



**KUMERA**  
*Norgear Marine Transmissions*

**SPEED INCREASING  
DRIVES**

fire pumps  
hydraulic power  
electric power



# NORGEAR FI - FI 1 DEDICATED FIRE-PUMP DRIVES

## NORGEAR GEARBOXES FOR FI-FI 1 FIRE PUMPS

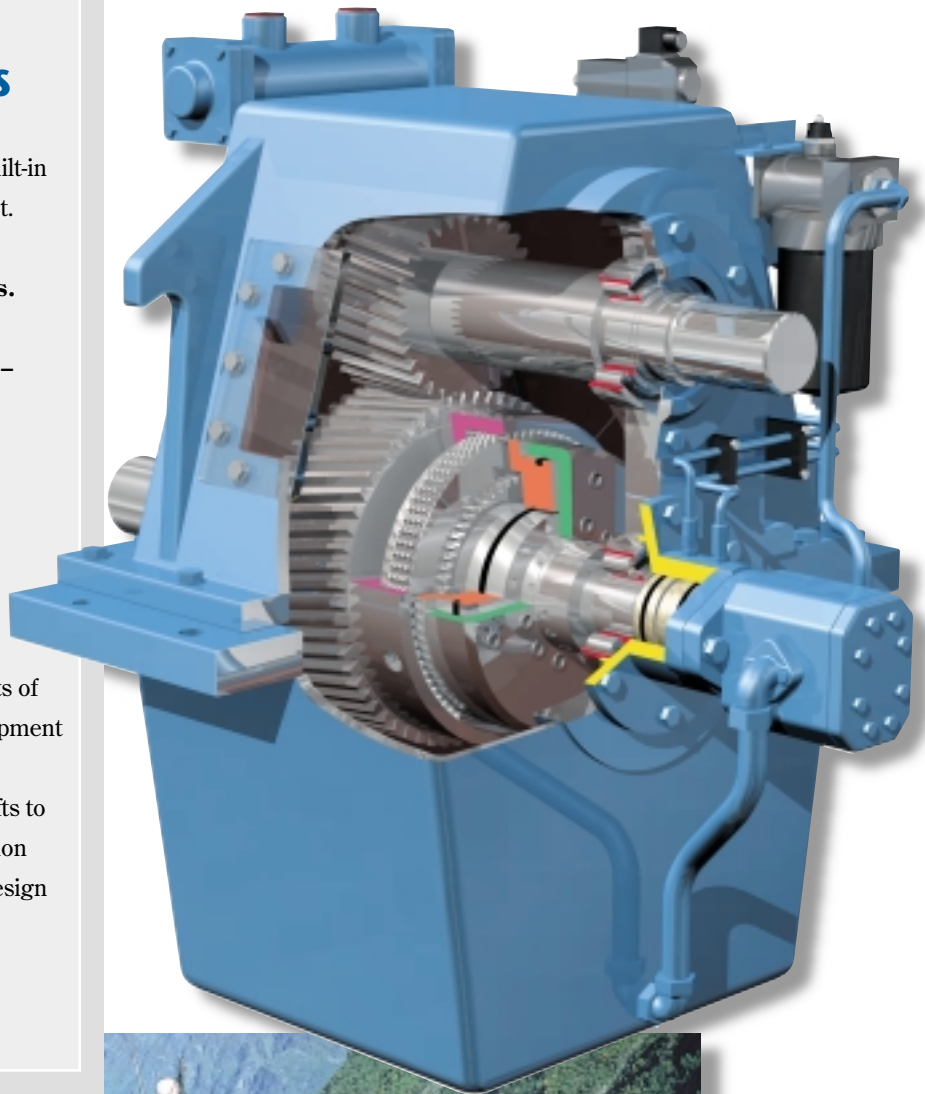
Single input/single output gearboxes with built-in oil operated clutch providing a compact layout.

**Type FVEC-280 with vertical offset shafts.**  
**Type 2FGEC-280 with horizontal offset shafts.** Standard torque capacities 7500 – 10200 Nm. Standard speed increasing ratios available.

In addition to the speed increasing gearbox, the NORGEAR drive package can include the highly flexible input coupling, output coupling and clutch control/alarm panel.

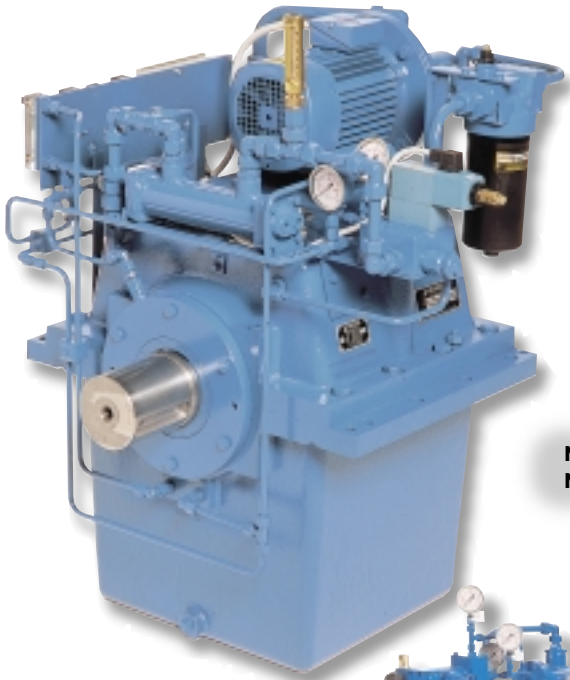
The design complies with the requirements of all the major Classification Societies and equipment would be built under Survey.

Gearboxes can be equipped with idler shafts to suit the configuration/rotation of the propulsion engines and fire pumps, please contact our design department for your specific proposal.

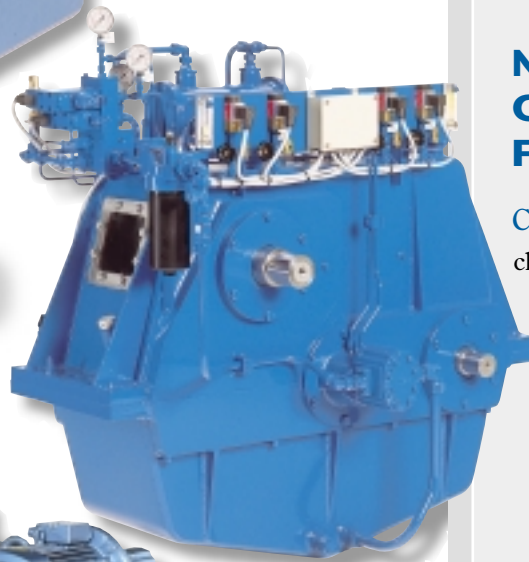




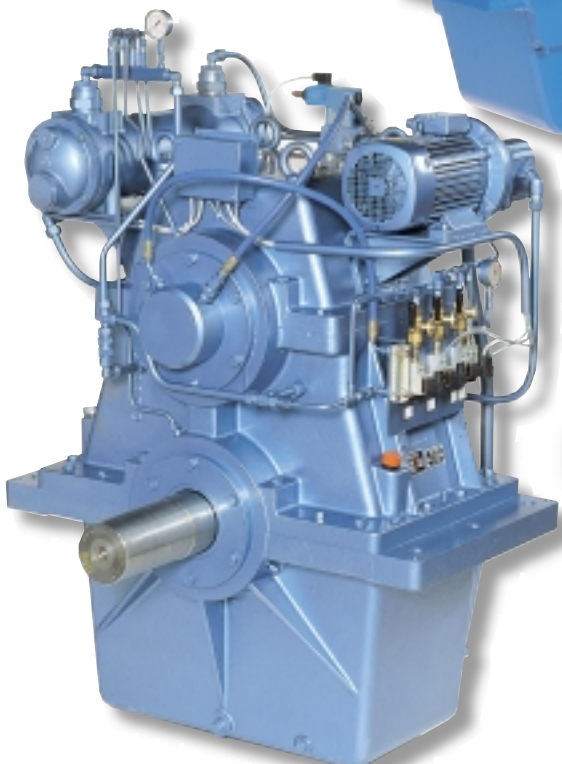
# THE RANGE OF NORGEAR FI - FI DRIVES ALSO INCLUDES



**Norgear type:  
NKHU-15000**



**Norgear type:  
6FGCC-390**



**Norgear type:  
FVC-450**

## NORGEAR HYDRAULIC CLUTCH UNITS

Free standing selfcontained oil operated clutch. Application where engine speed and fire pump speed are compatible, usually 1500 to 2100 RPM. Standard range 1250 - 45000 Nm.



## NORGEAR MULTI- CLUTCH FI - FI 1 DRIVES

Combination gearbox providing separate clutched drives for fire pumps, deck machinery pumps, cooling pumps and shaft alternators, with continuously driven or clutched shafts. Ensuring fire fighting and towing capability available in a black out condition.



## NORGEAR FI - FI II & III DRIVES

This highly rated fire fighting duty can be satisfied with either a single output dedicated fire pump drive gearbox or a combination gearbox for Fi - Fi II or III pump and alternator.

# NORGEAR MARINE TRANSMISSIONS

## MEMBER OF THE KUMERA CORPORATION

Kumera A/S has been a member of the Kumera corporation since 1979 bringing together 50 years experience of marine installations with the modern manufacturing facilities of the Group.

The Sandefjord plant is the centre of Kumera's marine transmissions activities including design, assembly, sales and service of NORGEAR gearboxes and hydraulic clutch units.

Auxiliary drives from the fore-end of main propulsion engines represents a major part of the production and can be broadly sub-divided into:

Dedicated fire pump drives in the form of speed increasing gearboxes or free standing hydraulic clutch units where standardisation allows serial production thus lowering costs and minimising delivery time.

Special designs for multi-shaft gearboxes giving combinations of fire pump/alternator or deck machinery pump and or cooling pump drives, where a close liaison with the customer can result in an optimum solution.

Manufacture in Kumera Oy in accordance with ISO 9001 is certified by Det Norske Veritas.

Kumera provides a 24 hour Service and Spare Parts operation from Sandefjord and designated stockists in our major markets.

Other transmission products include right angle gearboxes, vertical shaft gearboxes and hydraulic clutches for thruster and azimuth propeller drive.



AREA REPRESENTATIVE :



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