

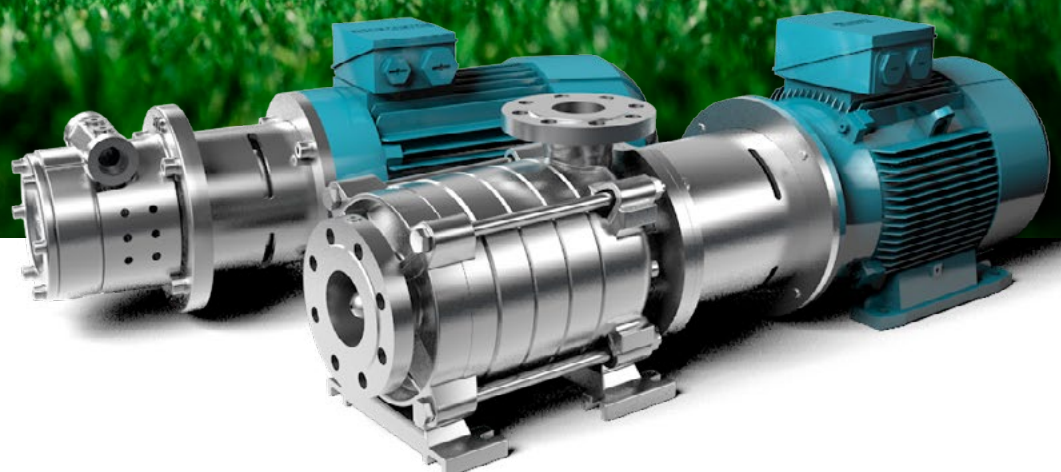


Product information

MADE IN GERMANY  
...SINCE 1927

Centrifugal Pumps

for the energy revolution



Integrated future:

# Our experience and reliability are guarantees for your success!

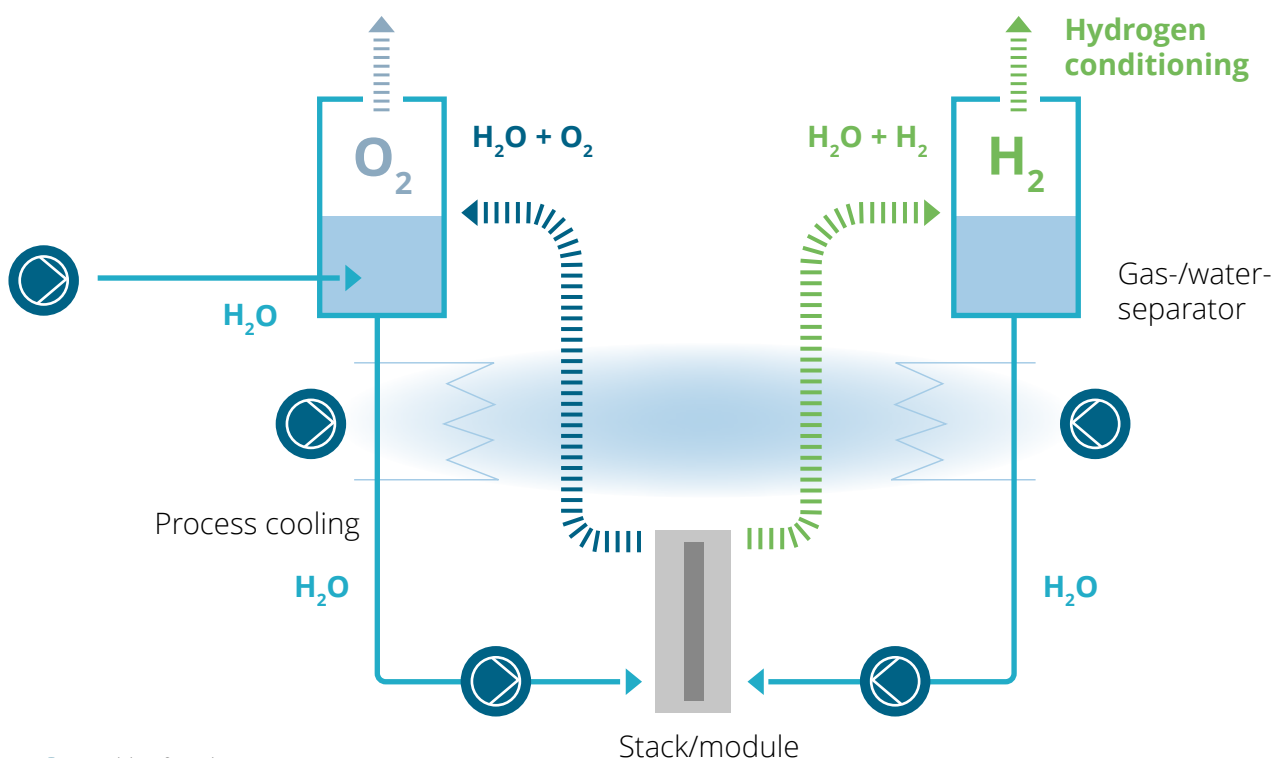
## PROVEN SOLUTIONS FOR NEW TECHNOLOGIES

The rapid development of modern energy systems makes new demands for pumps being used. EDUR-Centrifugal Pumps do provide unique product benefits to planners, designers and operators of modern energy storage systems for a safe and efficient operation. The wide experiences of our application engineers gained in innovative pilot projects and related areas of expertise, such as energy production, liquefied gas production or cogeneration, make EDUR a perfect partner for the development of future energy storage systems.

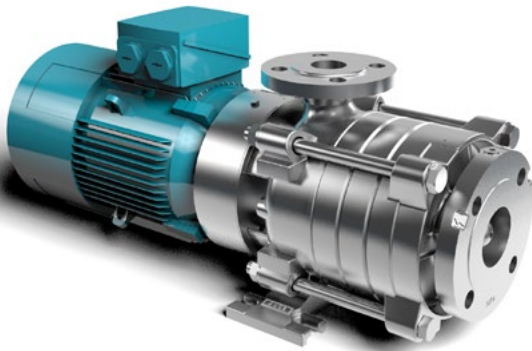
## MULTIPHASE PUMPS FOR NETWORKED ENERGY SYSTEMS

Just like the sector coupling does remove borders in the energy industry between areas such as mobility, electricity and heat supply, EDUR-Multiphase Pumps do break the boundaries between liquids and gas supplies. In applications such as hydrogen electrolysis or methanation, the multiphase pumps do offer a particularly high level of operational safety and efficiency when pumping gas-saturated liquids.

## EXAMPLE: INTEGRATION OF EDUR-PUMPS IN HYDROGEN PRODUCTION BY ELECTROLYSIS



**NEW SIZES  
COMING UP SOON!**



## SERIES LBU

**Properties:** Space saving, multistage, compact pump unit with three-phase motor

**Applications:** Feeding demineralized water, refrigeration circuits, undissolved gas contents

### Technical data

Flow rate up to 65 m<sup>3</sup>/h | 286 US gpm

Working pressure up to 40 bar | 580 psi

Temperature range -50 up to +160 °C

-58 up to +320 °F

Shaft sealing Single mechanical seal,  
double-acting mechanical seal

## SERIES LBM

**Properties:** Space saving, multistage, compact pump unit with three-phase motor

**Applications:** Clean liquids, gas saturated liquids

### Technical data

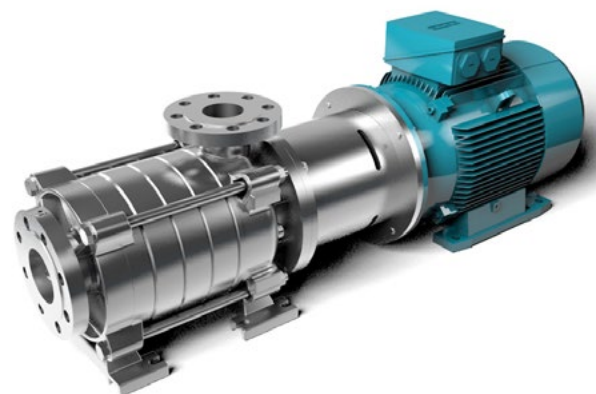
Flow rate up to 65 m<sup>3</sup>/h | 286 US gpm

Working pressure up to 40 bar | 580 psi

Temperature range -50 up to +220 °C

-58 up to +428 °F

Shaft sealing Magnetic coupling



## SERIES PBM

**Properties:** Peripheral pump in close-coupled design

**Applications:** Clean liquids, gas saturated liquids, undissolved gas contents

### Technical data

Flow rate up to 3,5 m<sup>3</sup>/h | 15 US gpm

Working pressure up to 16 bar | 232 psi

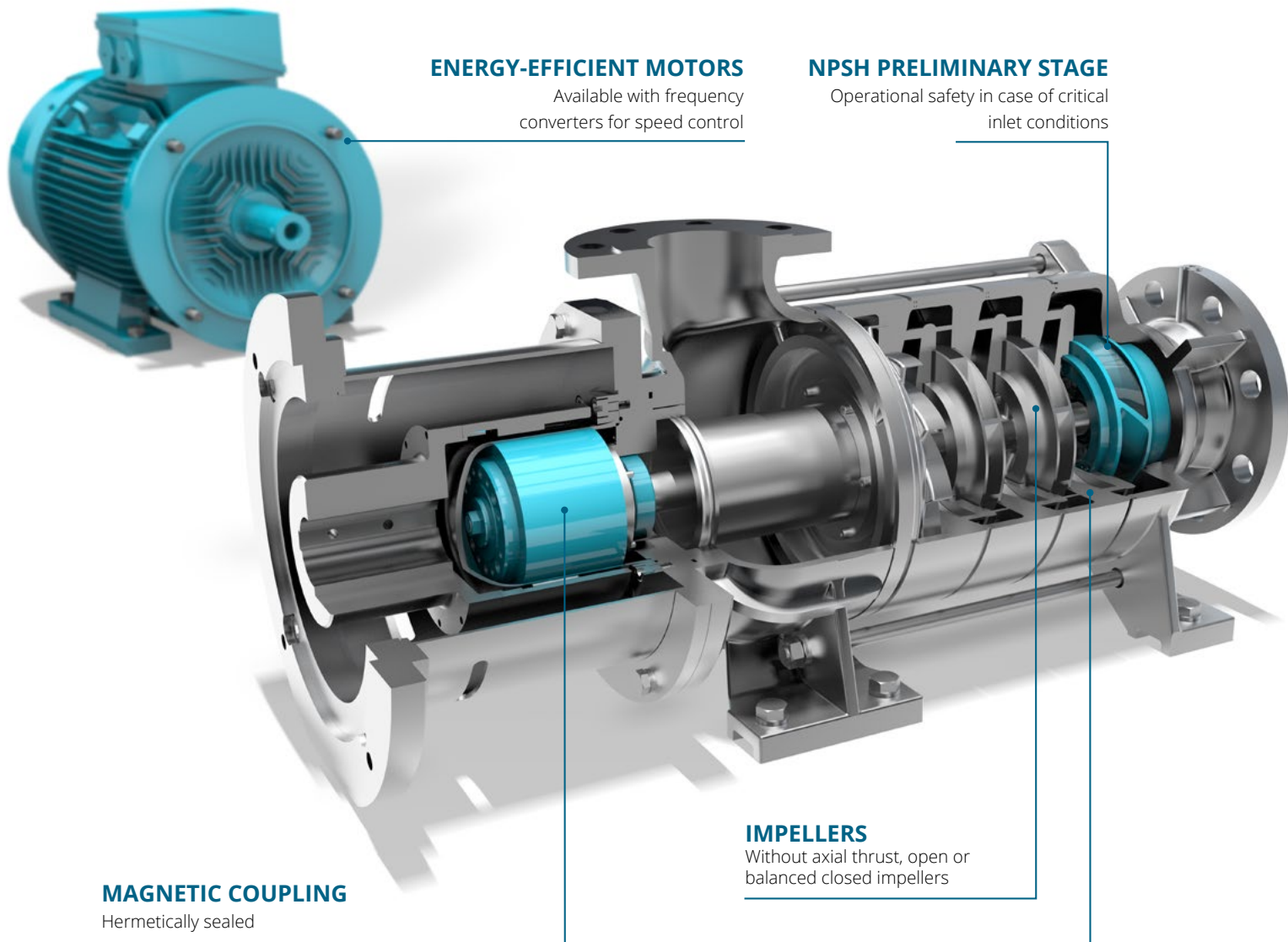
Temperature range -40 up to +220 °C

-40 up to +428 °F

Shaft sealing Magnetic coupling

EDUR-Centrifugal Pumps for energy storage systems:

# Individual – as your requirements for modern energy storage technologies!



## ENERGY-EFFICIENT MOTORS

Available with frequency converters for speed control

## NPSH PRELIMINARY STAGE

Operational safety in case of critical inlet conditions

## MAGNETIC COUPLING

Hermetically sealed

## IMPELLERS

Without axial thrust, open or balanced closed impellers

## RING HOUSING

Compensation of radial forces due to especially designed ring housing

# Advantages at a glance

## LOW OPERATING COSTS

- Very high efficiencies
- High energy efficiency due to using “lossless” containment shells with magnetic couplings
- Maintenance-free mechanical seals

## PROCESS SAFETY

- Hermetically sealed
- Low-wear
- Self-priming properties
- Maintenance-free
- Low NPSH (Net Positive Suction Head) values
- High operational safety
- Low noise emission

## ASSEMBLY-FRIENDLY

- Module system for customized solutions
- Compact block and base plate aggregate
- Minimal space needed

## TECHNICAL SUPERIORITY

- Large variety of materials
- High operating pressures

## DESIGN

- Optimum pump specification by our specialised engineers

## FIELDS OF APPLICATION AND TARGET GROUPS:

- |                   |                         |                      |
|-------------------|-------------------------|----------------------|
| ■ Power to Gas    | ■ Alkaline electrolysis | ■ Methanisation      |
| ■ Power to Liquid | ■ PEM electrolysis      | ■ Biodiesel / biogas |
| ■ Power to Heat   | ■ AEM electrolysis      |                      |

Your application is not listed?  
Please contact us!



# EDUR-Centrifugal Pumps – extremely versatile for smart energy systems of the future

