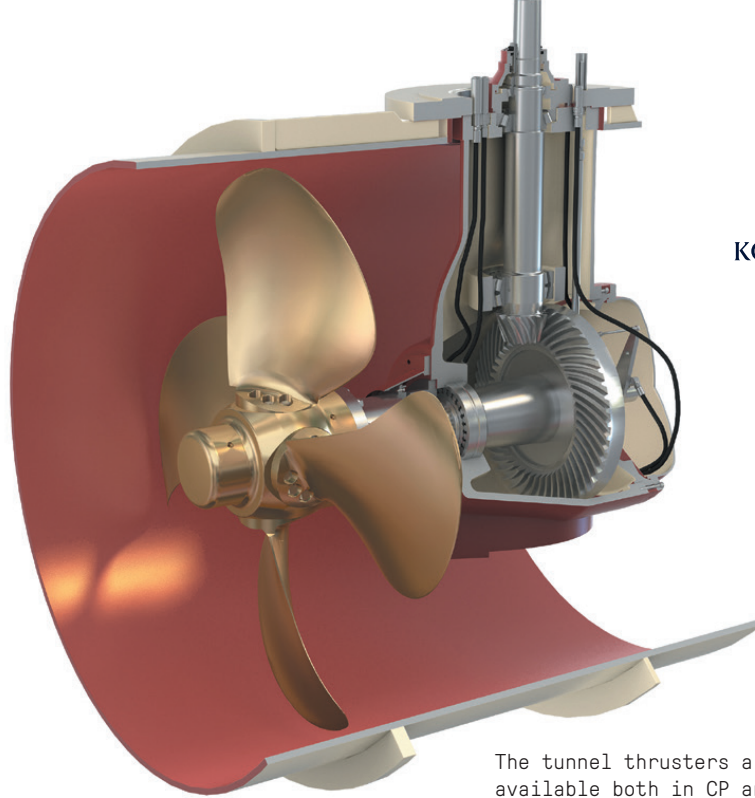


# TUNNEL THRUSTERS TYPE TT FP



KONGSBERG



The tunnel thrusters are available both in CP and FP type

## KONGSBERG TUNNEL THRUSTERS

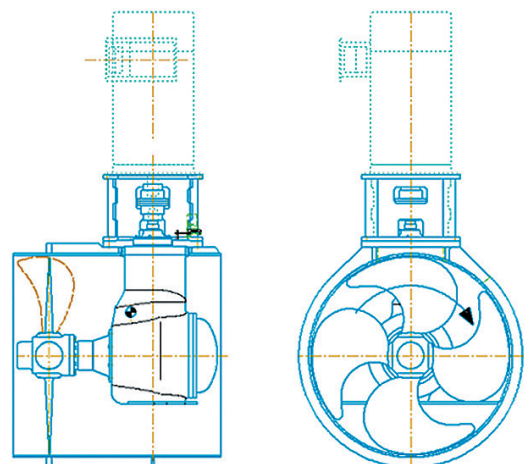
### Type TT FP

#### Key facts

The tunnel thruster is designed for giving max. sideforce to the ship in manoeuvring condition.

The system normally contains of thruster unit with tunnel, hydraulic equipment, remote control and electrical drivemotor with starter.

- Available also in CP type.
- Skew blades.
- Drive shaft seal can be changed without removing electric motor.
- Heavy duty propeller in DP condition.
- Shaft seal pressure control with drainconnection in DP condition.
- Mechanical locked bearings in DP condition.
- Available in super-silent version.



Ø D mm	INPUT RPM	FREQUENCY HZ	GEAR RATIO		OUTPUT RPM	TIP SPEED M/S	VERSION AUX KW	VERSION DPN/DPD KW
			Z1	Z2				
1100	1465/1755	50/60	13/41		465/556	27/32	255/300	230/270
1300	1470/1760	50/60	13/43		444/532	30/36	500/600	450/540
1300	1470/1760	50/60	13/49		390/467	27/32	390/460	350/410
1650	1475/1770	50/60	12/51		347/416	30/36	710/850	630/760
1650	1475/1770	50/60	11/52		312/374	27/32	600/720	530/640
1650	1180/1475	60/50	13/49		313/391	27/34	640/800	570/680
1850	1475/1770	50/60	12/63		281/337	27/33	620/750	550/660
1850	1180/1475/1770	60/50/60	11/52		250/312/374	24/30/36	690/860/1030	610/770/910
1850	1180/1475	60/50	13/53		289/362	28/35	750/930	660/830
2000	980	50	13/49		260	27	900	800
2000	1180	60	11/43		302	32	1150	1050
2000	1180	60	13/49		313	33	1080	950
2000	1180/1480	60/50	11/53		245/307	26/32	830/1040	730/920
2000	1180/1480	60/50	12/53		267/335	28/35	890/1100	790/980
2200	980	50	13/56		228	26	950	850 *
2200	980	50	12/47		250	29	1080	950
2200	980	50	12/47		250	30	1200	1070 *
2200	1480	50	11/54		301	35	1250	1150 *
2200	1480	50	13/64		301	35	930	840
2200	980/1190	50/60	13/56		228/276	26/32	820/1000	730/880
2200	1190	60	12/47		304	35	1250	1150
2200	1190	60	13/64		242	28	750	680
2200	1190	60	13/56		276	32	1150	1000 *
2200	1190	60	12/47		304	35	1500	1350 *
2200	1190	60	11/54		242	28	1000	900 *
2400	980	50	13/54		236	30	1300	1150
2400	980	50	11/51		211	27	1300	1200 *
2400	1480	50	12/62		286	36	1380	1220
2400	1480	50	12/62		286	36	1580	1400 *
2400	980/1190	50/60	11/51		211/257	27/32	1230/1500	1100/1320
2400	1190	60	12/62		230	29	1100	970
2400	1190	60	13/54		286	36	1570	1400
2400	1190	60	12/62		230	30	1280	1150 *
2400	1190	60	11/51		257	32	1600	1500 *
2650	880/980	60/50	13/56		204/228	28/32	1370/1520	1220/1350
2650	880/980/1190	60/50/60	13/59		194/216/262	27/30/36	1260/1400/1700	1120/1250/1500
2800	880/980	60/50	12/53		199/222	29/33	1630/1800	1450/1600
3000	980	50	13/56		228	36	2400	2100
3000	735/880	50/60	13/56		171/204	27/32	1700/2050	1500/1800
3000	710	60	13/56		165	32	1750	1520
3300	735/880	50/60	13/62		154/185	27/32	2150/2550	1880/2250
3300	710/735/880	60/50/60	13/54		171/177/212	30/31/37	2700/2800/3300	2350/2450/2950
3300	710	60	13/62		149	26	2100	1850

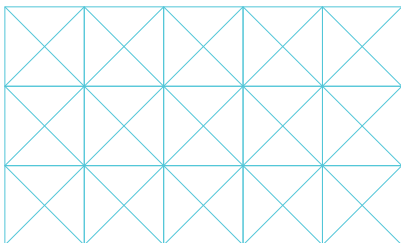
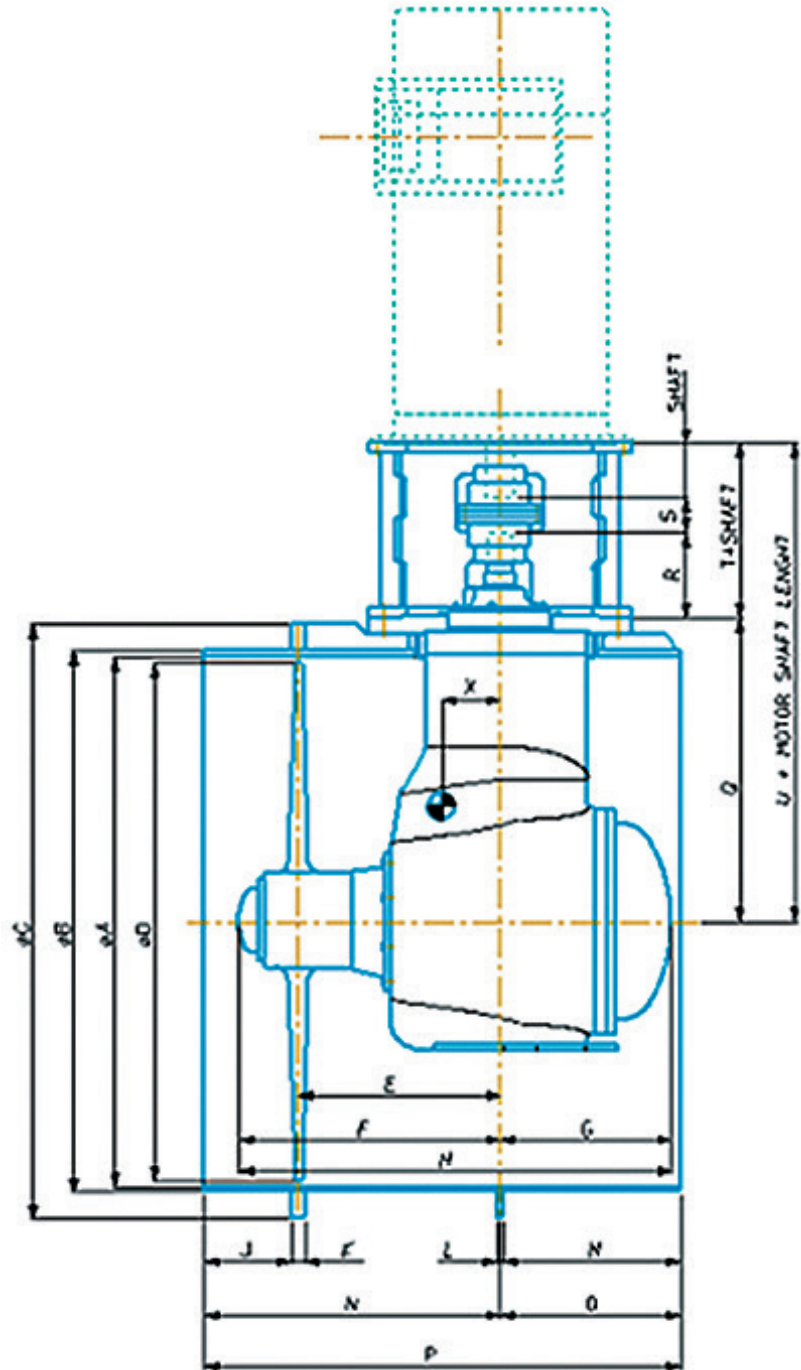
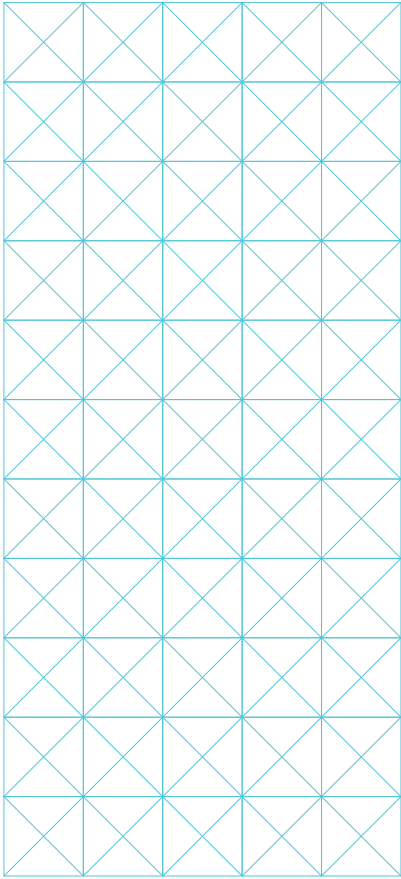
\* High grade material.

TECHNICAL DATA

TT-UNIT REFERED TO PROPELLER DIA D

	ØD	1100	1300	1650	1850	2000	2200	2400	2650	2800	3000	3300
øA	1 120	1 328	1 680	1 880	2 026	2 230	2 430	2 680	2 836	3 038	3 346	
øB	1 150	1 358	1 714	1 924	2 070	2 274	2 480	2 730	2 896	3 098	3 416	
øC	1 330	1 538	1 914	2 124	2 270	2 474	2 680	2 930	3 196	3 398	3 716	
E	523	570	662	780	800	868	1 018	1 126	1 172	1 289	1 349	
F	699	771	908	1 045	1 094	1 179	1 363	1 506	1 590	1 744	1 849	
G	460	495	567	635	656	712	783	861	893	975	1 011	
H	1 159	1 266	1 475	1 680	1 750	1 891	2 146	2 367	2 483	2 719	2 860	
J	215	270	310	315	340	365	420	457	505	540	650	
K	30	30	50	50	50	50	50	50	50	60	60	
L	15	15	20	20	20	20	20	20	20	25	25	
M	462	497	565	650	655	710	790					
N	753	855	997	1 120	1 165	1 258	1 463	1 608	1 702	1 859	2 029	
O	470	505	575	660	665	720	800	875	915	975	1 040	
P	1 223	1 360	1 572	1 780	1 830	1 978	2 263	2 483	2 617	2 834	3 069	
Q		638	756	957	1 075	1 160	1 275	1 380	1 527	1 610	1 723	1 875
R		204	223	263	300	330	380	380	413	440	509	580
S		25	45	112	112	130	150	180	203	203	219	255
T		229	268	375	412	460	530	560	616	643	728	835
U		867	1 024	1 332	1 487	1 620	1 805	1 940	2 143	2 253	2 451	2 710
X		135	185	225	250	275	300	350	375	400	425	450
Weight - AUX		1 150	2 000	3 400	4 400	5 900	7 800	10 000	13 300	15 500	19 500	26 300
Weight - ICE/ DPN/DPD		1 150	2 000	3 400	4 400	5 900	7 800	10 000	13 300	15 500	19 500	26 300

Weights of standard tunnel and propeller unit, hydraulic system and remote control system, excl. oil.  
 All weights in kg, all measurements in mm.  
 NOTE: All data is subject to change without prior notice.



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