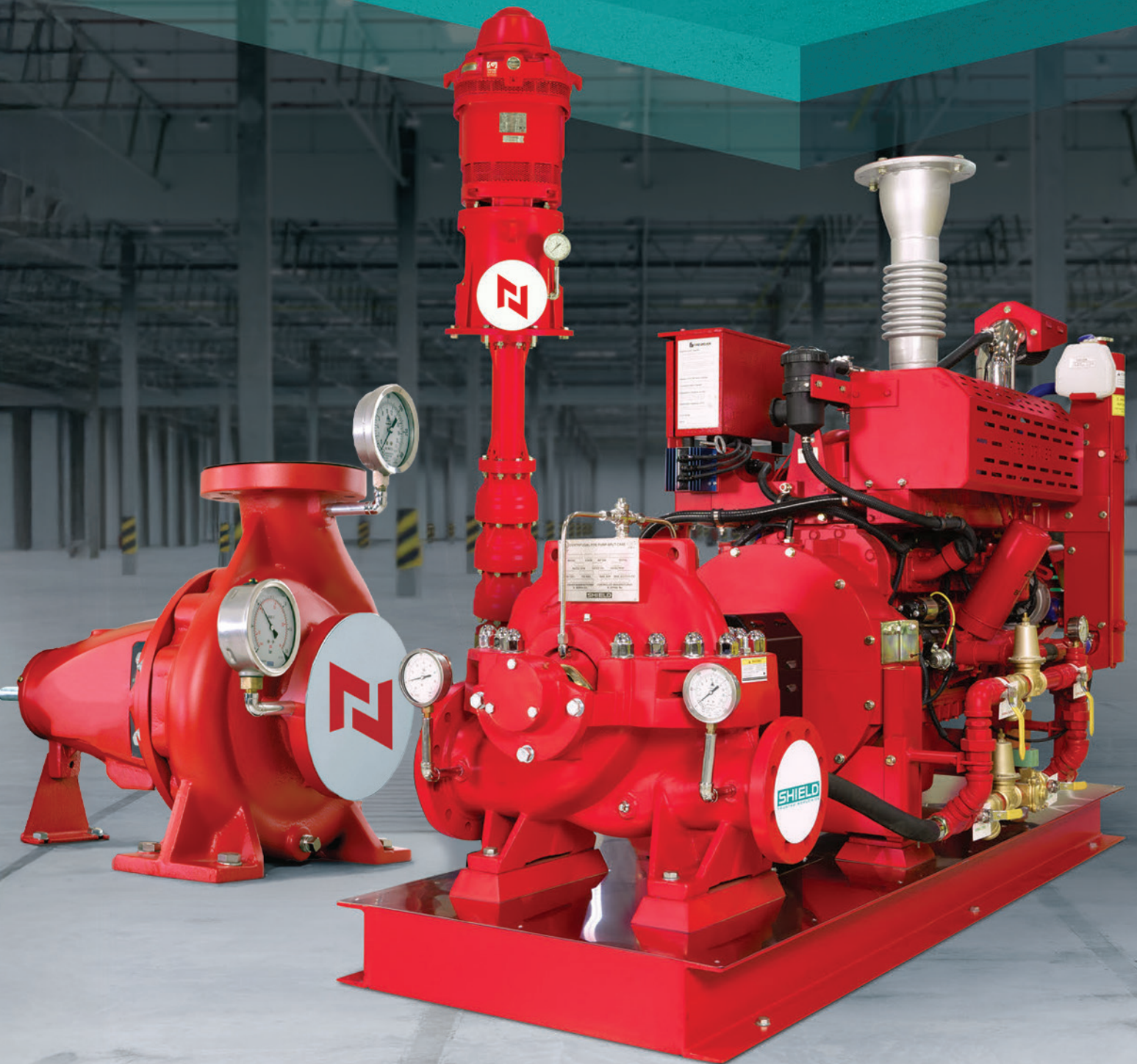




# SHIELD FIRE PUMP







Competence and innovation driven by consistent market development and customer requirements have shaped the successful development of the SHIELD Brand. The extensive product range of the market leader in the field of fire protection technology contains single, individually integrable system performances. In this way, a customized overall fire protection concept can be planned and realized for every need with optimally synchronized products.

Performance is in international demand, SHIELD is among the highly accredited fire protection companies that meet rigorous British and American standards for all projects from small conventional system to multi-site networks. Certifications such as UL and FM approvals have earned SHIELD a world-renowned reputation with quality products and powerful solutions.

A strong brand is generally known to be a secure basis for close and lasting customer relationships. In accordance with this, SHIELD uses available potential in order to keep on growing in a dynamic competitive environment. And at the same time, SHIELD stands for innovative and high quality fire protection systems.

We invite you to explore and visit our website [www.shieldglobal.com](http://www.shieldglobal.com). You can also send us your feedback and inquiry through our user-friendly online forms.

In line with SHIELD policy for continuous product development, SHIELD has the right to change specifications without prior notice.





The fire pump(s) shall be designed to deliver 150 % of the rated flow capacity at not less than 65% of the rated head in conformance to NFPA 20. Shutoff head shall not exceed 140% of rated head.

The motor capacity in horsepower shall be such that the maximum motor current in any phase under any condition of pump load and voltage unbalance shall not exceed the motor-rated full-load current multiplied by the service factor.

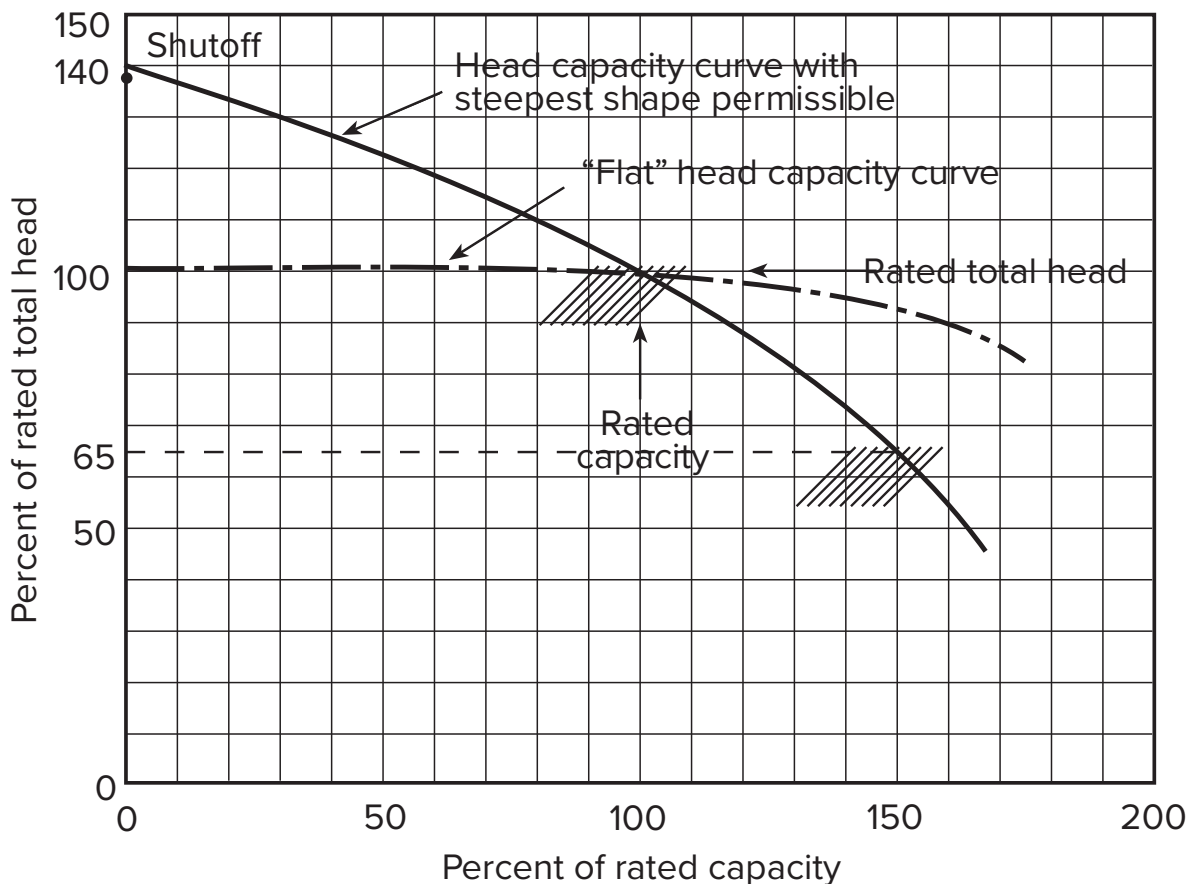
The engines shall have a 4-hour minimum horsepower rating equal to or greater than the brake horsepower required to drive the pump at its rated speed under any conditions listed for environmental conditions under pump load.

The Jockey pump capacity shall be 1% of the fire pump rated capacity of this system or the next higher capacity as per the availability of the

suitable pump; and pressure rating shall be 10 psi (0.7 bar) higher than that of fire pumps.

The controllers used in fire pump unit shall be specifically designed for such applications as per the requirements specified in NFPA 20 and shall be completely assembled and tested by the manufacturer before shipment from the factory.

Fire pump unit should include standard accessories such as one common Flow Meter for complete fire pump system, Compound Suction Gauge for each fire pump, Discharge Pressure Gauge for each fire pump, Air Release Valve for each fire pump if the pump is horizontal split case type, Circulation Relief Valve for each electric motor driven fire pump, Main Relief Valve for each diesel engine driven fire pump if required based on evaluation criteria specified in NFPA 20.



**FIGURE A.6.2 Pump Characteristics Curves.**



# AREAS OF USE

Building Technologies



Industrial Facilities



Power Plants

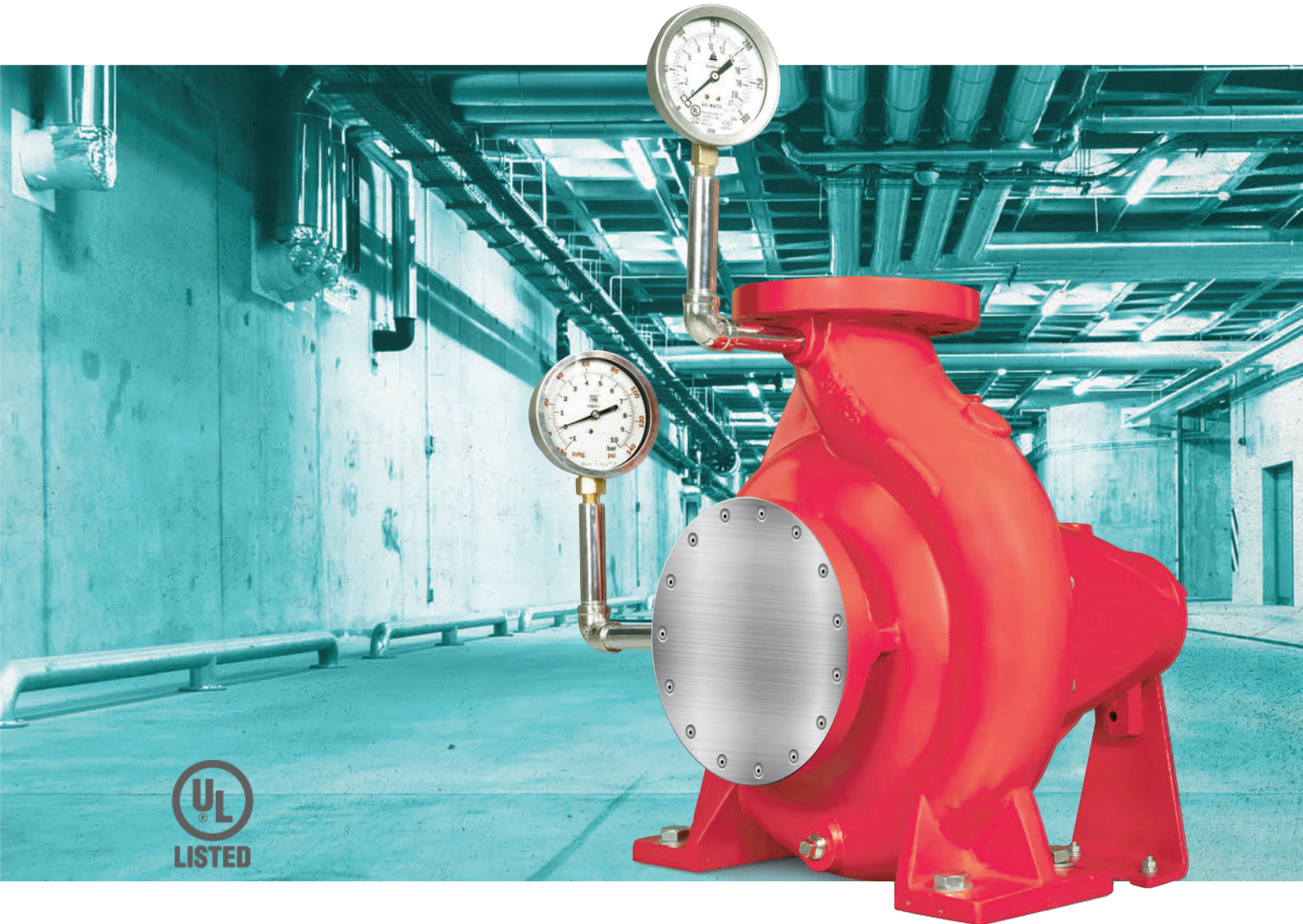


Fuel and Gas Industry





# FIRE PUMP END SUCTION



**SHIELD Fire Pumps** are designed as per NFPA standards meeting all the performance requirements for the fire pump applications. This strict compliance to the quality standards when combined with the long and reputed experience of SHIELD provides you with a reliable solution for all your firefighting pump needs. We are well-equipped to offer you a wide range of related services from the project design stage to the periodic maintenance. All pump sets are tested at our facility as per NFPA standards to ensure that the performance of the pumps are meeting the design requirements.

## **SERIES: SD-E, PERFORMANCE RATINGS: COMPREHENSIVE RANGE**

Flow Rate (Min. - Max.)	50 - 750 US GPM**
Pressure Ratings (Min. - Max.)	50 - 224 PSI**
Speed Ratings (Min. - Max.)	2900 - 3550 RPM**

\*\* These values only indicate overall range available in this series. For the availability of any specific ratings and details of its certification, please contact factory.



# Features

- Performance as per NFPA 20.
- Maximum Working Pressure verified through Hydrostatic Test
- Reliable Hydraulic characteristics
- High-Quality Component Materials
- Electric Motor or Diesel Engine combinations
- Factory equipped to test associated equipment along with Pumps.
- Availability of related additional accessories based on project demand.

## ***“Economical & Back Pull Out Design”***

### **IMPELLER**

Impeller is hydraulically balanced and positively driven by shaft key and axially locked between sleeve and impeller nut

### **SHAFT SEAL**

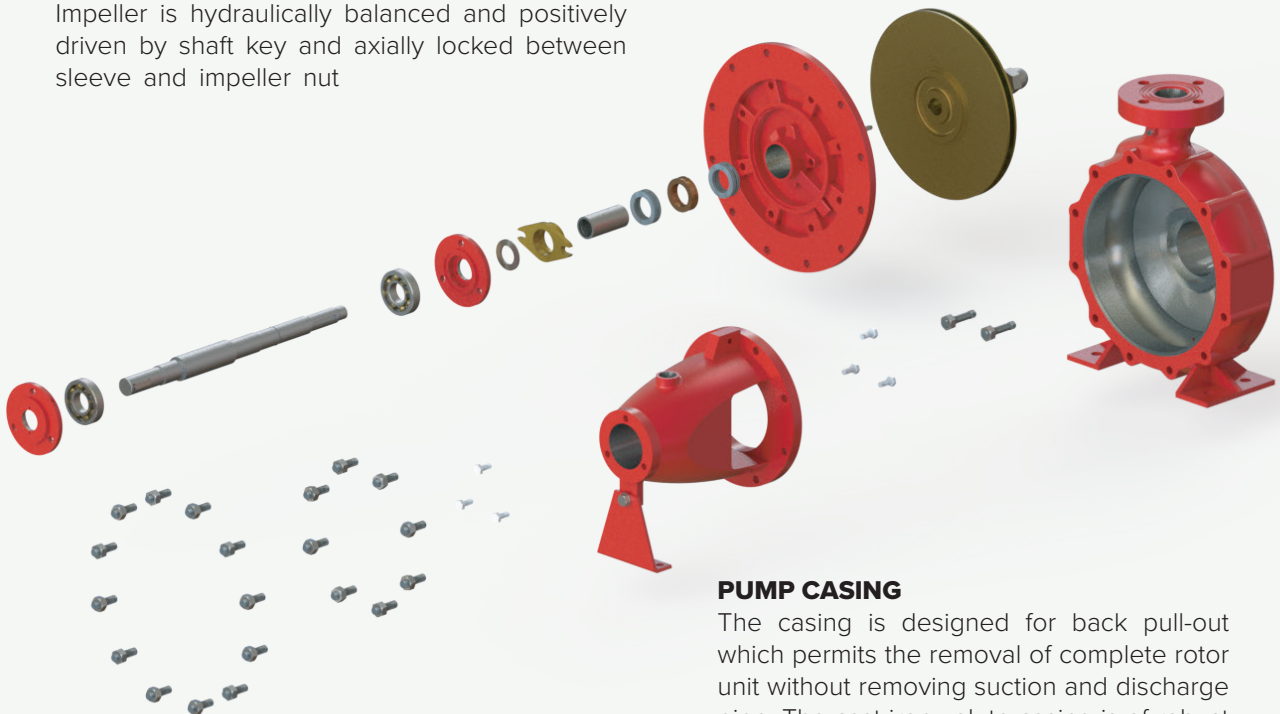
Soft Packed stuffing box. Graphite impregnated type gland packing.

### **BEARINGS**

High-quality grease-lubricated bearings are provided on both sides

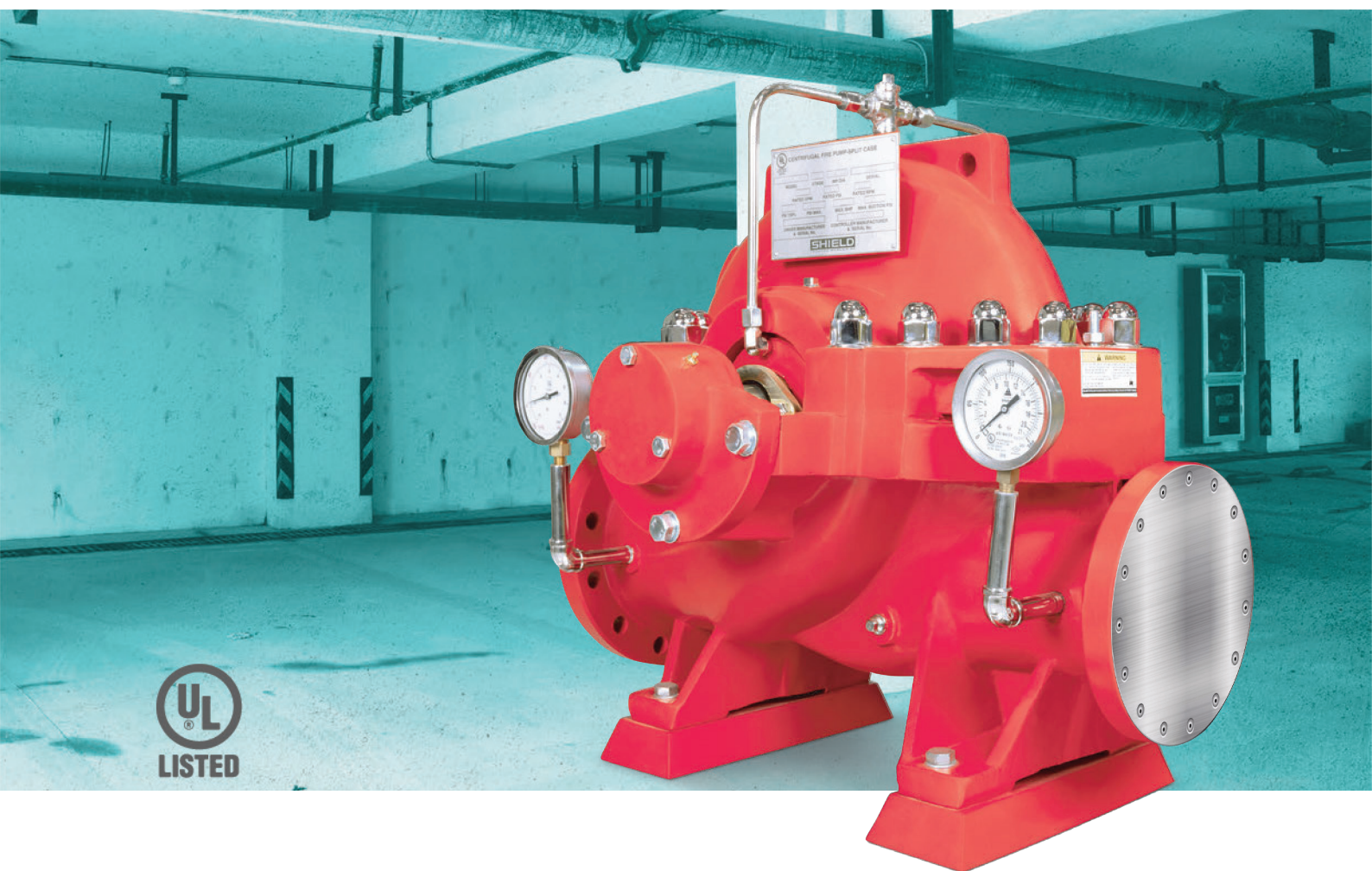
### **PUMP CASING**

The casing is designed for back pull-out which permits the removal of complete rotor unit without removing suction and discharge pipe. The cast iron volute casing is of robust design with integrally cast feet, vertical top centerline discharge with axial suction incorporating cast inlet vane to give best flow to impeller eye.





# FIRE PUMP HORIZONTAL SPLIT CASE



**SHIELD Fire Pumps** are designed as per NFPA standards meeting all the performance requirements for fire pump applications. This strict compliance to the quality standards, when combined with the long and reputed experience of SHIELD, provides you with a reliable solution for all your firefighting pump needs. We are well-equipped to offer you a wide range of related services from the project design stage to the periodic maintenance. All pump sets are tested at our facility as per NFPA standards to ensure that the performance of the pump is meeting the design requirements.

## **SERIES: SD-S, PERFORMANCE RATINGS: COMPREHENSIVE RANGE**

Flow Rate (Min. - Max.)	300 - 3500 US GPM**
Pressure Ratings (Min. - Max.)	81 – 332 PSI*
Speed Ratings (Min. - Max.)	1470 - 3550 RPM**

\*\* These values only indicate overall range available in this series. For the availability of any specific ratings and details of its certification, please contact factory.



# Features

- Performance as per NFPA 20.
- Maximum working pressure verified through hydrostatic test.
- Reliable hydraulic characteristics.
- High-Quality component materials.
- Electric Motor or Diesel Engine combinations
- Factory equipped to test the complete fire pump unit.
- Availability of related additional accessories based on project demand.

## *“Higher Capacity & Easy Maintenance”*

### **IMPELLER**

The double suction design of the impeller gives practically zero axial forces. Each impeller is dynamically balanced according to ISO 1940-1 standard.

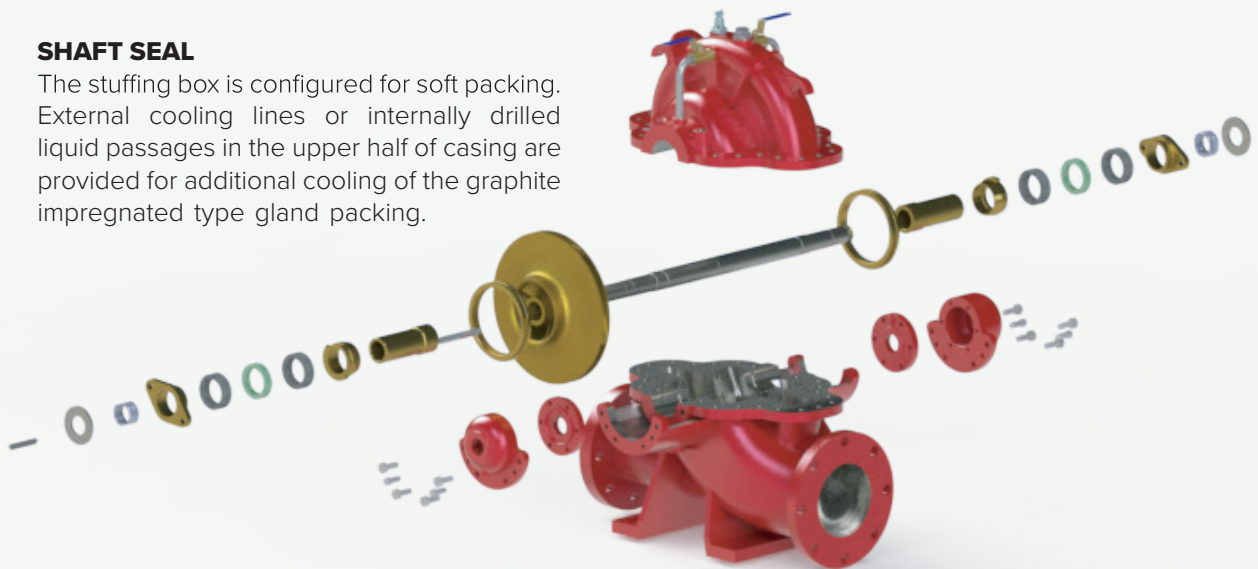


### **BEARINGS**

High-quality grease-lubricated type deep groove ball bearings are provided on both sides.

### **SHAFT SEAL**

The stuffing box is configured for soft packing. External cooling lines or internally drilled liquid passages in the upper half of casing are provided for additional cooling of the graphite impregnated type gland packing.



### **PUMP CASING**

Axially split casing permits the removal of the complete rotor without moving either piping or driver. Pumps generating high heads have double volutes to reduce axial forces, ensuring minimal shaft deflection and low bearing loads. Replaceable wearing rings protect the casing at the impeller running clearances.





# NAFFCO

PASSION TO PROTECT

## END SUCTION FIRE PUMP

### NL-E SERIES



LPS 1131 Cert/LPCB ref. 463u

**FIRE**

**SAFETY**

**SECURITY**



**NAFFCO**  
PASSION TO PROTECT

NAFFCO was founded in Dubai, UAE to become the world's leading producer and supplier of life safety solutions. By recognizing the importance and convenience of having easy access to multiple safety services, we became specialized by offering complete solutions under one roof .

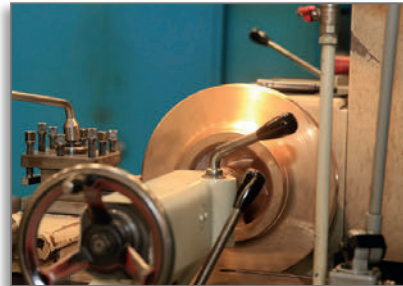
With the most talented and dedicated employees from around the world, NAFFCO has over 2,000 passionate engineers and over 5.5 million square feet of manufacturing facilities and are currently exporting to over 100 countries worldwide.

“ Protecting lives and property with our expertly crafted fire pumps”

**FACILITIES**



**FOUNDRY**  
Casting Quality



**MACHINE SHOP**  
Precision Machining



**ASSEMBLY**  
Perfect Assemblies



**TEST LAB**  
Rigorous Testing

### Company Certifications



NAFFCO  
ISO 45001 | ISO 14001 | ISO 9001  
20002009



global-mark®



UKCA  
0086/XXXX



0086/2021



2797/yy



2797



# FIREPUMP

## END SUCTION



LPS 1131 Cert/LPCB ref. 463u

► **NAFFCO** NL-E series fire pumps are designed as per LPCB standards meeting all the performance requirements for fire pump applications. These single-stage, end suction, back pull-out type, self-venting, centrifugal pumps meet the requirements for use in automatic sprinkler systems conforming to the 'LPC Rules for Automatic Sprinkler Installations'. The units meet the latest LPCB requirements and are red book listed. The performance of these pumps complies with the requirements of EN 12259-12 to provide stable H(Q) characteristics.

## WHAT SETS US APART

With more than three decades of experience in the Fire Pump market, and well-equipped manufacturing facilities NAFFCO is perfectly qualified to meet your fire pump needs. NAFFCO can supply complete accessories as per the project demand and we are fully capable to offer you a range of services including pre- and post-sales engineering assistance and product-related supports. Each pump set is subjected to rigorous performance tests at our factory prior to dispatch, in order to ensure that the performance conforms to the design requirements.

## CONFORMS TO

- **LPS 1131 - Requirements and testing methods for pumps for automatic sprinkler installation pump sets**
- **Designed considering various requirements of LPS 1240: Requirements for LPCB approved fire sprinkler pump sets used in automatic sprinkler installations.**
- **Complies with various requirements of BS EN 12845: Fixed firefighting systems - Automatic sprinkler systems - Design, installation and maintenance.**





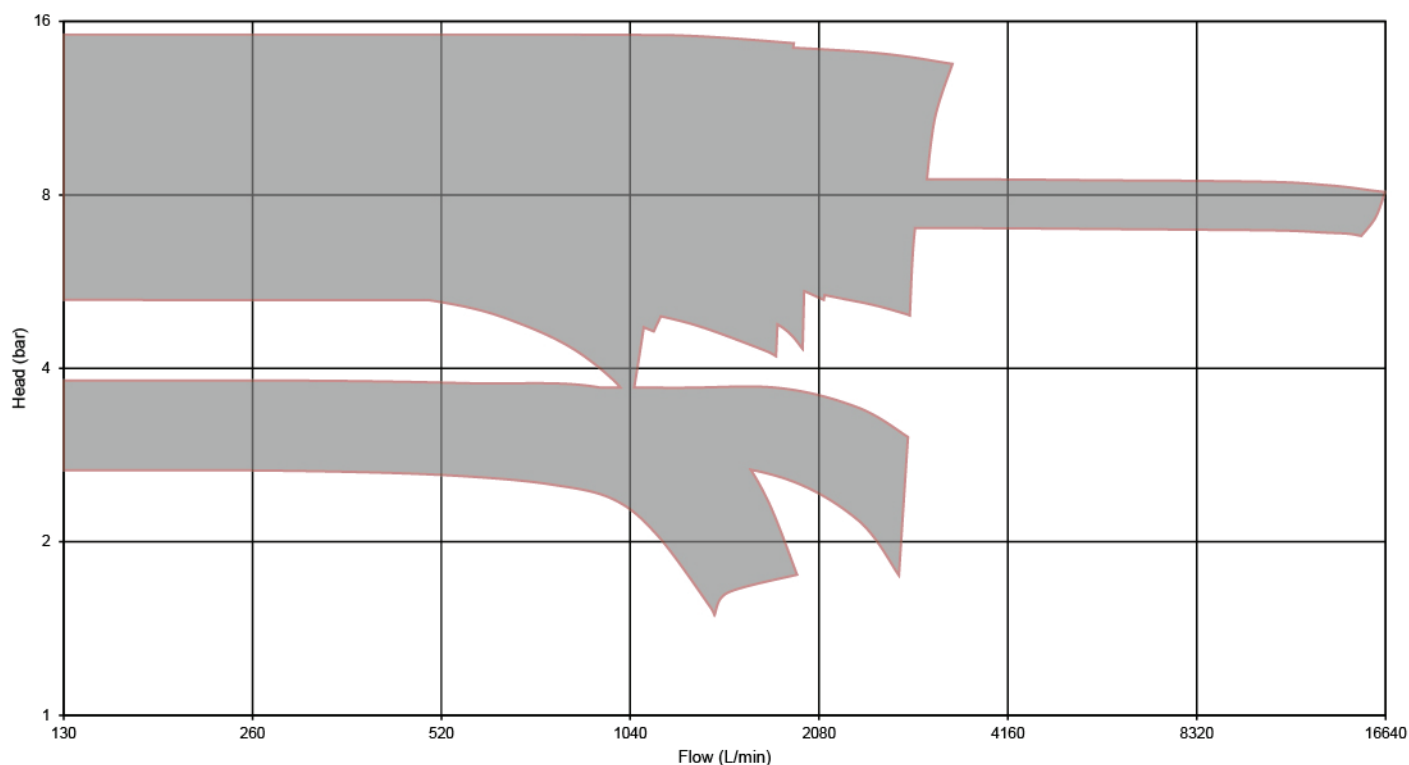
# NL-E SERIES

## APPROVED PERFORMANCE RANGE CHART



LPS 1131 Cert/LPCB ref. 463u

### LPCB CERTIFIED RATINGS



## APPLICATION

**LH**

Light Hazard includes occupancies such as certain areas of educational institutions, offices, etc. with low fire loads and low combustibility and with no single compartment greater than 126 m<sup>2</sup> with a fire resistance of at least 30 min.

**OH**

Ordinary Hazard includes occupancies such as Hospitals, Hotels, Sheet Metal Product Factories, etc. where combustible materials with a medium fire load and medium combustibility are processed or manufactured.

**HHP**

High Hazard, Process, includes various occupancies where the materials concerned have a high fire load and high combustibility and are capable of developing a quickly spreading or intense fire.

**HHS**

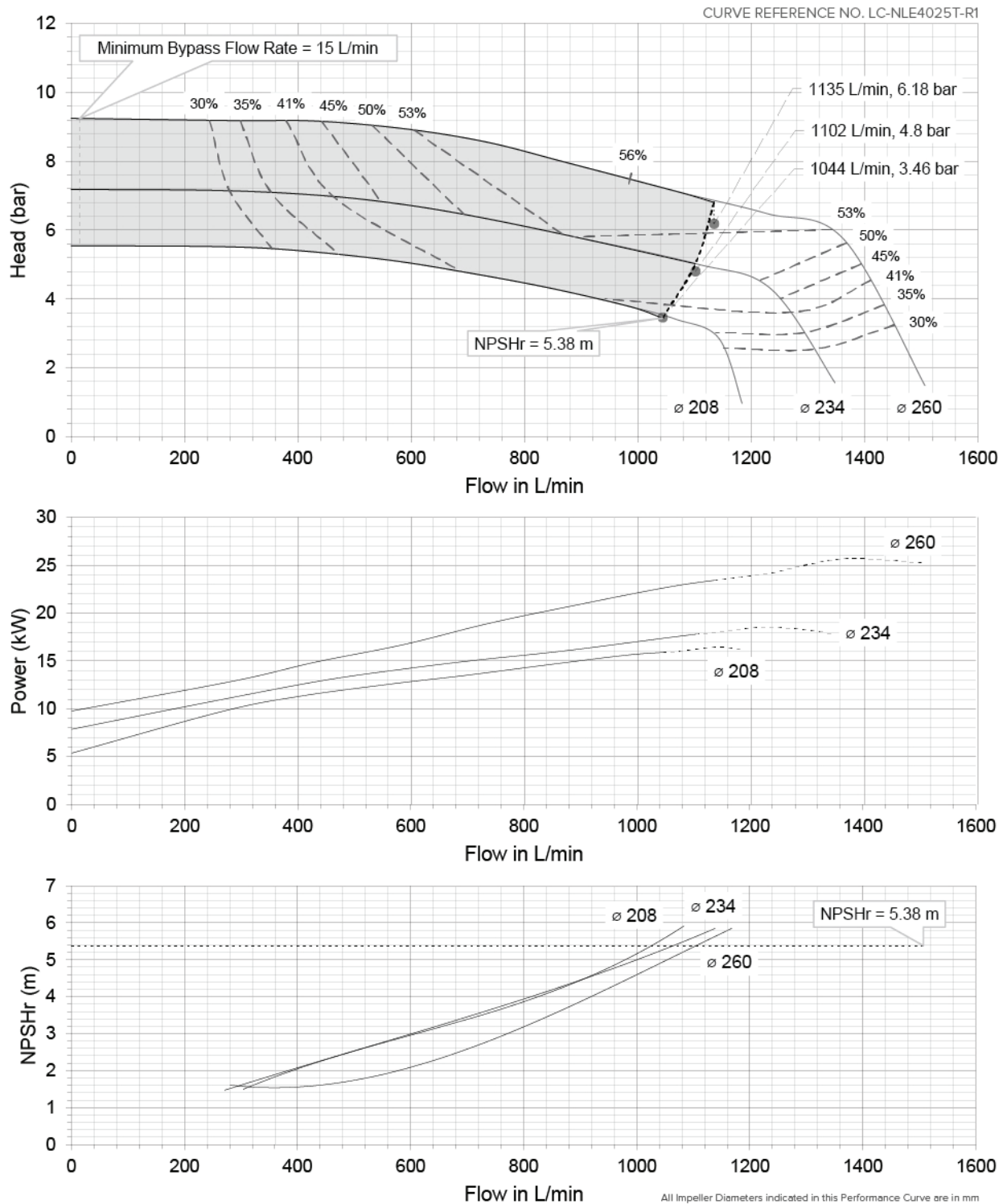
High Hazard, Storage, covers the storage of goods where the height of storage exceeds the limits permitted for the corresponding storage categories under Ordinary Hazard.



# NL-E-40-25T : 2900 RPM



## PERFORMANCE CURVE



➤ The above pump is LPCB approved for use at flow rates at which the NPSH required is below 5.38m as specified in LPS 1131, and it is approved with impeller diameters within the ranges shown above, to provide flows and heads within those ranges.

The approved region of the performance curve is highlighted above (refer Head -v- Flow Rate Curve).



# NL-E-40-25T DATASHEET



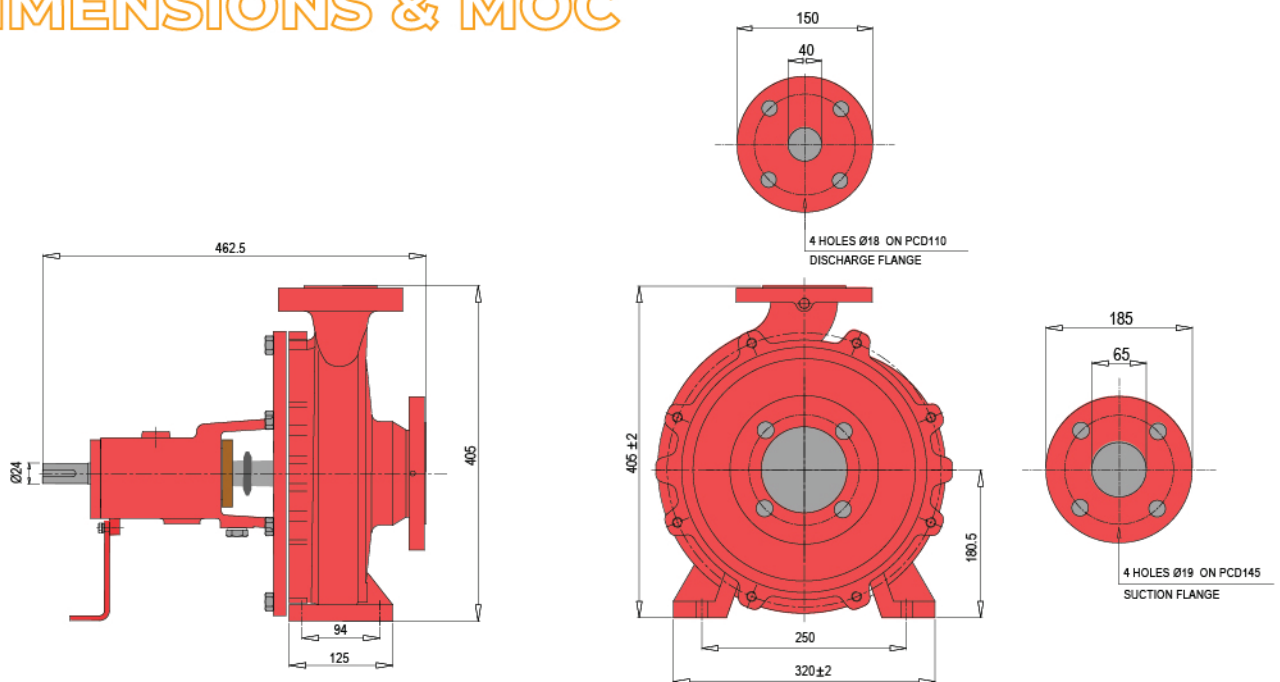
## LPCB CERTIFICATION RATING

MODEL	NL-E-40-25T		
Minimum Bypass Flow Rate (l/min)	15	15	15
Suction Inlet Diameter / Discharge Outlet Diameter (mm)	65/40	65/40	65/40
Impeller Diameter (mm)	208*	234*	260*
Rated Speed (Rev/min)	2900	2900	2900
Rated Flow (L/min) (at NPSH req. $\leq 5.38m$ )	1044	1102	1135
Rated Head (bar) (at NPSH req. $\leq 5.38m$ )	3.46	4.8	6.18
Closed Valve Head (bar)	5.55	7.18	9.25
LPCB Ref. No.	463u/06	463u/06	463u/06



\* These pumps are approved with impeller diameters, where applicable, speeds within the ranges shown, to provide flows and heads within those ranges.

## DIMENSIONS & MOC



■ CASING : CAST IRON

■ SHAFT : MEDIUM CARBON STEEL

■ IMPELLER : STAINLESS STEEL

■ BEARING HOUSING : CAST IRON

■ SHAFT SLEEVE : STAINLESS STEEL

■ WEAR RING: CAST IRON

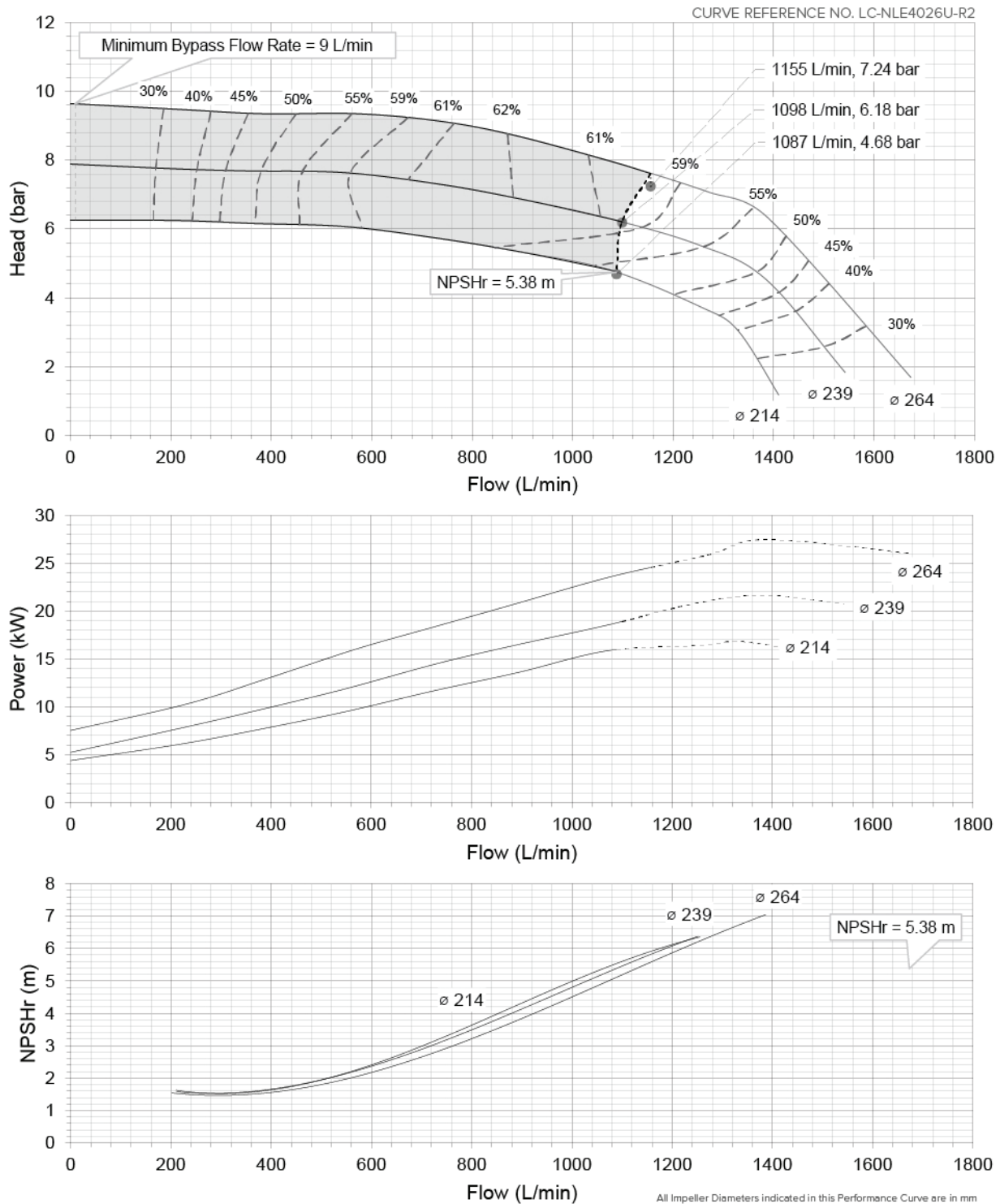


# NL-E-40-26C : 2900 RPM



LPS 1131 Cert/LPCB ref. 463u/01

## PERFORMANCE CURVE



➤ The above pump is LPCB approved for use at flow rates at which the NPSH required is below 5.38m as specified in LPS 1131, and it is approved with impeller diameters within the ranges shown above, to provide flows and heads within those ranges.

The approved region of the performance curve is highlighted above (refer Head -v- Flow Rate Curve).

# NL-E-40-26C DATASHEET



LPS 1131 Cert/LPCB ref. 463u/01

## LPCB CERTIFICATION RATING

### MODEL

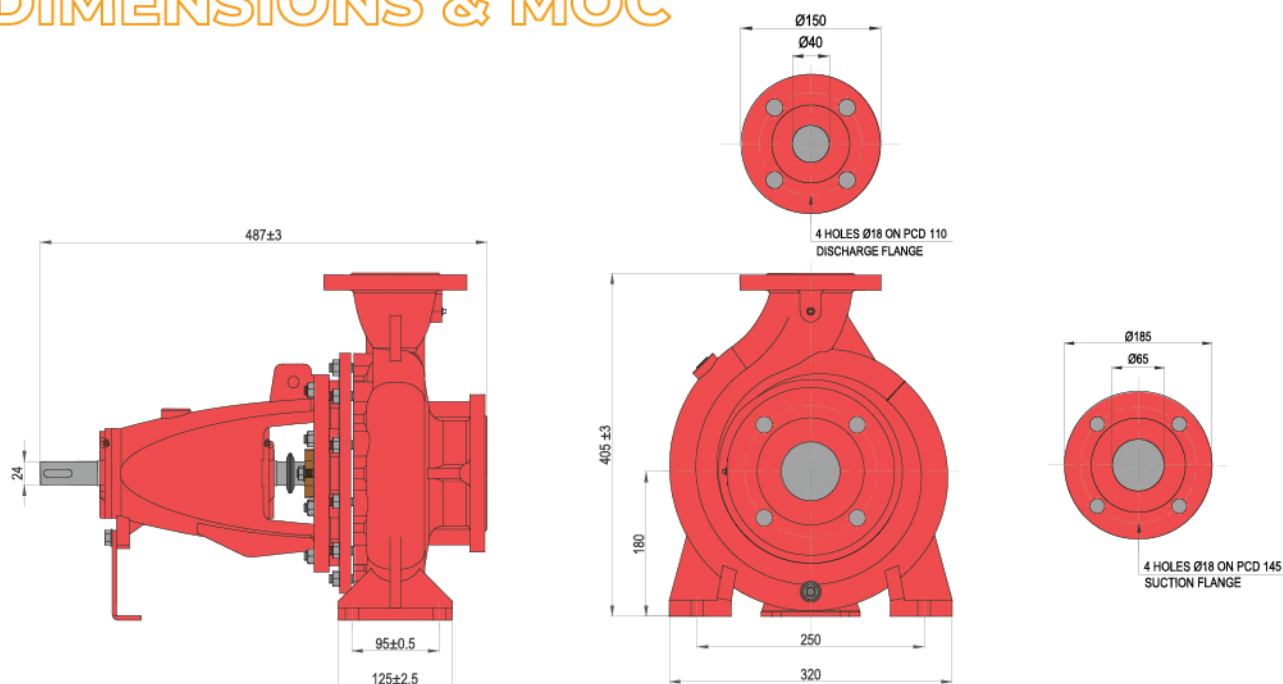
### NL-E-40-26C

Minimum Bypass Flow Rate (l/min)	9	9	9
Suction Inlet Diameter / Discharge Outlet Diameter (mm)	65/40	65/40	65/40
Impeller Diameter (mm)	214*	239*	264*
Rated Speed (Rev/min)	2900	2900	2900
Rated Flow (L/min) (at NPSH req. ≤ 5.38m)	1087	1098	1155
Rated Head (bar) (at NPSH req. ≤ 5.38m)	4.68	6.18	7.24
Closed Valve Head (bar)	6.25	7.89	9.65
LPCB Ref. No.	463u/01	463u/01	463u/01



\* These pumps are approved with impeller diameters, where applicable, speeds within the ranges shown, to provide flows and heads within those ranges.

## DIMENSIONS & MOC



■ CASING : CAST IRON

■ SHAFT : STAINLESS STEEL

■ IMPELLER : BRONZE

■ BEARING HOUSING : CAST IRON

■ SHAFT SLEEVE : STAINLESS STEEL

■ WEAR RING: BRONZE

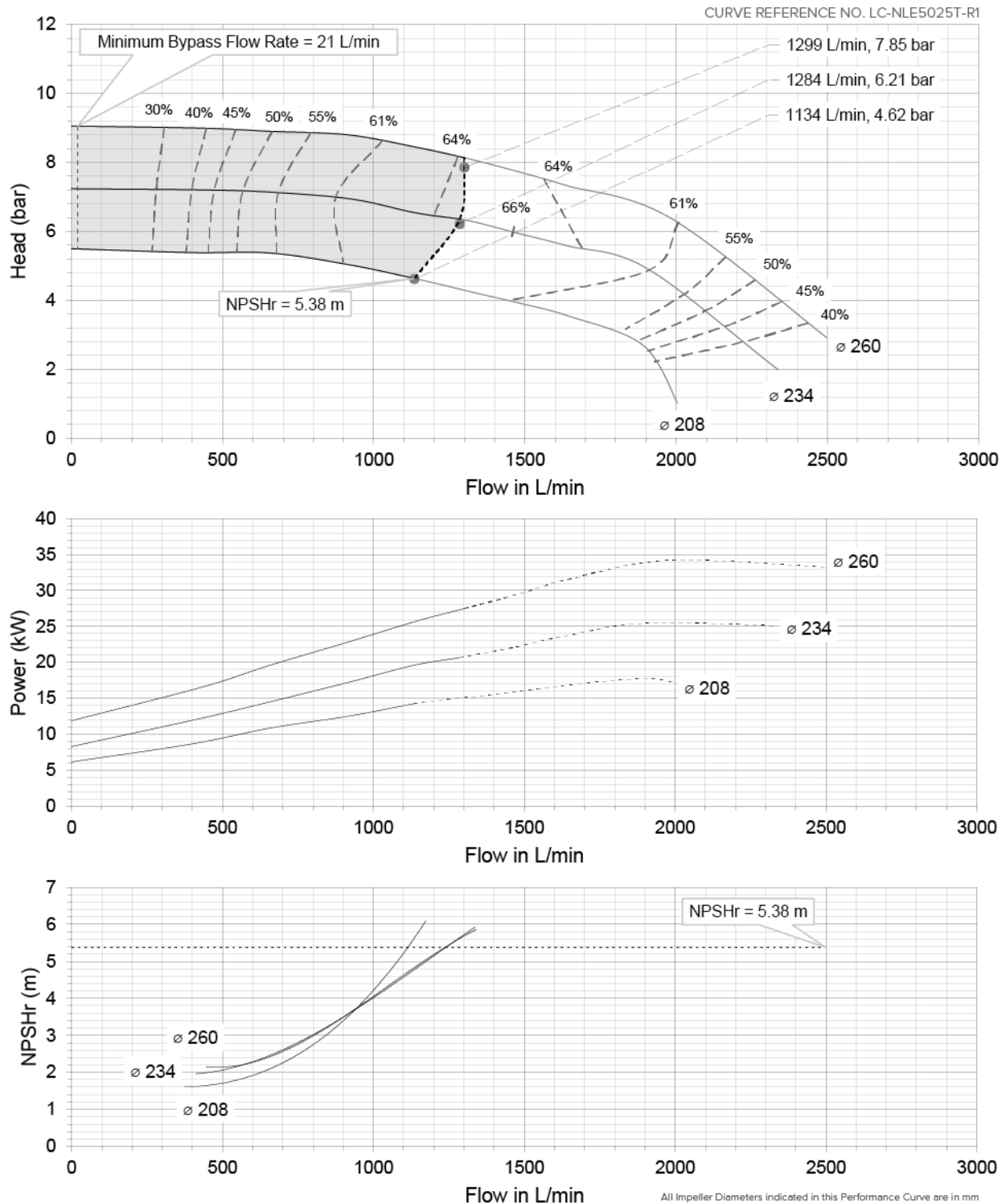


# NL-E-50-25T : 2900 RPM



LPS 1131 Cert/LPCB ref. 463u/07

## PERFORMANCE CURVE



➤ The above pump is LPCB approved for use at flow rates at which the NPSH required is below 5.38m as specified in LPS 1131, and it is approved with impeller diameters within the ranges shown above, to provide flows and heads within those ranges.

The approved region of the performance curve is highlighted above (refer Head -v- Flow Rate Curve).

# NL-E-50-25T DATASHEET



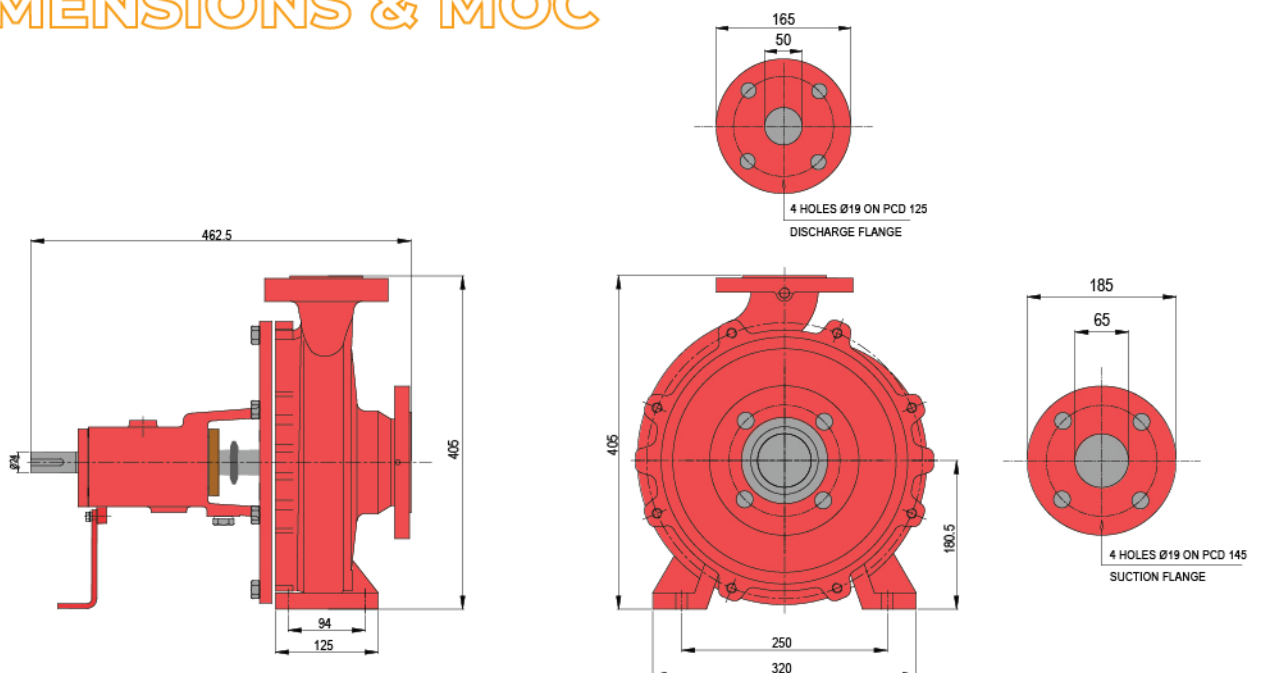
## LPCB CERTIFICATION RATING

MODEL	NL-E-50-25T		
Minimum Bypass Flow Rate (l/min)	21	21	21
Suction Inlet Diameter / Discharge Outlet Diameter (mm)	65/50	65/50	65/50
Impeller Diameter (mm)	208*	234*	260*
Rated Speed (Rev/min)	2900	2900	2900
Rated Flow (L/min) (at NPSH req. $\leq 5.38m$ )	1134	1284	1299
Rated Head (bar) (at NPSH req. $\leq 5.38m$ )	4.62	6.21	7.85
Closed Valve Head (bar)	5.5	7.24	9.05
LPCB Ref. No.	463u/07	463u/07	463u/07



\* These pumps are approved with impeller diameters, where applicable, speeds within the ranges shown, to provide flows and heads within those ranges.

## DIMENSIONS & MOC



■ CASING : CAST IRON

■ SHAFT : MEDIUM CARBON STEEL

■ IMPELLER : STAINLESS STEEL

■ BEARING HOUSING : CAST IRON

■ SHAFT SLEEVE : STAINLESS STEEL

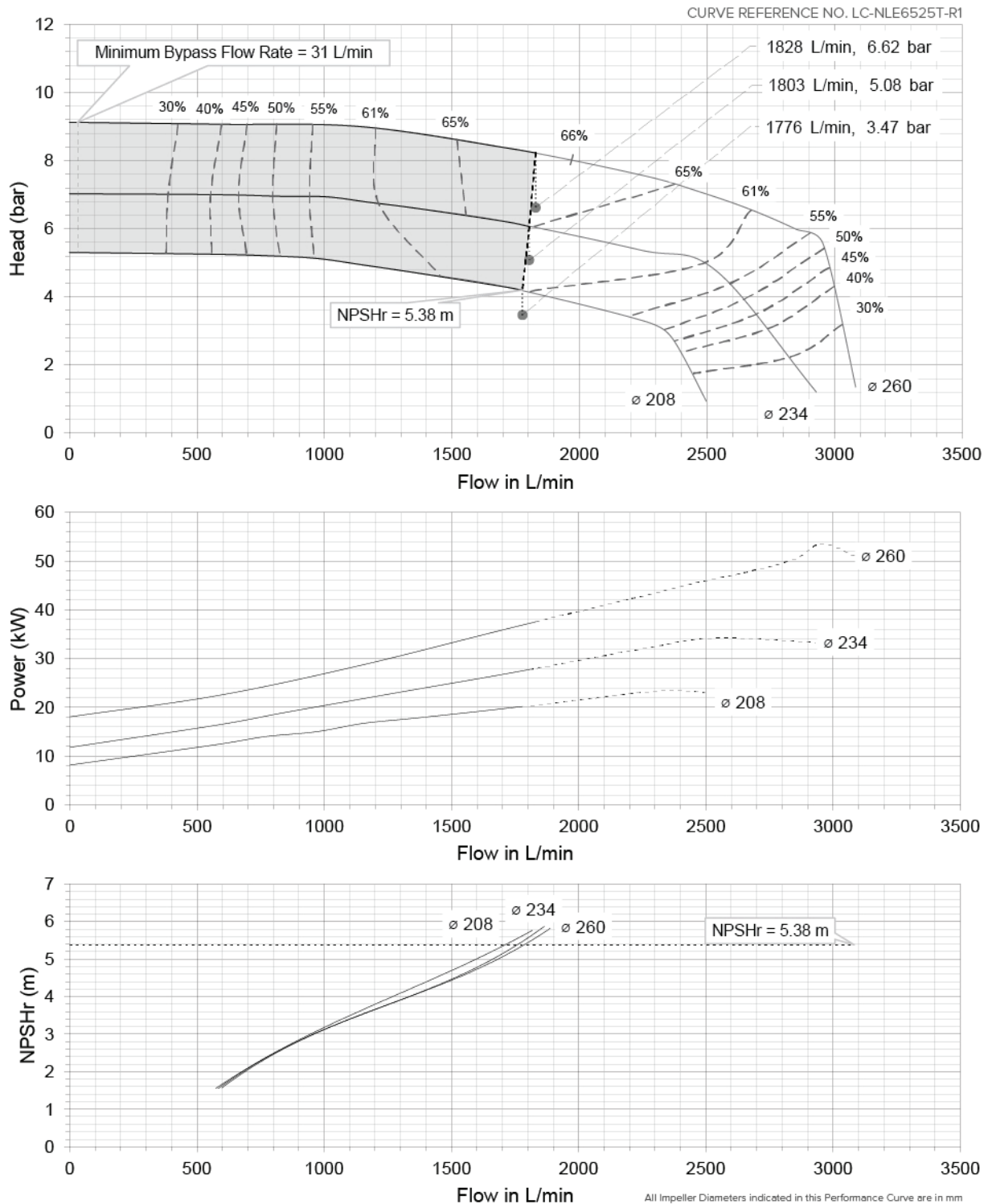
■ WEAR RING: CAST IRON



# NL-E-65-25T : 2900 RPM



## PERFORMANCE CURVE



➤ The above pump is LPCB approved for use at flow rates at which the NPSH required is below 5.38m as specified in LPS 1131, and it is approved with impeller diameters within the ranges shown above, to provide flows and heads within those ranges.

The approved region of the performance curve is highlighted above (refer Head -v- Flow Rate Curve).

# NL-E-65-25T DATASHEET



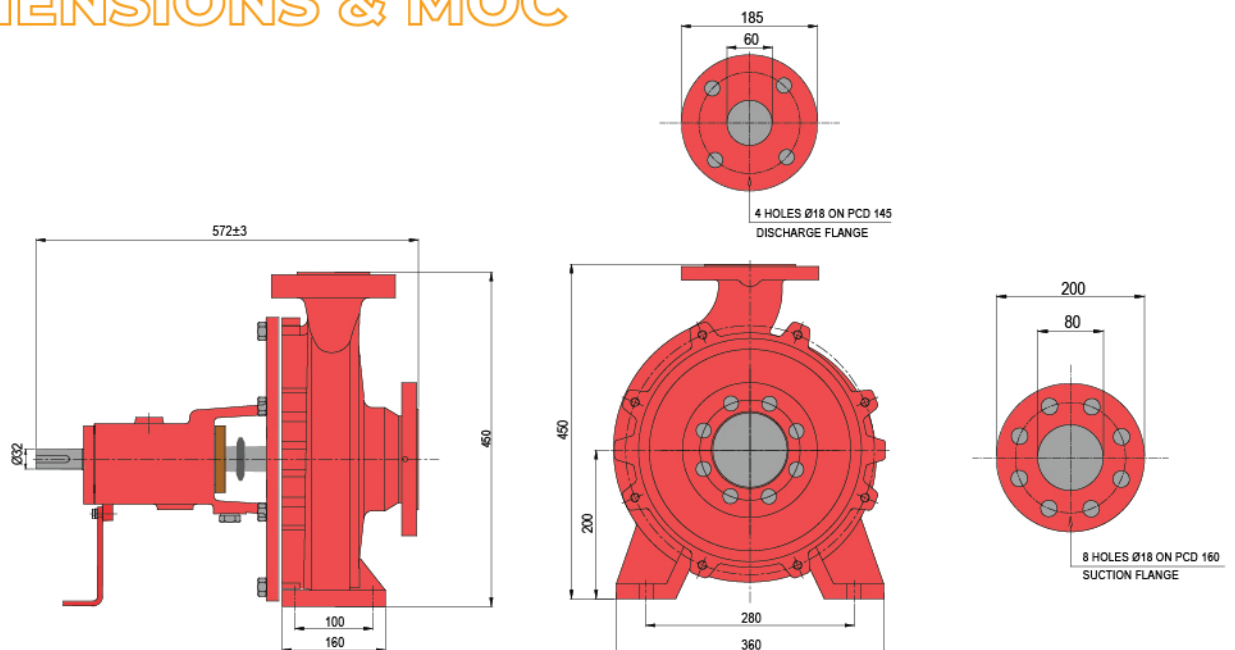
## LPCB CERTIFICATION RATING

MODEL	NL-E-65-25T		
Minimum Bypass Flow Rate (l/min)	31	31	31
Suction Inlet Diameter / Discharge Outlet Diameter (mm)	80/65	80/65	80/65
Impeller Diameter (mm)	208*	234*	260*
Rated Speed (Rev/min)	2900	2900	2900
Rated Flow (L/min) (at NPSH req. $\leq 5.38m$ )	1776	1803	1828
Rated Head (bar) (at NPSH req. $\leq 5.38m$ )	3.47	5.08	6.62
Closed Valve Head (bar)	5.31	7.03	9.13
LPCB Ref. No.	463u/08	463u/08	463u/08



\* These pumps are approved with impeller diameters, where applicable, speeds within the ranges shown, to provide flows and heads within those ranges.

## DIMENSIONS & MOC



■ CASING : CAST IRON

■ SHAFT : MEDIUM CARBON STEEL

■ IMPELLER : STAINLESS STEEL

■ BEARING HOUSING : CAST IRON

■ SHAFT SLEEVE : STAINLESS STEEL

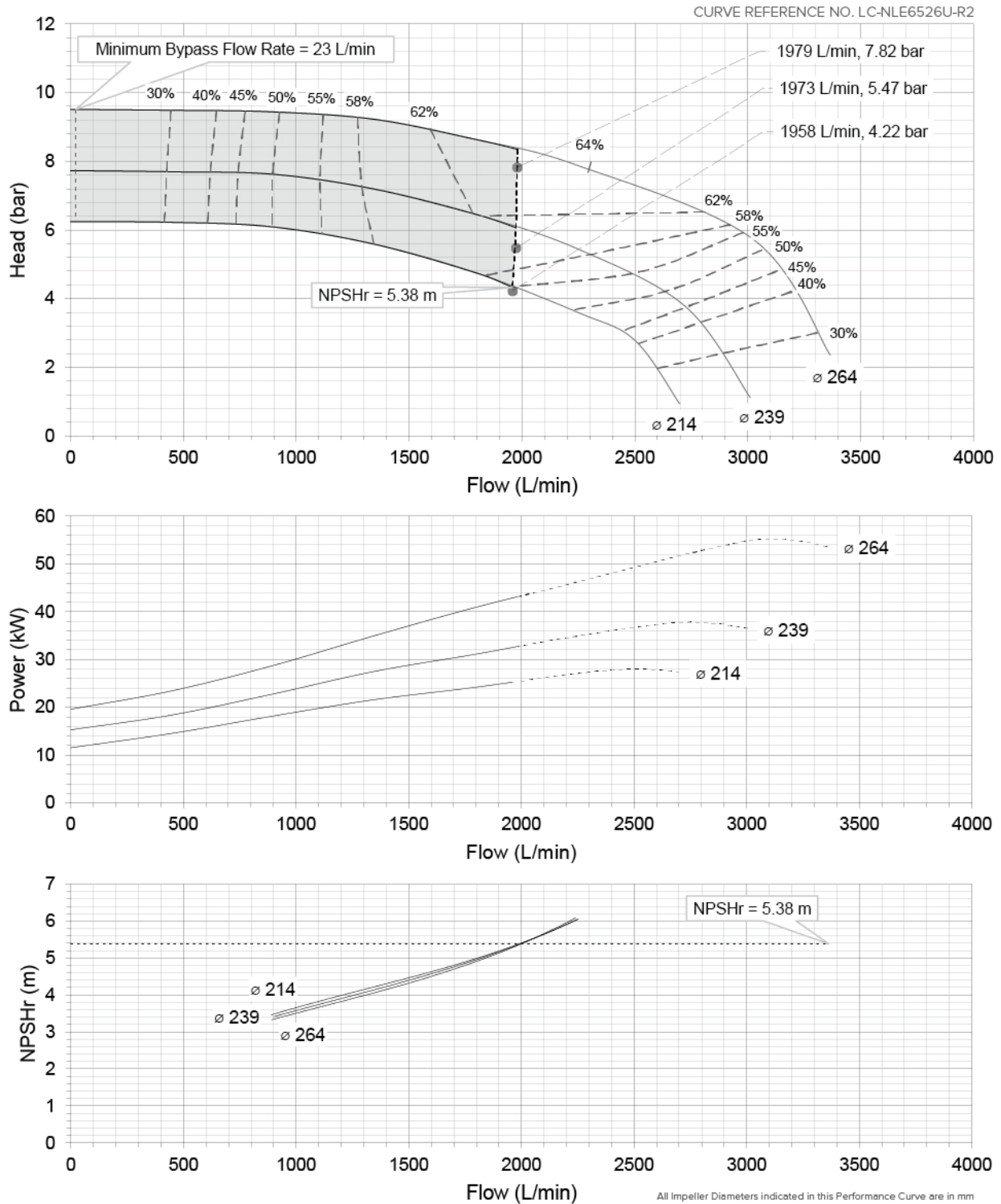
■ WEAR RING: CAST IRON



# NL-E-65-26C : 2900 RPM



## PERFORMANCE CURVE



► The above pump is LPCB approved for use at flow rates at which the NPSH required is below 5.38m as specified in LPS 1131, and it is approved with impeller diameters within the ranges shown above, to provide flows and heads within those ranges.

The approved region of the performance curve is highlighted above (refer Head -v- Flow Rate Curve).

# NL-E-65-26C DATASHEET



LPS 1131 Cert/LPCB ref. 463u/02

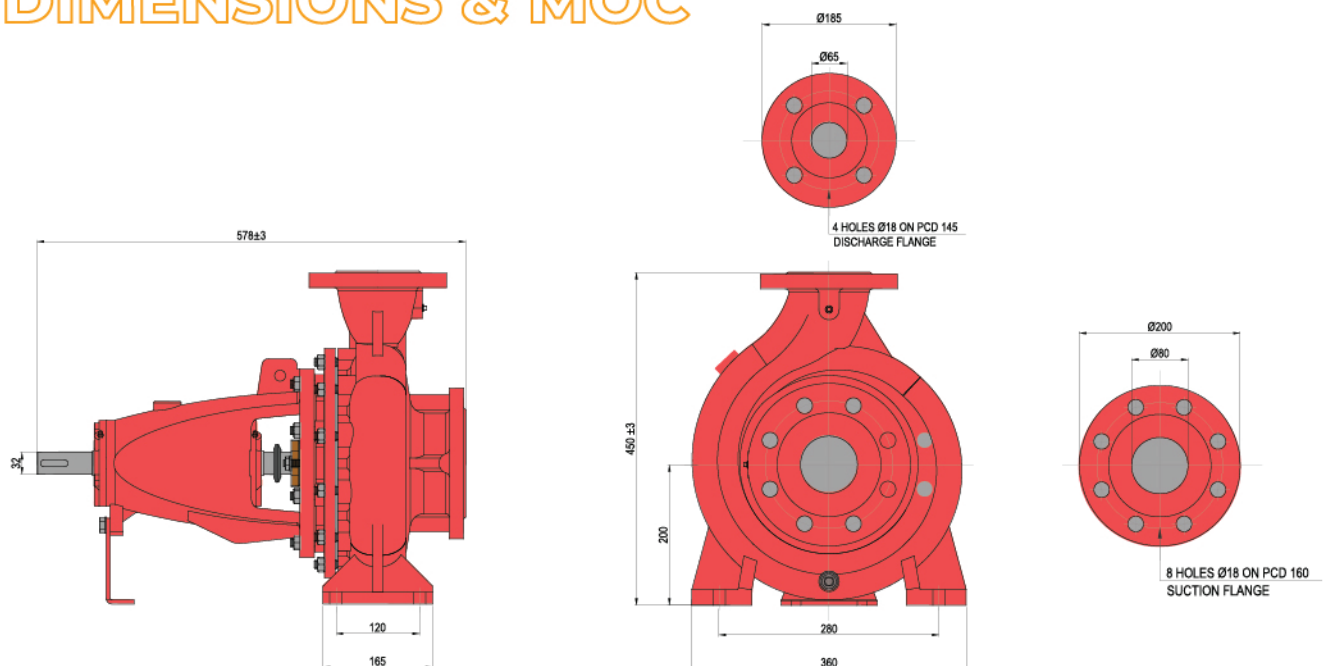
## LPCB CERTIFICATION RATING

MODEL	NL-E-65-26C		
Minimum Bypass Flow Rate (l/min)	23	23	23
Suction Inlet Diameter / Discharge Outlet Diameter (mm)	80/65	80/65	80/65
Impeller Diameter (mm)	214*	239*	264*
Rated Speed (Rev/min)	2900	2900	2900
Rated Flow (L/min) (at NPSH req. $\leq 5.38m$ )	1958	1973	1979
Rated Head (bar) (at NPSH req. $\leq 5.38m$ )	4.22	5.47	7.82
Closed Valve Head (bar)	6.24	7.73	9.52
LPCB Ref. No.	463u/02	463u/02	463u/02



\* These pumps are approved with impeller diameters, where applicable, speeds within the ranges shown, to provide flows and heads within those ranges.

## DIMENSIONS & MOC



■ CASING : CAST IRON

■ SHAFT : ALLOY STEEL

■ IMPELLER : BRONZE

■ BEARING HOUSING : CAST IRON

■ SHAFT SLEEVE : STAINLESS STEEL

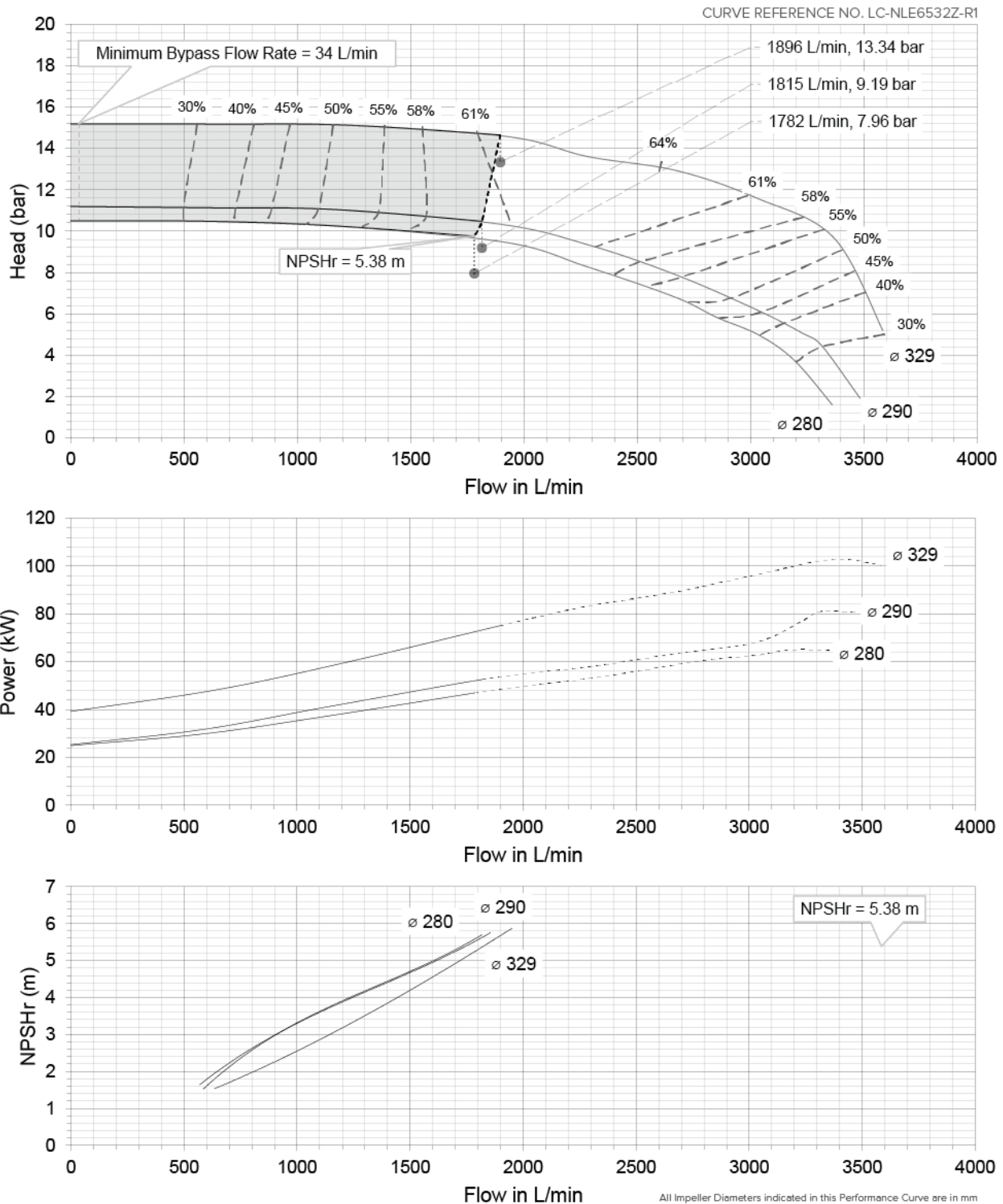
■ WEAR RING: BRONZE



# NL-E-65-32B : 2900 RPM



## PERFORMANCE CURVE



➤ The above pump is LPCB approved for use at flow rates at which the NPSH required is below 5.38m as specified in LPS 1131, and it is approved with impeller diameters within the ranges shown above, to provide flows and heads within those ranges.

The approved region of the performance curve is highlighted above (refer Head -v- Flow Rate Curve).

# NL-E-65-32B DATASHEET



LPS 1131 Cert/LPCB ref. 463u/10

## LPCB CERTIFICATION RATING

### MODEL

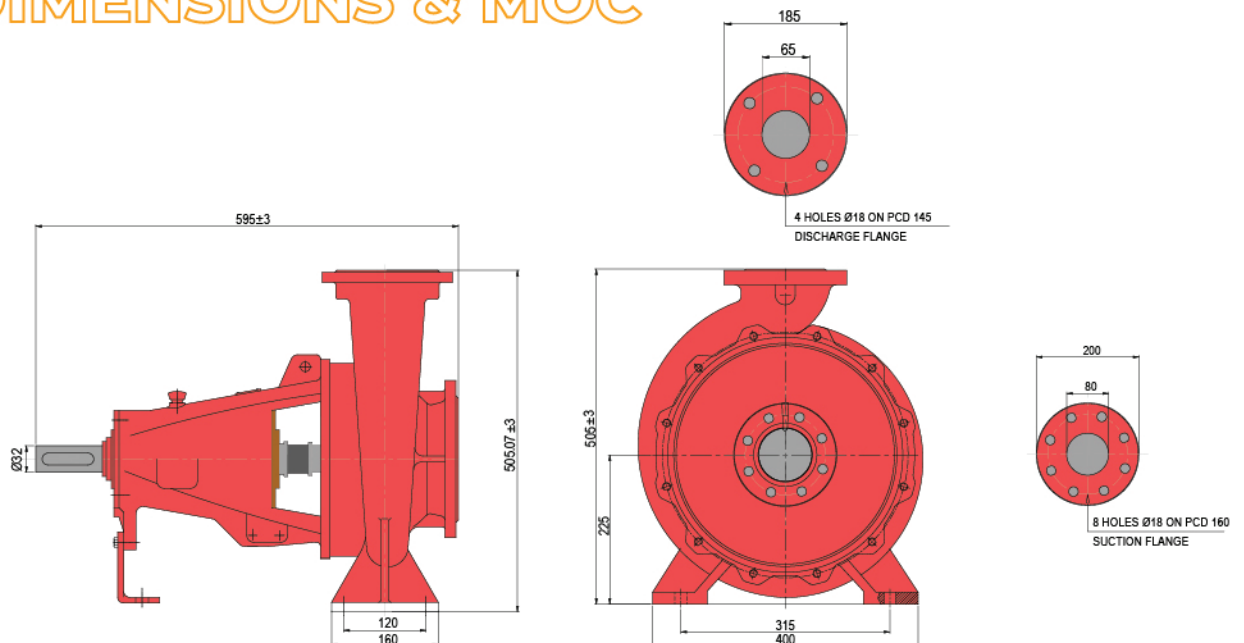
### NL-E-65-32B

Minimum Bypass Flow Rate (l/min)	34	34	34
Suction Inlet Diameter / Discharge Outlet Diameter (mm)	80/65	80/65	80/65
Impeller Diameter (mm)	280*	290*	329*
Rated Speed (Rev/min)	2900	2900	2900
Rated Flow (L/min) (at NPSH req. $\leq 5.38m$ )	1782	1815	1896
Rated Head (bar) (at NPSH req. $\leq 5.38m$ )	7.96	9.19	13.34
Closed Valve Head (bar)	10.5	11.2	15.2
LPCB Ref. No.	463u/10	463u/10	463u/10



\* These pumps are approved with impeller diameters, where applicable, speeds within the ranges shown, to provide flows and heads within those ranges.

## DIMENSIONS & MOC



■ CASING : CAST IRON

■ SHAFT : STAINLESS STEEL

■ IMPELLER : STAINLESS STEEL

■ BEARING HOUSING : CAST IRON

■ SHAFT SLEEVE : STAINLESS STEEL

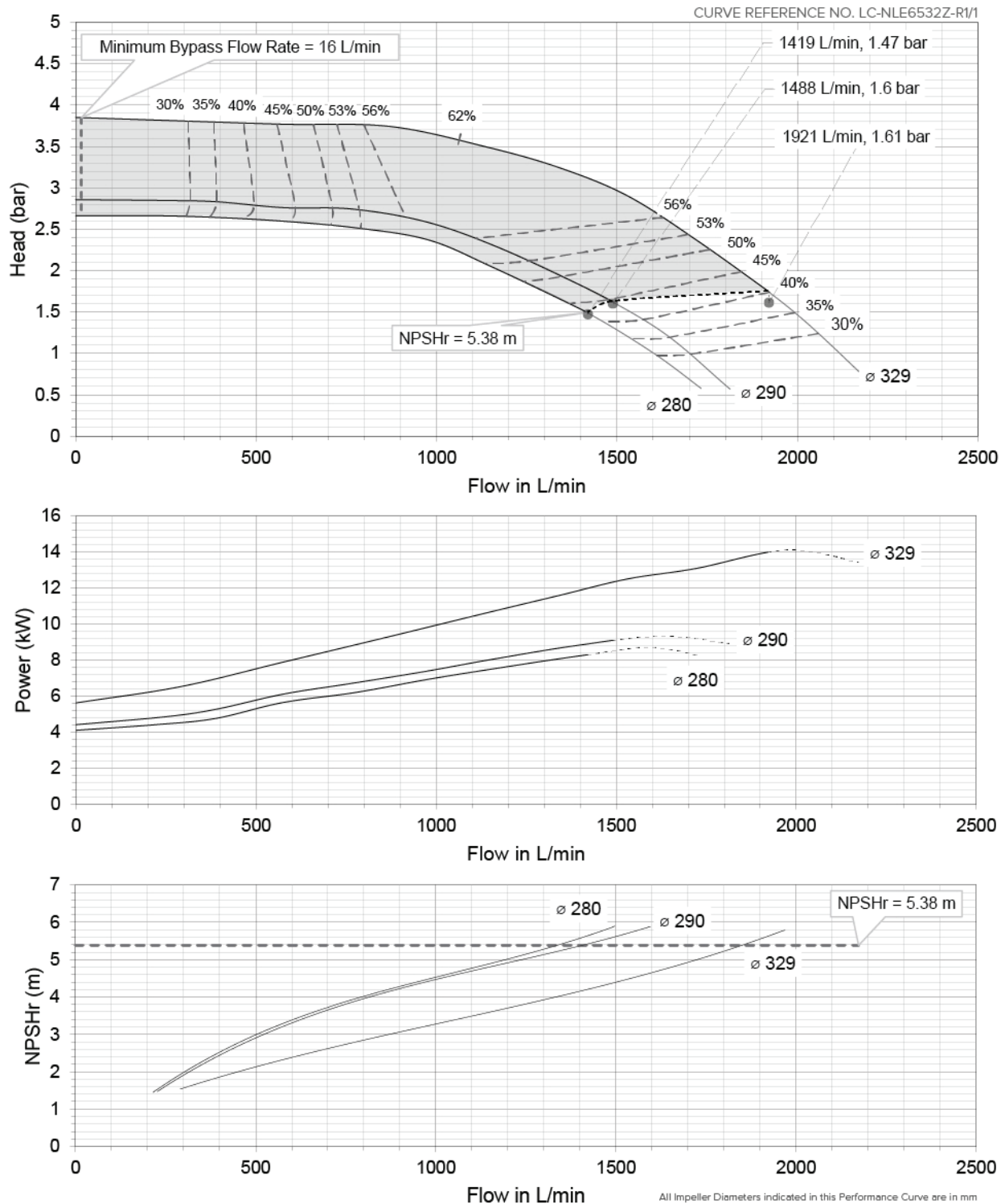
■ WEAR RING: CAST IRON



# NL-E-65-32B : 1450 RPM



## PERFORMANCE CURVE



➤ The above pump is LPCB approved for use at flow rates at which the NPSH required is below 5.38m as specified in LPS 1131, and it is approved with impeller diameters within the ranges shown above, to provide flows and heads within those ranges.

The approved region of the performance curve is highlighted above (refer Head -v- Flow Rate Curve).

# NL-E-65-32B DATASHEET



## LPCB CERTIFICATION RATING

### MODEL

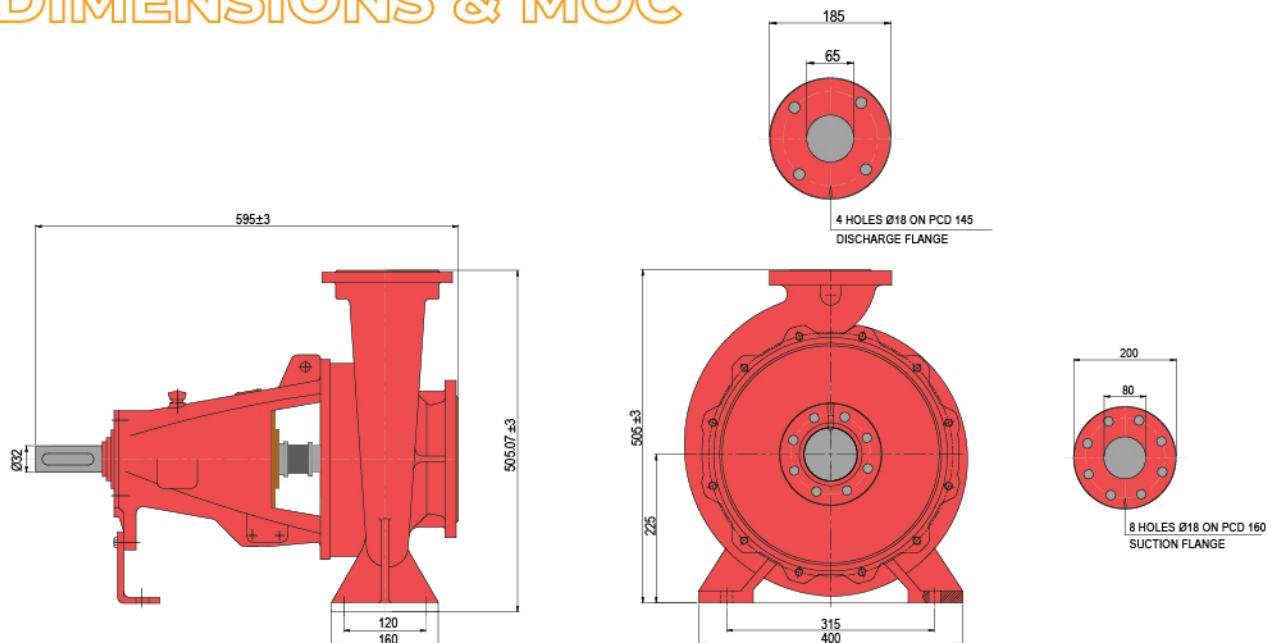
### NL-E-65-32B

Minimum Bypass Flow Rate (l/min)	16	16	16
Suction Inlet Diameter / Discharge Outlet Diameter (mm)	80/65	80/65	80/65
Impeller Diameter (mm)	280*	290*	329*
Rated Speed (Rev/min)	1450	1450	1450
Rated Flow (L/min) (at NPSH req. $\leq 5.38m$ )	1419	1488	1921
Rated Head (bar) (at NPSH req. $\leq 5.38m$ )	1.47	1.6	1.61
Closed Valve Head (bar)	2.66	2.86	3.85
LPCB Ref. No.	463u/13	463u/13	463u/13



\* These pumps are approved with impeller diameters, where applicable, speeds within the ranges shown, to provide flows and heads within those ranges.

## DIMENSIONS & MOC



■ CASING : CAST IRON

■ SHAFT : STAINLESS STEEL

■ IMPELLER : STAINLESS STEEL

■ BEARING HOUSING : CAST IRON

■ SHAFT SLEEVE : STAINLESS STEEL

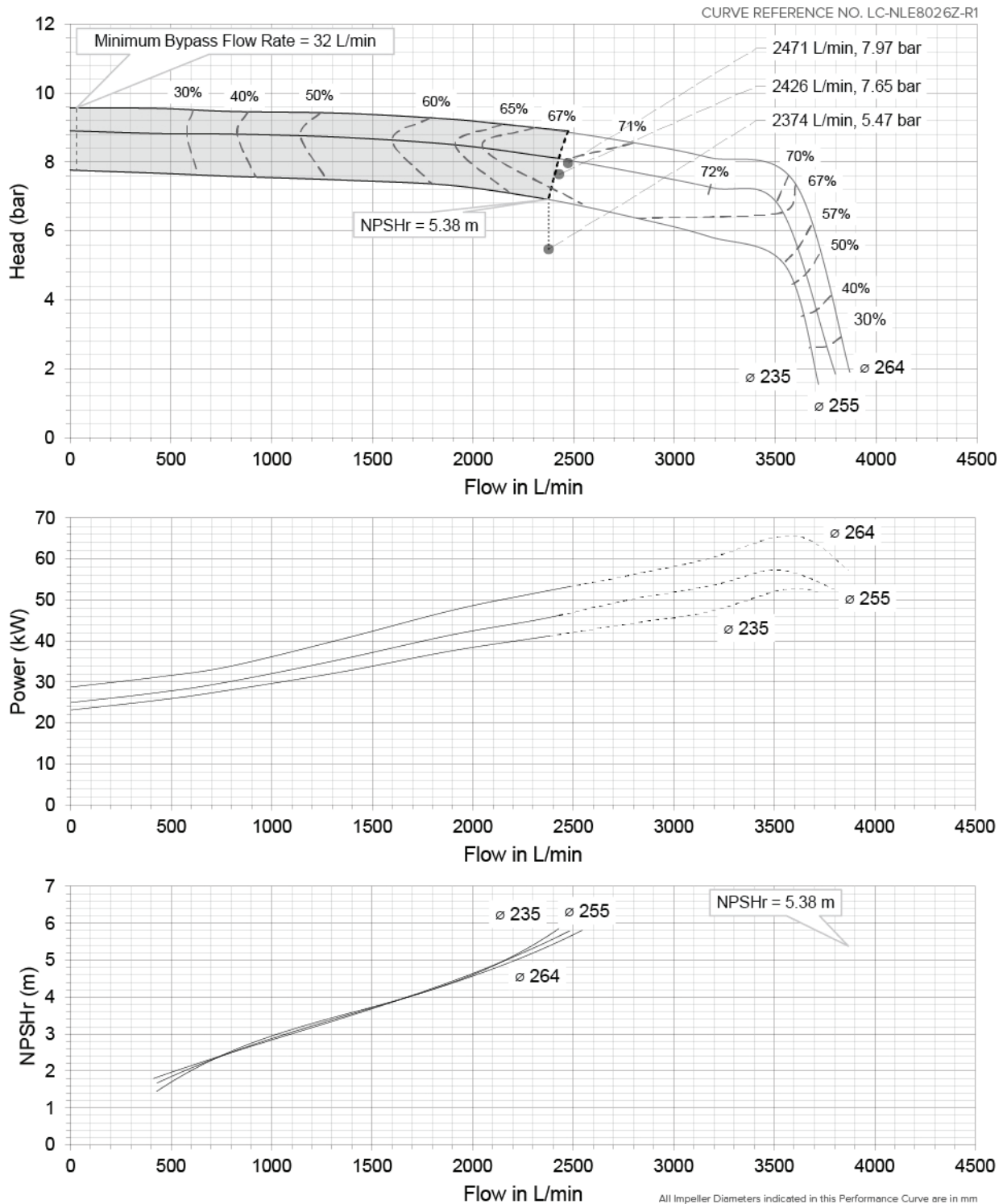
■ WEAR RING: CAST IRON



# NL-E-80-26B : 2900 RPM



## PERFORMANCE CURVE



► The above pump is LPCB approved for use at flow rates at which the NPSH required is below 5.38m as specified in LPS 1131, and it is approved with impeller diameters within the ranges shown above, to provide flows and heads within those ranges.

The approved region of the performance curve is highlighted above (refer Head -v- Flow Rate Curve).

# NL-E-80-26B DATASHEET



LPS 1131 Cert/LPCB ref. 463u/11

## LPCB CERTIFICATION RATING

### MODEL

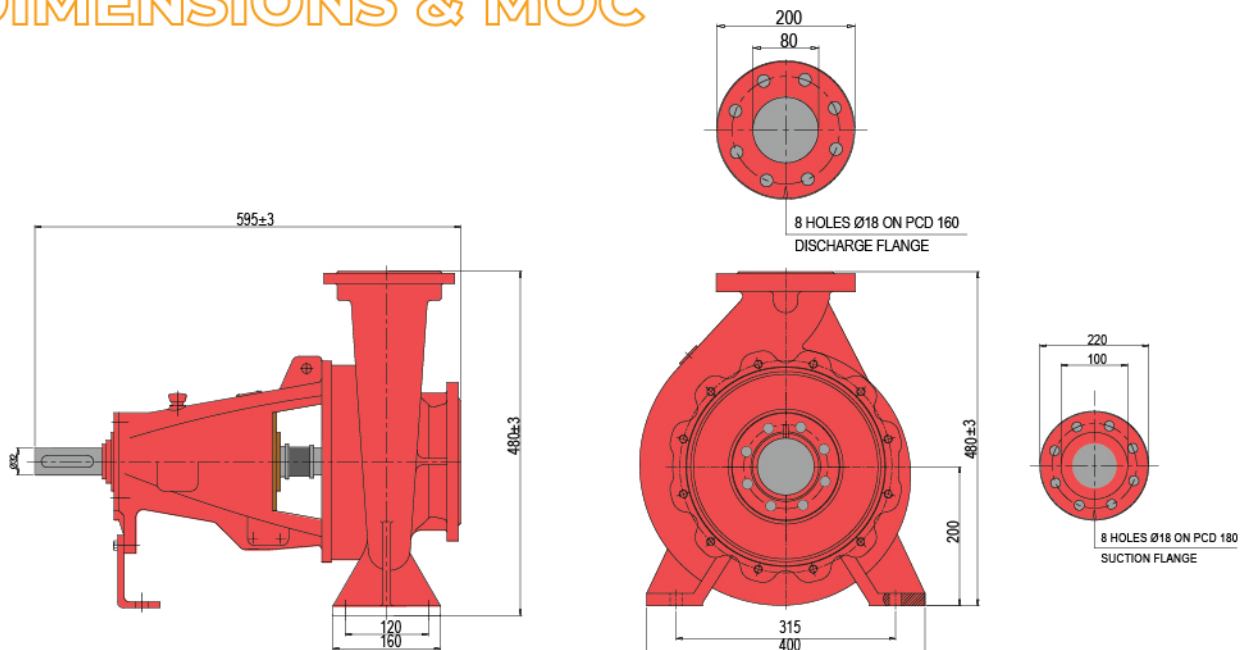
### NL-E-80-26B

Minimum Bypass Flow Rate (l/min)	32	32	32
Suction Inlet Diameter / Discharge Outlet Diameter (mm)	100/80	100/80	100/80
Impeller Diameter (mm)	235*	255*	264*
Rated Speed (Rev/min)	2900	2900	2900
Rated Flow (L/min) (at NPSH req. ≤ 5.38m)	2374	2426	2471
Rated Head (bar) (at NPSH req. ≤ 5.38m)	5.47	7.65	7.97
Closed Valve Head (bar)	7.77	8.91	9.58
LPCB Ref. No.	463u/11	463u/11	463u/11



\* These pumps are approved with impeller diameters, where applicable, speeds within the ranges shown, to provide flows and heads within those ranges.

## DIMENSIONS & MOC



■ CASING : CAST IRON

■ SHAFT : STAINLESS STEEL

■ IMPELLER : STAINLESS STEEL

■ BEARING HOUSING : CAST IRON

■ SHAFT SLEEVE : STAINLESS STEEL

■ WEAR RING: CAST IRON

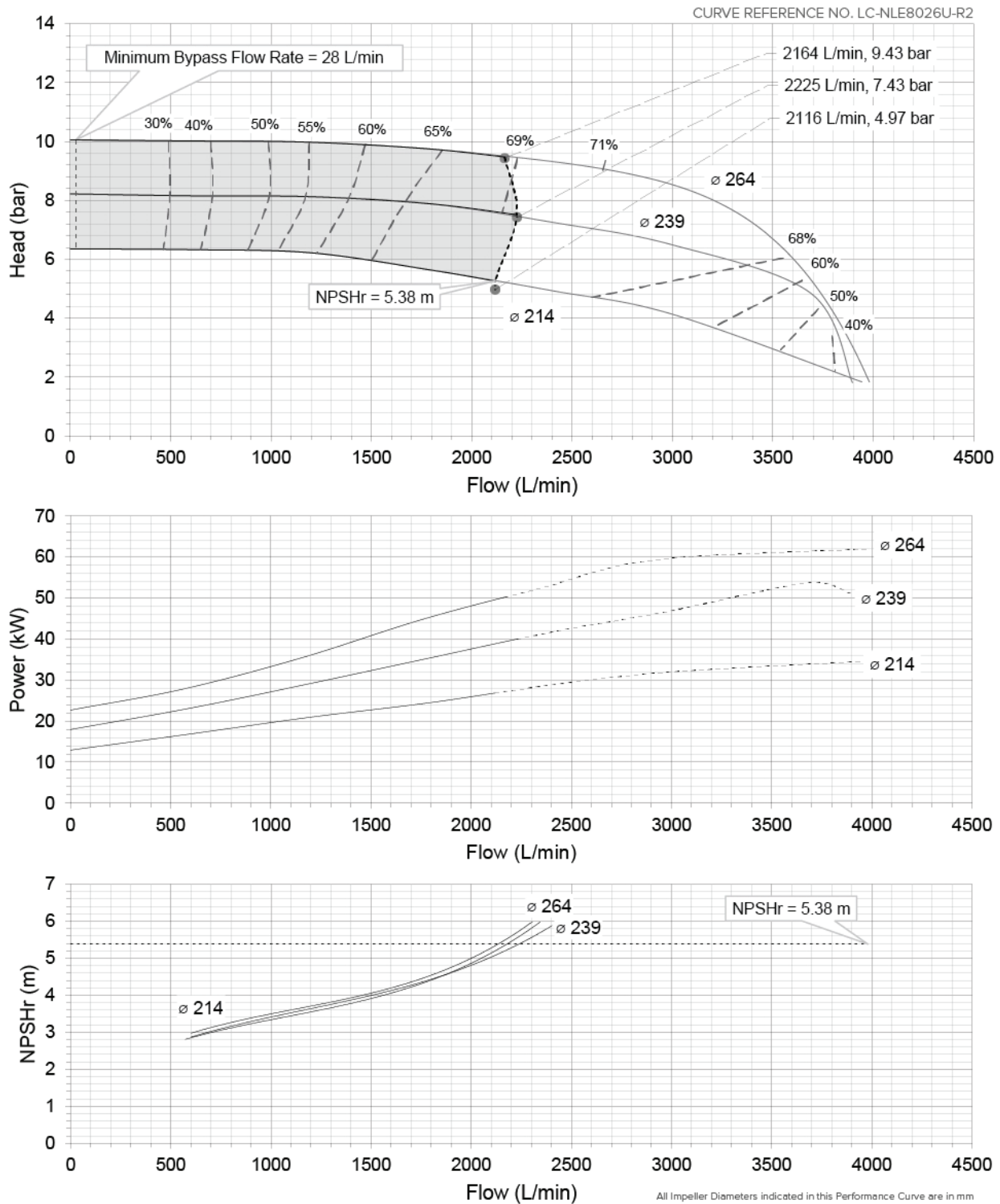


# NL-E-80-26C : 2900 RPM



LPS 1131 Cert/LPCB ref. 463u/03

## PERFORMANCE CURVE



► The above pump is LPCB approved for use at flow rates at which the NPSH required is below 5.38m as specified in LPS 1131, and it is approved with impeller diameters within the ranges shown above, to provide flows and heads within those ranges.

The approved region of the performance curve is highlighted above (refer Head -v- Flow Rate Curve).

# NL-E-80-26C DATASHEET



LPS 1131 Cert/LPCB ref. 463u/03

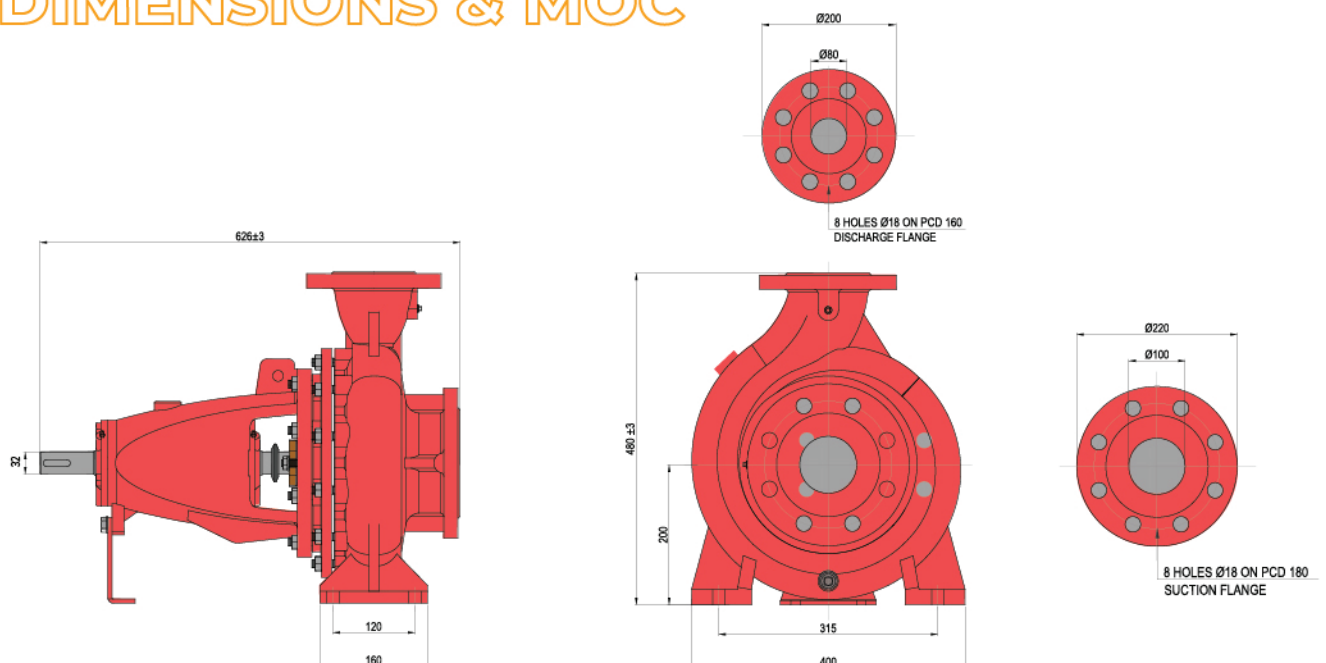
## LPCB CERTIFICATION RATING

MODEL	NL-E-80-26C		
Minimum Bypass Flow Rate (l/min)	28	28	28
Suction Inlet Diameter / Discharge Outlet Diameter (mm)	100/80	100/80	100/80
Impeller Diameter (mm)	214*	239*	264*
Rated Speed (Rev/min)	2900	2900	2900
Rated Flow (L/min) (at NPSH req. $\leq 5.38m$ )	2116	2225	2164
Rated Head (bar) (at NPSH req. $\leq 5.38m$ )	4.97	7.43	9.43
Closed Valve Head (bar)	6.35	8.22	10.07
LPCB Ref. No.	463u/03	463u/03	463u/03



\* These pumps are approved with impeller diameters, where applicable, speeds within the ranges shown, to provide flows and heads within those ranges.

## DIMENSIONS & MOC



■ CASING : CAST IRON

■ SHAFT : STAINLESS STEEL

■ IMPELLER : BRONZE

■ BEARING HOUSING : CAST IRON

■ SHAFT SLEEVE : STAINLESS STEEL

■ WEAR RING: BRONZE

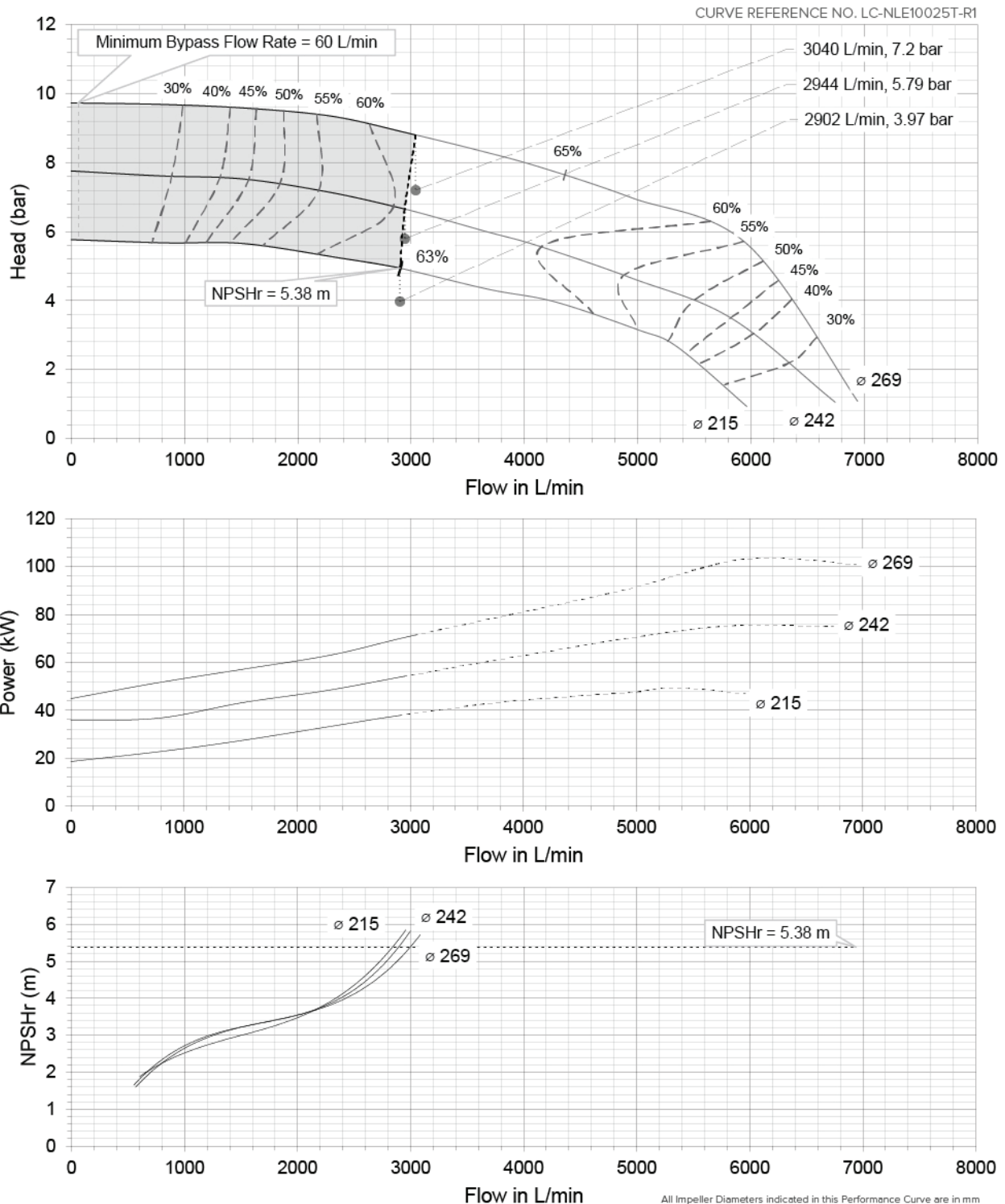


# NL-E-100-25T : 2900 RPM



LPS 1131 Cert/LPCB ref. 463u/09

## PERFORMANCE CURVE



▶ The above pump is LPCB approved for use at flow rates at which the NPSH required is below 5.38m as specified in LPS 1131, and it is approved with impeller diameters within the ranges shown above, to provide flows and heads within those ranges.

The approved region of the performance curve is highlighted above (refer Head -v- Flow Rate Curve).

# NL-E-100-25T DATASHEET



## LPCB CERTIFICATION RATING

### MODEL

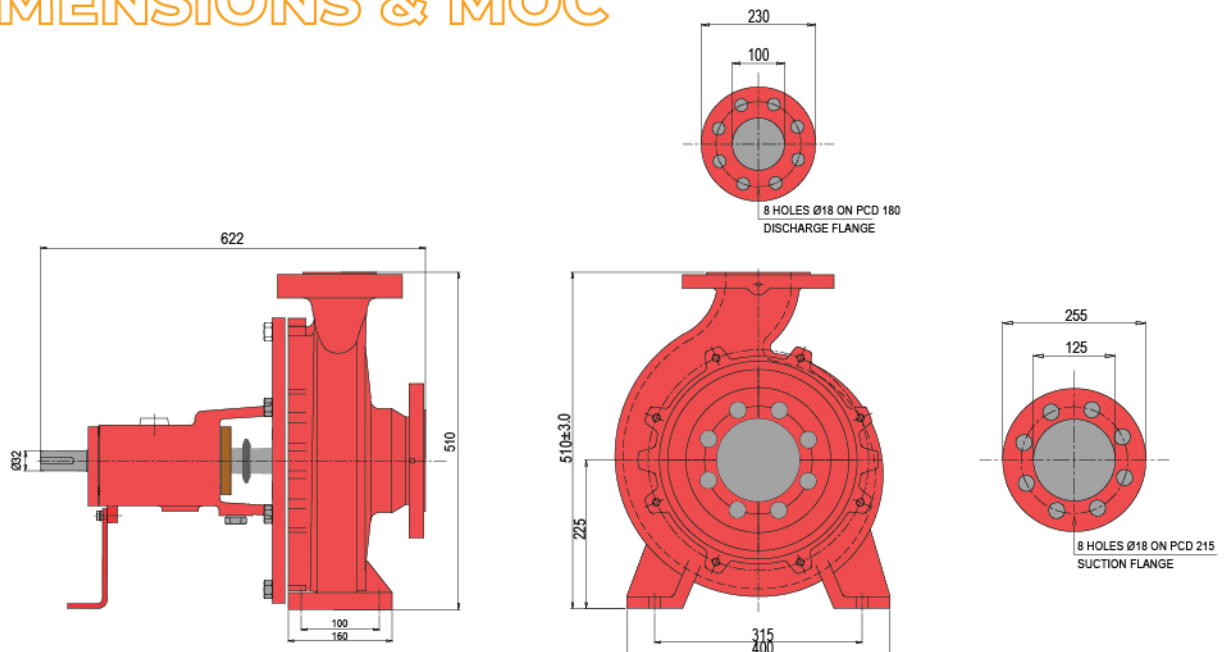
### NL-E-100-25T

Minimum Bypass Flow Rate (l/min)	60	60	60
Suction Inlet Diameter / Discharge Outlet Diameter (mm)	125/100	125/100	125/100
Impeller Diameter (mm)	215*	242*	269*
Rated Speed (Rev/min)	2900	2900	2900
Rated Flow (L/min) (at NPSH req. ≤ 5.38m)	2902	2944	3040
Rated Head (bar) (at NPSH req. ≤ 5.38m)	3.97	5.79	7.2
Closed Valve Head (bar)	5.76	7.76	9.73
LPCB Ref. No.	463u/09	463u/09	463u/09



\* These pumps are approved with impeller diameters, where applicable, speeds within the ranges shown, to provide flows and heads within those ranges.

## DIMENSIONS & MOC



■ CASING : CAST IRON

■ SHAFT : MEDIUM CARBON STEEL

■ IMPELLER : STAINLESS STEEL

■ BEARING HOUSING : CAST IRON

■ SHAFT SLEEVE : STAINLESS STEEL

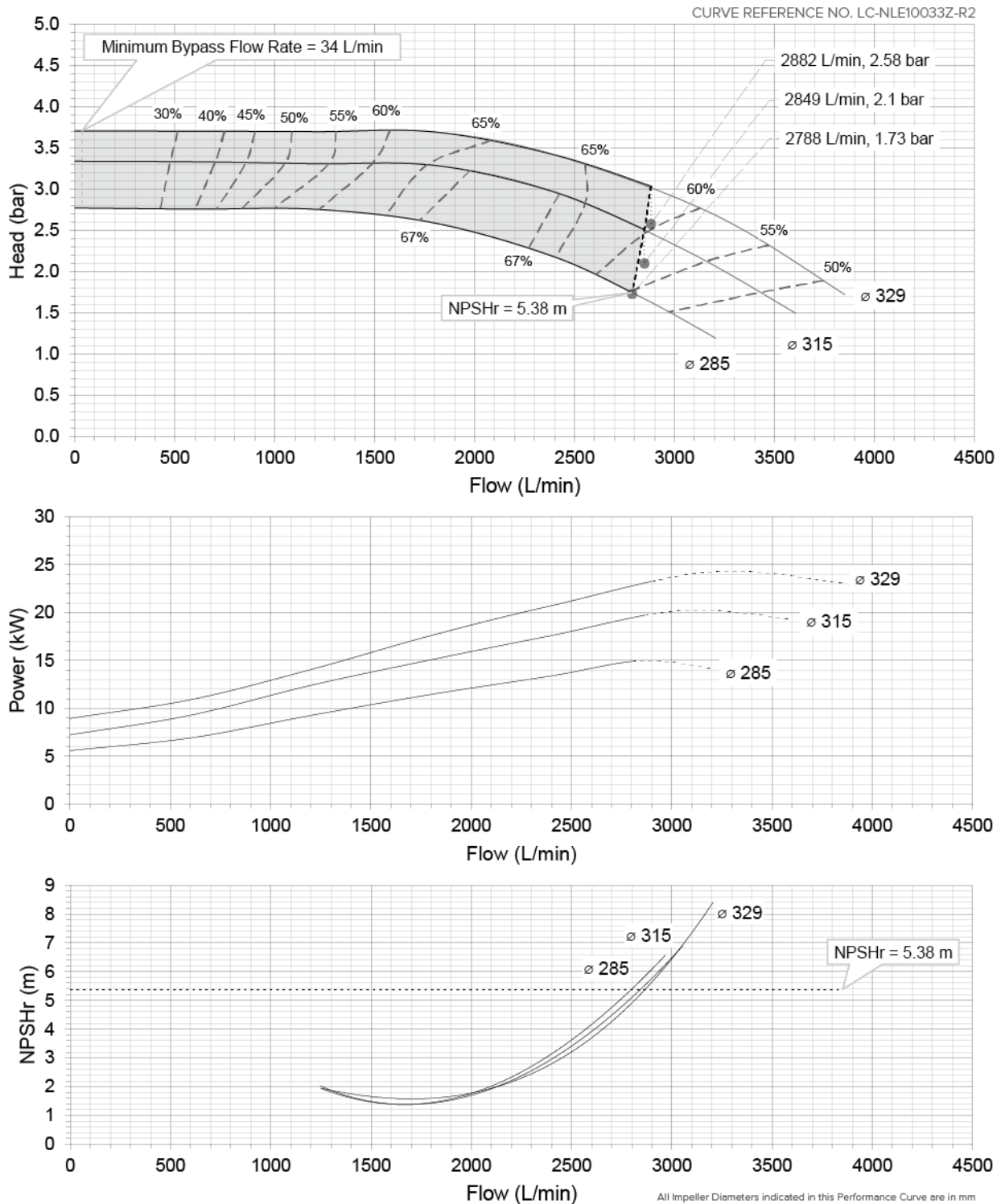
■ WEAR RING: CAST IRON



# NL-E-100-32B : 1450 RPM



## PERFORMANCE CURVE



► The above pump is LPCB approved for use at flow rates at which the NPSH required is below 5.38m as specified in LPS 1131, and it is approved with impeller diameters within the ranges shown above, to provide flows and heads within those ranges.

The approved region of the performance curve is highlighted above (refer Head -v- Flow Rate Curve).

# NL-E-100-32B DATASHEET



LPS 1131 Cert/LPCB ref. 463u/05

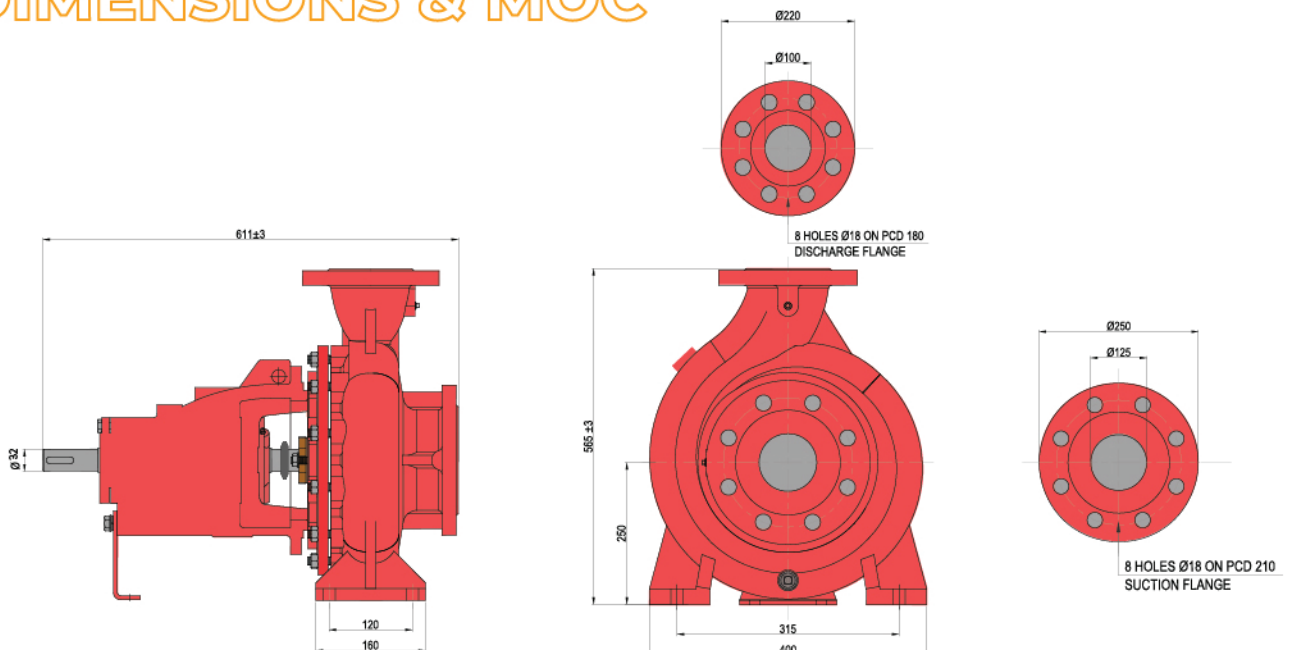
## LPCB CERTIFICATION RATING

MODEL	NL-E-100-32B		
Minimum Bypass Flow Rate (l/min)	34	34	34
Suction Inlet Diameter / Discharge Outlet Diameter (mm)	125/100	125/100	125/100
Impeller Diameter (mm)	285*	315*	329*
Rated Speed (Rev/min)	1450	1450	1450
Rated Flow (L/min) (at NPSH req. ≤ 5.38m)	2788	2849	2882
Rated Head (bar) (at NPSH req. ≤ 5.38m)	1.73	2.1	2.58
Closed Valve Head (bar)	2.78	3.34	3.71
LPCB Ref. No.	463u/05	463u/05	463u/05



\* These pumps are approved with impeller diameters, where applicable, speeds within the ranges shown, to provide flows and heads within those ranges.

## DIMENSIONS & MOC



■ CASING : CAST IRON

■ SHAFT : STAINLESS STEEL

■ IMPELLER : STAINLESS STEEL

■ BEARING HOUSING : CAST IRON

■ SHAFT SLEEVE : STAINLESS STEEL

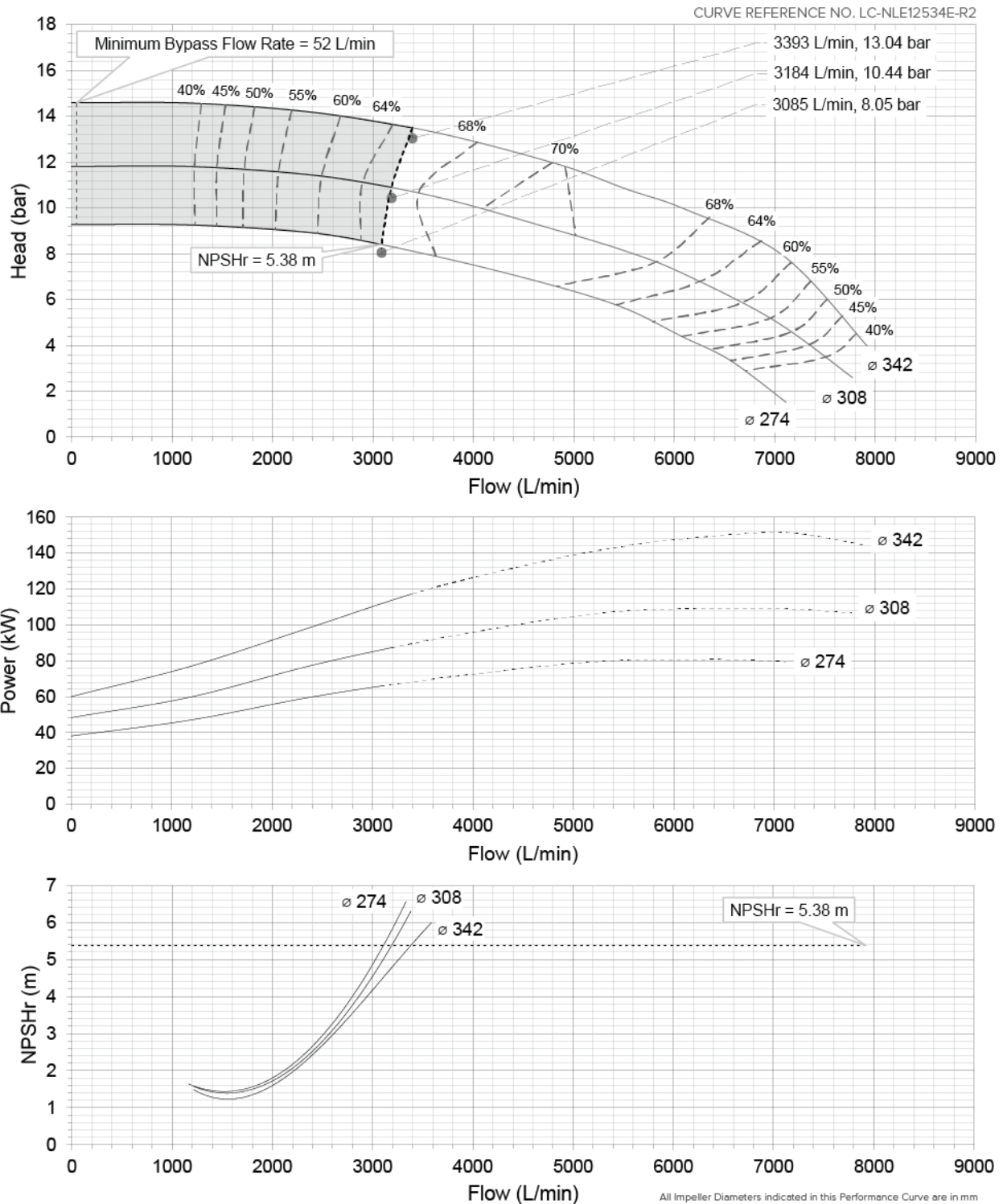
■ WEAR RING: CAST IRON

# NL-E-100-34C : 2900 RPM



LPS 1131 Cert/LPCB ref. 463u/04

## PERFORMANCE CURVE



► The above pump is LPCB approved for use at flow rates at which the NPSH required is below 5.38m as specified in LPS 1131, and it is approved with impeller diameters within the ranges shown above, to provide flows and heads within those ranges.

The approved region of the performance curve is highlighted above (refer Head -v- Flow Rate Curve).



# NL-E-100-34C DATASHEET



LPS 1131 Cert/LPCB ref. 463u/04

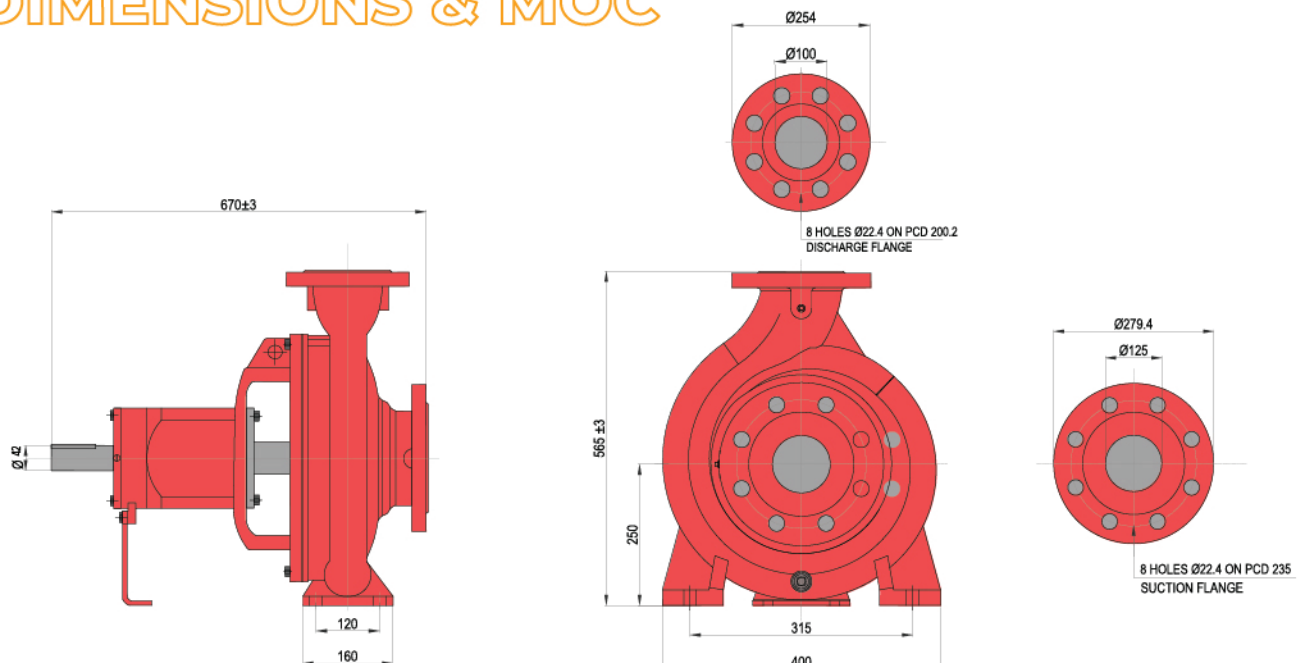
## LPCB CERTIFICATION RATING

MODEL	NL-E-100-34C		
Minimum Bypass Flow Rate (l/min)	52	52	52
Suction Inlet Diameter / Discharge Outlet Diameter (mm)	125/100	125/100	125/100
Impeller Diameter (mm)	274*	308*	342*
Rated Speed (Rev/min)	2900	2900	2900
Rated Flow (L/min) (at NPSH req. $\leq 5.38m$ )	3085	3184	3393
Rated Head (bar) (at NPSH req. $\leq 5.38m$ )	8.05	10.44	13.04
Closed Valve Head (bar)	9.28	11.81	14.6
LPCB Ref. No.	463u/04	463u/04	463u/04



\* These pumps are approved with impeller diameters, where applicable, speeds within the ranges shown, to provide flows and heads within those ranges.

## DIMENSIONS & MOC



■ CASING : DUCTILE IRON

■ SHAFT : STAINLESS STEEL

■ IMPELLER : BRONZE

■ BEARING HOUSING : CAST IRON

■ SHAFT SLEEVE : STAINLESS STEEL

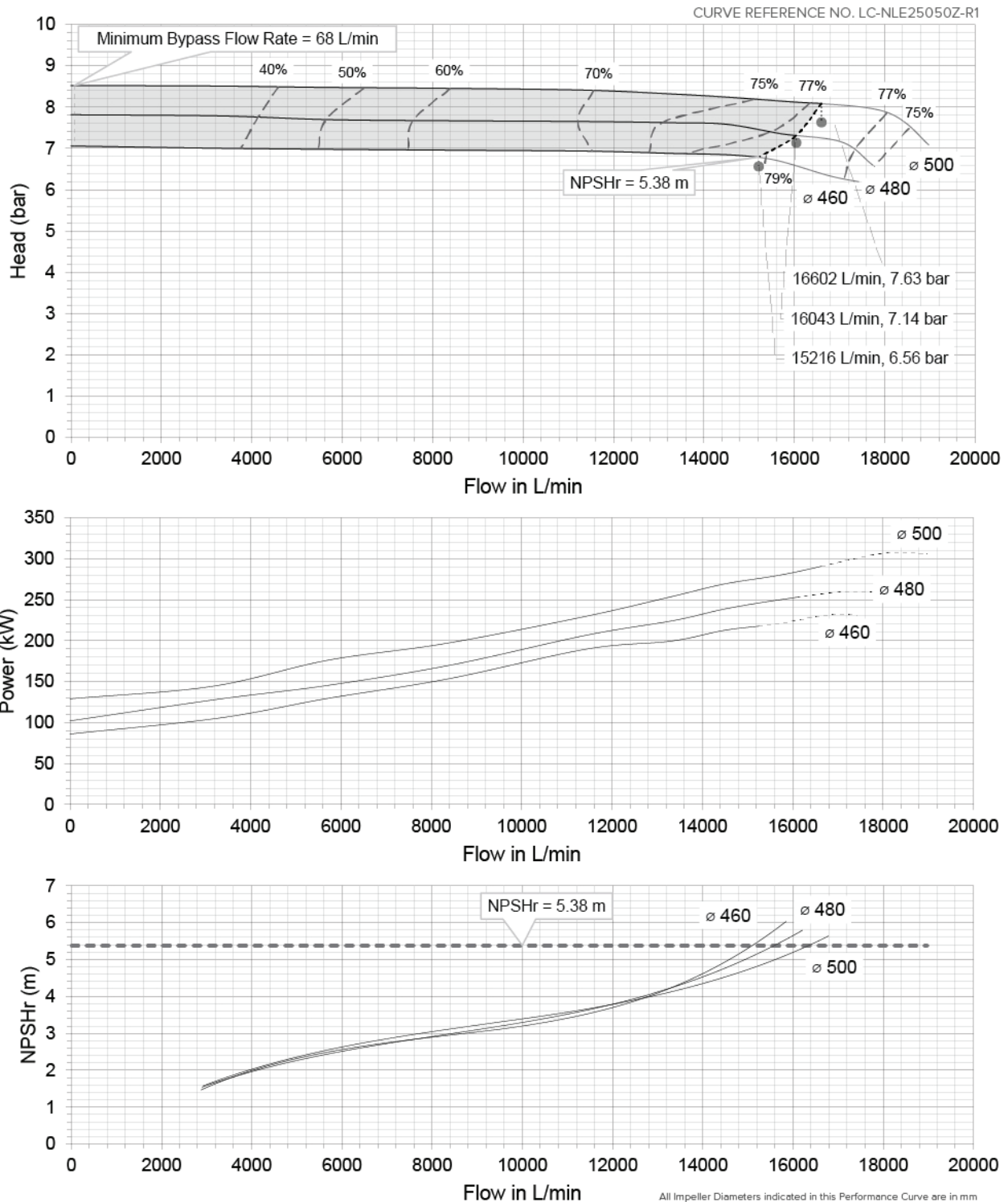
■ WEAR RING: BRONZE

# NL-E-250-50B : 1450 RPM



LPS 1131 Cert/LPCB ref. 463u/12

## PERFORMANCE CURVE



► The above pump is LPCB approved for use at flow rates at which the NPSH required is below 5.38m as specified in LPS 1131, and it is approved with impeller diameters within the ranges shown above, to provide flows and heads within those ranges.

The approved region of the performance curve is highlighted above (refer Head -v- Flow Rate Curve).

# NL-E-250-50B DATASHEET



LPS 1131 Cert/LPCB ref. 463u/12

## LPCB CERTIFICATION RATING

### MODEL

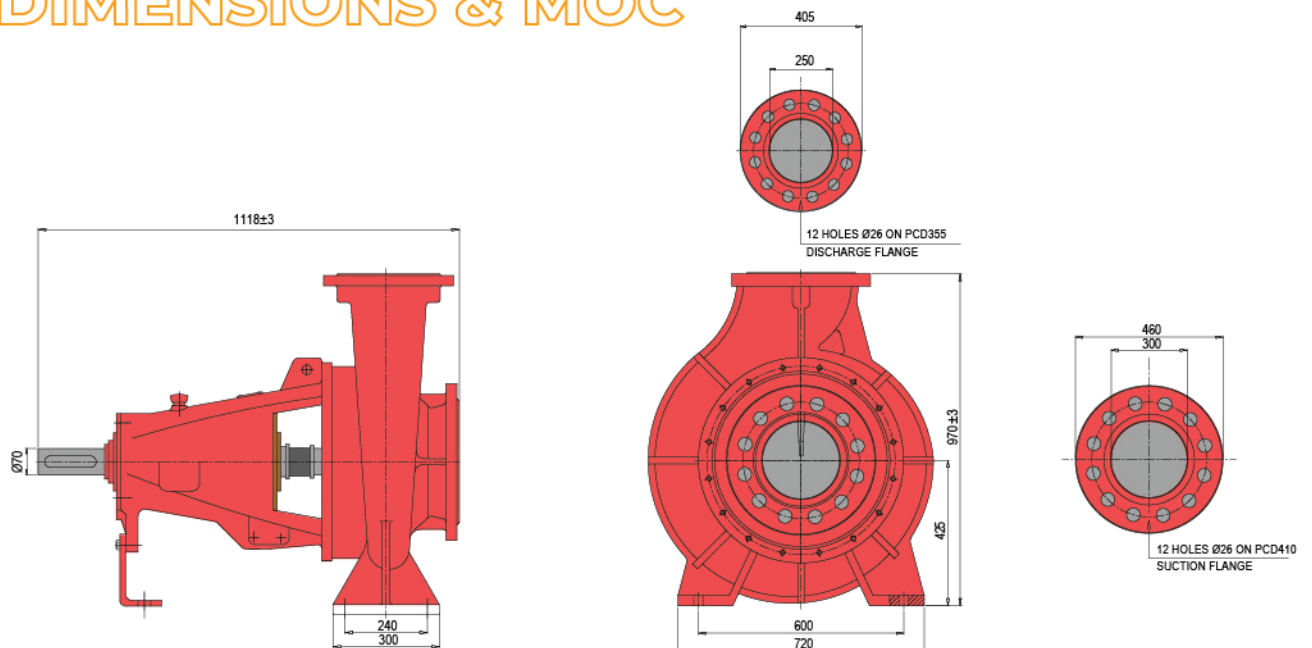
### NL-E-250-50B

Minimum Bypass Flow Rate (l/min)	68	68	68
Suction Inlet Diameter / Discharge Outlet Diameter (mm)	300/250	300/250	300/250
Impeller Diameter (mm)	460*	480*	500*
Rated Speed (Rev/min)	1450	1450	1450
Rated Flow (L/min) (at NPSH req. ≤ 5.38m)	15216	16043	16602
Rated Head (bar) (at NPSH req. ≤ 5.38m)	6.56	7.14	7.63
Closed Valve Head (bar)	7.06	7.82	8.52
LPCB Ref. No.	463u/12	463u/12	463u/12



\* These pumps are approved with impeller diameters, where applicable, speeds within the ranges shown, to provide flows and heads within those ranges.

## DIMENSIONS & MOC



■ CASING : CAST IRON

■ SHAFT : STAINLESS STEEL

■ IMPELLER : STAINLESS STEEL

■ BEARING HOUSING : CAST IRON

■ SHAFT SLEEVE : STAINLESS STEEL

■ WEAR RING: CAST IRON



# HORIZONTAL SPLITCASE FIRE PUMP

*NL-S  
SERIES*



LPS 1131 Cert/LPCB ref. 463u

# FIREPUMP



## HORIZONTAL SPLITCASE

► **NAFFCO** NL-S series fire pumps are designed as per LPCB standards meeting all the performance requirements for fire pump applications. These horizontal split-case pumps feature axial suction and impellers with radial discharge ports which meet the requirements for use in automatic sprinkler systems conforming to the 'LPC Rules for Automatic Sprinkler Installations'. The units meet the latest LPCB requirements and are red book listed. The performance of these pumps complies with the requirements of EN 12259-12 to provide stable H(Q) characteristics.

## WHAT SETS US APART

With more than three decades of experience in the Fire Pump market, and well-equipped manufacturing facilities NAFFCO is perfectly qualified to meet your fire pump needs. NAFFCO can supply complete accessories as per the project demand and we are fully capable to offer you a range of services including pre- and post-sales engineering assistance and product-related supports. Each pump set is subjected to rigorous performance tests at our factory prior to dispatch, in order to ensure that the performance conforms to the design requirements.

## CONFORMS TO

- **LPS 1131 - Requirements and testing methods for pumps for automatic sprinkler installation pump sets**
- **Designed considering various requirements of LPS 1240: Requirements for LPCB approved fire sprinkler pump sets used in automatic sprinkler installations.**
- **Complies with various requirements of BS EN 12845: Fixed firefighting systems - Automatic sprinkler systems - Design, installation and maintenance.**



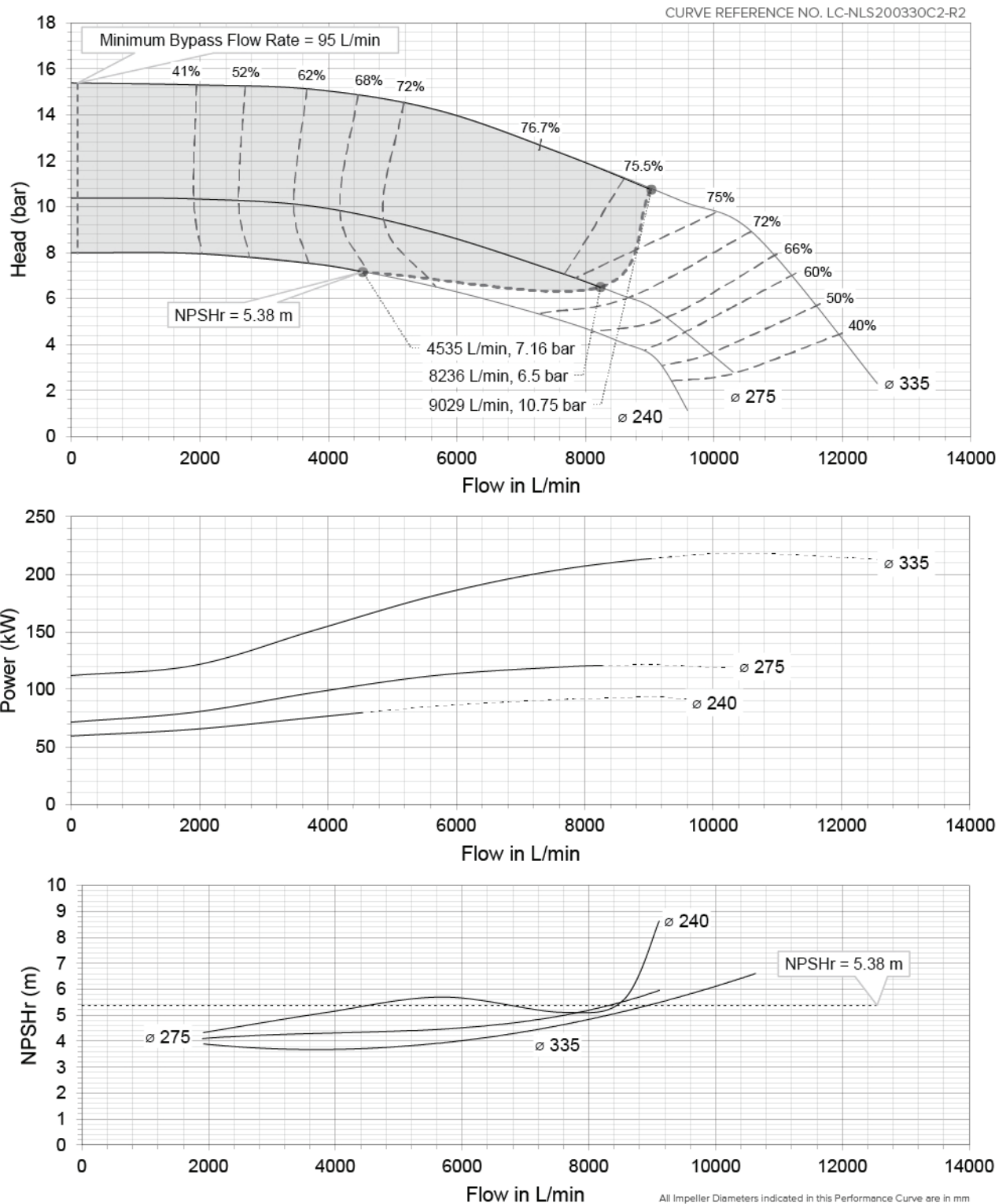


# NL-S-200-330C : 2900 RPM



LPS 1131 Cert/LPCB ref. 463u/18

## PERFORMANCE CURVE



► The above pump is LPCB approved for use at flow rates at which the NPSH required is below 5.38m as specified in LPS 1131, and it is approved with impeller diameters within the ranges shown above, to provide flows and heads within those ranges.

The approved region of the performance curve is highlighted above (refer Head -v- Flow Rate Curve).



# NL-S-200-330C DATASHEET



LPS 1131 Cert/LPCB ref. 463u/18

## LPCB CERTIFICATION RATING

### MODEL

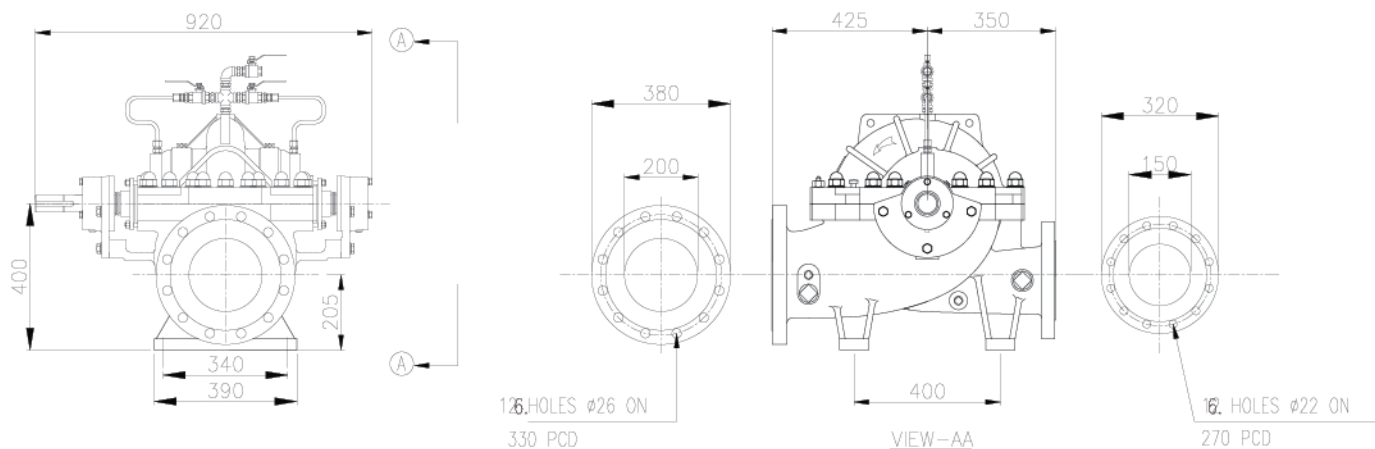
### NL-S-200-330C

Minimum Bypass Flow rate (l/min)	95	95	95
Suction Inlet Diameter / Discharge Outlet Diameter (mm)	200/150	200/150	200/150
Impeller Diameter (mm)	240*	275*	335*
Rated Speed (Rev/min)	2900	2900	2900
Rated Flow (L/min) (at NPSH req. $\leq 5.38m$ )	4535	8236	9029
Rated Head (bar) (at NPSH req. $\leq 5.38m$ )	7.16	6.5	10.75
Closed Valve Head (bar)	8	10.38	15.4
LPCB Ref. No.	463u/18	463u/18	463u/18



★ These pumps are approved with impeller diameters, where applicable, speeds within the ranges shown, to provide flows and heads within those ranges.

## DIMENSIONS & MOC



■ CASING : DUCTILE IRON

■ SHAFT : ALLOY STEEL

■ IMPELLER : STAINLESS STEEL

■ BEARING HOUSING : DUCTILE IRON

■ SHAFT SLEEVE : STAINLESS STEEL

■ WEAR RING: BRASS





**SHIELD FIRE, SAFETY & SECURITY LTD**

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[www.shieldglobal.com](http://www.shieldglobal.com)