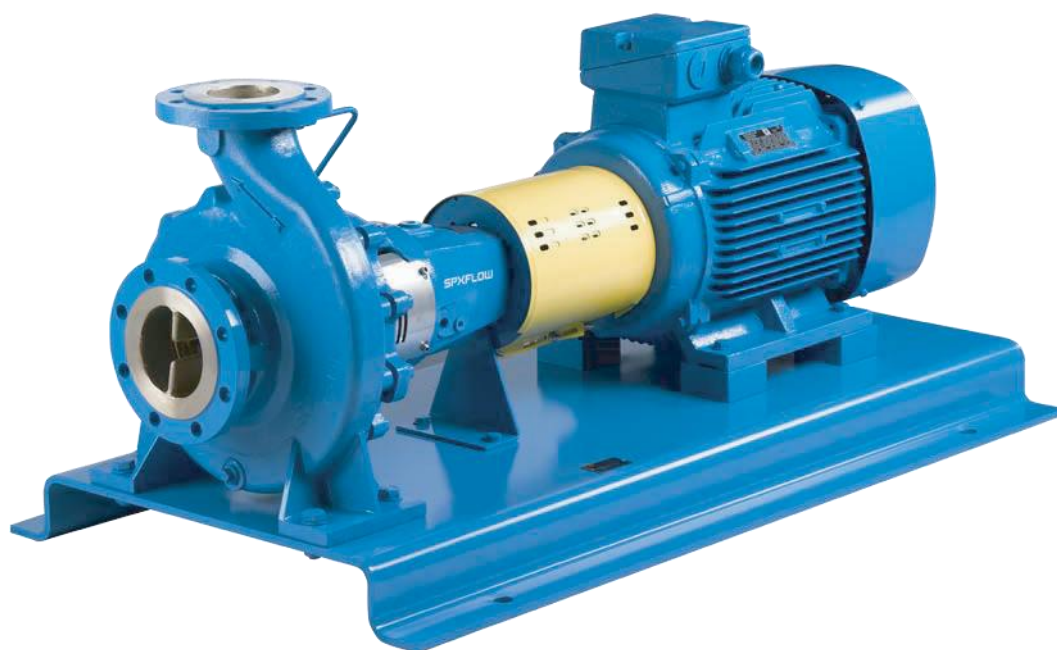


# CEN

Centrifugal pump according to EN 733 (DIN 24255)



MStella Projects' CEN system is a modular programme of single stage centrifugal pumps with a high degree of interchangeability of parts between the different pump constructions.

Based in Cape Town, South Africa, MStella Projects is a multi-industry Third Party Procurement Company for all your needs. MStella Projects' innovative, world-class products and highly-engineered solutions are helping to meet the needs of a constantly developing world and growing global population. You'll find our innovative solutions in everything from dairy plants and power plants to oil and gas pipelines, and the power grid.

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## CEN

### Always the right pump!

The CEN is a centrifugal pump according to EN733 (DIN 24255).

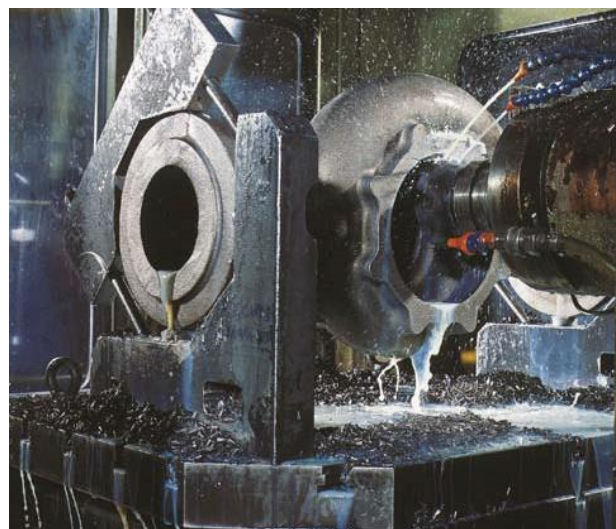
This is one of the most versatile pump types. The pump has a wide range of shaft sealing options, varying from gland packing to balanced cartridge double seal. Standard and heavy duty bearings are available, either grease or oil lubricated. That's why CEN is always the right pump!

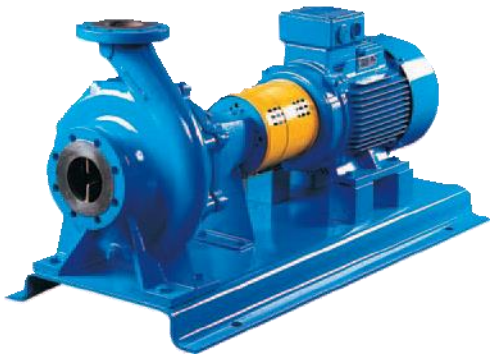
CEN represents a range of horizontal centrifugal pumps suited for handling low-viscosity, clean or slightly contaminated liquids. The pump is designed to EN 733 (DIN 24255); however, the number of available types is somewhat larger, which provides a wider hydraulic field.

A characteristic of the CEN is the large number of material, shaft seal and bearing system options. The modular design offers maximum interchangeability between the variants. Hence CEN is able to handle most pump duties.

The Back Pull Out design greatly facilitates maintenance of the CEN.

Thanks to the similarity between the structural parts, the stock of spare parts can be limited.





#### KEY FEATURES

- Available in several materials
- Only 5 shaft groups for the whole range
- Suitable for a wide range of duties
- Mechanical seals according to EN 12756 (DIN 24960)
- Single and double cartridge seals
- Oil or grease lubricated heavy duty bearing
- Back Pull Out principle
- Pump cover options for cylindrical bore and tapered bore

## Typical product applications

### From know-how to finding solutions

#### INDUSTRY

CEN's ample choice of shaft sealing options and its availability in several materials makes it a very suitable pump for general purposes. Complying to EN 733 (DIN 24255), provided with industrial standard gland packing or mechanical seals according to EN 12756 (DIN 24960) CEN is always the right pump.



#### UTILITY

Applications of the CEN within utility buildings are as general duty pumps, circulation pumps in heating systems and pumps in water purification plants.



# Features and Benefits

## PUMP PERFORMANCE

- optimised volute design
- *high efficiency*
- smooth surfaces
- *minimal internal losses*

## MATERIAL OPTIONS

- available in cast iron, nodular cast iron and bronze
- impellers available in cast iron, bronze and stainless steel
- other material available upon request
- *suitable for a wide range of applications*

## SUCTION CAPABILITIES

- smooth suction entry in pump casing
- smooth surface
- *optimum NPSH*
- anti-rotation vane
- *minimal flow distortion giving better suction capabilities*

## PUMP CASING

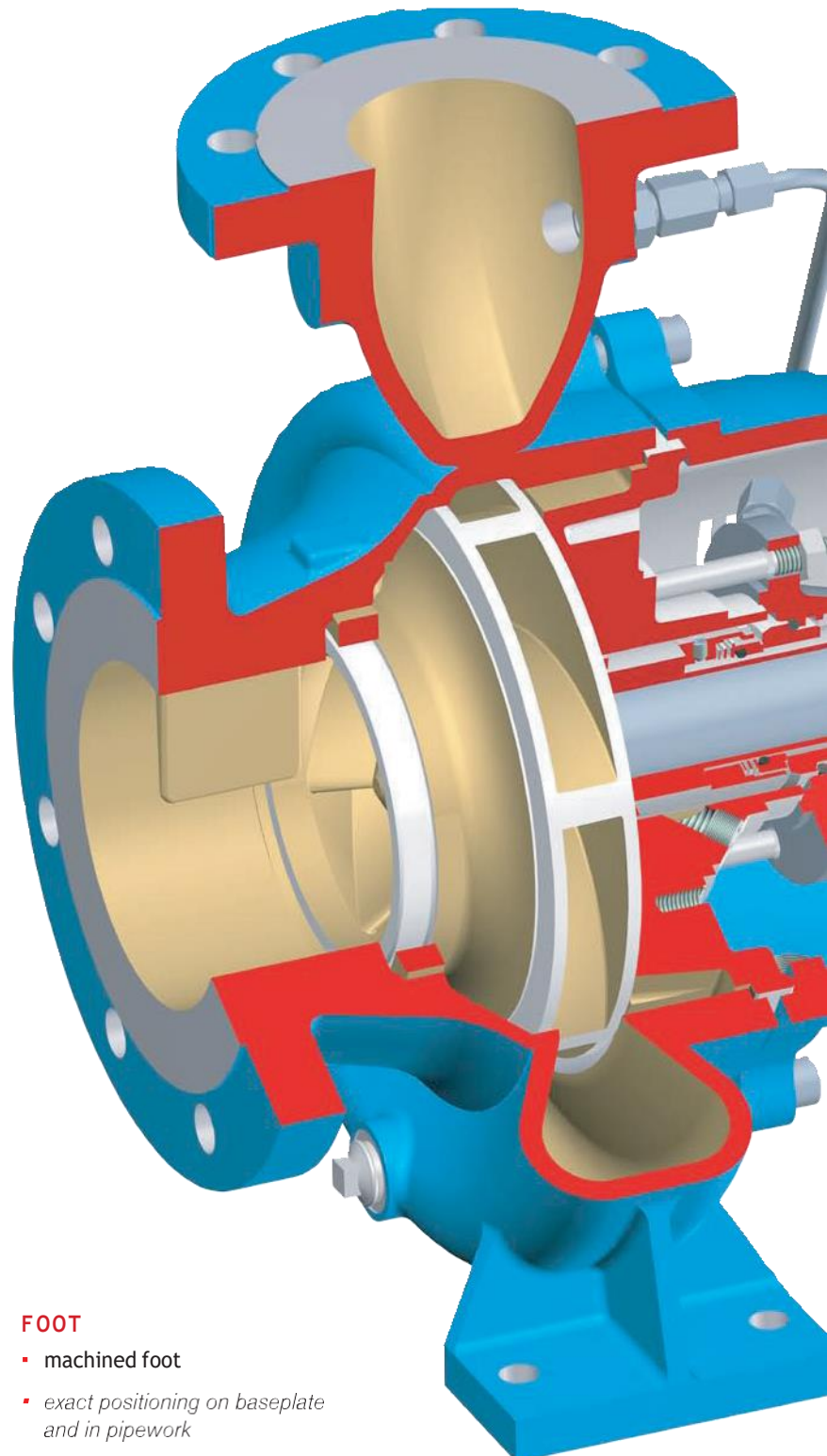
- flanges according to ISO 7005 PN 10 / PN 16
- max. working pressure 1000 kPa (10 bar)
- *wide range of applications*
- large drain opening
- *complete and fast draining of the casing*

## IMPELLER LOCKING

- stainless steel impeller cap nut with flat gasket
- *reliable and economic locking*

## IMPELLER BACK VANES

- flat cover for hydraulic balancing
- back vanes for hydraulic balancing
- *extended bearing life*
- *keeps solids away from shaft sealing area*
- *circulation flow over mechanical seal*



## FOOT

- machined foot
- *exact positioning on baseplate and in pipework*

### SHAFT

- stainless steel shaft
- *rigid, reliable shaft*
- most seal options

### OIL LUBRICATION

- breather / filling plug on top
- oil bath
- oil sight glass
- constant level oiler
- large drain plug

### SHAFT SEALING

- 8 possible mechanical EN 12756 (DIN 24960)-seal options, including cartridge seals
- sealing rings and elastomers in several possible combinations
- mechanical seal flushed by pumped liquid (plan 11)
- quenched mechanical seal option mechanical seal option with cooling / heating jacket
- 3 possible gland packing options e.g. with cooling cover or external flush
- *suitable for many possible applications*
- *suitable for many liquids*
- *also suitable for high temperatures*

### BEARINGS

- 2-deep groove ball bearings sealed for life or oil lubricated double row angular contact bearing and roller bearing greased for re-lubrication or oil lubricated
- *extended MTBF*
- *economic bearing lock-up*
- rigid cast iron bearing bracket construction
- *exact alignment*

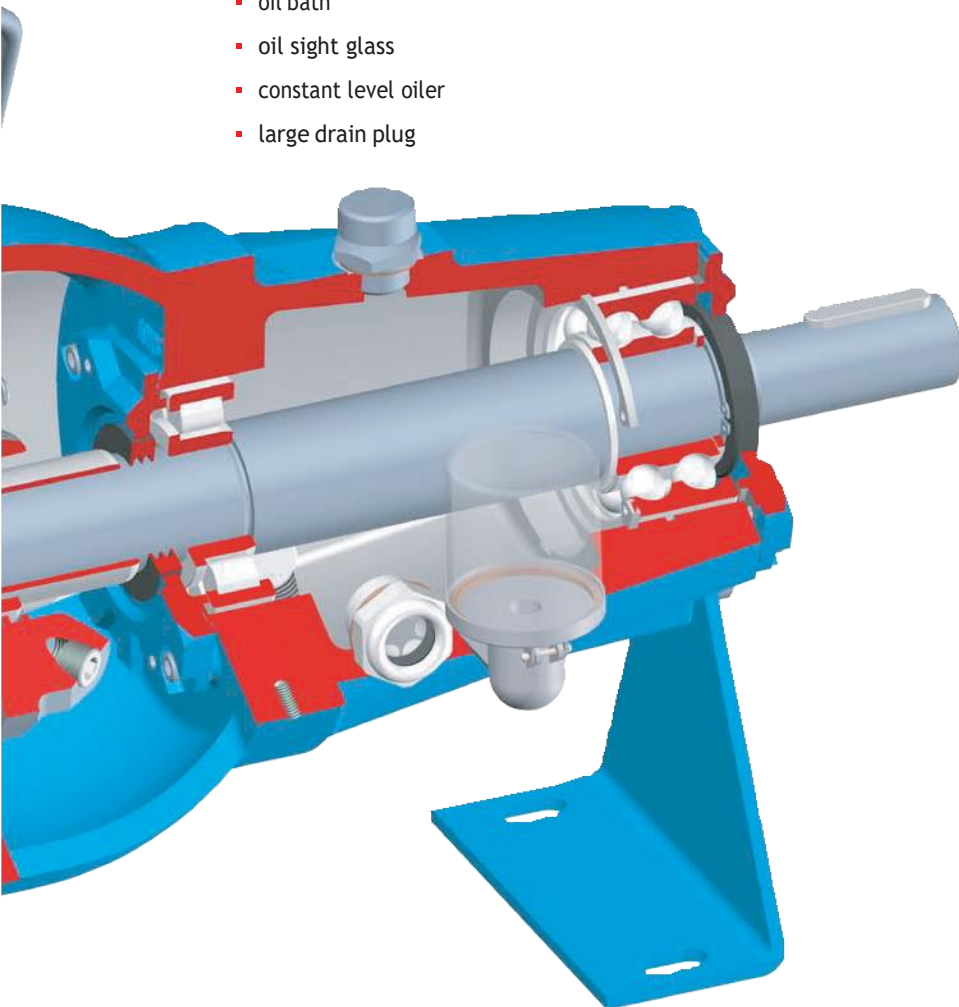
### EASY AND LOW COST

#### MAINTENANCE

- Back Pull Out principle
- *reduced maintenance downtimes, quick and easy impeller replacement*
- mechanical seals according to EN 12756 (DIN 24960)
- *reduced maintenance costs*
- cartridge seals
- changeable wear ring
- *reduced maintenance costs*

### PUMP COVER

- flat gasket, fully chambered
- *no gasket blow-out*
- machined fits
- integrated stuffing box/mechanical seal chamber with cylindrical bore
- *perfect alignment of all components*
- integrated pump cover with tapered bore seal chamber with flow-guiding ribs
- *optimize seal life through improved heat dissipation*

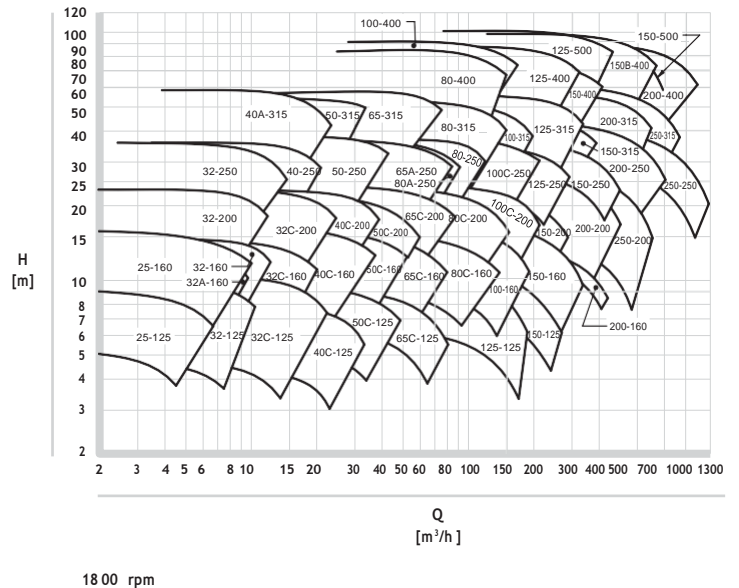
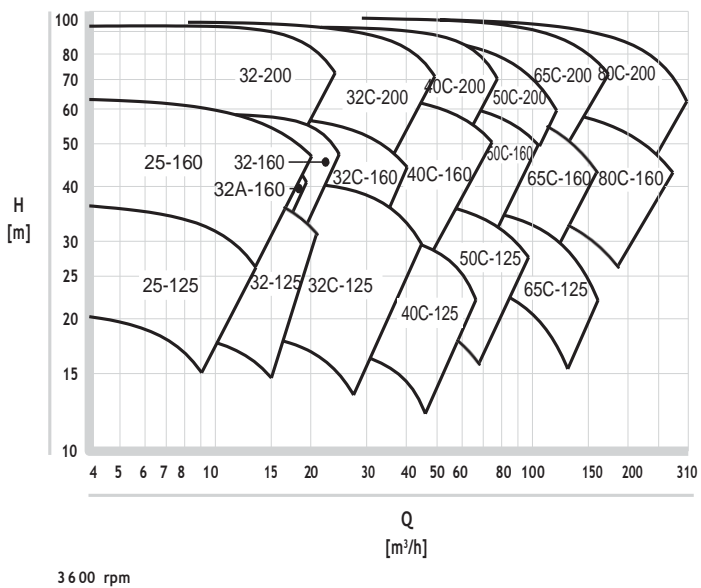
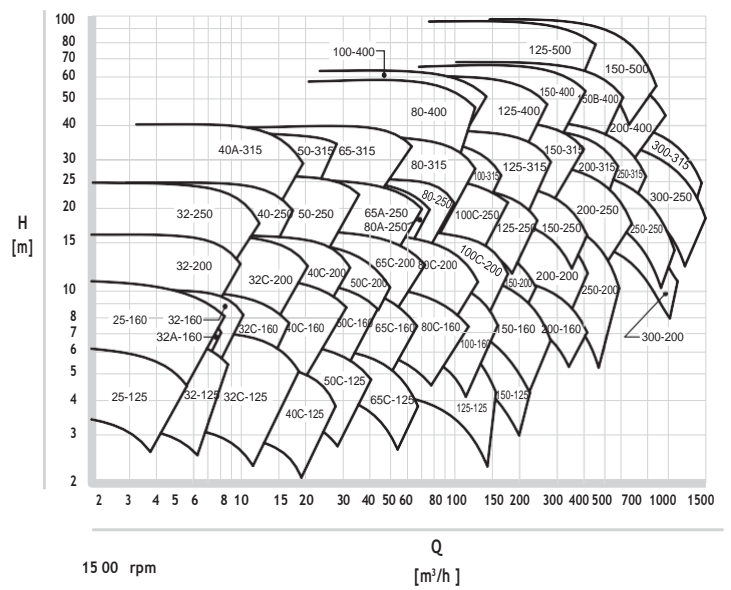
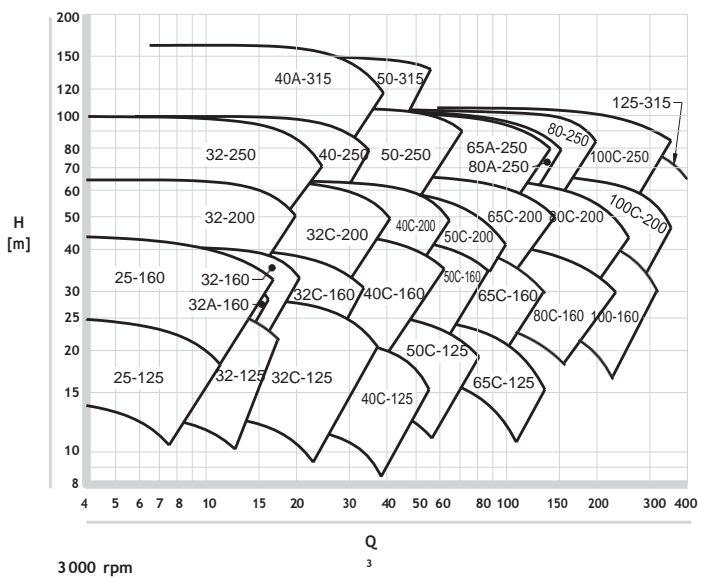




# Technical data

Max. capacity	1500 m <sup>3</sup> /h
Max. head	160 m
Max. working pressure	1600 kPa (16 bar)
Max. temperature	200 °C
Max. speed	3600 rpm

# Hydraulic performance data



Subject to alterations



Create. Enhance. Sustain. Driven by passion!

# STORK®

CEN

Centrifugal pump according to  
EN 733 (DIN 24255)

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