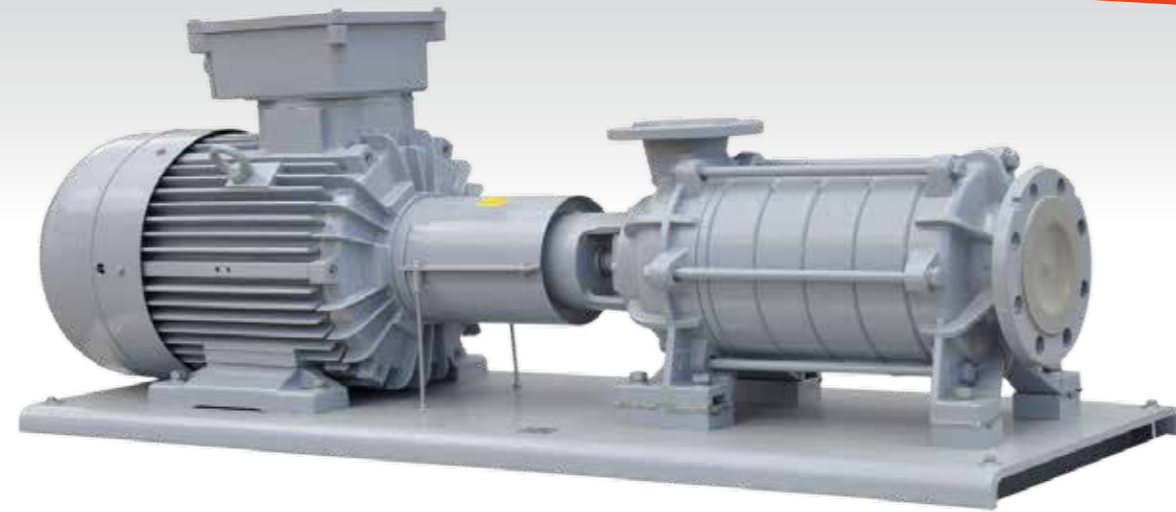


FAS - NZ Pump Technology
Efficiency - Experience - Reliability



► CENTRIFUGAL PUMPS FOR LPG

The centrifugal pumps of series FAS NZ are characterized above all by the optimization of the constructive operating characteristics with clearly reduced energy consumption. The compact construction, the optimization of the hydraulic components as well as the reduction of the noise level and of vibrations are further advantages.

These pumps are specifically suitable for the use in innovative and highly complex large-scale projects such as LPG terminals, tank farms, district heating power stations, refineries etc. The pumps may also be installed in existing plants and systems for modernization purposes and optionally may be supplied with adapters for exchange of other pump models.



► Technical Features:

- Capacities up to 170 m³/h
- Max. differential pressure 14 bar
- Single acting mechanical seal (standard)
- Options:
 - Double acting mechanical seal
 - Magnetic coupling (see following page)

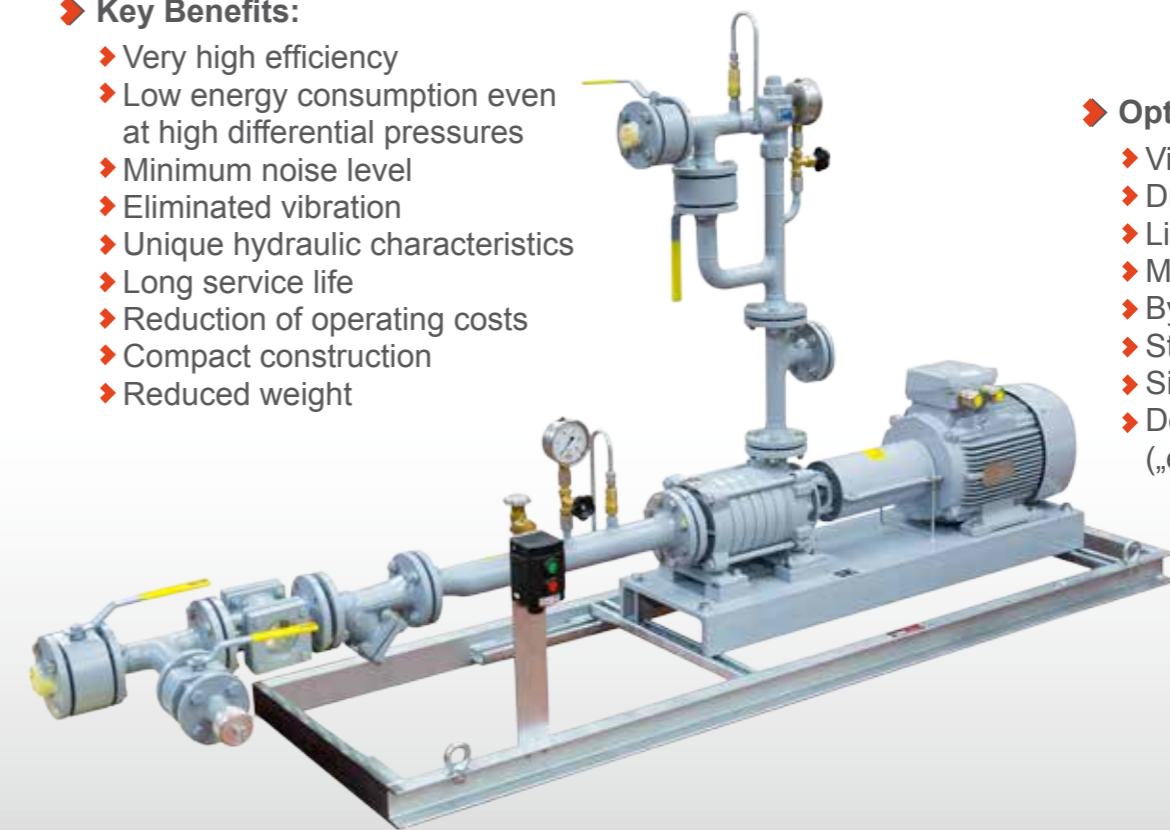
► Overview FAS NZ Pump Models

Model	Capacity m ³ /h	Differential pressure bar	Motor capacity kW	Flange connection Inlet / Outlet DN
NZ 18-8-10	18	8	10,0	65/40
NZ 25-13-15	25	13	15,0	80/65
NZ 30-9-15	30	9		
NZ 30-14-24	30	14	24,0	80/65
NZ 40-6-12,5	40	6	12,5	
NZ 40-8-15		8	15,0	
NZ 40-10-20		10	20,0	
NZ 60-5-15	60	5	15,0	125/100
NZ 60-7-20		7	20,0	
NZ 60-10-28		10	28,0	
NZ 80-6-24	80	6	24,0	125/100
NZ 80-7-28		7		
NZ 80-11-47		11	47,0	
NZ 100-5-24	100	5	24,0	125/100
NZ 100-7-28		7	28,0	
NZ 100-10-47		10	47,0	
NZ 150-5-36	150	5	36,0	125/100
NZ 150-7-47		7	47,0	
NZ 150-10-58		10	58,0	
NZ 170-5-47	170	5	47	125/100
NZ 170-8-75		9	75	

Other pump models and executions available on request.

► Key Benefits:

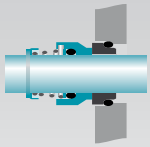
- Very high efficiency
- Low energy consumption even at high differential pressures
- Minimum noise level
- Eliminated vibration
- Unique hydraulic characteristics
- Long service life
- Reduction of operating costs
- Compact construction
- Reduced weight



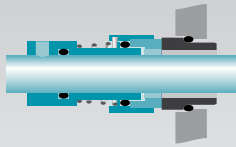
► Options:

- Vibration monitoring
- Dry-running sensor
- Liquid level sensor
- Max. pressure sensor
- By-pass valve
- Strainer
- Sight flow indicator
- Double push button („emergency stop“)

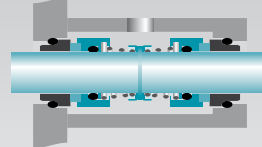
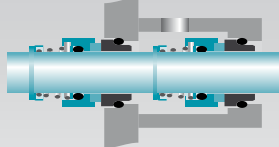




▶ Single acting mechanical seal (standard)



▶ Double acting mechanical seal



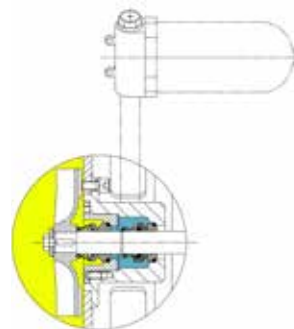
▶ Magnetic coupling

▶ USE OF DOUBLE MECHANICAL SEALS IN TANDEM ARRANGEMENT

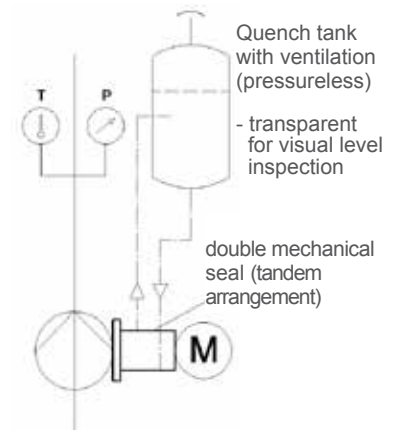
Conversely to the single mechanical seals, the double mechanical seals avoid that the medium may escape into the atmosphere only for a limited period of time in case of a failure of the first seal. The tandem arrangement is a combination of two single mechanical seals arranged in series. For the use of double mechanical seals in tandem arrangement a corresponding supply system is required for the flushing liquid, respectively quench medium.

▶ Key Benefits:

- ▶ Prevention of leakages
- ▶ Monitoring the leakage rate
- ▶ Cooling and lubrication
- ▶ Dry-running protection
- ▶ Stabilization of lubrication film, e.g. in vacuum operation
- ▶ Hermetic sealing for media reacting in an undesired way or crystallizing when in contact with oxygen
- ▶ Prevention of icing
- ▶ Reduction of operating costs



Product side Atmosphere side



▶ MAGNETIC COUPLING

The option with a magnetic coupling is the safest solution for a highly reliable and leak-free operation. The magnetic couplings are extremely long-lived with lowest maintenance costs.

- ▶ Certified according to DIN EN ISO 9001
SCC** (Service)



Flüssiggas-Anlagen GmbH

Peiner Straße 217
38229 Salzgitter - Germany

Phone: +49 5341 8697-0
Fax: +49 5341 8697-11

E-Mail: info@fas.de
www.fas-engineering.de

www.fas.de