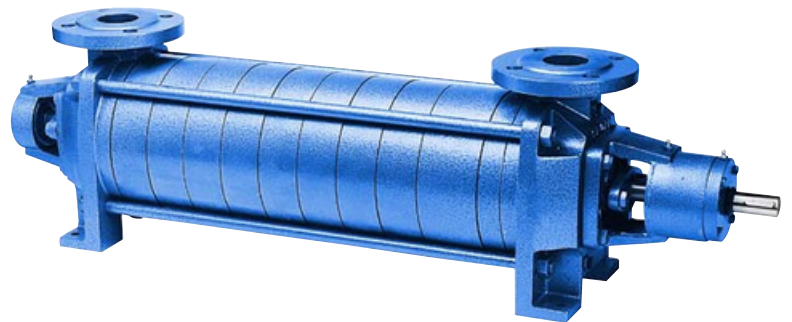
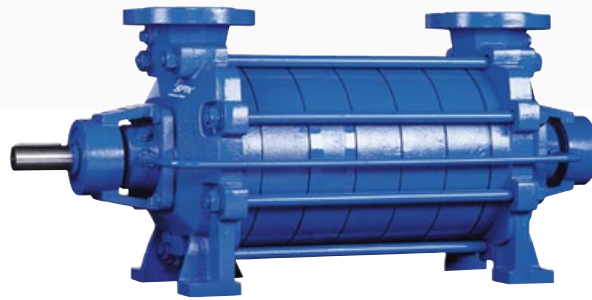




SOUTHERN PUMPS SA (PTY) LTD
SOUTH AFRICA (PTY) LTD

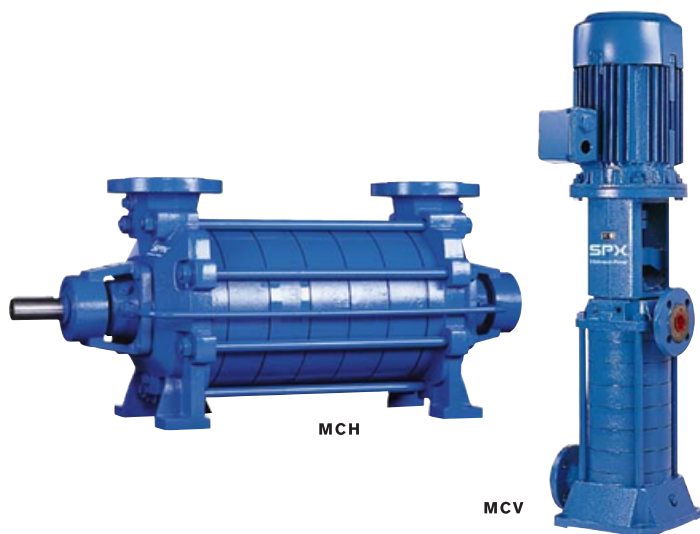
Johnson Pump®

MCV - MCH - MCHZ



Southern Pumps SA (Pty) Ltd
48 Marconi Road, Montague Gardens, Cape Town 7441
Phone: +27 (021) 5512490
info@southernpumps.co.za | sales@southernpumps.co.za
www.southernpumps.co.za

Multi-stage pump types



TYPICAL CHARACTERISTICS

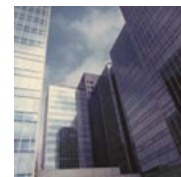
- Rigid, reliable construction
- Available in cast iron and bronze
- High pump efficiency
- Suitable for a wide range of duties
- Low maintenance cost
- Including a self-priming version
- Shaft sealing by means of mechanical seal or gland packing

TECHNICAL DATA	
MAX. CAPACITY	100 M ³ /H
MAX. HEAD	340 M
MAX. WORKING PRESSURE	40 BAR, MINUS 3x INLET PRESSURE
MAX. TEMPERATURE	-20 °C / + 150 °C
MAX. SPEED	3600 RPM

Typical product applications Proven quality all over the place!

UTILITY

Multistage pumps are used for pressure booster sets for water supply in high rise buildings. They are used for sinking piles by water injection on building projects. Other main duties comprise fire fighting units.



GENERAL INDUSTRY

In general industry typical applications are pumping of condensate and boiler feeding, circulation of hot water or cooling water.

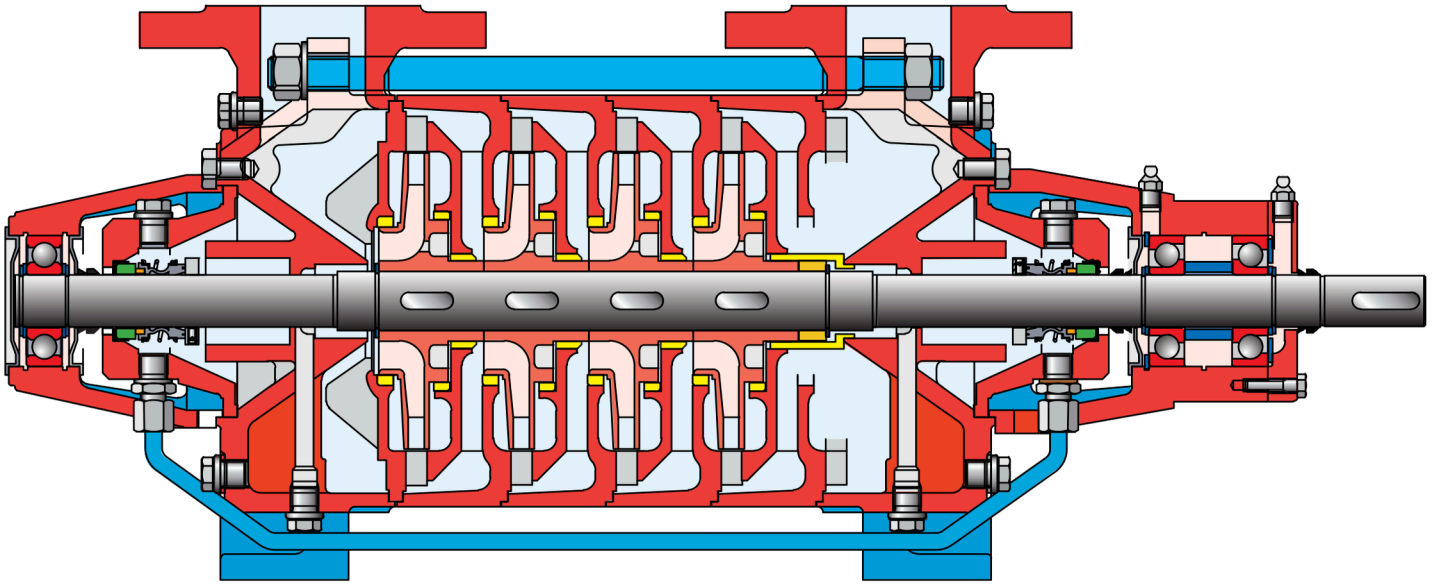


SHIP BUILDING

Multistage pumps can handle fresh water as well as sea water, both clean and slightly contaminated. Their compact, space saving build makes them ideal pumps for engine rooms and general duties.



Features and *benefits*



BEARING HOUSING

- fitted with 2 apertures
- easily accessible gland housing

MCH

MCH FEET

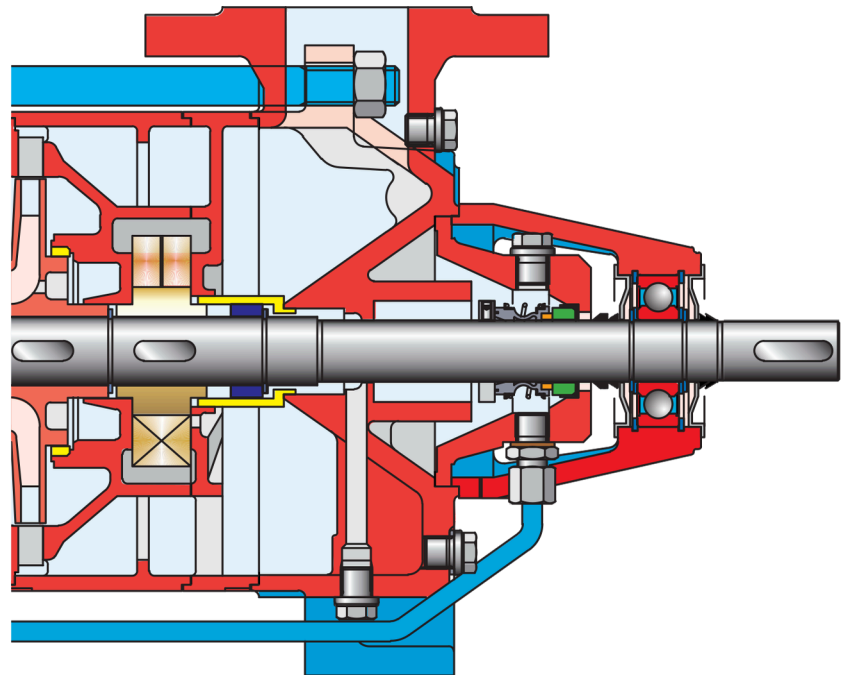
- pump casing support in vertical centre line with flange and piping
- optimal distribution of forces

MCHZ SELF-PRIMING SECTION

- contains a built-in vacuum pump
- operates according to the liquid ring principle
- always ready for immediate duty
- good air and gas handling, discharged immediately via the pressure pipe

WEARRINGS

- on all stages casing wearrings are applied
- increased maintainability



PUMP CASINGS

- cast flanges on suction and pressure casing
- cast foot on MCV suction casing
- fitted with connections for pressure gauge, balance line, possible barrier liquid and drain
- versatile casing design
- very rigid and durable construction
- exact positioning in pipework

SUCTION COVER

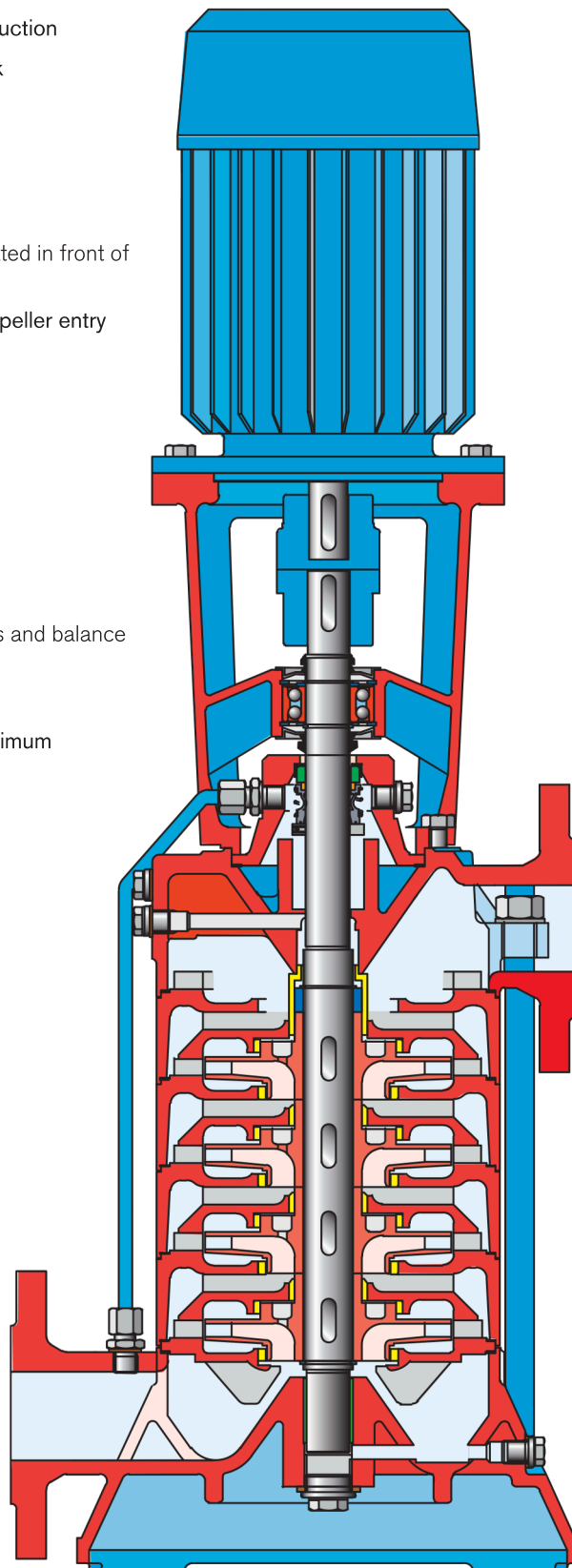
- with 2 anti-rotation vanes located in front of the first impeller
- prevents for turbulence at impeller entry
- better NPSHr values

IMPELLERS

- closed impellers
- designed with 2 sealing edges and balance holes
- better hydraulic performance
- axial forces reduced to a minimum

BEARING

- axially mounted bearing
- absorbing the remaining axial thrust



STAGE CASINGS

- fitted with exchangeable wear rings
- with radial diffusors
- longer pump life
- minimal radial forces resulting in low vibration

MCV CONNECTION

- pressure flange can be fitted in 4 ways
- versatile connection possibilities

MCV SLIDE BEARING

- lubricated by the pumped liquid
- fitted in the inlet casing
- requires no maintenance

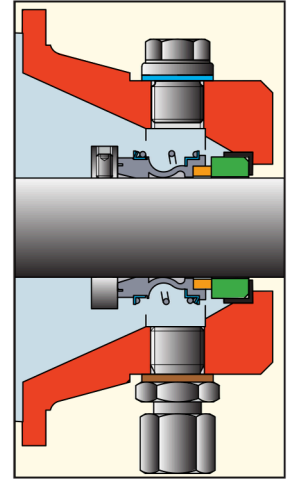
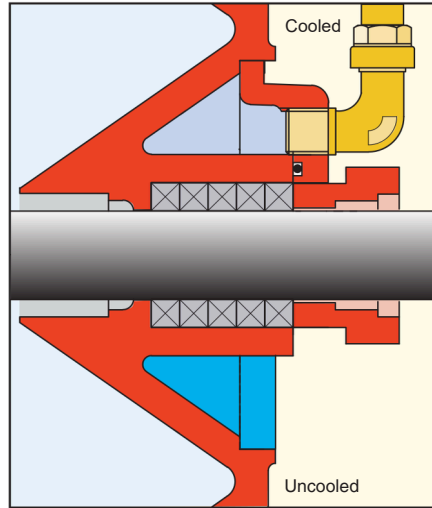
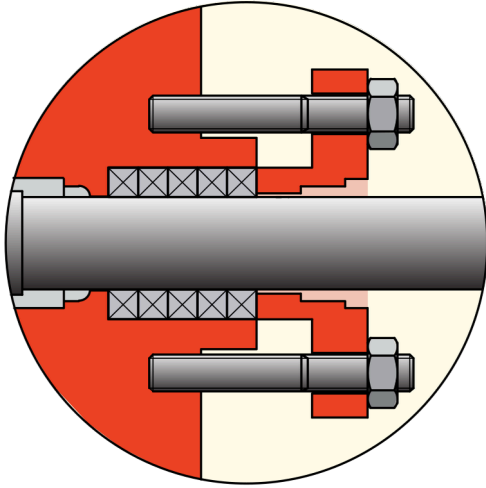
MCV



Shaft sealing

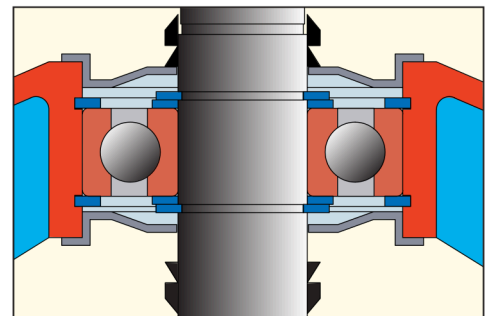
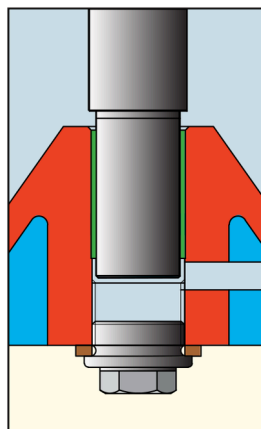
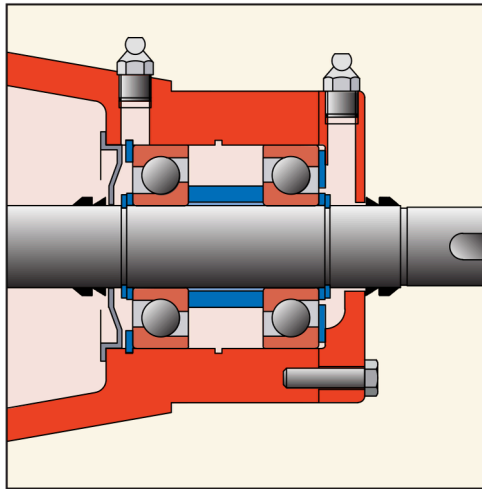
Shaft sealing is available in two variants:

- Standardized gland packing rings. When the pressure in the gland becomes too high the pumps are provided with a balance pipe. For the horizontal pump types a water cooled stuffing box is optional.
- Mechanical seal with bellows. Cooling and lubrication of this seal is achieved by circulation of the pumped liquid via a balance pipe.



Bearing

- The horizontal pumps are designed with 2 deep-groove ball bearings. The largest types have a double-row angular contact bearing on pressure side. MCH 14 can be supplied with a reinforced bearing, consisting of 2 singlerow angular contact bearings on pressure side. The bearing on pressure side is axially fixed.
- The vertical types are fitted with a double-row angular contact bearing which is axially fixed in the lantern piece. MCV 16 has a deep groove ball bearing.
- All bearings are grease-lubricated.
- In the suction casing the MCV types have a slide bearing, lubricated by the pumped liquid.



Performance

- = limits MCV
- = limits MCH
- = limits MCHZ

