

# Azimuthing retractable thrusters

for aux. / DP propulsion  
UL (horizontal drive)  
ULE (vertical drive)

## Typical applications

Offshore supply vessels, AHTS, offshore production vessels, offshore construction vessels, research vessels, multipurpose vessels.

## Mounting

The mounting is "bolt-in, top mounted type". First the casing plate is welded into the hull structure. Then the complete thruster unit is lowered into the well, aligned and the lower support is welded into the well side. After this the thruster can be bolted in place.

## Drive shaft arrangement (UL)

Thruster drive is either horizontally mounted electric motor or diesel engine. Standard drive shaft arrangement includes short solid shaft with bearings and flexible coupling for prime mover.

## Drive shaft arrangement (ULE)

Thruster drive is vertically mounted electric motor with two mounting types depending of the thruster size:

1. ULE 255 and bigger: Drive motor is fixed mounted on the deck, requires telescopic intermediate shafting and flexible coupling
2. ULE 2001 and smaller: Drive motor is mounted on the integrated motor foundation and moves together with thruster unit, requires flexible coupling between the thruster and motor.

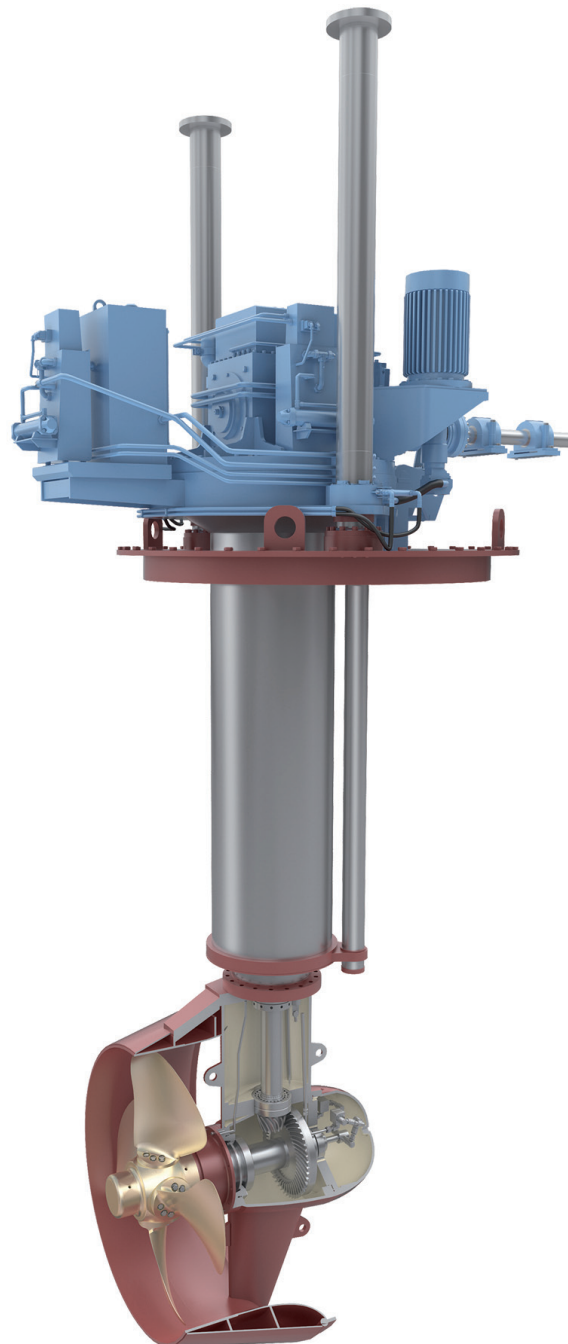
## Lowering / lifting operation

Lowering and lifting of the azimuth thruster is activated by a push-button on the bridge panel or by locally on the starter cabinet. Following actions will automatically happen:

- Unlocking (locking) of locking device
- Lifting or lowering of the thruster
- Engagement (disengagement) of drive shaft coupling (only UL type)

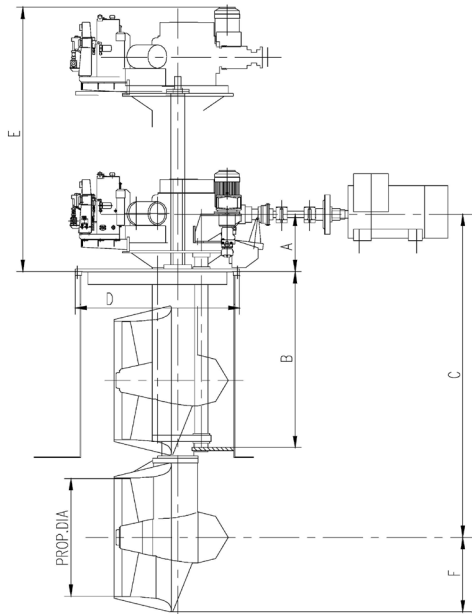
## Propeller shaft sealing

Propeller shaft sealing is chosen based on operation draft.

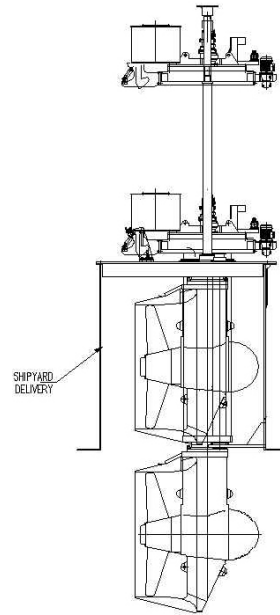


# Fact Sheet

## UL with electric drive motor



## ULE with telescopic shafting



### Technical data UL

	UL 601	UL 901	UL 1201	UL 1401	UL 2001	UL 255	UL 305	UL 355
Propeller diameter (mm)	1300 PV	1600 PV	1800 PV	1 800 FP/CP	2000 PV	2800 TK	3000 TK	Not designed Details available on request
Propeller type	FP	FP	FP/CP	FP/CP	FP/CP	FP	FP	
Max. input power (kW)	440	660	880	1090	1500	2200	3000	
Input speed alternatives (rpm)		1000	750 900	750 900	750 900	900		
		1200	1000 1200	1000 1200	1000 1200	1000 1200	750 800	
	1500	1500	1500	1500	1400	1500	1200	
	1800	1800	1800	1800	1600 1800	1600 1800	1600	
Dry weight (kg)	6000	12 000	16 500	24 000	27 500	47 000	66 000	
Dimensional drawing (FP)	5253653	5251270	5253448	5253495	5151052	5256976	5257456	

### Technical data ULE

	ULE 601	ULE 901	ULE 1201	ULE 1401	ULE 2001	ULE 255	ULE 305	ULE 355
Propeller diameter (mm)	Not designed	Not designed	1800 PV	Not designed	2300 TK	2800 TK	Not designed	Not designed
Propeller type			FP		FP	FP		
Max. input power (kW)	Details available on request	Details available on request	880	Details available on request	1500	2200	Details available on request	Details available on request
Input speed alternatives (rpm)			1000		720 750	720 750		
Dry weight (kg)			21 000		32 000	43 000		
Dimensional drawing			5253448		5256325	5257325		

NOTE. All data is subject to change without prior notice.