

Kongsberg Azimuth Thrusters

Underwater Mountable azimuth thrusters Type UUC and UUC PM

A robust, heavy-duty L-drive azimuth thruster specifically designed for extended and reliable dynamic positioning (DP) operation on offshore rigs and drillships.

Our range of underwater mountable thrusters is designed for easy underwater mounting and dismantling without dry-docking the application. Our underwater mountable thrusters provide reliable transit and DP operation.

Our thrusters are delivered with power ratings from 3,000 kW up to 6,500 kW. Compact construction provides advantages for mounting at the shipyard and during maintenance. The range is capable of underwater mounting and demounting without the need for dry-docking, using a special lifting technique, and a unique sealing and locking device.

Typical applications of UUC PM and UUC thrusters

- Semi-sub drilling rigs / ships
- Production vessels
- Offshore windmill installation vessels
- Other large-scale vessels

Key features

- L-drive with integrated steering gear
- Nozzle: Straight or tilted with mild or stainless-steel inner surface
- FP propeller for variable speed
- Electric drive
- Hydraulic and electric steering

Type UUC PM

The UUC PM type underwater mountable thruster is a highly efficient, simple, and compact solution for various offshore applications where space is limited. The integrated PM motor is mounted very low between the steering gear, which enables the low installation height. Thanks to the PM motor, the thruster gives great electrical efficiency over the complete operational profile. With a new type of lubrication and, as an alternative, environmentally friendly sealing solution, the UUC PM thruster type has become more environmentally conscious as well as more energy efficient.

Key advantages of UUC PM thrusters

- Integrated PM motor allows for a low installation height
- PM motor, electric steering, and spray lubrication contribute to greater energy efficiency
- Simple design; eliminates need for intermediate shafting or flexible coupling
- Underwater mountable and demountable

Type UUC

Over 1,000 units have been delivered to date, and the wellknown UUC product family offers a complete range of thruster sizes. The compact construction is an advantage when mounting and demounting the thruster. The design is suitable for various applications.

Key advantages of UUC thrusters

- Proven design; over 1,000 units delivered
- Excellent in both DP and transit
- Complete range of UUC thrusters for optimum unit choice
- Underwater mountable and demountable

UUC HT - High Thrust version

The UUC HT is a well known and trusted product. All the components are within our well proven range, and the HT product range is interchangeable with existing UUC series: The 405 is interchangeable with 355 HT

All larger, slowly rotating propeller creates same thrust with less power, giving increased efficiency up to 18-25 %

A smaller e-motor for power and drive also provides the following benefits:

- Less installed power on the vessel.
- Reduced underwater noise.

The KONGSBERG UUC thrusters can be further configured to meet special customer needs such as different height options between thruster and e-motor, condition monitoring solutions (CMS) and remaining useful life (RUL), and integration between control, DP, and automation systems.



UUC PM 355

Technical data

UUC PM	355			
Propeller diameter (m)	3.7			
Power (kW)	4200			
Input (rpm)	750			
Thrust (mtons)	81			
UUC HT	355			
	4.5			
Propeller diameter (m)				
Power (kW)	3800			
Input (rpm)	750			
Thrust (mtons)	86			
UUC	305	355	355 405	355 405 455
Propeller diameter (m)	3.5 - 3.5	3.0 - 3.2	3.0 - 3.2 3.8 - 3.8	3.0 - 3.2 3.8 - 3.8 4.1 - 4.1
Power (kW)	3000 - 3200	3800 - 4000	3800 - 4000 4500 - 4800	3800 - 4000 4500 - 4800 5000 - 5500
Input (rpm)	720 - 720	720 - 750	720 - 750 720 - 750	720 - 750 720 - 750 720 - 750
Thrust (mtons)	55 - 61	71 - 74	71 - 74 84 - 90	71 - 74 84 - 90 95 - 102