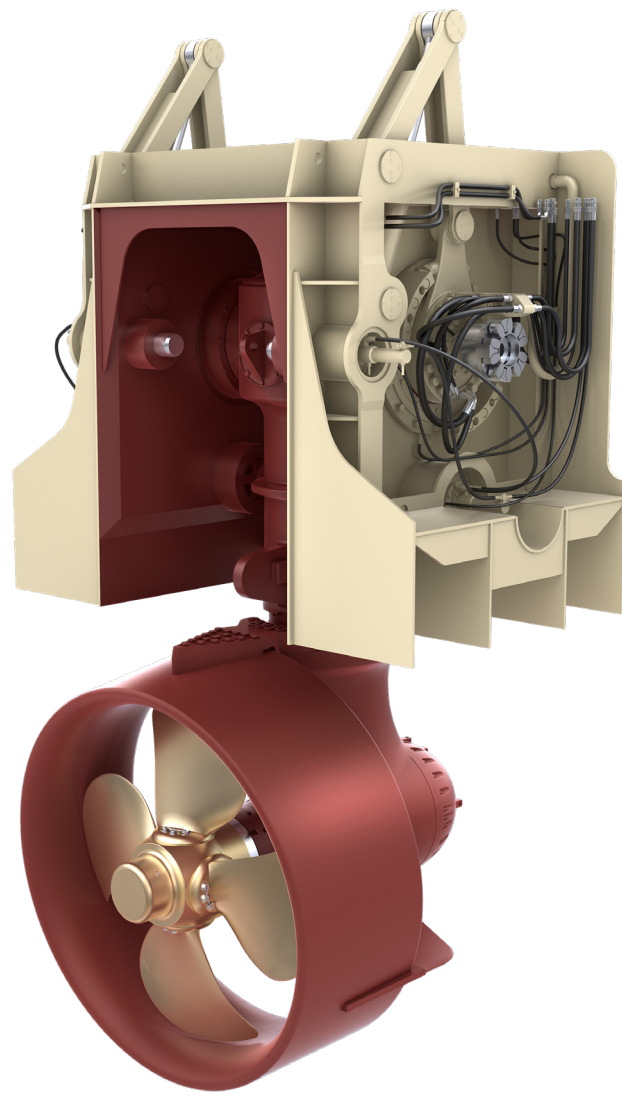


TCNS 075/50-170
TCNS 100/66-220



KONGSBERG



KONGSBERG MARITIME AZIMUTH THRUSTERS

Swing-up azimuth thruster, type: TCNS 075/50-170 TCNS 100/66-220

THE THRUSTER CONSISTS OF THE FOLLOWING MAIN COMPONENTS:

- Thruster unit with nozzle
- Steering gear with top bevel gear
- Hydraulic system
- Remote control system
- Drive motor system

Swing-up thruster

This thruster swings up into a housing in the hull when not in use. It can quickly be swung down about a horizontal axis into the operating position. In operation, it functions as an azimuth thruster and is designed to develop maximum bollard pull in the manoeuvring condition, or to provide positioning power for station keeping. The thruster has the added safety benefit of functioning as a "get-you-home" drive. A high thrust is developed in relation to input power, and this thrust can be vectored in any desired direction.

In the stowed position the thruster does not protrude below the vessel's keel/baseline, an important consideration for shallow water operations. Additional azimuth thrusters are often located at the lowest possible position in the hull due to space envelope restrictions, especially for equipment mounted at the bow, and thrusters need to be retracted into the hull when not in use.

TCNS075 TCNS100

| | | |
|---|------|------|
| A | 4365 | 5415 |
| B | 1750 | 2160 |
| C | 2440 | 3015 |
| D | 2859 | 3536 |
| E | 2240 | 2770 |
| F | 1175 | 1476 |
| G | 2151 | 2764 |
| H | 1310 | 1607 |
| I | 925 | 1200 |
| J | 2235 | 2807 |
| K | 1335 | 1450 |
| L | 1230 | 1350 |
| M | 882 | 989 |
| N | 1448 | 1765 |
| O | 2440 | 2770 |
| P | 690 | 860 |
| Q | 2670 | 2900 |
| R | R100 | R100 |
| S | R80 | R100 |

TECHNICAL DATA FOR

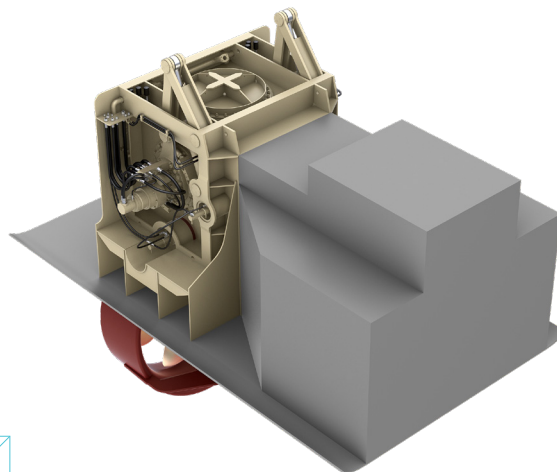
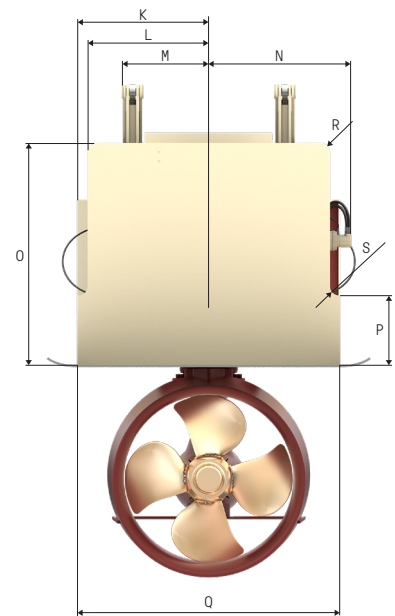
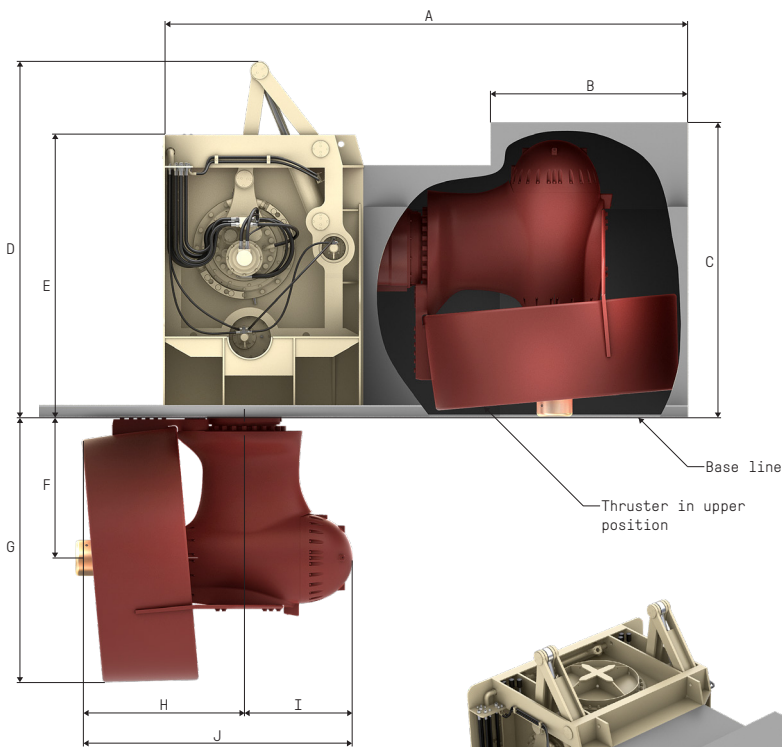
TCNS/C 075

TCNS/C 100

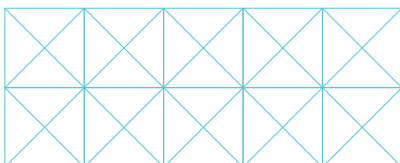
| | | |
|--------------------------------|-------------------|-------------------|
| Propeller diameter | 1700mm | 2200 mm |
| Max power continuous rating | 750 - 1000 kW | 1665 - 2000 kW |
| Nominal input speed | 1500 - 2000 RPM | 1500 - 1800 RPM |
| Max Output thrust | 120 - 160 kN | 265 - 320 kN |
| Propeller speed | 253 - 337 RPM | 214 - 257 RPM |
| Direction of rotation | Clockwise output | Clockwise output |
| Reduction Ratio | 5.9:1 (two steps) | 7:1 (two steps) |
| Weight lower gear house/nozzle | Approx. 4600 kg | Approx. 9600 kg |
| Weight upper gear house | Approx. 6500 kg | Approx. 9800 kg |
| Weight RRM hull module | Approx. 5100 kg | Approx. 9700 kg |
| Total weight (dry) | Approx. 16200 kg | Approx. 29100 kg |
| Versions | Both FP & CP | Both FP & CPP |
| Ice class | DNV Ice C | DnV Ice C |
| Dimension sketch drawing no | RRM300018782 | RRM300019229 |

Applications

Vital dimensions only



Grey hull module is not Kongsberg Maritime delivery



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