, including flow-head performance test (ISO 9906:2012 – Grade 3B) and hydrostatic pressure test.

#### b) Audit Test Report

- Test report for electric pumps compiled in the test room, comprising flow-head-pump input-pump efficiency performance test (according to ISO 9906:2012)

#### c) NPSH Test Report

- Test report for electric pumps compiled in the test room, comprising flow-NPSH performance test (according to ISO 9906:2012)

#### d) Noise Test Report

- Report indicating sound pressure and power measurements (EN ISO 20361, EN ISO 11203, EN ISO 4871)

#### e) Vibration Test Report

(unavailable for submerged or submergible pumps)

- Report indicating vibration measurements (ISO 10816-1)

### ii) Declaration of product conformity with the technical requirements indicated in the order

#### a) EN 10204:2004 - type 2.1

- does not include test results on supplied or similar products.

#### b) EN 10204:2004 - type 2.2

- includes test results (materials certificates) on similar products.

### iii) Issue of a further EC Declaration of Conformity,

- in addition to the one accompanying the product, it comprises references to European law and the main technical standards (e.g.: MD 2006/42/EC, EMCD 2004/108/EC, ErP 2009/125/EC).

*N.B.: if the request is made after receipt of the product, communicate the code (name) and serial number (date + progressive number).*

### iv) Manufacturer's declaration of conformity

- relative to one of more types of products without indicating specific codes and serial numbers.

### v) Other certificates and/or documentation on request

- subject to availability or feasibility.

### vi) Duplication of certificates and/or documentation on request

- subject to availability or feasibility.



# TECHNICAL APPENDIX

## NPSH

The minimum operating values that can be reached at the pump suction end are limited by the onset of cavitation.

Cavitation is the formation of vapour-filled cavities within liquids where the pressure is locally reduced to a critical value, or where the local pressure is equal to, or just below the vapour pressure of the liquid.

The vapour-filled cavities flow with the current and when they reach a higher pressure area the vapour contained in the cavities condenses. The cavities collide, generating pressure waves that are transmitted to the walls. These, being subjected to stress cycles, gradually become deformed and yield due to fatigue. This phenomenon, characterized by a metallic noise produced by the hammering on the pipe walls, is called incipient cavitation.

The damage caused by cavitation may be magnified by electrochemical corrosion and a local rise in temperature due to the plastic deformation of the walls. The materials that offer the highest resistance to heat and corrosion are alloy steels, especially austenitic steel. The conditions that trigger cavitation may be assessed by calculating the total net suction head, referred to in technical literature with the acronym NPSH (Net Positive Suction Head).

The NPSH represents the total energy (expressed in m.) of the liquid measured at suction under conditions of incipient cavitation, excluding the vapour pressure (expressed in m.) that the liquid has at the pump inlet.

To find the static height  $h_z$  at which to install the machine under safe conditions, the following formula must be verified:

$$h_p + h_z \geq (NPSH_r + 0.5) + h_f + h_{pv} \quad \textcircled{1}$$

where:

- $h_p$**  is the absolute pressure applied to the free liquid surface in the suction tank, expressed in m. of liquid;  $h_p$  is the quotient between the barometric pressure and the specific weight of the liquid.
- $h_z$**  is the suction lift between the pump axis and the free liquid surface in the suction tank, expressed in m.;  $h_z$  is negative when the liquid level is lower than the pump axis.
- $h_f$**  is the flow resistance in the suction line and its accessories, such as: fittings, foot valve, gate valve, elbows, etc.
- $h_{pv}$**  is the vapour pressure of the liquid at the operating temperature, expressed in m. of liquid.  $h_{pv}$  is the quotient between the  $P_v$  vapour pressure and the liquid's specific weight.
- 0,5** is the safety factor.

The maximum possible suction head for installation depends on the value of the atmospheric pressure (i.e. the elevation above sea level at which the pump is installed) and the temperature of the liquid.

To help the user, with reference to water temperature (4° C) and to the elevation above sea level, the following tables show the drop in hydraulic pressure head in relation to the elevation above sea level, and the suction loss in relation to temperature.

Water temperature (°C)	20	40	60	80	90	110	120
Suction loss (m)	0,2	0,7	2,0	5,0	7,4	15,4	21,5

Elevation above sea level (m)	500	1000	1500	2000	2500	3000
Suction loss (m)	0,55	1,1	1,65	2,2	2,75	3,3

Friction loss is shown in the tables Flow Resistance of this catalogue. To reduce it to a minimum, especially in cases of high suction head (over 4-5 m.) or within the operating limits with high flow rates, we recommend using a suction line having a larger diameter than that of the pump's suction port. It is always a good idea to position the pump as close as possible to the liquid to be pumped.

Make the following calculation:

Liquid: water at ~15°C  $\gamma = 1 \text{ kg/dm}^3$

Flow rate required: 25 m<sup>3</sup>/h

Head for required delivery: 70 m.

Suction lift: 3,5 m.

The selection is an 33SV3G075T pump whose NPSH required value is, at 25 m<sup>3</sup>/h, of 2 m.

For water at 15 °C

$$h_p = P_a / \gamma = 10,33\text{m}, h_{pv} = P_v / \gamma = 0,174\text{m} (0,01701 \text{ bar})$$

The  $H_f$  flow resistance in the suction line with foot valves is ~ 1,2 m.

By substituting the parameters in formula  $\textcircled{1}$  with the numeric values above, we have:

$$10,33 + (-3,5) \geq (2 + 0,5) + 1,2 + 0,17$$

from which we have: 6,8 > 3,9

The relation is therefore verified.

**VAPOUR PRESSURE**

**VAPOUR PRESSURE  $p_s$  AND  $\rho$  DENSITY OF WATER TABLE**

t °C	T K	$p_s$ bar	$\rho$ kg/dm <sup>3</sup>	t °C	T K	$p_s$ bar	$\rho$ kg/dm <sup>3</sup>	t °C	T K	$p_s$ bar	$\rho$ kg/dm <sup>3</sup>
0	273,15	0,00611	0,9998	55	328,15	0,15741	0,9857	120	393,15	1,9854	0,9429
1	274,15	0,00657	0,9999	56	329,15	0,16511	0,9852	122	395,15	2,1145	0,9412
2	275,15	0,00706	0,9999	57	330,15	0,17313	0,9846	124	397,15	2,2504	0,9396
3	276,15	0,00758	0,9999	58	331,15	0,18147	0,9842	126	399,15	2,3933	0,9379
4	277,15	0,00813	1,0000	59	332,15	0,19016	0,9837	128	401,15	2,5435	0,9362
5	278,15	0,00872	1,0000	60	333,15	0,1992	0,9832	130	403,15	2,7013	0,9346
6	279,15	0,00935	1,0000	61	334,15	0,2086	0,9826	132	405,15	2,867	0,9328
7	280,15	0,01001	0,9999	62	335,15	0,2184	0,9821	134	407,15	3,041	0,9311
8	281,15	0,01072	0,9999	63	336,15	0,2286	0,9816	136	409,15	3,223	0,9294
9	282,15	0,01147	0,9998	64	337,15	0,2391	0,9811	138	411,15	3,414	0,9276
10	283,15	0,01227	0,9997	65	338,15	0,2501	0,9805	140	413,15	3,614	0,9258
11	284,15	0,01312	0,9997	66	339,15	0,2615	0,9799	145	418,15	4,155	0,9214
12	285,15	0,01401	0,9996	67	340,15	0,2733	0,9793	155	428,15	5,433	0,9121
13	286,15	0,01497	0,9994	68	341,15	0,2856	0,9788	160	433,15	6,181	0,9073
14	287,15	0,01597	0,9993	69	342,15	0,2984	0,9782	165	438,15	7,008	0,9024
15	288,15	0,01704	0,9992	70	343,15	0,3116	0,9777	170	443,15	7,920	0,8973
16	289,15	0,01817	0,9990	71	344,15	0,3253	0,9770	175	448,15	8,924	0,8921
17	290,15	0,01936	0,9988	72	345,15	0,3396	0,9765	180	453,15	10,027	0,8869
18	291,15	0,02062	0,9987	73	346,15	0,3543	0,9760	185	458,15	11,233	0,8815
19	292,15	0,02196	0,9985	74	347,15	0,3696	0,9753	190	463,15	12,551	0,8760
20	293,15	0,02337	0,9983	75	348,15	0,3855	0,9748	195	468,15	13,987	0,8704
21	294,15	0,24850	0,9981	76	349,15	0,4019	0,9741	200	473,15	15,550	0,8647
22	295,15	0,02642	0,9978	77	350,15	0,4189	0,9735	205	478,15	17,243	0,8588
23	296,15	0,02808	0,9976	78	351,15	0,4365	0,9729	210	483,15	19,077	0,8528
24	297,15	0,02982	0,9974	79	352,15	0,4547	0,9723	215	488,15	21,060	0,8467
25	298,15	0,03166	0,9971	80	353,15	0,4736	0,9716	220	493,15	23,198	0,8403
26	299,15	0,03360	0,9968	81	354,15	0,4931	0,9710	225	498,15	25,501	0,8339
27	300,15	0,03564	0,9966	82	355,15	0,5133	0,9704	230	503,15	27,976	0,8273
28	301,15	0,03778	0,9963	83	356,15	0,5342	0,9697	235	508,15	30,632	0,8205
29	302,15	0,04004	0,9960	84	357,15	0,5557	0,9691	240	513,15	33,478	0,8136
30	303,15	0,04241	0,9957	85	358,15	0,5780	0,9684	245	518,15	36,523	0,8065
31	304,15	0,04491	0,9954	86	359,15	0,6011	0,9678	250	523,15	39,776	0,7992
32	305,15	0,04753	0,9951	87	360,15	0,6249	0,9671	255	528,15	43,246	0,7916
33	306,15	0,05029	0,9947	88	361,15	0,6495	0,9665	260	533,15	46,943	0,7839
34	307,15	0,05318	0,9944	89	362,15	0,6749	0,9658	265	538,15	50,877	0,7759
35	308,15	0,05622	0,9940	90	363,15	0,7011	0,9652	270	543,15	55,058	0,7678
36	309,15	0,05940	0,9937	91	364,15	0,7281	0,9644	275	548,15	59,496	0,7593
37	310,15	0,06274	0,9933	92	365,15	0,7561	0,9638	280	553,15	64,202	0,7505
38	311,15	0,06624	0,9930	93	366,15	0,7849	0,9630	285	558,15	69,186	0,7415
39	312,15	0,06991	0,9927	94	367,15	0,8146	0,9624	290	563,15	74,461	0,7321
40	313,15	0,07375	0,9923	95	368,15	0,8453	0,9616	295	568,15	80,037	0,7223
41	314,15	0,07777	0,9919	96	369,15	0,8769	0,9610	300	573,15	85,927	0,7122
42	315,15	0,08198	0,9915	97	370,15	0,9094	0,9602	305	578,15	92,144	0,7017
43	316,15	0,09639	0,9911	98	371,15	0,9430	0,9596	310	583,15	98,70	0,6906
44	317,15	0,09100	0,9907	99	372,15	0,9776	0,9586	315	588,15	105,61	0,6791
45	318,15	0,09582	0,9902	100	373,15	1,0133	0,9581	320	593,15	112,89	0,6669
46	319,15	0,10086	0,9898	102	375,15	1,0878	0,9567	325	598,15	120,56	0,6541
47	320,15	0,10612	0,9894	104	377,15	1,1668	0,9552	330	603,15	128,63	0,6404
48	321,15	0,11162	0,9889	106	379,15	1,2504	0,9537	340	613,15	146,05	0,6102
49	322,15	0,11736	0,9884	108	381,15	1,3390	0,9522	350	623,15	165,35	0,5743
50	323,15	0,12335	0,9880	110	383,15	1,4327	0,9507	360	633,15	186,75	0,5275
51	324,15	0,12961	0,9876	112	385,15	1,5316	0,9491	370	643,15	210,54	0,4518
52	325,15	0,13613	0,9871	114	387,15	1,6362	0,9476	374,15	647,30	221,20	0,3154
53	326,15	0,14293	0,9862	116	389,15	1,7465	0,9460				
54	327,15	0,15002	0,9862	118	391,15	1,8628	0,9445				

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## TABLE OF FLOW RESISTANCE IN 100 m OF STRAIGHT CAST IRON PIPELINE (HAZEN-WILLIAMS FORMULA C=100)

FLOW RATE		NOMINAL DIAMETER in mm and inches																											
m <sup>3</sup> /h	l/min	15 1/2"	20 3/4"	25 1"	32 1 1/4"	40 1 1/2"	50 2	65 2 1/2"	80 3"	100 4"	125 5"	150 6"	175 7"	200 8"	250 10"	300 12"	350 14"	400 16"											
0,6	10	v hr	0,94 16	0,53 3,94	0,34 1,33	0,21 0,40	0,13 0,13																						
0,9	15	v hr	1,42 33,9	0,80 8,35	0,51 2,82	0,31 0,85	0,20 0,29		The hr values must be multiplied by:  0,71 for galvanized or painted steel pipes  0,54 for stainless steel or copper pipes  0,47 for PVC or PE pipes																				
1,2	20	v hr	1,89 57,7	1,06 14,21	0,68 4,79	0,41 1,44	0,27 0,49	0,17 0,16																					
1,5	25	v hr	2,36 87,2	1,33 21,5	0,85 7,24	0,52 2,18	0,33 0,73	0,21 0,25																					
1,8	30	v hr	2,83 122	1,59 30,1	1,02 10,1	0,62 3,05	0,40 1,03	0,25 0,35																					
2,1	35	v hr	3,30 162	1,86 40,0	1,19 13,5	0,73 4,06	0,46 1,37	0,30 0,46																					
2,4	40	v hr		2,12 51,2	1,36 17,3	0,83 5,19	0,53 1,75	0,34 0,59	0,20 0,16																				
3	50	v hr		2,65 77,4	1,70 26,1	1,04 7,85	0,66 2,65	0,42 0,89	0,25 0,25																				
3,6	60	v hr		3,18 108	2,04 36,6	1,24 11,0	0,80 3,71	0,51 1,25	0,30 0,35																				
4,2	70	v hr		3,72 144	2,38 48,7	1,45 14,6	0,93 4,93	0,59 1,66	0,35 0,46																				
4,8	80	v hr		4,25 185	2,72 62,3	1,66 18,7	1,06 6,32	0,68 2,13	0,40 0,59																				
5,4	90	v hr			3,06 77,5	1,87 23,3	1,19 7,85	0,76 2,65	0,45 0,74	0,30 0,27																			
6	100	v hr			3,40 94,1	2,07 28,3	1,33 9,54	0,85 3,22	0,50 0,90	0,33 0,33																			
7,5	125	v hr			4,25 142	2,59 42,8	1,66 14,4	1,06 4,86	0,63 1,36	0,41 0,49																			
9	150	v hr				3,11 59,9	1,99 20,2	1,27 6,82	0,75 1,90	0,50 0,69	0,32 0,23																		
10,5	175	v hr				3,63 79,7	2,32 26,9	1,49 9,07	0,88 2,53	0,58 0,92	0,37 0,31																		
12	200	v hr				4,15 102	2,65 34,4	1,70 11,6	1,01 3,23	0,66 1,18	0,42 0,40																		
15	250	v hr				5,18 154	3,32 17,5	2,12 4,89	1,26 4,89	0,83 1,78	0,53 0,60	0,34 0,20																	
18	300	v hr				3,98 72,8	2,55 24,6	1,51 6,85	1,00 2,49	0,64 0,84	0,41 0,28																		
24	400	v hr				5,31 124	3,40 41,8	2,01 11,66	1,33 4,24	0,85 1,43	0,54 0,48	0,38 0,20																	
30	500	v hr				6,63 187	4,25 63,2	2,51 17,6	1,66 6,41	1,06 2,16	0,68 0,73	0,47 0,30																	
36	600	v hr				5,10 88,6	3,02 24,7	1,99 8,98	1,27 3,03	0,82 1,02	0,57 0,42	0,42 0,20																	
42	700	v hr				5,94 118	3,52 32,8	2,32 11,9	1,49 4,03	0,95 1,36	0,66 0,56	0,49 0,26																	
48	800	v hr				6,79 151	4,02 42,0	2,65 15,3	1,70 5,16	1,09 1,74	0,75 0,72	0,55 0,34																	
54	900	v hr				7,64 188	4,52 52,3	2,99 19,0	1,91 6,41	1,22 2,16	0,85 0,89	0,62 0,42																	
60	1000	v hr				5,03 63,5	3,32 23,1	2,12 7,79	1,36 2,63	1,06 1,08	0,74 0,51	0,53 0,27	0,53 0,27																
75	1250	v hr				6,28 96,0	4,15 34,9	2,65 11,8	1,70 3,97	1,18 1,63	0,87 0,77	0,66 0,40																	
90	1500	v hr				7,54 134	4,98 48,9	3,18 16,5	2,04 5,57	1,42 2,29	1,04 1,08	0,80 0,56																	
105	1750	v hr				8,79 179	5,81 65,1	3,72 21,9	2,38 7,40	1,65 3,05	1,21 1,44	0,93 0,75																	
120	2000	v hr				6,63 83,3	4,25 28,1	2,72 9,48	1,89 3,90	1,39 1,84	1,06 0,96	0,68 0,32	0,68 0,32																
150	2500	v hr				8,29 126	5,31 42,5	3,40 14,3	2,36 5,89	1,73 2,78	1,33 1,45	0,85 0,49																	
180	3000	v hr				6,37 59,5	4,08 20,1	2,83 8,26	2,08 3,90	1,59 2,03	1,02 0,69	0,71 0,28																	
210	3500	v hr				7,43 79,1	4,76 26,7	3,30 11,0	2,43 5,18	1,86 2,71	1,19 0,91	0,83 0,38																	
240	4000	v hr				8,49 101	5,44 34,2	3,77 14,1	2,77 6,64	2,12 3,46	1,36 1,17	0,94 0,48																	
300	5000	v hr				6,79 51,6	4,72 21,2	3,47 10,0	2,65 5,23	1,70 1,77	1,18 0,73																		
360	6000	v hr				8,15 72,3	5,66 29,8	4,16 14,1	3,18 7,33	2,04 2,47	1,42 1,02																		
420	7000	v hr				6,61 39,6	4,85 18,7	3,72 9,75	2,38 3,29	1,65 1,35	1,21 0,64																		
480	8000	v hr				7,55 50,7	5,55 23,9	4,25 12,49	2,72 4,21	1,89 1,73	1,39 0,82																		
540	9000	v hr				8,49 63,0	6,24 29,8	4,78 15,5	3,06 5,24	2,12 2,16	1,56 1,02	1,19 0,53																	
600	10000	v hr				6,93 36,2	5,31 18,9	3,40 6,36	2,36 2,62	1,73 1,24	1,33 0,65																		

hr = flow resistance for 100 m of straight pipeline (m)

V = water speed (m/s)

G-at-pct-en\_b\_th

## FLOW RESISTANCE TABLE OF FLOW RESISTANCE IN BENDS, VALVES AND GATES

The flow resistance is calculated using the equivalent pipeline length method according to the table below:

ACCESSORY TYPE	DN											
	25	32	40	50	65	80	100	125	150	200	250	300
	Equivalent pipeline length (m)											
45° bend	0,2	0,2	0,4	0,4	0,6	0,6	0,9	1,1	1,5	1,9	2,4	2,8
90° bend	0,4	0,6	0,9	1,1	1,3	1,5	2,1	2,6	3,0	3,9	4,7	5,8
90° smooth bend	0,4	0,4	0,4	0,6	0,9	1,1	1,3	1,7	1,9	2,8	3,4	3,9
Union tee or cross	1,1	1,3	1,7	2,1	2,6	3,2	4,3	5,3	6,4	7,5	10,7	12,8
Gate valve	-	-	-	0,2	0,2	0,2	0,4	0,4	0,6	0,9	1,1	1,3
Foot check valve	1,1	1,5	1,9	2,4	3,0	3,4	4,7	5,9	7,4	9,6	11,8	13,9
Non return valve	1,1	1,5	1,9	2,4	3,0	3,4	4,7	5,9	7,4	9,6	11,8	13,9

G-a-pcv-en\_b\_th

The table is valid for the Hazen Williams coefficient  $C=100$  (cast iron pipework);

for steel pipework, multiply the values by 1,41;

for stainless steel, copper and coated cast iron pipework, multiply the values by 1,85;

When the **equivalent pipeline length** has been determined, the flow resistance is obtained from the table of flow resistance.

The values given are guideline values which are bound to vary slightly according to the model, especially for gate valves and non-return valves, for which it is a good idea to check the values supplied by manufacturers.

## VOLUMETRIC CAPACITY

Litres per minute l/min	Cubic metres per hour m <sup>3</sup> /h	Cubic feet per hour ft <sup>3</sup> /h	Cubic feet per minute ft <sup>3</sup> /min	Imperial gallon per minute Imp. gal/min	U.S. gallon per minute US gal/min
<b>1,000</b>	0,0600	2,1189	0,0353	0,2200	0,2642
16,6667	<b>1,0000</b>	35,3147	0,5886	3,6662	4,4029
0,4719	0,0283	<b>1,0000</b>	0,0167	0,1038	0,1247
28,3168	1,6990	60,0000	<b>1,0000</b>	6,2288	7,4805
4,5461	0,2728	9,6326	0,1605	<b>1,0000</b>	1,2009
3,7854	0,2271	8,0208	0,1337	0,8327	<b>1,0000</b>

## PRESSURE AND HEAD

Newton per square metre N/m <sup>2</sup>	kilo Pascal kPa	bar bar	Pound force per square inch psi	Metre of water m H <sub>2</sub> O	Millimetre of mercury mm Hg
<b>1,0000</b>	0,0010	1 x 10 <sup>-5</sup>	1,45 x 10 <sup>-4</sup>	1,02 x 10 <sup>-4</sup>	0,0075
1 000,0000	<b>1,0000</b>	0,0100	0,1450	0,1020	7,5006
1 x 10 <sup>5</sup>	100,0000	<b>1,0000</b>	14,5038	10,1972	750,0638
6 894,7570	6,8948	0,0689	<b>1,0000</b>	0,7031	51,7151
9 806,6500	9,8067	0,0981	1,4223	<b>1,0000</b>	73,5561
133,3220	0,1333	0,0013	0,0193	0,0136	<b>1,0000</b>

## LENGTH

Millimetre mm	Centimetre cm	Metre m	Inch in	Foot ft	Yard yd
<b>1,0000</b>	0,1000	0,0010	0,0394	0,0033	0,0011
10,0000	<b>1,0000</b>	0,0100	0,3937	0,0328	0,0109
1 000,0000	100,0000	<b>1,0000</b>	39,3701	3,2808	1,0936
25,4000	2,5400	0,0254	<b>1,0000</b>	0,0833	0,0278
304,8000	30,4800	0,3048	12,0000	<b>1,0000</b>	0,3333
914,4000	91,4400	0,9144	36,0000	3,0000	<b>1,0000</b>

## VOLUME

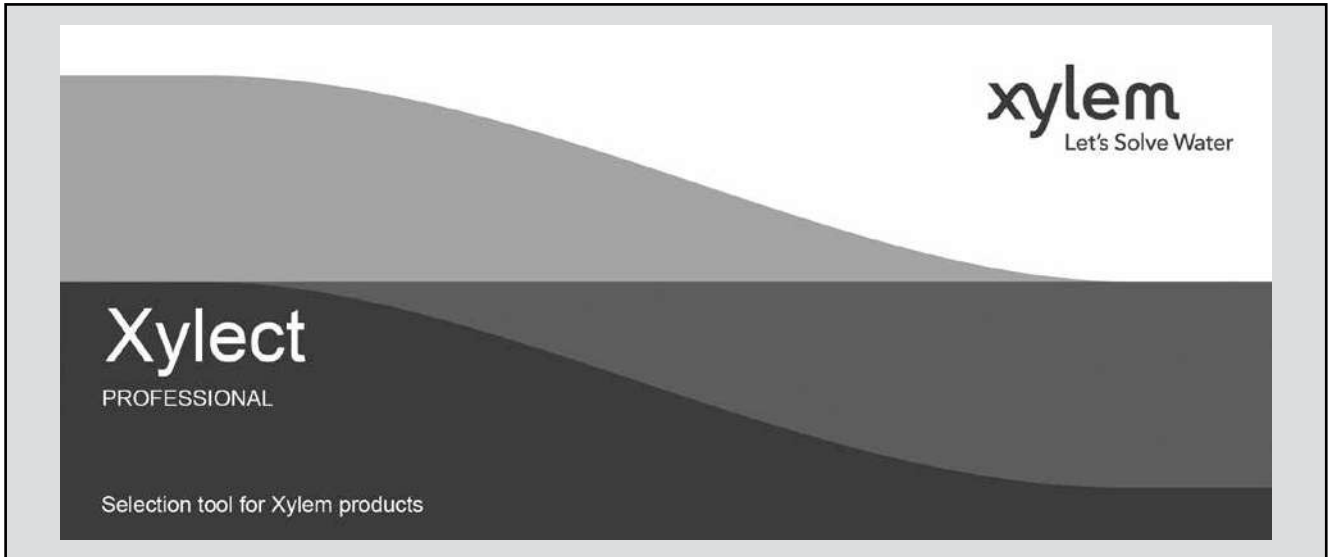
Cubic metre m <sup>3</sup>	Litre L	Millilitre ml	Imperial gallon imp. gal.	U.S. gallon US gal.	Cubic foot ft <sup>3</sup>
<b>1,0000</b>	1 000,0000	1 x 10 <sup>6</sup>	219,9694	264,1720	35,3147
0,0010	<b>1,0000</b>	1 000,0000	0,2200	0,2642	0,0353
1 x 10 <sup>-6</sup>	0,0010	<b>1,0000</b>	2,2 x 10 <sup>-4</sup>	2,642 x 10 <sup>-4</sup>	3,53 x 10 <sup>-5</sup>
0,0045	4,5461	4 546,0870	<b>1,0000</b>	1,2009	0,1605
0,0038	3,7854	3 785,4120	0,8327	<b>1,0000</b>	0,1337
0,0283	28,3168	28 316,8466	6,2288	7,4805	<b>1,0000</b>

## TEMPERATURE

Water	Kelvin K	Celsius °C	Fahrenheit °F	$^{\circ}\text{F} = ^{\circ}\text{C} \times \frac{9}{5} + 32$ $^{\circ}\text{C} = (^{\circ}\text{F} - 32) \times \frac{5}{9}$
icing	273,1500	0,0000	32,0000	
boiling	373,1500	100,0000	212,0000	

G-at\_pp-en\_b\_sc

**FURTHER PRODUCT SELECTION  
AND DOCUMENTATION**  
**Xylect**



Xylect is pump solution selection software with an extensive online database of product information across the entire Lowara range of pumps and related products, with multiple search options and helpful project management facilities. The system holds up-to-date product information on thousands of products and accessories.

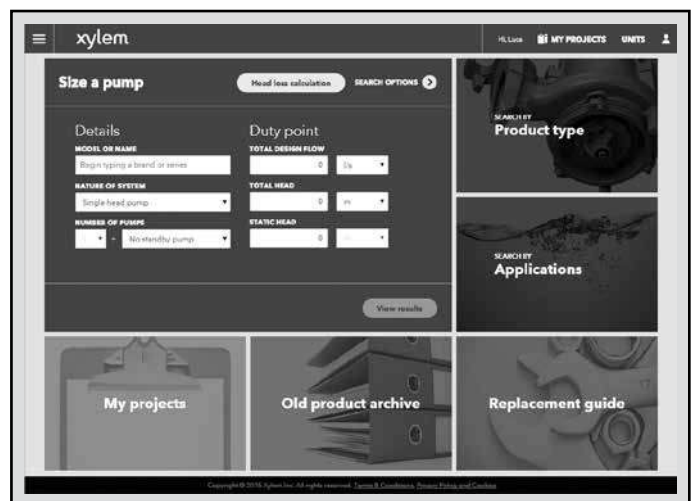
The possibility to search by applications and the detailed information output given makes it easy to make the optimal selection without having detailed knowledge about the Lowara products.

The search can be made by:

- Application
- Product type
- Duty point

Xylect gives a detailed output:

- List with search results
- Performance curves (flow, head, power, efficiency, NPSH)
- Motor data
- Dimensional drawings
- Options
- Data sheet printouts
- Document downloads incl dxf files



*The search by application guides users not familiar with the product range to the right choice.*

## FURTHER PRODUCT SELECTION AND DOCUMENTATION

### Xylect



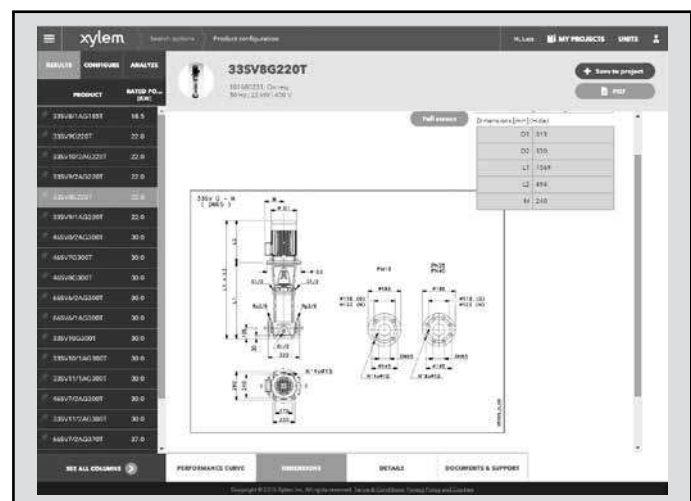
The detailed output makes it easy to select the optimal pump from the given alternatives.

The best way to work with Xylect is to create a personal account. This makes it possible to:

- Set own standard units
- Create and save projects
- Share projects with other Xylect users

Every registered user has a proper space, where all projects are saved.

For more information about Xylect please contact our sales network or visit [www.xylect.com](http://www.xylect.com).



Dimensional drawings appear on the screen and can be downloaded in dxf format.





# Xylem |'zīləm|

- 1) The tissue in plants that brings water upward from the roots;
- 2) a leading global water technology company.

We're a global team unified in a common purpose: creating advanced technology solutions to the world's water challenges. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. Our products and services move, treat, analyze, monitor and return water to the environment, in public utility, industrial, residential and commercial building services settings. Xylem also provides a leading portfolio of smart metering, network technologies and advanced analytics solutions for water, electric and gas utilities. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise with a strong focus on developing comprehensive, sustainable solutions.

**For more information on how Xylem can help you, go to [www.xylem.com](http://www.xylem.com).**



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