

## High Pressure Centrifugal Pump

SERIES: **Multistage**

### Application

The KSB HDB series is recommended for boiler feedwater and power plants, production under pressure at pressure and descaling.

### General Description

Horizontal, multistage, with radially split suction, discharge and stage casings. The sealing between the stage casings is metallic and the union of the components with rods keeps the junction of metallic surfaces under pressure. The stage casings and rods are covered with a jacket. The execution of the suction impeller of HDB 40 up to 65 is standard; HDB 80 and 100 execution is standard or with improved suction hydraulics; HDB 125 and 150 only with improved suction hydraulics.

The pump is supported at the shaft centerline.

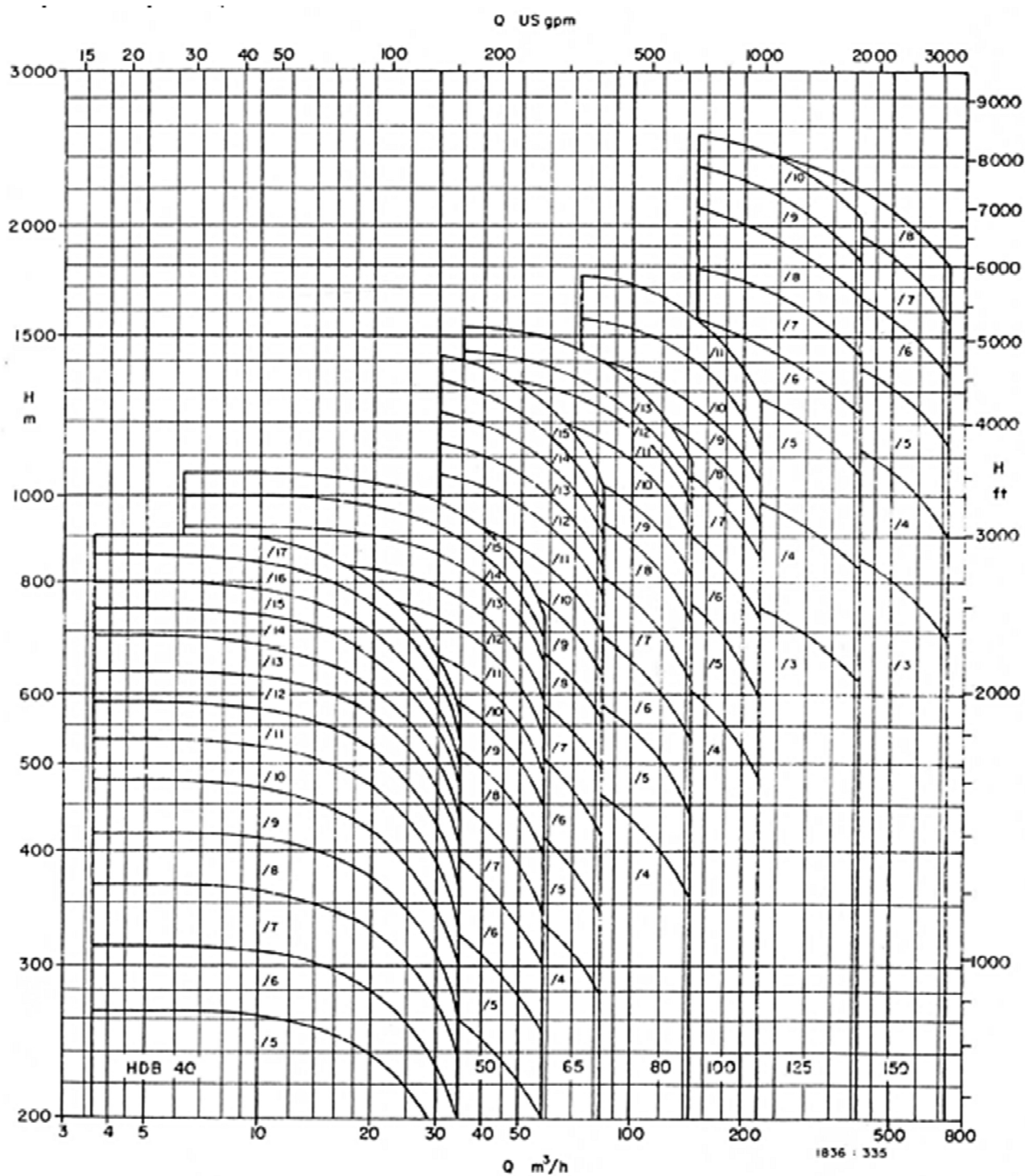
### Designation

Brand                      **KSB** **HDB** **100** / **7**  
 Model                       
 Discharge nozzle diameter (mm)                       
 Number of stages                     

### Operation Data

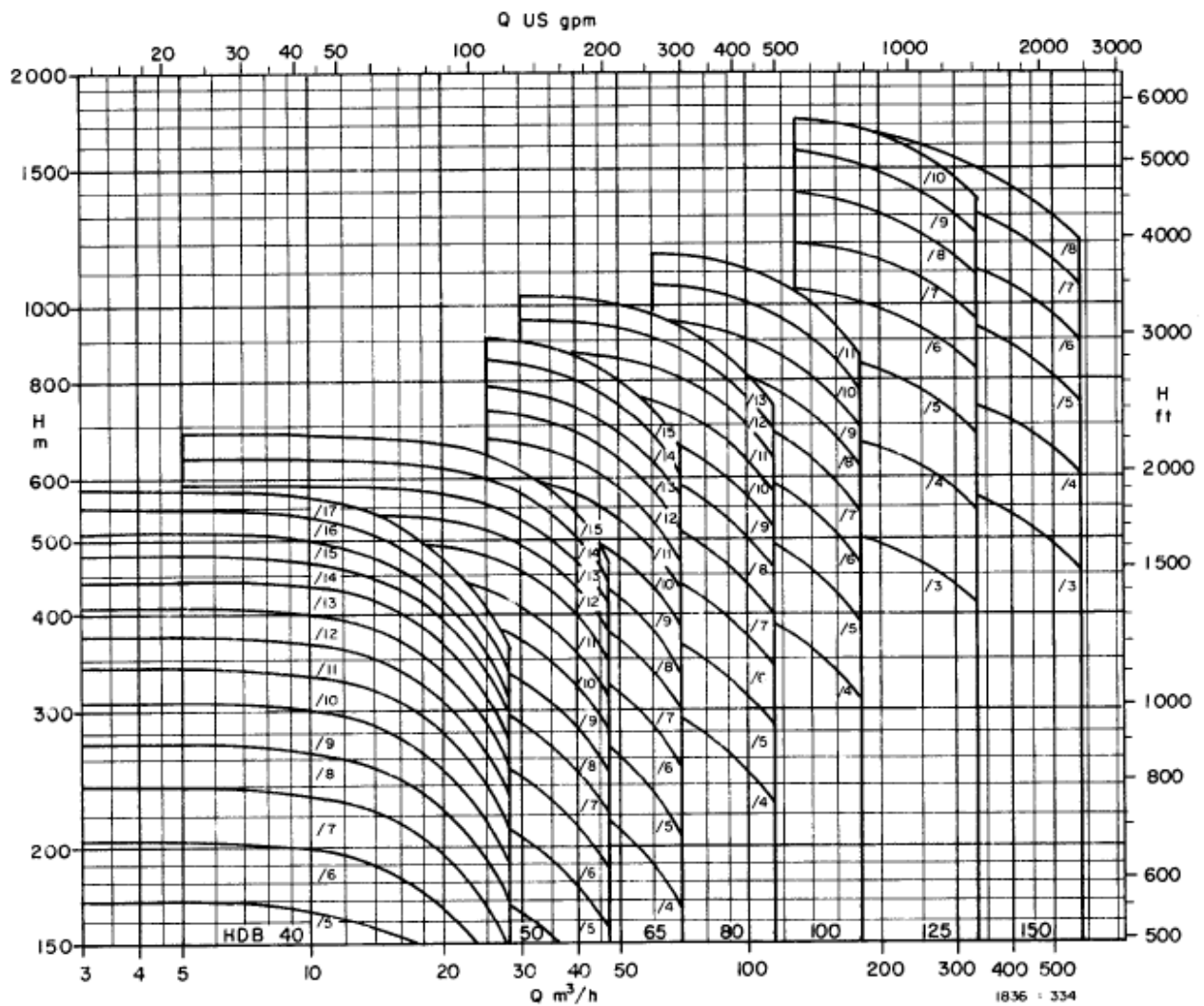
Sizes	- ND 40 up to 150
Flows	- up to 700 m³/h
Heads	- up to 2.500 m
Temperature	- up to 230°C
Rotation	- up to 5500 rpm

## Selection chart - 60 Hz



Speed: 3550 rpm

### Selection chart - 50 Hz



**Speed: 2900 rpm**

## Technical Description

### Casing

Top suction and discharge flanges. Flanges on the stage casing for extraction of one or more partial flows of feed water for use elsewhere.

### Rotor

Radial, closed, single suction impeller.

### Shaft

Pump shaft is provided with shaft protection sleeve and spacer sleeve.

### Shaft sealing

The shaft is sealed by packing. Cooling chamber is necessary for temperatures above 105°C. Option for shaft sealing by mechanical seal is available.

### Axial thrust balance

Axial thrust balance by balance disc, with balance line piping towards the suction casing or suction tank.

### Bearings

The bearings are installed in two flanged bearing brackets on both ends of the pump. Bearings can be rolling bearings, or plain bearings with lubrication by oil rings or forced feed lubrication.

### Accessories (Optional):

#### - Drive

Direct drive by flexible coupling or indirect drive by means of gearbox, electric motor, turbine, diesel motor, etc.

#### - Coupling

Flexible coupling sleeve to allow shaft axial displacement.

#### - Coupling protection

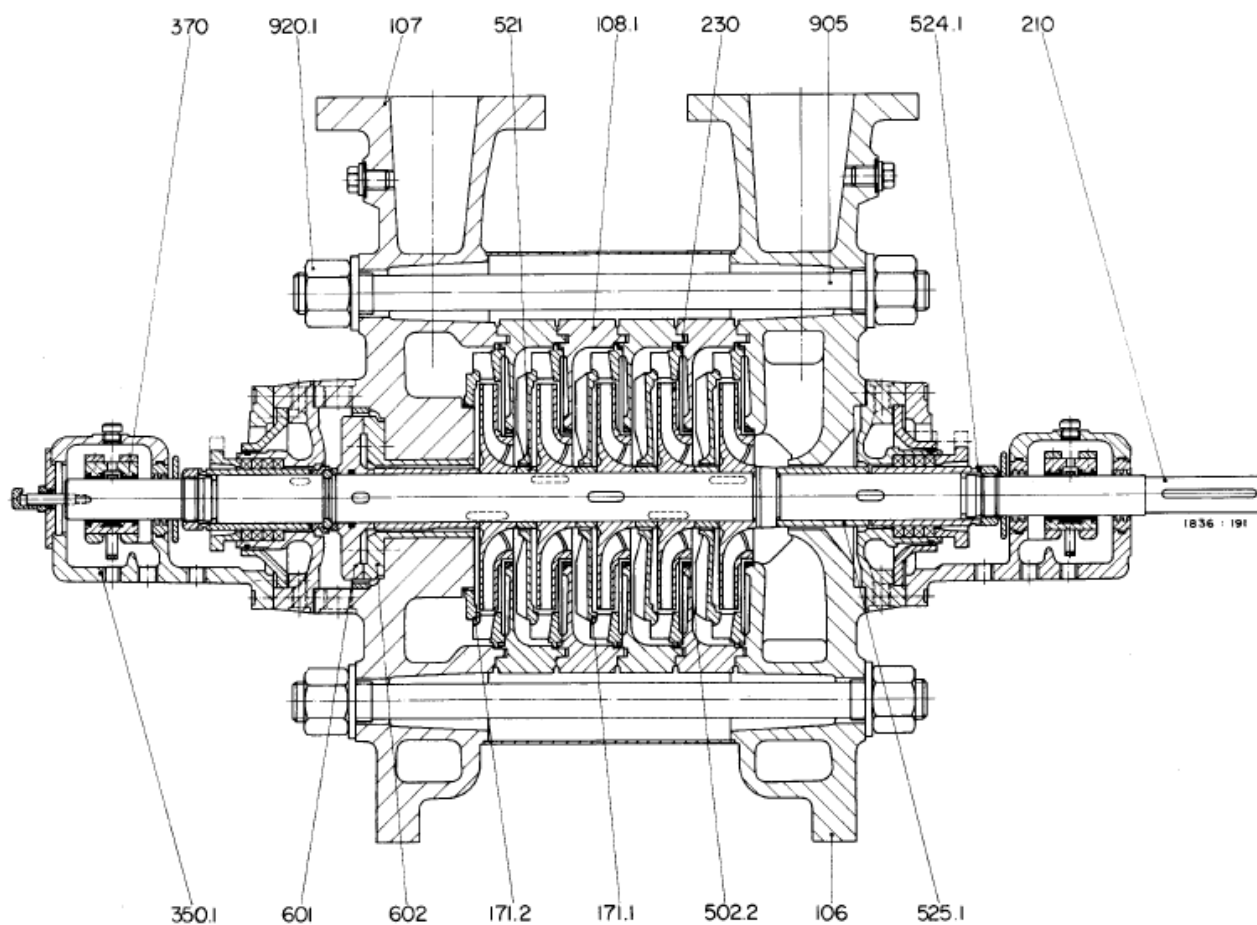
KSB standard.

#### -Base

KSB standard, made of steel.

#### - Suction strainer

Suction strainer must always be installed on the suction piping in order to protect the pump.



## Parts List

Designation	Part Number
Suction casing	106
Pressure casing	107
Stage casing	108.1
Diffuser	171.1
Diffuser last stage	171.2
Shaft	210
Impeller	230
Bearing casing	350.1
Bearing shell	370
Wear ring	502.2
Stage sleeve	521
Shaft protecting sleeve	524.1
Spacer sleeve	525.1
Balance disc	601
Balance disc seat	602
Rod	905
Nut	920.1

**KSB Brasil Ltda.**  
Rua José Rabello Portella, 400  
Várzea Paulista SP 13220-540 - Brazil  
<http://www.ksb.com.br>  
Phone: +55 11 4596 8500  
**SAK – KSB Customer Service**  
e-mail: [sak@ksb.com](mailto:sak@ksb.com)