



All Gearbox Types

For further information,
please contact our Technical Sales Department at
sales@meproduction.dk

Standard Gearbox Types

Overview of Standard Gearbox Maximum Power

Standard Gear Types		Reference
	Maximum power @ 1800 rpm	
270HS	400 kW	270HS
337HS	500 kW	337HS
350HS	510 kW	350HS
400HS	1000 kW	400HS
430HS	1300 kW	430HS
430-2HS	1050 kW	430-2HS
450HS	2700 kW	450HS
450-2HS	2000 kW	450-2HS
500HS	4320 kW	500HS
500-2HS	2800 kW	500-2HS
580HS	6600 kW	580HS
580HS-H	6600 kW	580HS-H
650HS	8200 kW	650HS

Salling Yachts

270HS/LS	400 kW	270HS
350HS/LS	510 kW	350HS
400HS/LS	1000 kW	400HS

Compacted/High Speed Vessels

200HSC	468 kW	200HSC
235HSC	630 kW	235HSC
280HSC	1100 kW	280HSC

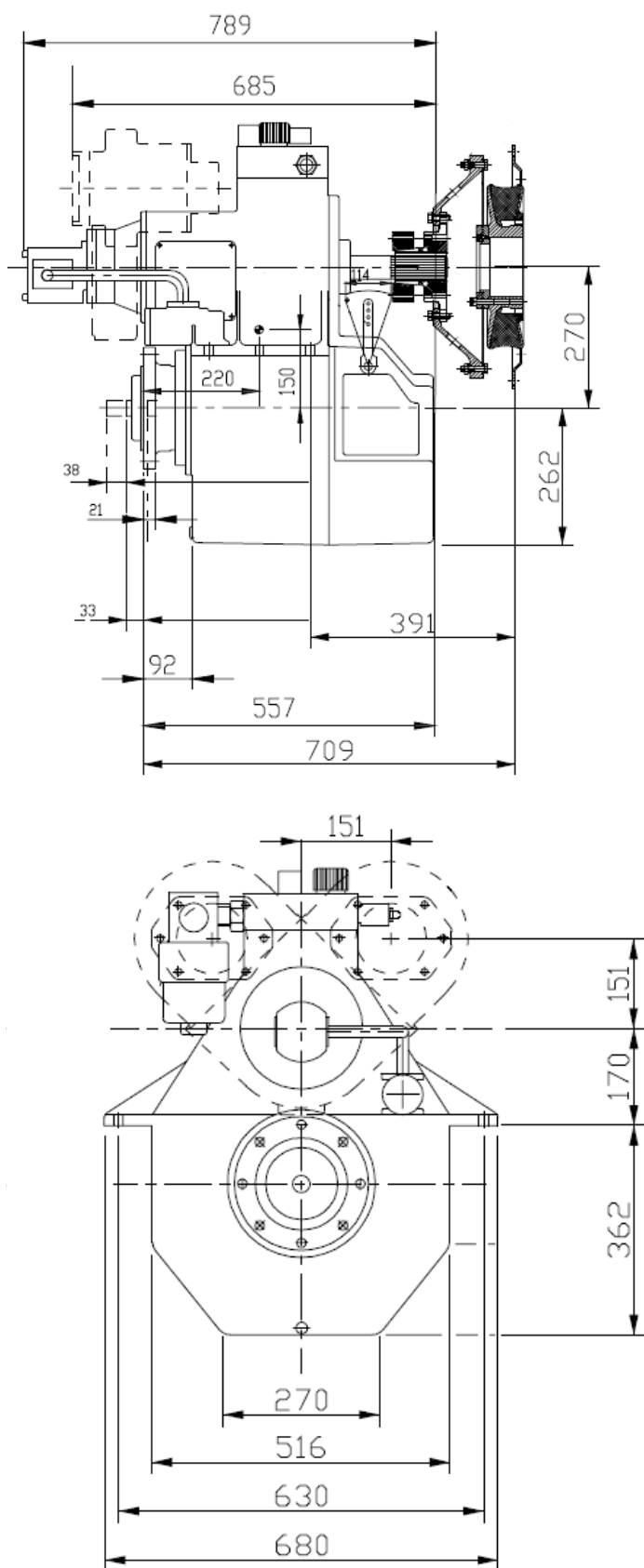
Twin Gearboxes

Twin 1400/0	2x550 kW	Twin1400/0
Twin 1400HS/450	2x550 kW	Twin1400HS/450
Twin 1800HS	2000 kW	Twin1800HS

Front Gear Types

PTO 900	900 kW	PTO900
PTO 1500	1650 kW	PTO1500

270HS - MARINE GEARBOX



Assembly Type 270HS

Reduction ratio	PF kW/rpm	Input shaft mm
1,61-1,97-2,47-2,96-3,52:1	0,220	50
3,95-4,47-5,12-5,51:1	0,163	45
5,93:1	0,145	45
6,53:1	0,128	45

Servo for CP Propeller:

Max force = 93 kN

Max stroke = 76 mm

PTO:

PTO with SAE C-flange and 14 tooth 1 1/4" involute inside spline

Other SAE and ISO flanges and splines available

Free shaft end also available

Max torque from PTO: 600 Nm

Weight:

Approx. 375 kg

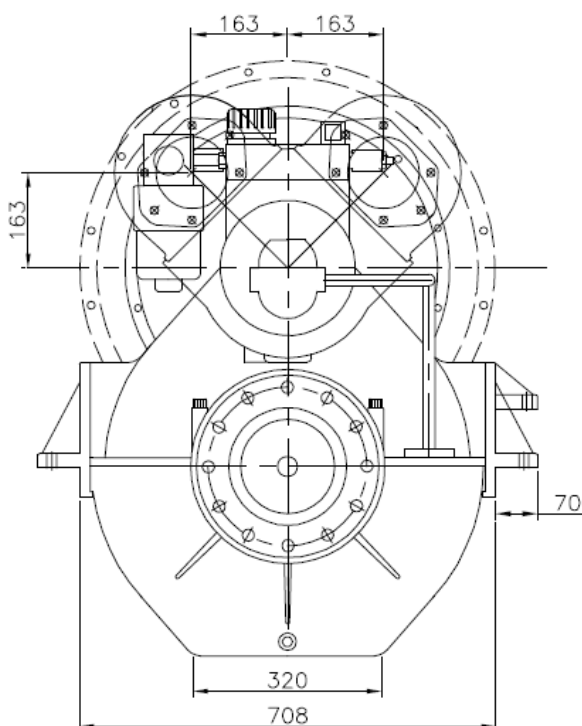
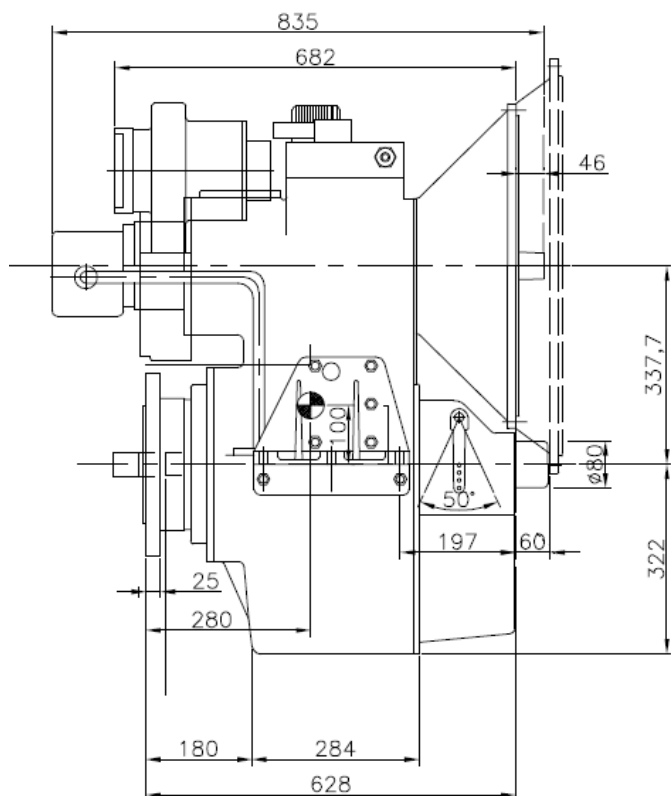
Gearbox:

- Built-in servo system for CP propeller
- Compact design
- Large economical reduction ratio
- Option of 1 or 2 PTOs each with own hydraulic clutch
- Rigid cast iron housing
- Helical ground gearwheels in casehardened and highly alloyed steel
- Hydraulic multi-plate clutch
- Oil system with direct driven oil pump, cooler, filter, valves etc.
- Pressure lubricated spherical roller bearings
- Designed according to the rules of the classification societies
- Each gearbox is tested and approved in test bed

Variants:

270HS/LS extra long stroke for feathering propeller

337HS - MARINE GEARBOX



Assembly Type 337HS

Reduction ratio	PF kW/rpm	Input shaft mm
2,48-3,00-3,54-4,14:1	0,278	50
4,55-5,11-5,47-5,94:1	0,220	50

Servo for CP Propeller:

Max force = 120 kN

Max stroke = 90 mm

PTO:

PTO with SAE C-flange and 14 tooth 1 1/4" involute inside spline

Other SAE and ISO flanges and splines available

Free shaft end also available

Max torque from PTO: 800 Nm

Weight:

Approx. 550 kg

Gearbox:

- Built-in servo system for CP propeller
- Compact design
- Large economical reduction ratio
- Option of 1 or 2 PTOs each with own hydraulic clutch
- Rigid cast iron housing
- Helical ground gearwheels in casehardened and highly alloyed steel
- Hydraulic multi-plate clutch
- Oil system with direct driven oil pump, cooler, filter, valves etc.
- Pressure lubricated spherical roller bearings
- Designed according to the rules of the classification societies
- Each gearbox is tested and approved in test bed

Variants:

337HS-IS with built-in intermediate shaft for counter rotating propeller

Technical drawing showing the front view of a mechanical assembly with dimensions in millimeters (mm). The drawing includes a dashed line indicating a hidden internal feature.

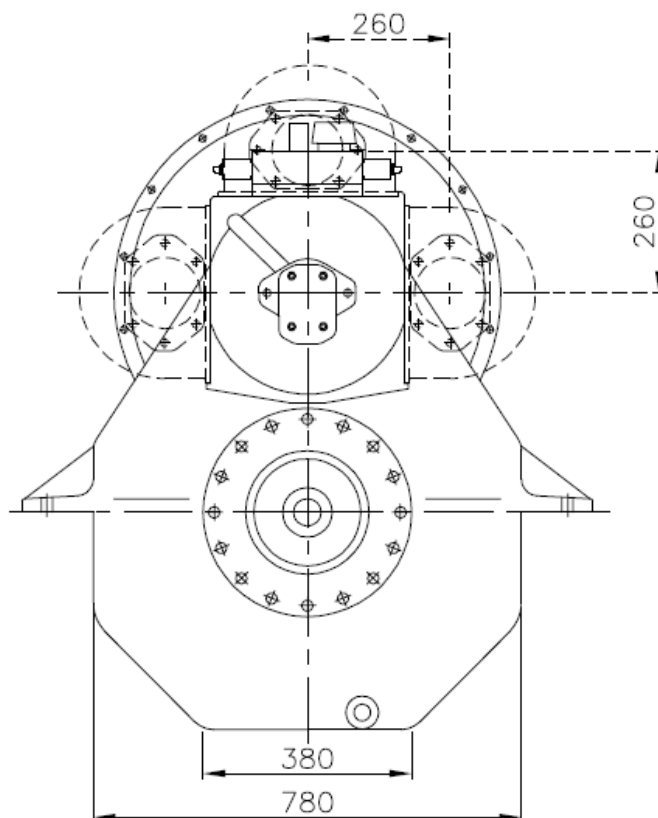
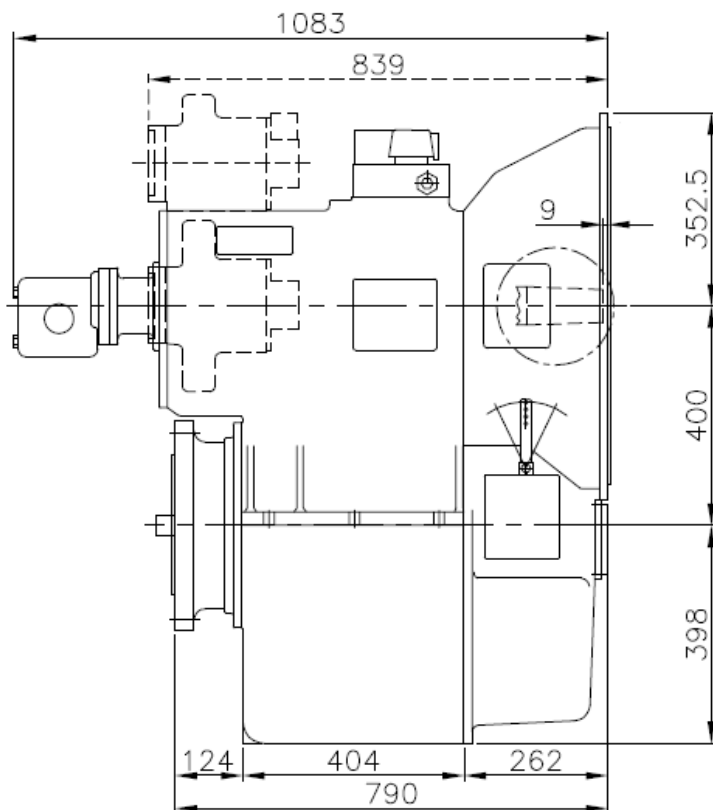
Dimensions:

- Overall width: 875
- Overall height: 350
- Top section width: 715
- Top section height: 276
- Left section height: 185
- Left section width: 98
- Right section height: 340
- Right section width: 70
- Internal feature width: 49
- Internal feature height: 78
- Internal feature width: 135
- Internal feature height: 170
- Internal feature width: 250
- Internal feature height: 46
- Internal feature width: 47
- Internal feature height: 42
- Internal feature width: 125
- Internal feature height: 103
- Internal feature width: 231
- Internal feature height: 617



- 350HS/LS extra long stroke for feathering propeller
- 350HS with reverse gear for counter rotating propeller

400HS - MARINE GEARBOX



Assembly Type 400HS

Reduction ratio	PF kW/rpm	Input shaft mm
3,04-3,57-4,11-4,65-5,17:1	0,540	70
5,53:1	0,518	70
5,94:1	0,453	70
6,59:1	0,367	70
6,89:1	0,344	70

Servo for CP Propeller:

Max force = 150 kN

Max stroke = 120 mm

PTO:

PTO with SAE C-flange and 14 tooth 1 1/4" involute inside spline

Other SAE and ISO flanges and splines available

Free shaft end also available

Max torque from PTO: 900 Nm

Weight:

Approx. 900 kg

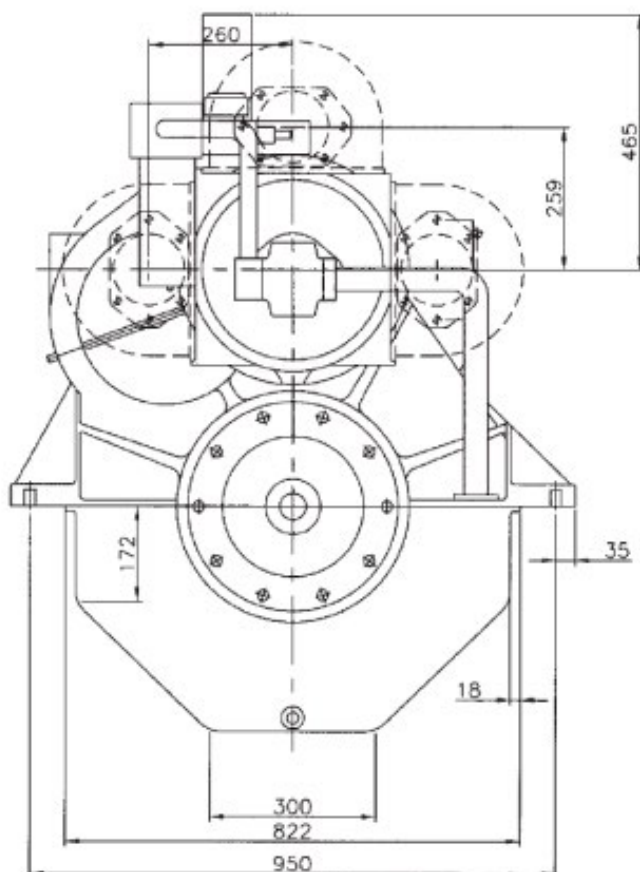
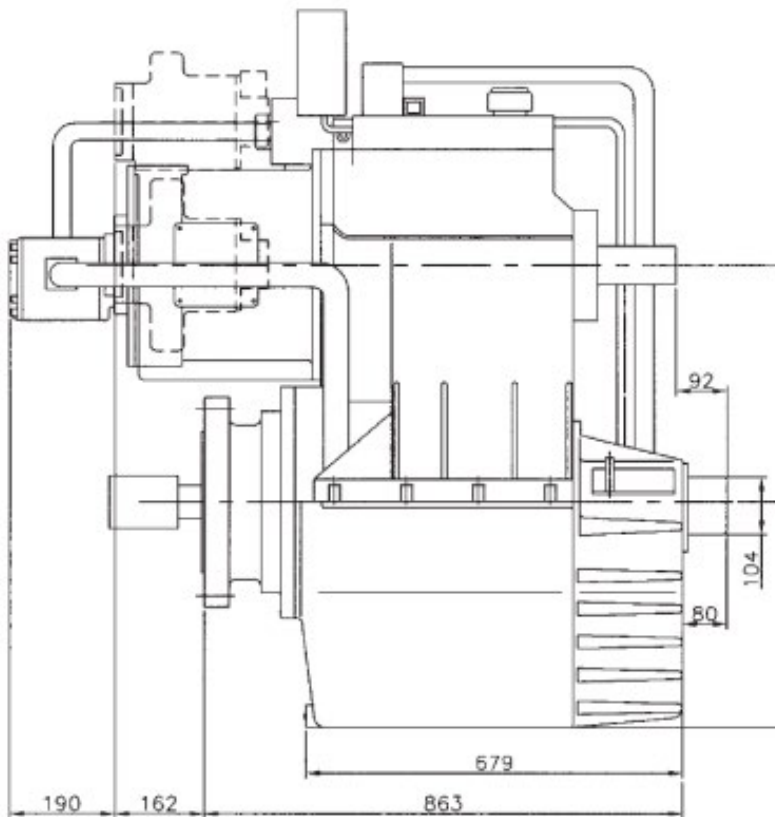
Gearbox:

- Built-in servo system for CP propeller
- Compact design
- Large economical reduction ratio
- Option of 1, 2 or 3 PTOs each with own hydraulic clutch
- Rigid cast iron housing
- Helical ground gearwheels in casehardened and highly alloyed steel
- Hydraulic multi-plate clutch
- Oil system with direct driven oil pump, cooler, filter, valves etc.
- Pressure lubricated spherical roller bearings
- Designed according to the rules of the classification societies
- Each gearbox is tested and approved in test bed

Variants:

- 400HS/LS extra long stroke for feathering propeller
- 400HS with reverse gear for counter rotating propeller

430HS - MARINE GEARBOX



Assembly Type 430HS

Reduction ratio	PF kW/rpm	Input shaft mm
1,56-2,04-2,48-3,12-3,48:1	0,690	80
4,15-4,45-5,12:1	0,690	80
5,44:1	0,613	80
4,56-5,04:1	0,540	70
5,56:1	0,540	70
5,87:1	0,530	70
6,53:1	0,460	70

Servo for CP Propeller:

Max force = 200 kN

Max stroke = 124 mm

PTO:

PTO with SAE C-flange and 14 tooth 1 1/4" involute inside spline

Other SAE and ISO flanges and splines available

Free shaft end also available

Max torque from PTO: 900 Nm

Weight:

Approx. 1340 kg

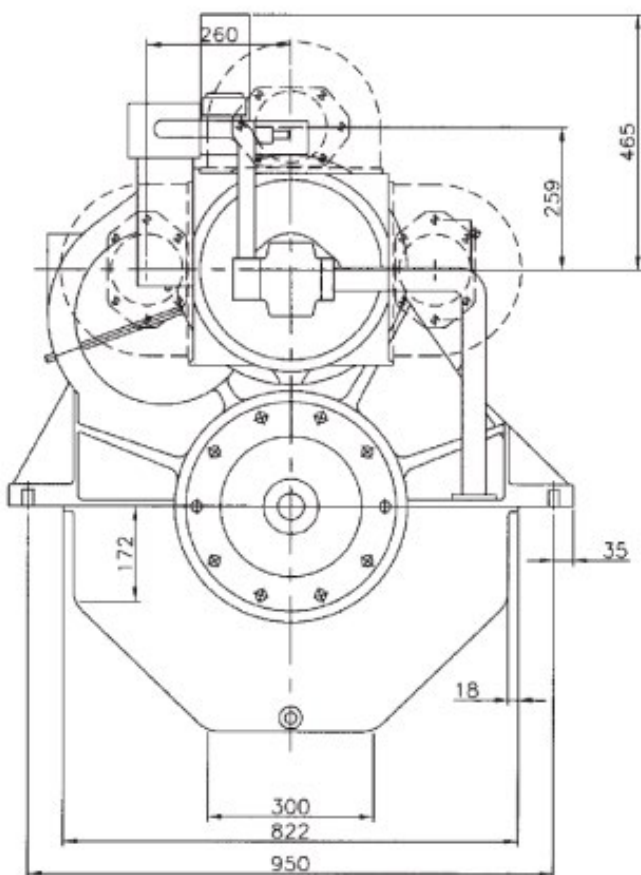
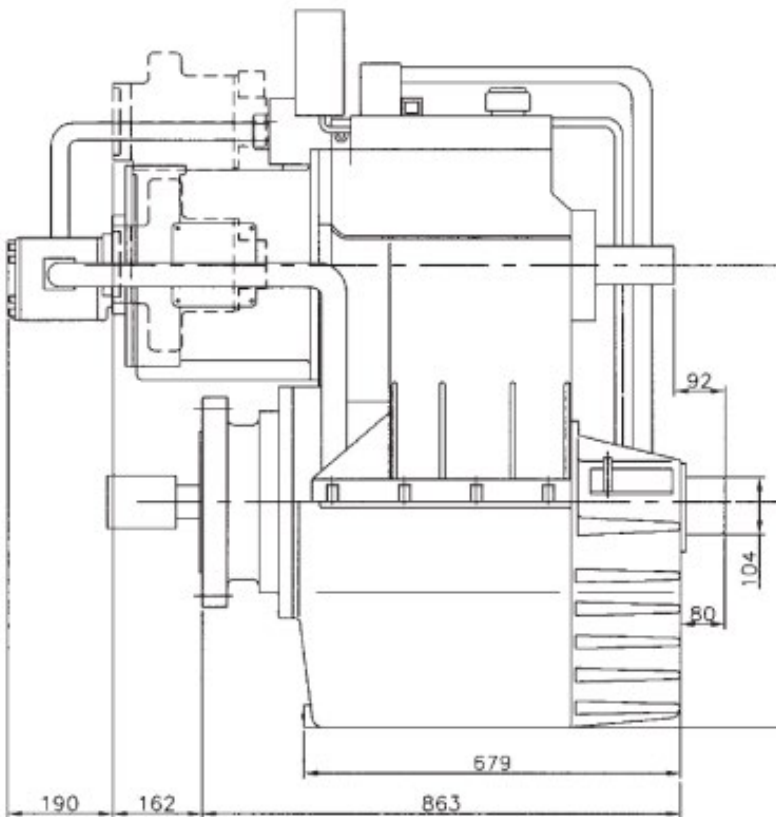
Gearbox:

- Built-in servo system for CP propeller
- Compact design
- Large economical reduction ratio
- Option of 1, 2 or 3 PTOs each with own hydraulic clutch
- Rigid cast iron housing
- Helical ground gearwheels in casehardened and highly alloyed steel
- Hydraulic multi-plate clutch
- Oil system with direct driven oil pump, cooler, filter, valves etc.
- Pressure lubricated spherical roller bearings
- Designed according to the rules of the classification societies
- Each gearbox is tested and approved in test bed

Variants:

430OD prepared for OD system

430-2HS - MARINE GEARBOX



Assembly Type 430HS-2HS

Reduction ratio	PF kW/rpm	Input shaft mm
1,56-2,04-2,48-3,12-3,48:1	0,690	80
4,15-4,45-5,12:1	0,690	80
5,44:1	0,613	80
4,56-5,04:1	0,540	70
5,56:1	0,540	70
5,87:1	0,530	70
6,53:1	0,460	70

Servo for CP Propeller:

Max force = 200 kN

Max stroke = 124 mm

PTO:

PTO with SAE C-flange and 14 tooth 1 1/4" involute inside spline

Other SAE and ISO flanges and splines available

Free shaft end also available

Max torque from PTO: 900 Nm

Weight:

Approx. 1440 kg

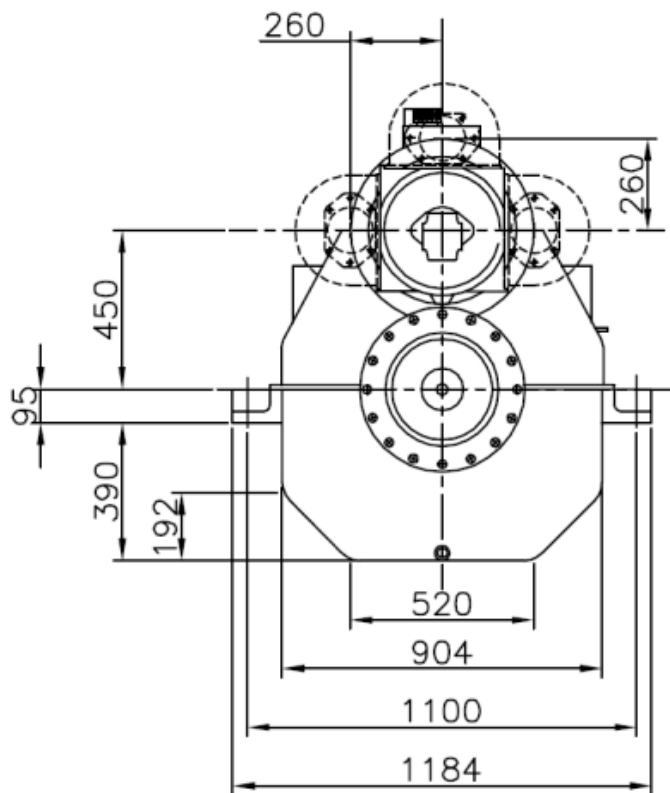
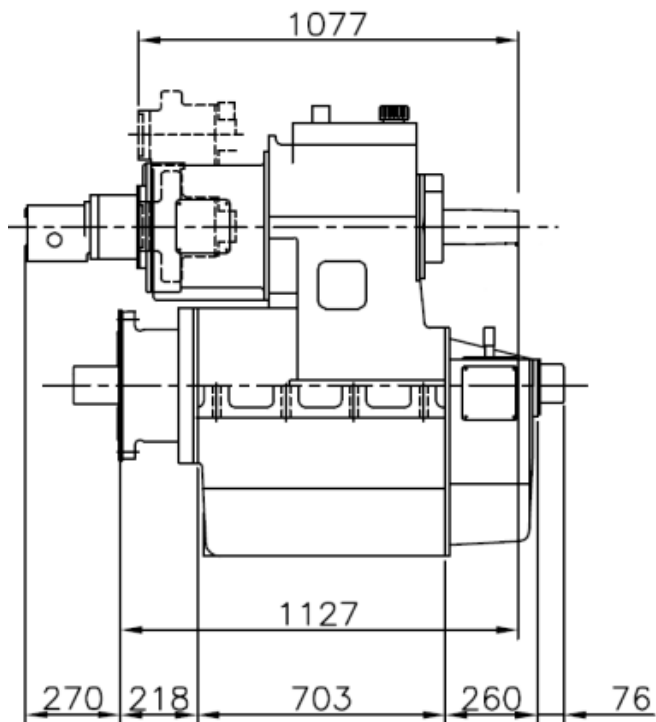
Gearbox:

- Built-in servo system for CP propeller
- Compact design
- Large economical reduction ratio
- Option of 1, 2 or 3 PTOs each with own hydraulic clutch
- Rigid cast iron housing
- Helical ground gearwheels in casehardened and highly alloyed steel
- Hydraulic multi-plate clutch
- Oil system with direct driven oil pump, cooler, filter, valves etc.
- Pressure lubricated spherical roller bearings
- Designed according to the rules of the classification societies
- Each gearbox is tested and approved in test bed

Variants:

430-2OD prepared for OD system

450HS - MARINE GEARBOX



Assembly Type 450HS

Reduction ratio	PF kW/rpm	Input shaft mm
3,11-3,58:1	0,690	80
4,18-4,44:1	0,690	80
5,11:1	0,613	80
5,47:1	0,540	70
5,94:1	0,540	70
6,47:1	0,530	70

Servo for CP Propeller:

Max force = 300 kN

Max stroke = 180 mm

PTO:

PTO with SAE C-flange and 14 tooth 1 1/4" involute inside spline

Other SAE and ISO flanges and splines available

Free shaft end also available

Max torque from PTO: 2000 Nm

Weight:

Approx. 2300 kg

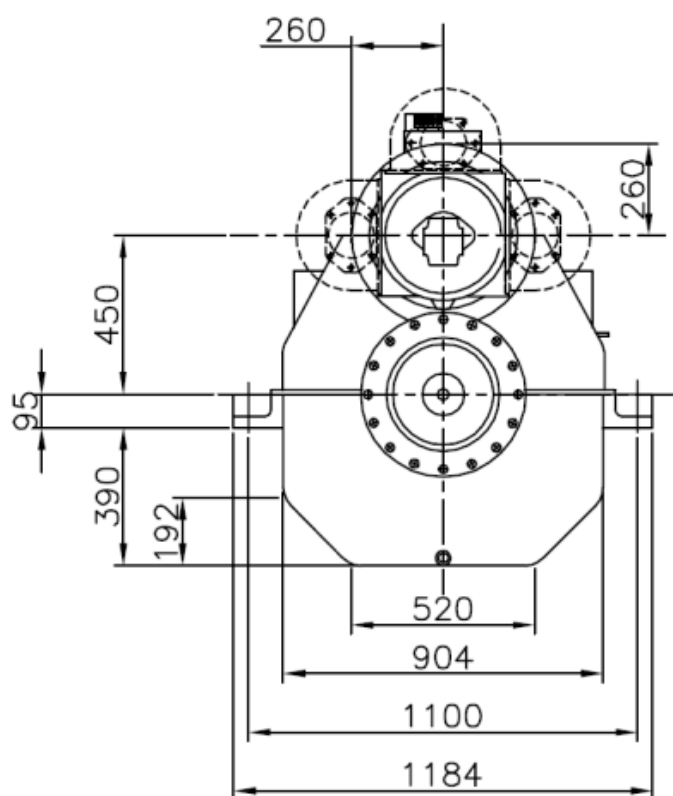
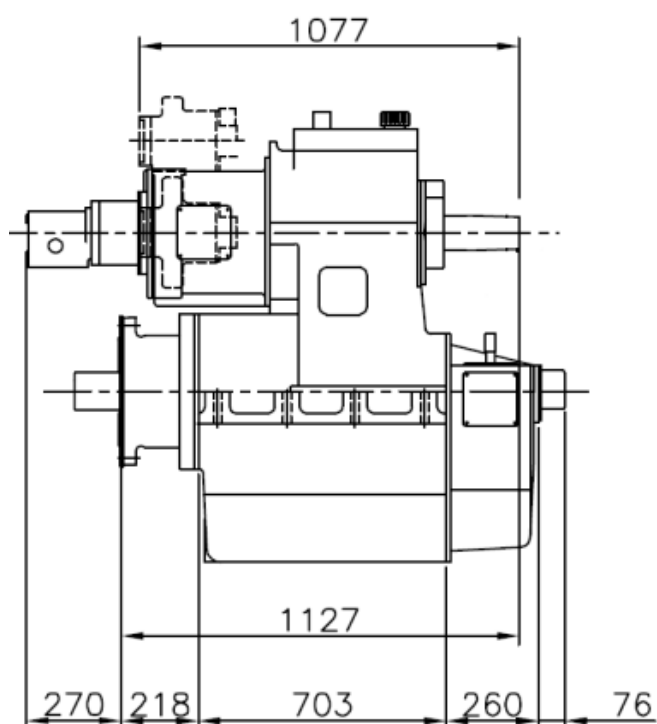
Gearbox:

- Built-in servo system for CP propeller
- Compact design
- Large economical reduction ratio
- Option of 1, 2 or 3 PTOs each with own hydraulic clutch
- Rigid cast iron housing
- Helical ground gearwheels in casehardened and highly alloyed steel
- Hydraulic multi-plate clutch
- Oil system with direct driven oil pump, cooler, filter, valves etc.
- Pressure lubricated spherical roller bearings
- Designed according to the rules of the classification societies
- Each gearbox is tested and approved in test bed

Variants:

450OD prepared for OD system

450-2HS - MARINE GEARBOX



Assembly Type 450-2HS

Reduction ratio	PF kW/rpm	Input shaft mm
3,11-3,58:1	0,690	80
4,18-4,44:1	0,690	80
5,11:1	0,613	80
5,47:1	0,540	70
5,94:1	0,540	70
6,47:1	0,530	70

Servo for CP Propeller:

Max force = 300 kN

Max stroke = 180 mm

PTO:

PTO with SAE C-flange and 14 tooth 1 1/4" involute inside spline

Other SAE and ISO flanges and splines available

Free shaft end also available

Max torque from PTO: 2000 Nm

Weight:

Approx. 2400 kg

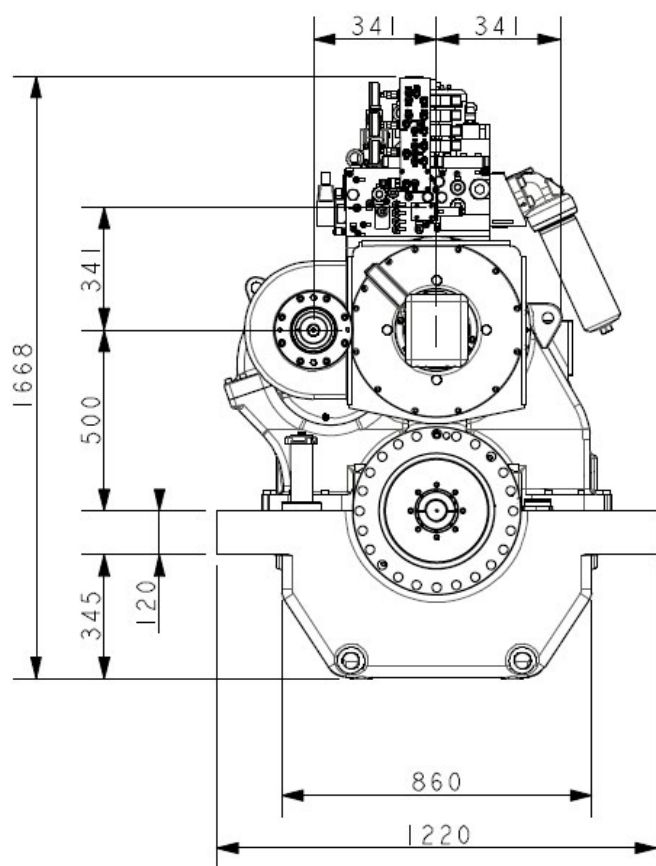
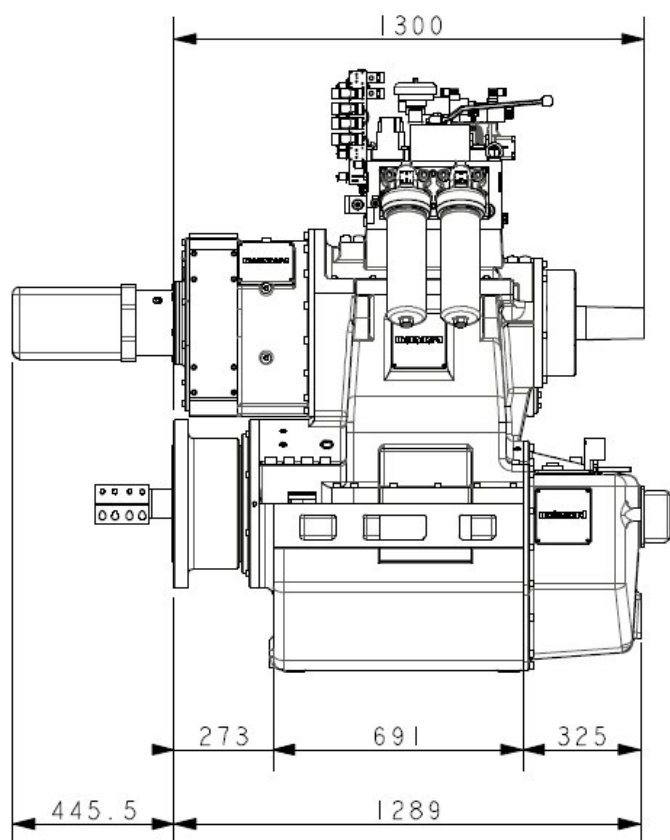
Gearbox:

- Built-in servo system for CP propeller
- Compact design
- Large economical reduction ratio
- Option of 1, 2 or 3 PTOs each with own hydraulic clutch
- Rigid cast iron housing
- Helical ground gearwheels in casehardened and highly alloyed steel
- Hydraulic multi-plate clutch
- Oil system with direct driven oil pump, cooler, filter, valves etc.
- Pressure lubricated spherical roller bearings
- Designed according to the rules of the classification societies
- Each gearbox is tested and approved in test bed

Variants:

450-2OD prepared for OD system

500HS - MARINE GEARBOX



Assembly Type 500HS

Reduction ratio	PF kW/rpm	Input shaft mm
2,03-2,56-3,04-3,32:1	2,400	120
3,63:1	2,315	120
4,24:1	1,803	120
4,39:1	1,752	120
4,56:1	1,433	100
4,94:1	1,345	100
5,67:1	1,026	100
6,06:1	0,951	100
6,56:1	0,810	100

Servo for CP Propeller:

Max force = 300 kN

Max stroke = 180 mm

PTO/PTI:

PTO with SAE D-flange and 13 tooth 1 3/4" involute inside spline

Other SAE and ISO flanges and splines available

Free shaft end also available

Max torque from PTO: 2000 Nm

Max torque from PTO/PTI: 3500 Nm

Weight:

Approx. 2400 kg

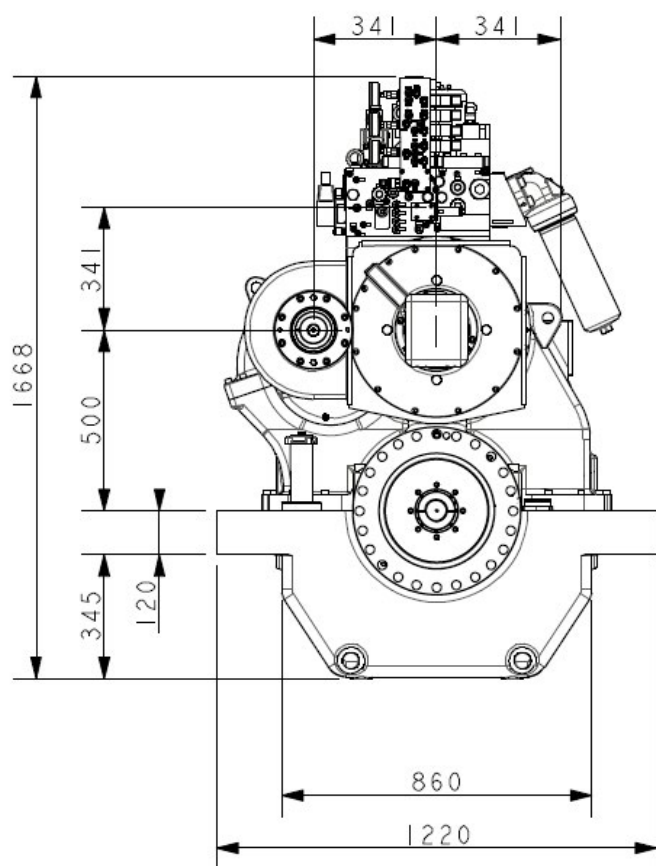
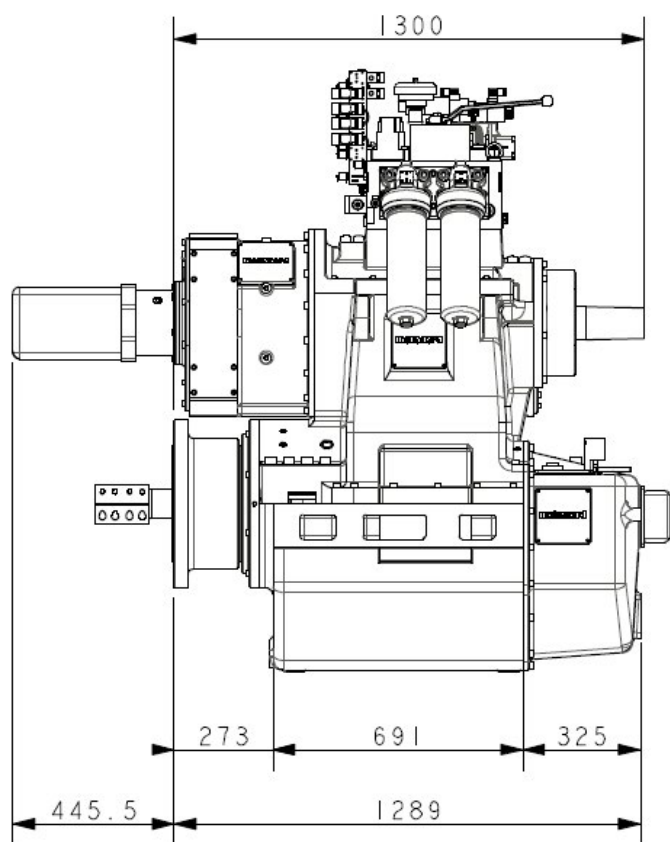
Gearbox:

- Built-in servo system for CP propeller
- Compact design
- Large economical reduction ratio
- Option of 1, 2 or 3 PTOs each with own hydraulic clutch
- Rigid cast iron housing
- Helical ground gearwheels in casehardened and highly alloyed steel
- Hydraulic multi-plate clutch
- Oil system with direct driven oil pump, cooler, filter, valves etc.
- Pressure lubricated spherical roller bearings
- Designed according to the rules of the classification societies
- Each gearbox is tested and approved in test bed

Variants:

500OD prepared for OD system

500-2HS - MARINE GEARBOX



Assembly Type 500-2HS

Reduction ratio	PF kW/rpm	Input shaft mm
2,03-2,56-3,04-3,32:1	2,400	120
3,63:1	2,315	120
4,24:1	1,803	120
4,39:1	1,752	120
4,56:1	1,433	100
4,94:1	1,345	100
5,67:1	1,026	100
6,06:1	0,951	100
6,56:1	0,810	100

Servo for CP Propeller:

Max force = 300 kN

Max stroke = 180 mm

PTO/PTI:

PTO with SAE D-flange and 13 tooth 1 3/4" involute inside spline

Other SAE and ISO flanges and splines available

Free shaft end also available

Max torque from PTO: 2000 Nm

Max torque from PTO/PTI: 3500 Nm

Weight:

Approx. 3000 kg

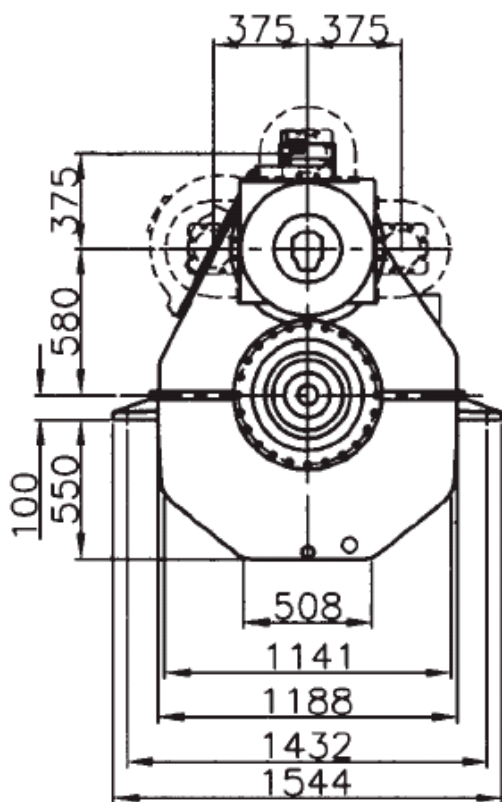
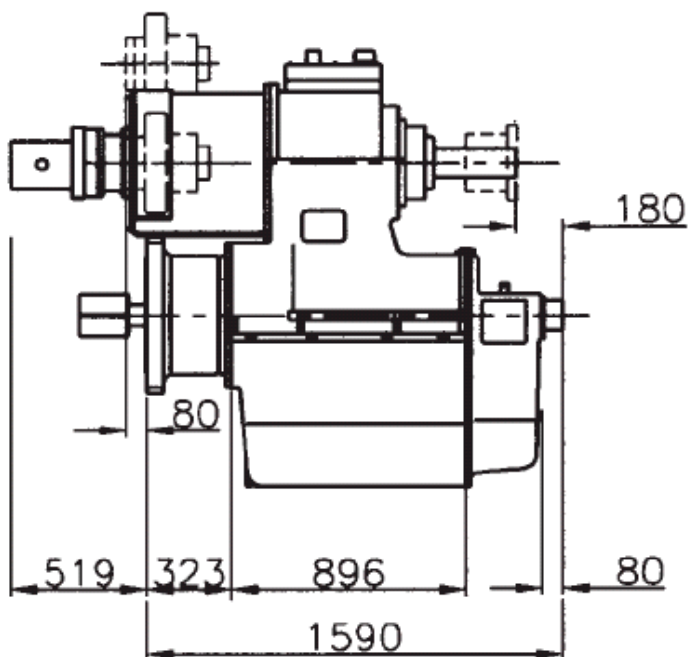
Gearbox:

- Built-in servo system for CP propeller
- Compact design
- Large economical reduction ratio
- Option of 1, 2 or 3 PTOs each with own hydraulic clutch
- Rigid cast iron housing
- Helical ground gearwheels in casehardened and highly alloyed steel
- Hydraulic multi-plate clutch
- Oil system with direct driven oil pump, cooler, filter, valves etc.
- Pressure lubricated spherical roller bearings
- Designed according to the rules of the classification societies
- Each gearbox is tested and approved in test bed

Variants:

500-2OD prepared for OD system

580HS - MARINE GEARBOX



Assembly Type 580HS

Reduction ratio	PF kW/rpm	Input shaft mm
2,03-2,55-3,12-3,48:1	3,680	130
4,15:1	3,280	130
4,53:1	2,730	130
5,06:1	2,330	110
5,65:1	1,960	110
6,06:1	1,800	95
6,53:1	1,250	95
6,94:1	1,160	95

Servo for CP Propeller:

Max force = 730 kN

Max stroke = 190 mm

PTO/PTI:

PTO with SAE D-flange and 13 tooth 1 3/4" involute inside spline

Other SAE and ISO flanges and splines available
Free shaft end also available

Max torque from PTO: 2700 Nm

Max torque from PTO/PTI: 4700 Nm

Weight:

Approx. 4900 kg

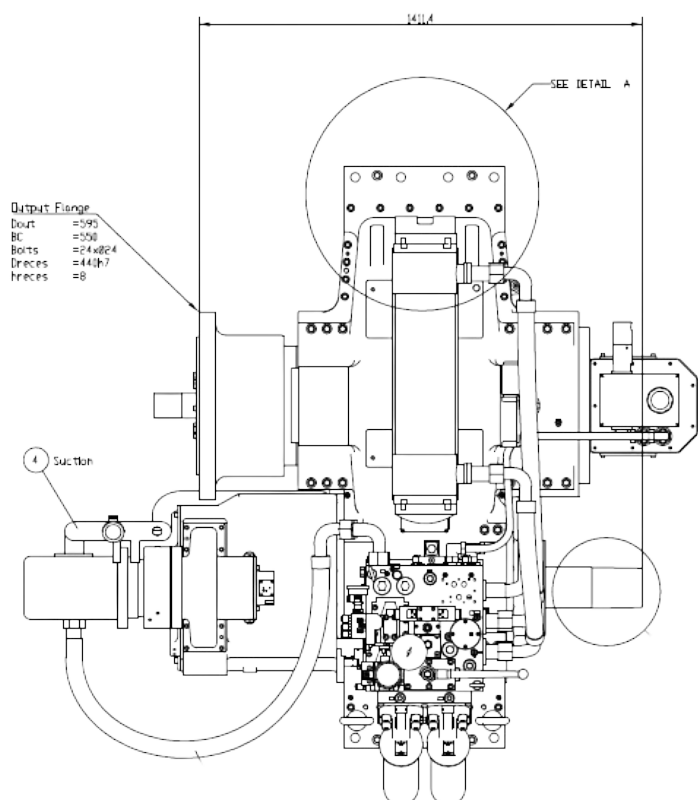
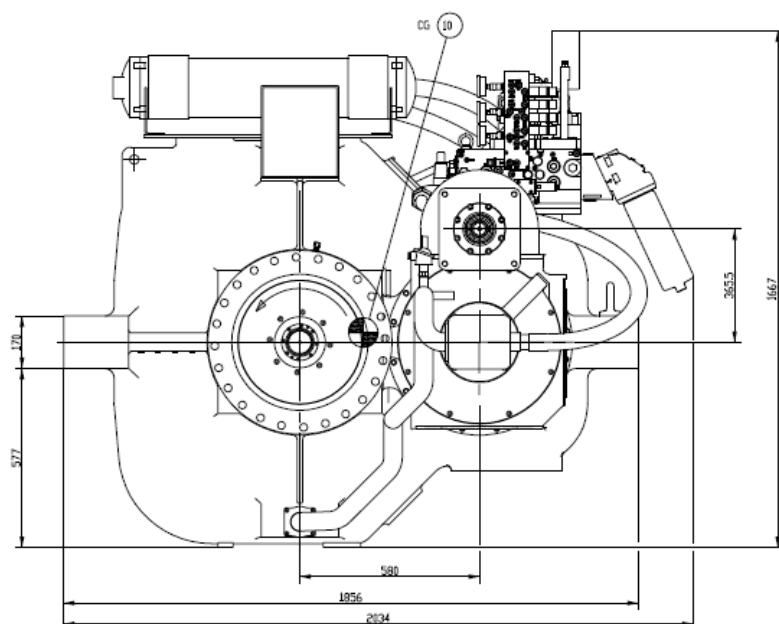
Gearbox:

- Built-in servo system for CP propeller
- Compact design
- Large economical reduction ratio
- Option of 1, 2 or 3 PTOs each with own hydraulic clutch
- Rigid cast iron housing
- Helical ground gearwheels in casehardened and highly alloyed steel
- Hydraulic multi-plate clutch
- Oil system with direct driven oil pump, cooler, filter, valves etc.
- Pressure lubricated spherical roller bearings
- Designed according to the rules of the classification societies
- Each gearbox is tested and approved in test bed

Variants:

- 580HS-IS with intermediate shaft for counter rotating propeller
- 580OD prepared for OD system
- 580OD-IS with intermediate shaft for counter rotating propeller

580HS-H - MARINE GEARBOX



Assembly Type 580HS-H

Reduction ratio	PF kW/rpm	Input shaft mm
2,03-2,55-3,12-3,48:1	3,680	130
4,15:1	3,280	130
4,53:1	2,730	130
5,06:1	2,330	110
5,65:1	1,960	110
6,06:1	1,800	95
6,53:1	1,250	95
6,94:1	1,160	95

Servo for CP Propeller:

Max force = 730 kN

Max stroke = 190 mm

PTO/PTI:

PTO with SAE D-flange and 13 tooth 1 3/4" involute inside spline

Other SAE and ISO flanges and splines available

Free shaft end also available

Max torque from PTO: 2700 Nm

Max torque from PTO/PTI: 4700 Nm

Weight:

Approx. 4900 kg

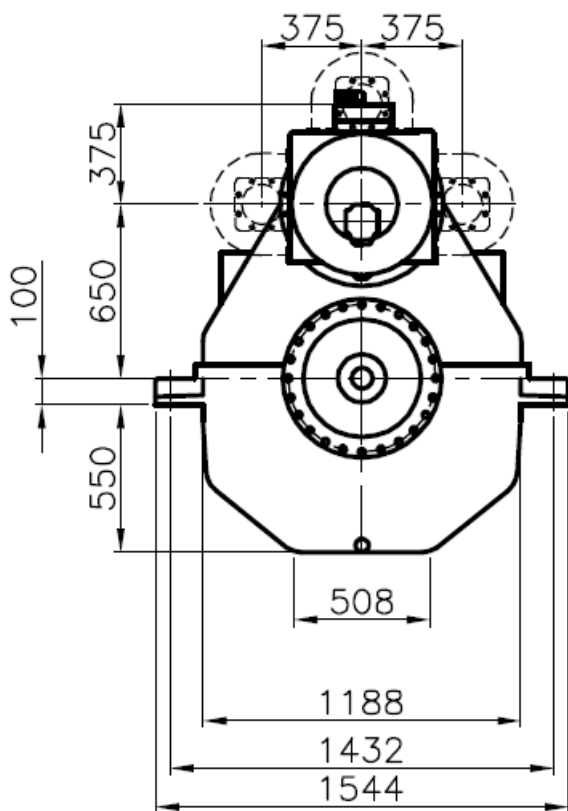
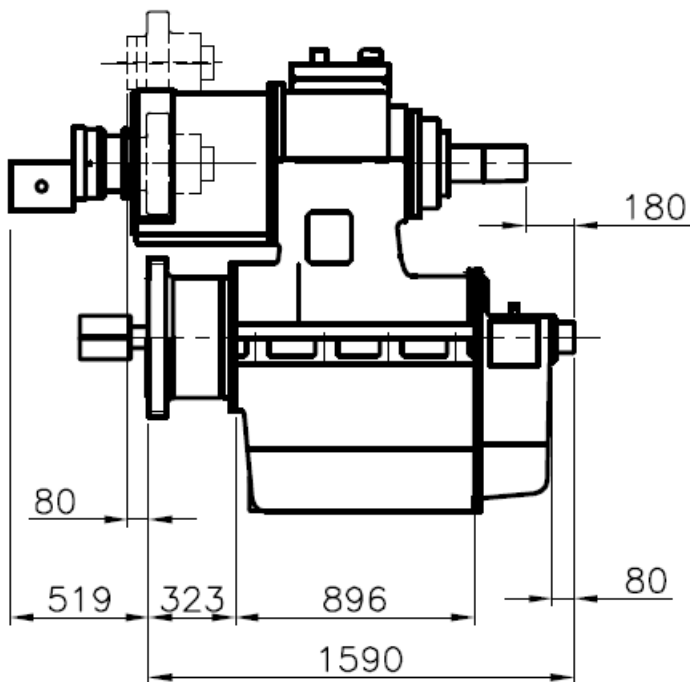
Gearbox:

- Built-in servo system for CP propeller
- Compact design
- Large economical reduction ratio
- Option of 1, 2 or 3 PTOs each with own hydraulic clutch
- Rigid cast iron housing
- Helical ground gearwheels in casehardened and highly alloyed steel
- Hydraulic multi-plate clutch
- Oil system with direct driven oil pump, cooler, filter, valves etc.
- Pressure lubricated spherical roller bearings
- Designed according to the rules of the classification societies
- Each gearbox is tested and approved in test bed

Variants:

- 580OD-H prepared for OD system

650HS - MARINE GEARBOX



Assembly Type 650HS

Reduction ratio	PF kW/rpm	Input shaft mm
2,03-2,58-3,04-3,55:1	4,580	140
4,05:1	4,185	130
4,53:1	3,631	130
5,05:1	3,067	130
5,44:1	2,836	130
6,06:1	2,303	110
6,47:1	1,990	110

Servo for CP Propeller:

Max force = 730 kN

Max stroke = 190 mm

PTO/PTI:

PTO with SAE D-flange and 13 tooth 1 3/4" involute inside spline

Other SAE and ISO flanges and splines available

Free shaft end also available

Max torque from PTO: 2000 Nm

Max torque from PTO/PTI: 4700 Nm

Weight:

Approx. 5500 kg

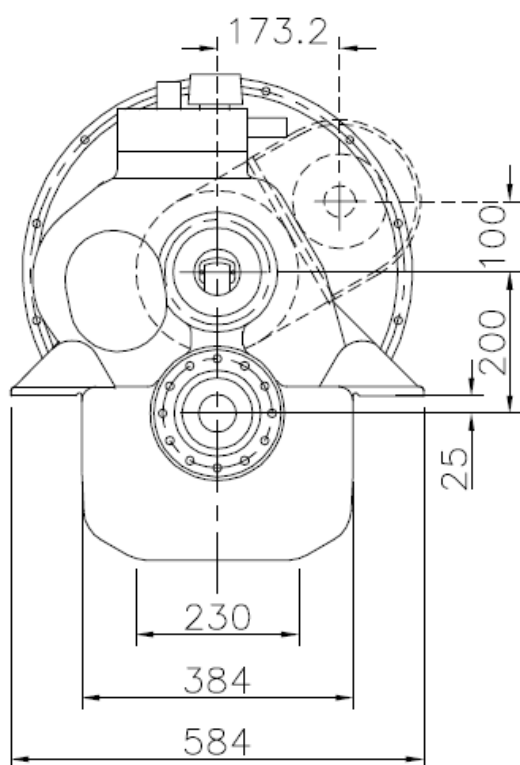
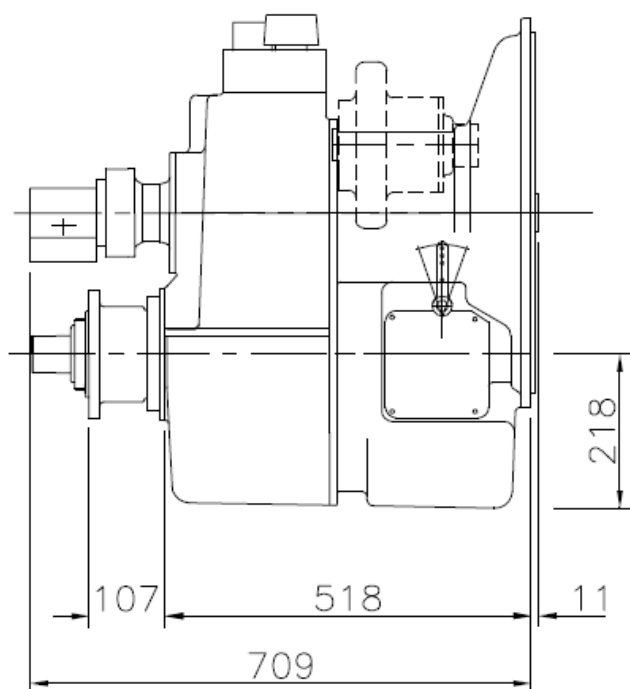
Gearbox:

- Built-in servo system for CP propeller
- Compact design
- Large economical reduction ratio
- Option of 1, 2 or 3 PTOs each with own hydraulic clutch
- Rigid cast iron housing
- Helical ground gearwheels in casehardened and highly alloyed steel
- Hydraulic multi-plate clutch
- Oil system with direct driven oil pump, cooler, filter, valves etc.
- Pressure lubricated spherical roller bearings
- Designed according to the rules of the classification societies
- Each gearbox is tested and approved in test bed

Variants:

- 650OD prepared for OD systemt

200HSC - MARINE GEARBOX



Assembly Type 200HSC

Reduction Ratio	PF kW/rpm	Input Shaft Diameter mm
2,13:1	0,260	57
2,55:1	0,226	57
2,94:1	0,224	57

Servo for CP Propeller:

Max force = 75 kN

Max stroke = 70 mm

PTO

PTO with SAE B-flange and 13 tooth $\frac{7}{8}$ " involute inside spline

Max torque from PTO: 400 Nm

Weight:

Approx. 275 kg

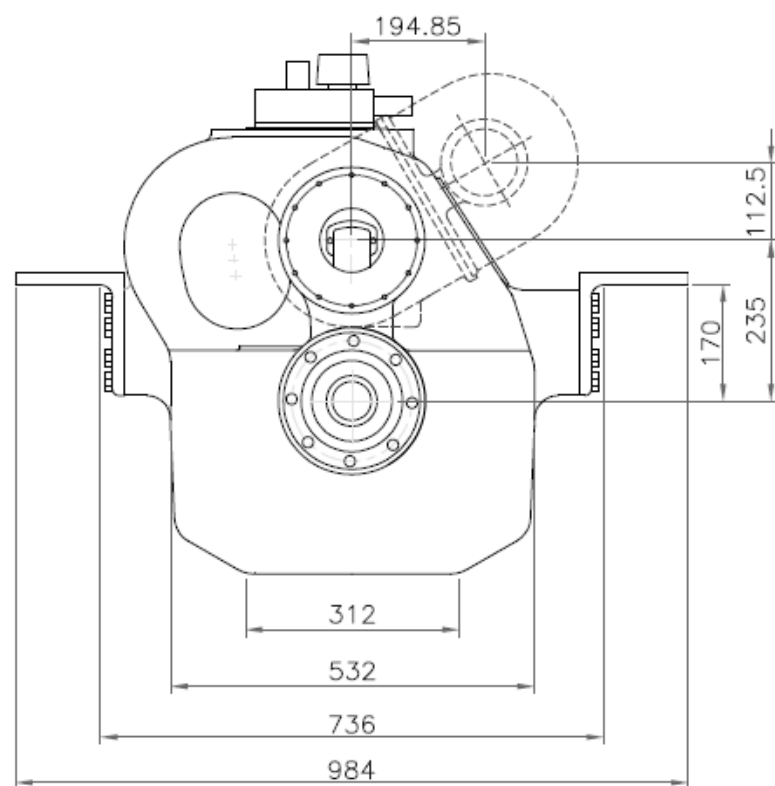
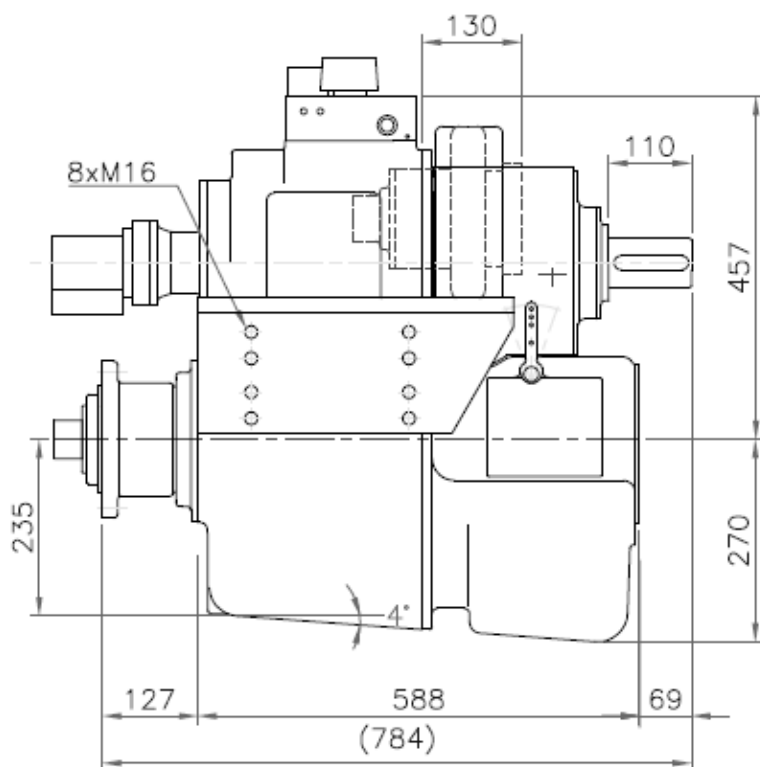
Gearbox:

- Built-in servo system for CP propeller
- Compact design
- Option of 1 PTO with own hydraulic clutch
- Rigid cast iron housing
- Helical ground gearwheels in casehardened and highly alloyed steel
- Hydraulic multi-plate clutch
- Oil system with direct driven oil pump, cooler, filter, valves etc.
- Pressure lubricated spherical roller bearings
- Designed according to the rules of the classification societies
- Each gearbox is tested and approved in test bed

Variants:

- 200HSC-IS with built-in intermediate shaft for counter rotating propeller
- 200HSC-U with U-drive
- 200HSC-U-IS with U-drive and intermediate shaft for counter rotating propeller

235HSC - MARINE GEARBOX



Assembly Type 235HSC

Reduction ratio	PW kW/rpm	Input shaft mm
1,96-2,45:1	0,350	65
2,94:1	0,310	65
3,43:1	0,226	65

Servo for CP Propeller:

Max force = 110 kN
Max stroke = 80 mm

PTO

PTO with SAE B-flange and 13 tooth $\frac{7}{8}$ " involute inside spline
Max torque from PTO: 600 Nm

Weight:

Approx. 400 kg

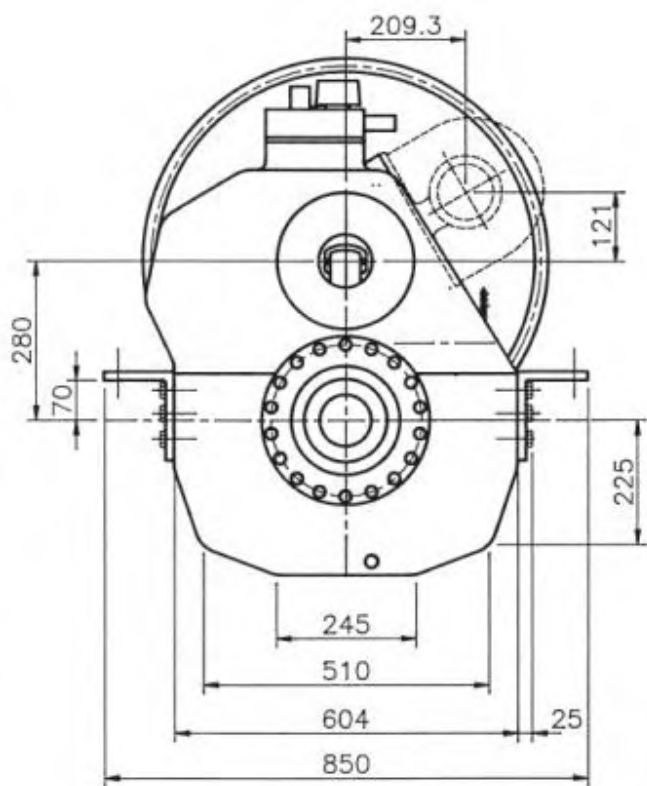
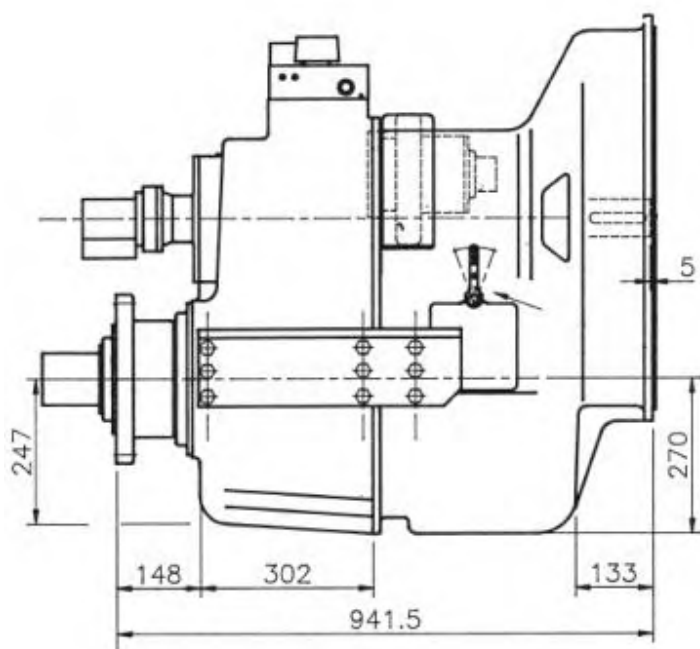
Gearbox:

- Built-in servo system for CP propeller
- Compact design
- Option of 1 PTO with own hydraulic clutch
- Rigid cast iron housing
- Helical ground gearwheels in casehardened and highly alloyed steel
- Hydraulic multi-plate clutch
- Oil system with direct driven oil pump, cooler, filter, valves etc.
- Pressure lubricated spherical roller bearings
- Designed according to the rules of the classification societies
- Each gearbox is tested and approved in test bed

Variants:

- 235HSC-IS with built-in intermediate shaft for counter rotating propeller
- 235HSC-U with U-drive
- 235HSC-U-IS with U-drive and intermediate shaft for counter rotating propeller

280HSC - MARINE GEARBOX



Assembly Type 280HSC

Reduction ratio	PW kW/rpm	Input shaft mm
1,75-2,06-2,55:1	0,610	80
3,06:1	0,570	80
3,47:1	0,474	80

Servo for CP Propeller:

Max force = 156 kN

Max stroke = 114 mm

PTO

PTO with SAE B-flange and 14 tooth 1 ¼" involute inside spline

Step-up 1:1,11

Max torque from PTO: 600 Nm

Weight:

Approx. 700 kg

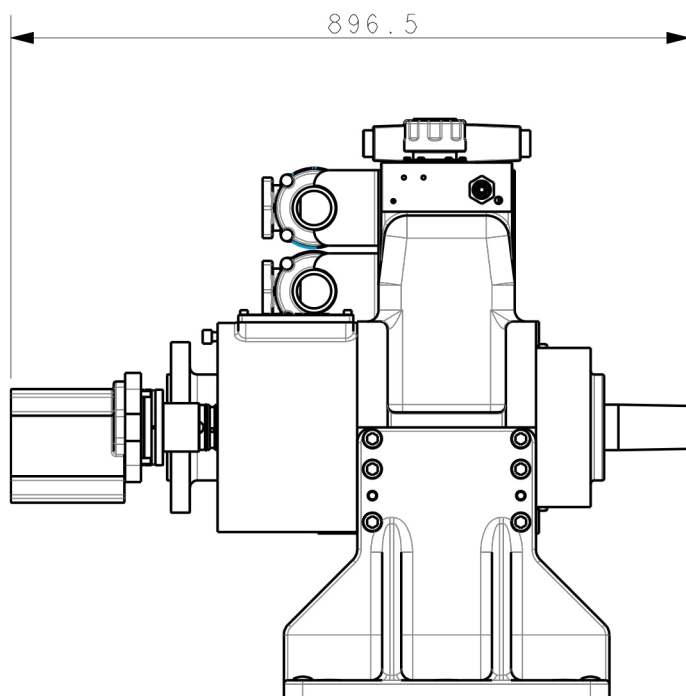
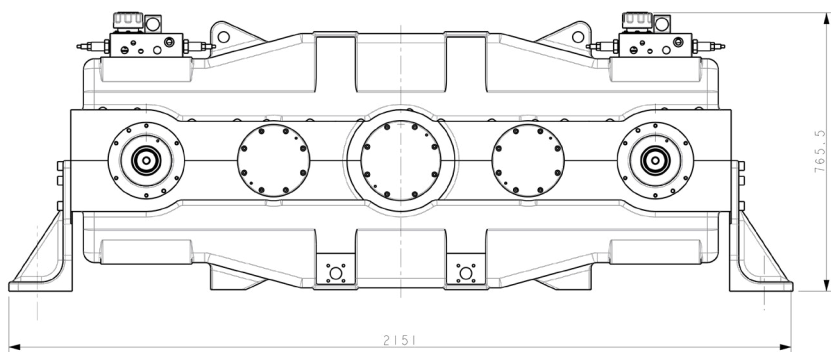
Gearbox:

- Built-in servo system for CP propeller
- Compact design
- Option of 1 PTO with own hydraulic clutch
- Rigid cast iron housing
- Helical ground gearwheels in casehardened and highly alloyed steel
- Hydraulic multi-plate clutch
- Oil system with direct driven oil pump, cooler, filter, valves etc.
- Pressure lubricated spherical roller bearings
- Designed according to the rules of the classification societies
- Each gearbox is tested and approved in test bed

Variants:

- 280HSC-IS with built-in intermediate shaft for counter rotating propeller
- 280HSC-U with U-drive
- 280HSC-U-IS with U-drive and built-in intermediate shaft for counter rotating propeller

TWIN1400/0 - MARINE GEARBOX



Assembly Type Twin1400HS

Reduction ratio	PW kW/rpm	Input shaft mm
1:1	2x0,302	2X60
2,03:1	2x0,302	2X60
4,03:1	2x0,302	2X60
5,04:1	2x0,302	2X60
5,94:1	2x0,24	2X60

Servo for CP Propeller:

Max force = 200 kN

Max stroke = 124 mm

PTO

PTO with SAE C-flange and 14 tooth 1 ¼" involute inside spline

Other SAE and ISO flanges and splines available

Free shaft end also available

Max torque from PTO: 800 Nm

Gearbox:

- Compact design
- Large economical reduction ratio
- Option of 1, 2 or 3 PTOs each with own hydraulic clutch
- Rigid cast iron housing
- Helical ground gearwheels in casehardened, highly alloyed steel
- Hydraulic multi-plate clutch
- Oil system with direct driven oil pump, cooler, filter, valves etc.
- Pressure lubricated spherical roller bearings
- Designed according to the rules of the classification societies
- Each gearbox is tested and approved in test bed

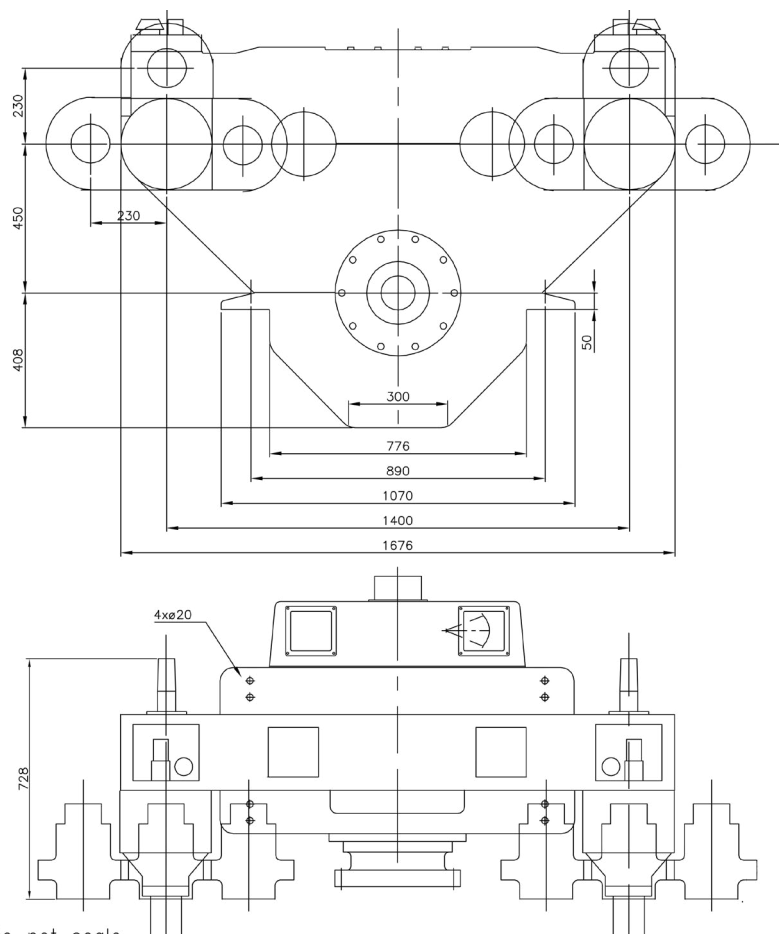
Weight:

Approx. 1700 kg

Variants:

TWIN1400-U with U-drive

TWIN1400HS/450 - MARINE GEARBOX



Assembly Type Twin1400HS/450

Reduction ratio	PW kW/rpm	Input shaft mm
2,03-4,03-5,04:1	2x0,302	2X60
6,11:1	2x0,280	2X60
7,18:1	2x0,229	2X60

Servo for CP Propeller:

Max force = 200 kN
Max stroke = 124 mm

PTO

PTO with SAE C-flange and 14 tooth 1 ¼" involute inside spline
Other SAE and ISO flanges and splines available
Free shaft end also available
Max torque from PTO: 800 Nm

Gearbox:

- Built-in servo system for CP propeller
- Compact design
- Large economical reduction ratio
- Option of 1, 2 or 3 PTOs each with own hydraulic clutch
- Rigid cast iron housing
- Helical ground gearwheels in casehardened, highly alloyed steel
- Hydraulic multi-plate clutch
- Oil system with direct driven oil pump, cooler, filter, valves etc.
- Pressure lubricated spherical roller bearings
- Designed according to the rules of the classification societies
- Each gearbox is tested and approved in test bed

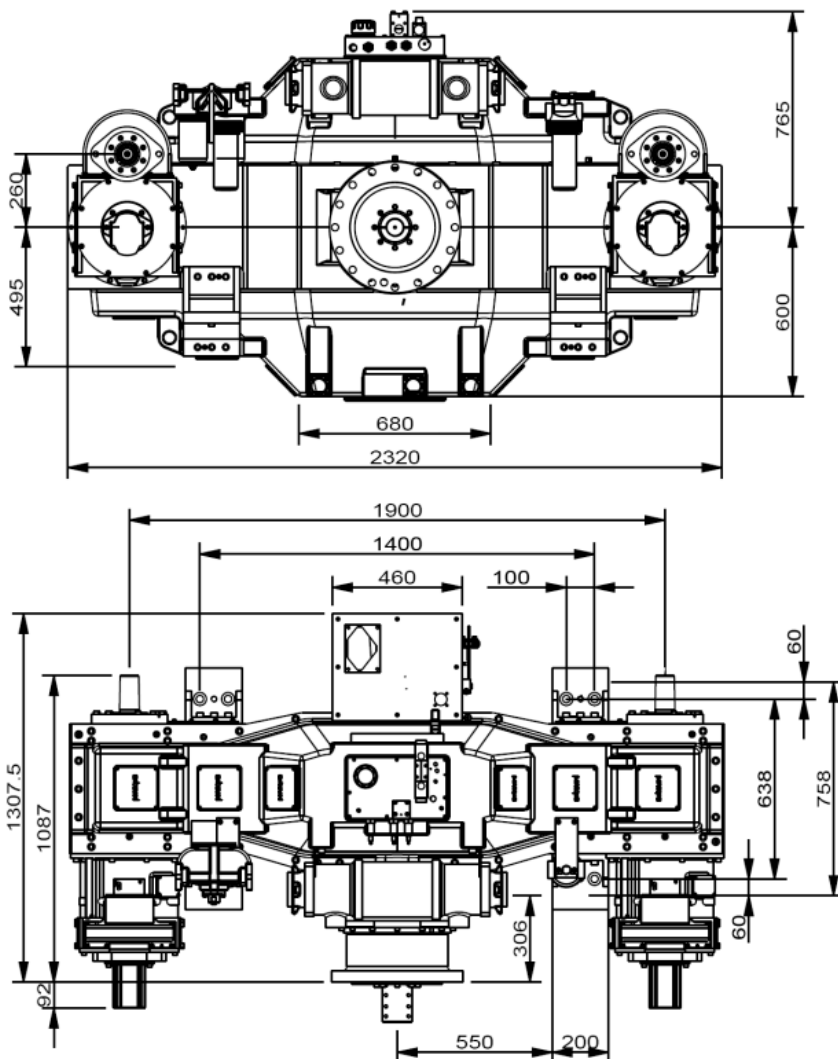
Weight:

Approx. 1700 kg

Variants:

TWIN1400-U with U-drive
TWIN1400OD prepared for OD system

TWIN1800HS - MARINE GEARBOX



Assembly Type Twin1800HS

Reduction ratio	PW kW/rpm	Input shaft mm
2,34-4,05:1	2x0,540	2X60
4,55-5,05:1	2x0,540	2X60
6,05:1	2x0,540	2X60
7,12:1	2x0,540	2X60
7,59:1	2x0,540	2X60

Servo for CP Propeller:

Max force = 200 kN

Max stroke = 124 mm

PTO

PTO with SAE C-flange and 14 tooth 1 ¼" involute inside spline

Other SAE and ISO flanges and splines available

Free shaft end also available

Max torque from PTO: 800 Nm

Weight:

Approx. 2300 kg

Gearbox:

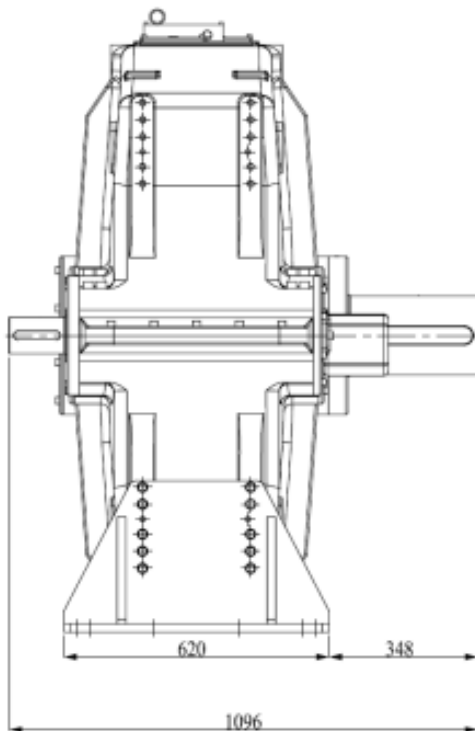
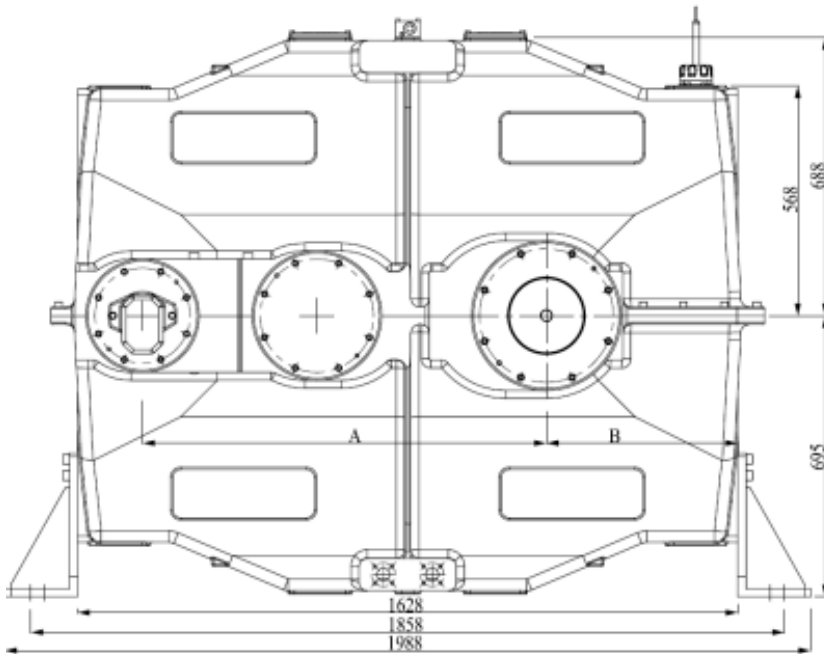
- Built-in servo system for CP propeller
- Compact design
- Large economical reduction ratio
- Option of 1, 2 or 3 PTOs each with own hydraulic clutch
- Rigid cast iron housing
- Helical ground gearwheels in casehardened, highly alloyed steel
- Hydraulic multi-plate clutch
- Oil system with direct driven oil pump, cooler, filter, valves etc.
- Pressure lubricated spherical roller bearings
- Designed according to the rules of the classification societies
- Each gearbox is tested and approved in test bed

Variants:

TWIN1800-U with U-drive

TWIN1800OD prepared for OD system

PTO900 - MARINE GEARBOX



Assembly Type PTO900

Input rpm	Output rpm	Step up ratio	Max.power kW
113	1789	1:15,83	900
127	1820	1:14,30	900
146	1816	1:12,44	900
173	1805	1:10,44	900
173	1506	1:8,71	700
210	1502	1:7,15	900

Most efficient PTO system for controllable pitch propulsion systems. Designed for 2-stroke engine applications with specific focus on environment and fuel economy.

Weight:

Approx. 2800 kg with 3 PTOs mounted

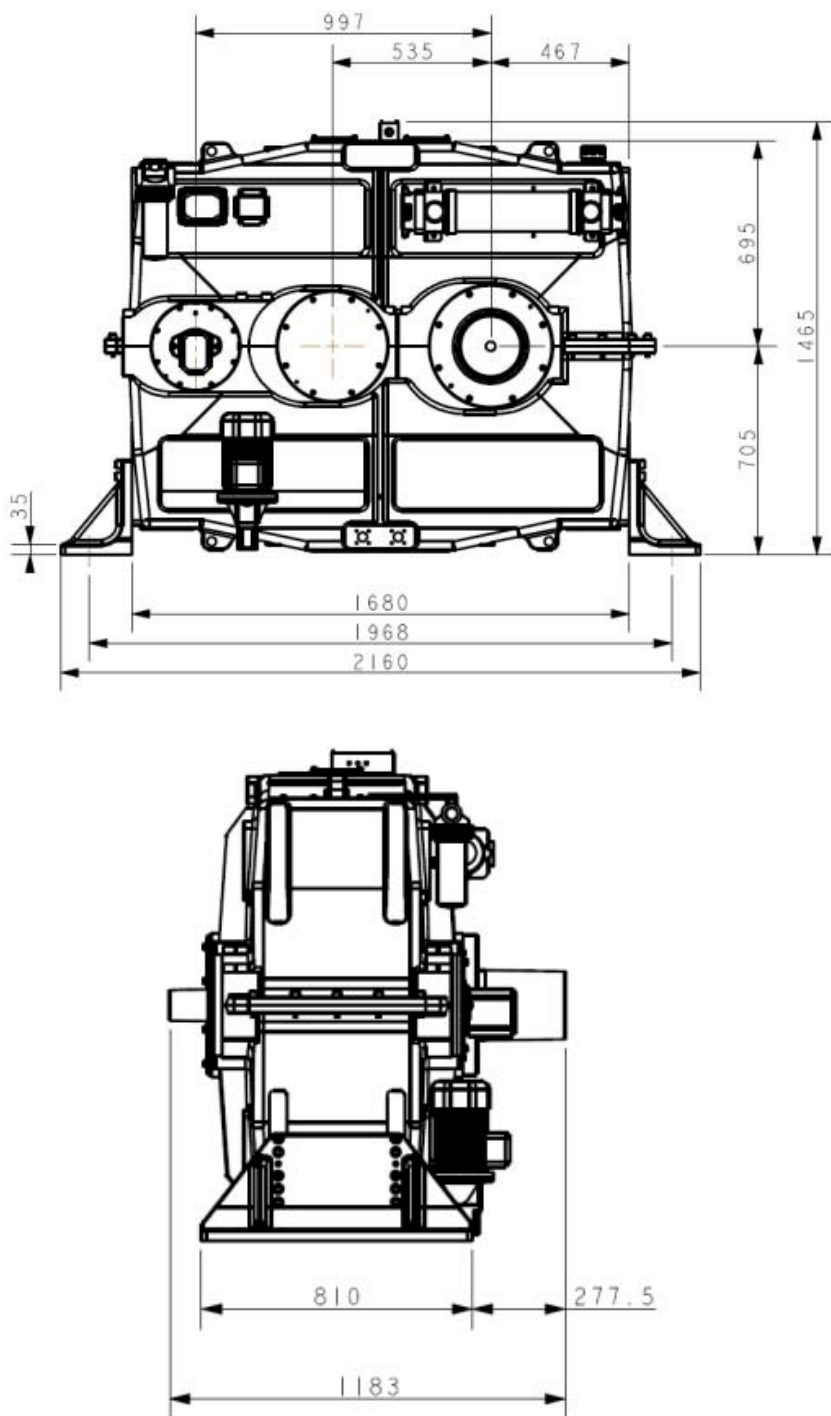
Gearbox:

- Rigid cast iron housing with oil sump, supports and inspection lids
- Roller bearings of double spherical type
- Gearwheels in casehardened and highly alloyed steel
- Ø100 mm input shaft
- Pressure transmitter and temperature sensor
- Oil system with pump, pressure regulating valve and cooler
- Hydraulic multidisc clutch
- Solenoid valve for remote control of clutch
- Drive shaft with SAE C flange and 14 tooth 1 3/4" involute inside spline (other configurations available on request)
- Pressure lubricating system for bearings and gears
- Designed according to the rules of the classification societies
- Each gearbox is tested and approved in test bed

Variants:

Customized step up ratios available on request
1 step or 2 step configurations

PTO1500 - MARINE GEARBOX



Assembly Type PT1500

Input rpm	Output rpm	Step up ratio	Max.power kW
110	1801	1:16,37	1250
127	1803	1:14,20	1350
167	1802	1:10,79	1650
173	1805	1:10,44	1650

Most efficient PTO system for controllable pitch propulsion systems. Designed for 2-stroke engine applications with specific focus on environment and fuel economy.

Weight:

Approx. 3800 kg

Gearbox:

- Rigid cast iron housing with oil sump, supports and inspection lids
- Horizontal offset
- Roller bearings of double spherical type
- Tapered 1:30 input and output shafts
- Gearwheels in casehardened and highly alloyed steel
- Pressure transmitter and temperature sensor
- Oil system with direct driven oil pump, cooler, filter, valves, manometer etc.
- Pressure lubricating system for bearings and gears
- Designed according to the rules of the classification societies
- Built on emergency oil pump unit 1 kW with automatic start
- Each gearbox is tested and approved in test bed

Variants:

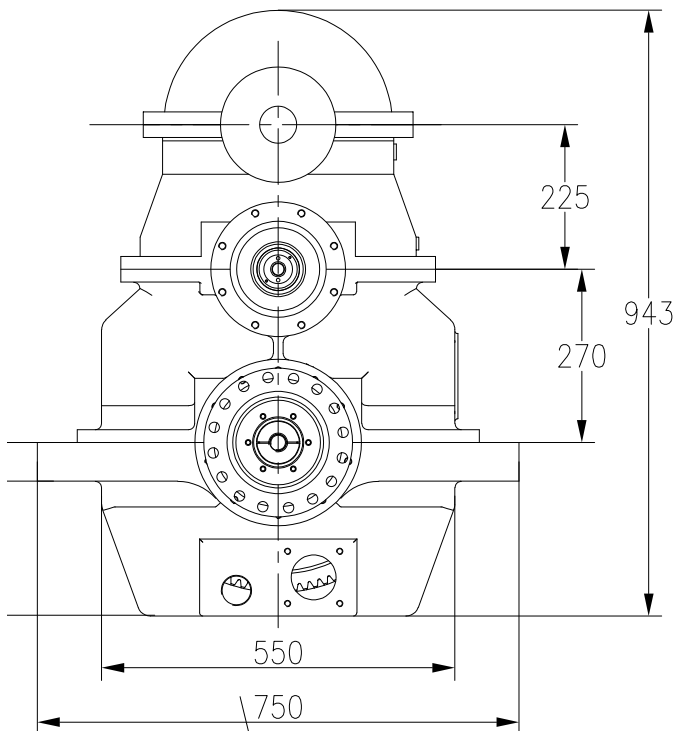
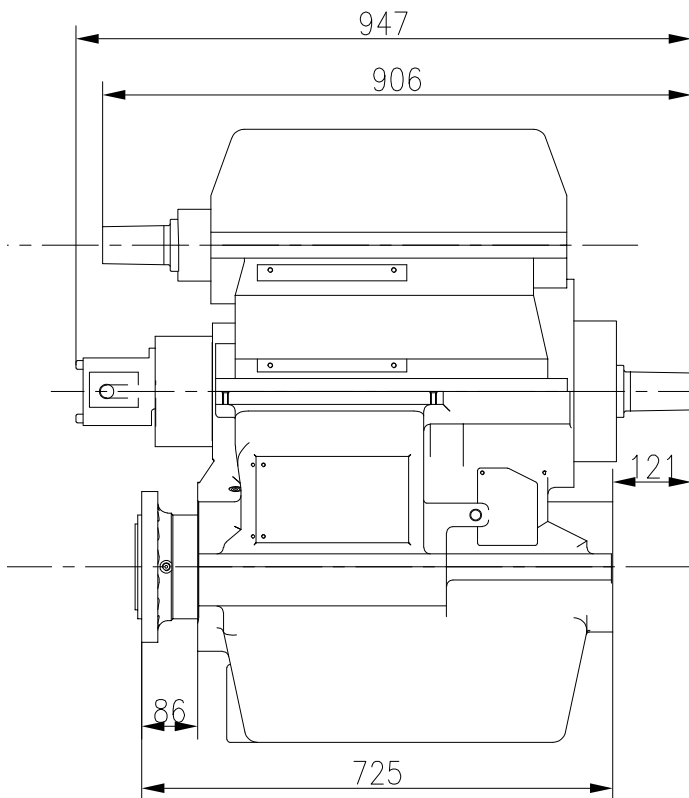
Customized step up ratios available on request
1 step or 2 step configurations

Hybrid Gearbox Types

Overview of Hybrid Gearbox Maximum Power

Hybrid Gear Types		Reference
	Maximum power @ 1800 rpm	
27HS	400 kW	27HS
35HS	540 kW	35HS
40HS	1000 kW	40HS
45HS/OD	2700 kW	45HS
50HS/OD	4320 kW	50HS
	Maximum power @ 1200 rpm	
60HS/OD	4500 kW	60HS/OD
70HS/OD	8400 kW	70HS/OD
800D	10000 kW	800D

27HS - MARINE GEARBOX



Assembly Type 27HS PTO/PTI

Reduction ratio	PW kW/rpm	Max. PTI PF kW/rpm*	Max. combined PW kW/rpm
1,61-1,97:1	0,22	0,14	0,36
2,47-2,96:1	0,22	0,14	0,32
3,52:1	0,22	0,14	0,26
3,95:1	0,16	0,14	0,23
4,47:1	0,16	0,14	0,20
5,12:1	0,16	0,14	0,17
5,50:1	0,16	0,14	0,16
5,93:1	0,15	0,14	0,15
6,53:1	0,13	0,14	0,13

Servo for CP Propeller:

Max force = 93 kN

Max stroke = 120 mm

PTO/PTI:

PTO/PTI with free shaft

PTO ratios: 0,49:1-1,21:1

PTI ratios: 0,89:1-2,04:1

Max power: 210 kW @ 1500 RPM

Weight:

Approx. 750 kg

Gearbox:

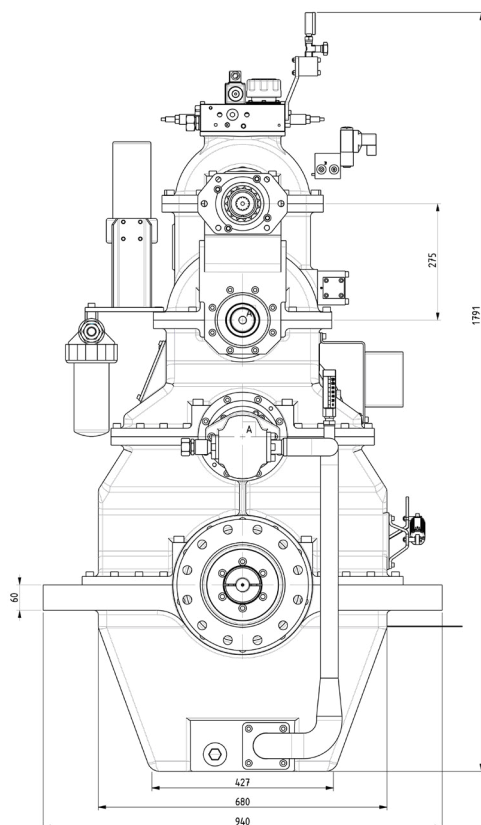
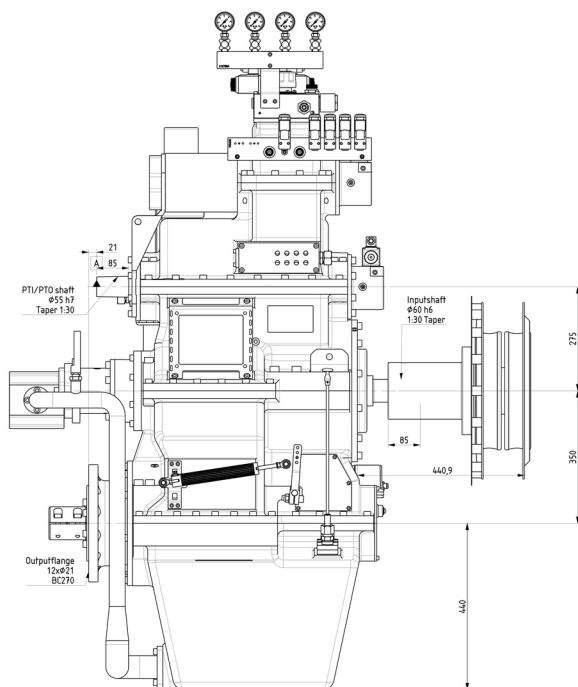
- Hybrid gearbox gives different running modes
- Built-in servo system for CP propeller
- Compact design
- Large economical reduction ratio
- Option for one PTO, each with its own hydraulic clutch
- Rigid cast iron housing
- Helical ground gearwheels in casehardened and highly alloyed steel
- Hydraulic multi-plate clutch
- Oil system with direct driven oil pump, cooler, filter, valves etc.
- Pressure lubricated spherical roller bearings
- Designed according to the rules of the classification societies
- Each gearbox is tested and approved in test bed

Variants:

27HS with reverse gear for counter rotating propeller

27HS with intermediate shaft for counter rotating propeller

35HS - MARINE GEARBOX



Assembly Type 35HS PTO/PTI

Reduction ratio	PW kW/rpm	Max. PTI PF kW/rpm*	Max. combined PW kW/rpm
1,9 -2,53:1	0,300	0,18	0,490
3,04-3,52:1	0,300	0,18	0,490
4,14:1	0,300	0,18	0,410
4,65:1	0,300	0,18	0,370
5,12:1	0,300	0,18	0,330
5,53:1	0,300	0,18	0,310
5,94:1	0,280	0,18	0,280
6,35:1	0,240	0,18	0,240
6,94:1	0,210	0,18	0,210

*If the PW is less than the stated value, the PTI PW can be higher, if only the max.combined PW is not exceeding the specified value in this table.

Servo for CP Propeller:

Max force = 120 kN

Max stroke = 90 mm

PTO/PTI:

PTO/PTI with free shaft

PTO ratios: 0,83:1-1,12:1

PTI ratios: 0,89:1-1,2:1

Max power: 270 kW @ 1500 RPM

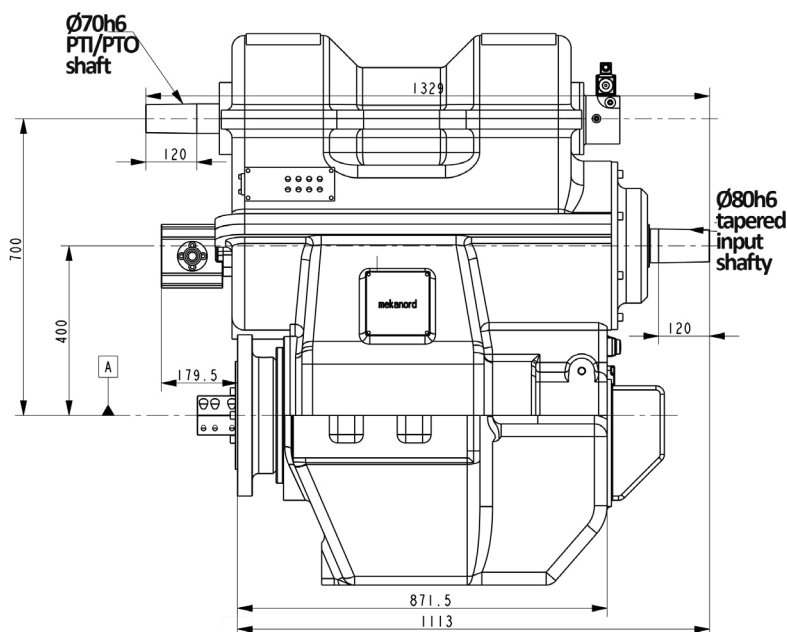
Weight:

Approx. 1500 kg

Gearbox:

- Hybrid gearbox gives different running modes
- Built-in servo system for CP propeller
- Compact design
- Large economical reduction ratio
- Rigid cast iron housing
- Helical ground gearwheels in casehardened and highly alloyed steel
- Hydraulic multi-plate clutch
- PTO/PTI with individual hydraulic clutches
- Oil system with direct driven oil pump, cooler, filter, valves etc.
- Option of standby oil pump
- Pressure lubricated spherical roller bearings
- Designed according to the rules of the classification societies
- Each gearbox is tested and approved in test bed

40HS - MARINE GEARBOX



Reduction ratio	PW kW/rpm	Max. PTI PF kW/rpm*	Max. combined PW kW/rpm
3,04:1	0,54	0,26	0,80
3,57:1	0,54	0,26	0,78
4,11:1	0,54	0,26	0,68
4,65:1	0,54	0,26	0,60
5,17:1	0,54	0,26	0,48
5,53:1	0,52	0,26	0,45
5,94:1	0,45	0,26	0,45
6,59:1	0,37	0,26	0,37
6,89:1	0,25	0,26	0,25

Servo for CP Propeller:

Max force = 150 kN

Max stroke = 180 mm

PTO/PTI

PTO/PTI with free shaft

PTO ratios: 0,68:1-1,27:1

PTI ratios: 0,78:1-1,47:1

Max power: 390 kW @ 1500 rpm

Weight:

Approx. 2000 kg

Gearbox:

- Hybrid gearbox gives different running modes
- Built-in servo system for CP propeller
- Compact design
- Large economical reduction ratio
- Rigid cast iron housing
- Helical ground gearwheels in casehardened and highly alloyed steel
- Hydraulic multi-plate clutch
- Oil system with direct driven oil pump, cooler, filter, valves etc.
- Pressure lubricated spherical roller bearings
- Designed according to the rules of the classification societies
- Each gearbox is tested and approved in test bed

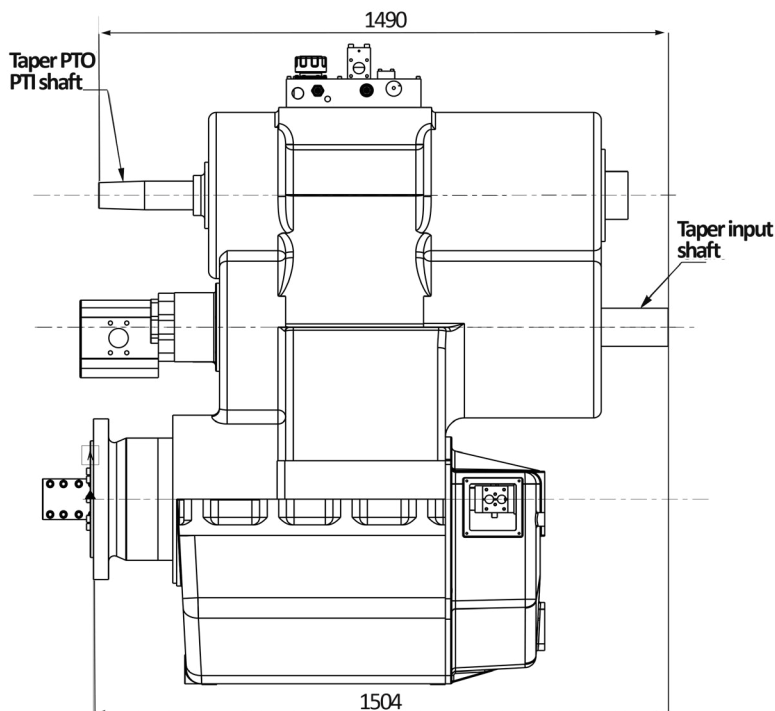
Variants:

40HS with reverse gear for counter rotating propeller

40HS with intermediate shaft for counter rotating propeller

Assembly Type 40HS PTO/PTI

45HS/OD - MARINE GEARBOX



Reduction ratio	PW kW/rpm	Max. PTI PF kW/rpm*	Max. combined PW kW/rpm
2,04:1	2,125	0,52	2,64
2,59:1	1,938	0,52	2,08
3,24:1	1,50	0,52	1,66
3,85:1	1,50	0,52	1,50
4,18:1	1,120	0,52	1,12
4,44:1	1,120	0,52	1,12
5,11:1	0,972	0,52	0,972
5,47:1	0,889	0,52	0,889
5,94:1	0,773	0,52	0,773
6,47:1	0,670	0,52	0,67

Servo for CP Propeller:

Max force = 300 kN

Max stroke = 180 mm

PTO/PTI:

PTO/PTI with free shaft

PTO ratio: 0,46:1-1,36:1

PTI ratio: 0,74:1-2,18:1

Max power 780 kW @ 1500 rpm

Weight:

Approx. 3200 kg

Gearbox:

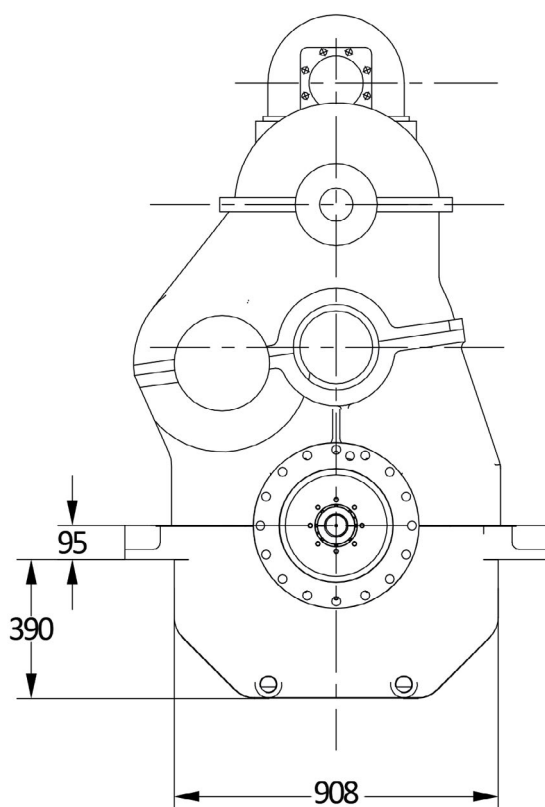
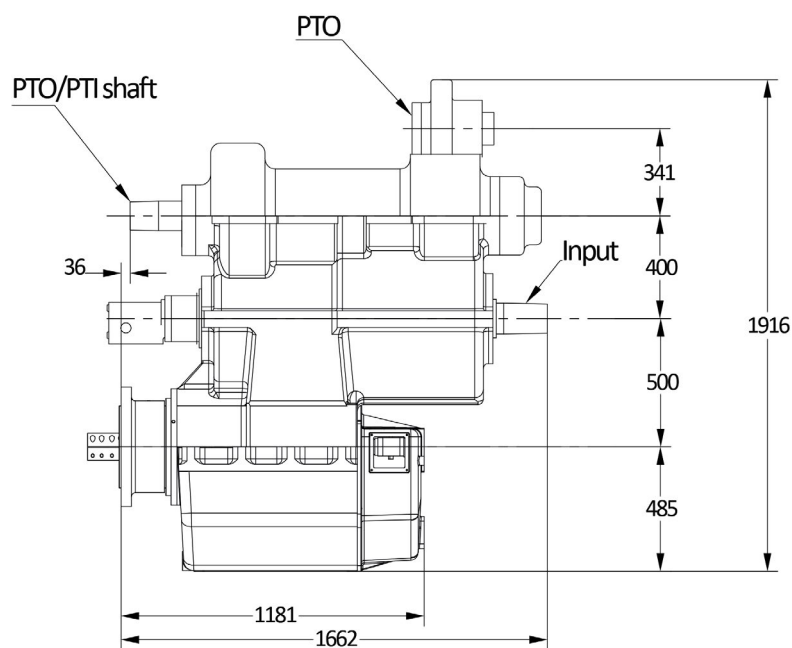
- Hybrid gearbox gives different running modes
- Compact design
- Large economical reduction ratio
- Option of PTO/PTI with individual hydraulic clutches
- Rigid cast iron housing
- Helical ground gearwheels in casehardened and highly alloyed steel
- Hydraulic multi-plate clutch
- Oil system with direct driven oil pump, cooler, filter, valves etc.
- Pressure lubricated spherical roller bearings
- Designed according to the rules of the classification societies
- Each gearbox is tested and approved in test bed

Variants:

45HS with built-in servo system for CP propeller
 45HS with intermediate shaft for counter rotating propeller
 45OD prepared for OD system

Assembly Type 45HS PTO/PTI

50HS/OD - MARINE GEARBOX



Assembly Type 50HS PTO/PTI

Reduction ratio	PW kW/rpm	Max. PTI PF kW/rpm*	Max. combined PW kW/rpm
2,03:1	2,400	0,52	2,92
2,56:1	2,400	0,52	2,92
3,04:1	2,400	0,52	2,72
3,63:1	2,32	0,52	2,32
4,56:1	1,433	0,52	1,433
4,94:1	1,345	0,52	1,345
6,06:1	0,95	0,52	0,95
6,56:1	0,810	0,52	0,81

Servo for CP Propeller:

Max force = 300 kN
Max stroke = 180 mm

PTO/PTI:

PTO/PTI with free shaft
PTO ratio 0,46:1-1,36:1
PTI ratio 0,74:1-2,18:1
Max power 780 kW @ 1500 rpm

Weight:

Approx. 3500 kg

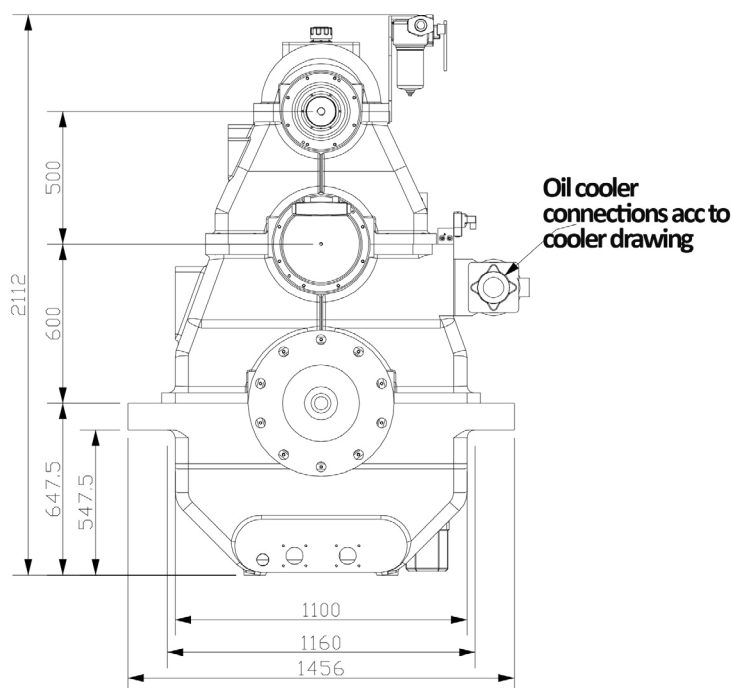
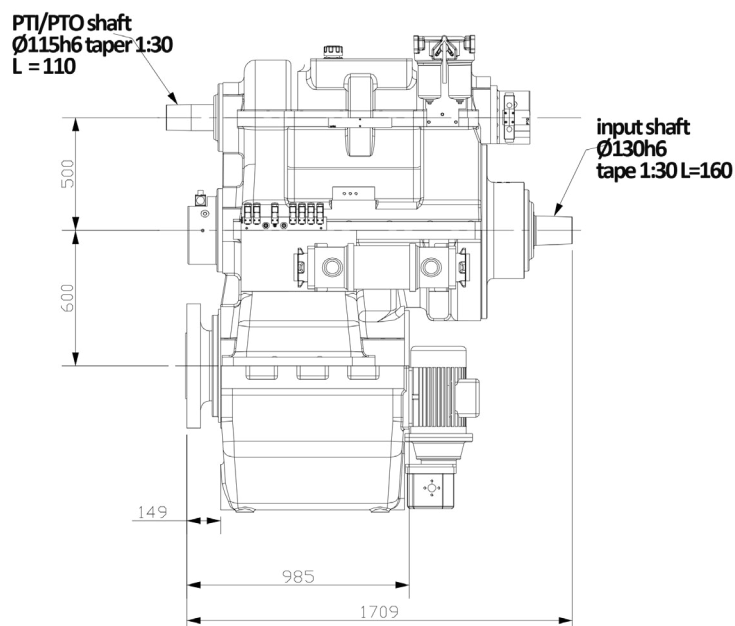
Gearbox:

- Hybrid gearbox gives different running modes
- Compact design
- Large economical reduction ratio
- Option of PTO/PTI with individual hydraulic clutches
- Rigid cast iron housing
- Helical ground gearwheels in casehardened and highly alloyed steel
- Hydraulic multi-plate clutch
- Oil system with direct driven oil pump, cooler, filter, valves etc.
- Pressure lubricated spherical roller bearings
- Designed according to the rules of the classification societies
- Each gearbox is tested and approved in test bed

Variants:

50HS with built-in servo system for CP propeller
50HS with intermediate shaft for counter rotating
50OD prepared for OD system

60HS/OD - MARINE GEARBOX



Assembly Type 60OD PTO/PTI

Reduction ratio	PW kW/rpm	Max. PTI PF kW/rpm*	Max. combined PW kW/rpm
2,84:1	3,700	0,89	4,59
3,67:1	3,700	0,89	4,35
4,06:1	3,700	0,89	3,94
4,44:1	3,600	0,89	3,60
4,94:1	3,000	0,89	3,00
5,61:1	2,600	0,89	2,60
5,94:1	2,300	0,89	2,30

Servo for CP Propeller:

Max force = 1200 kN

Max stroke = 175 mm

PTO/PTI:

PTO/PTI with free shaft

PTO ratio 0,45:1-0,70:1

PTI ratio 1,43:1-3,21:1

Max power PTO 540 kW @ 1200 rpm

Max power PTI 1068 kW @ 1200 rpm

Weight:

Approx. 5500 kg

Gearbox:

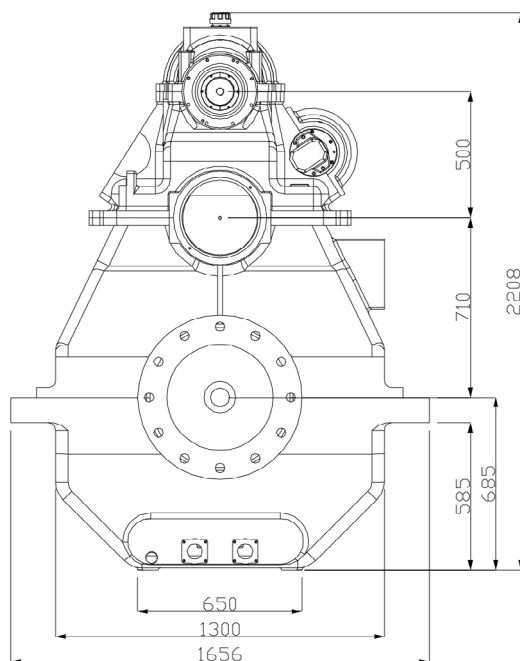
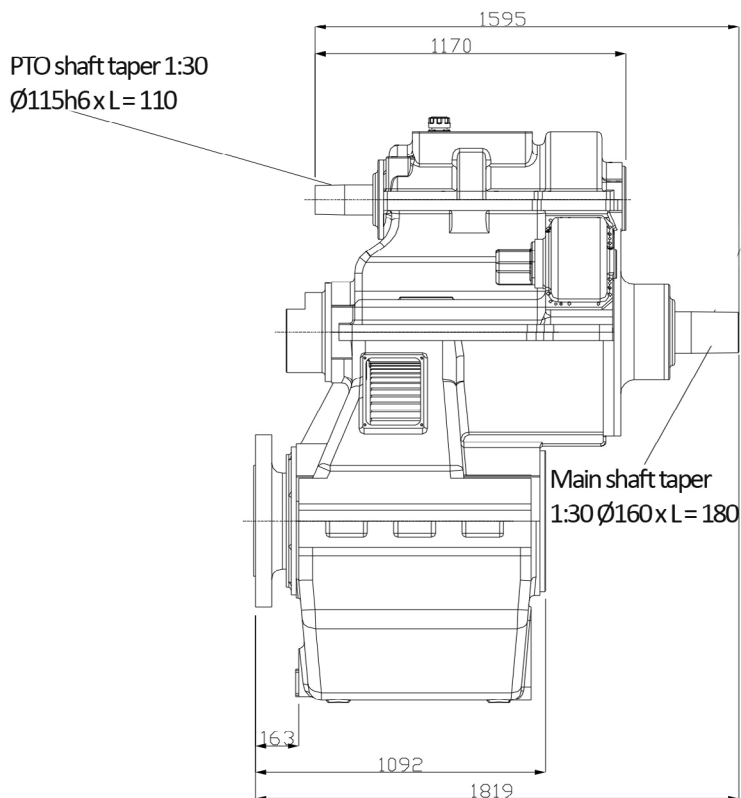
- Hybrid gearbox gives different running modes
- Compact design
- Large economical reduction ratio
- Option of PTO/PTI with individual hydraulic clutches
- Rigid cast iron housing
- Helical ground gearwheels in casehardened and highly alloyed steel
- Hydraulic multi-plate clutch
- Oil system with direct driven oil pump, cooler, filter, valves etc.
- Pressure lubricated spherical roller bearings
- Designed according to the rules of the classification societies
- Each gearbox is tested and approved in test bed

Variants:

60HS with built-in servo system for CP propeller

60OD prepared for OD system

70HS/OD - MARINE GEARBOX



Assembly Type 70OD PTO/PTI

Reduction ratio	PW kW/rpm	Max. PTI PF kW/rpm*	Max. combined PW kW/rpm
3,05:1	7,00	0,89	7,89
3,53:1	6,80	0,89	6,80
4,16:1	5,90	0,89	5,90
4,44:1	5,30	0,89	5,30
5,05:1	4,50	0,89	4,50
5,58:1	3,80	0,89	3,80
5,94:1	3,50	0,89	3,50

Servo for CP Propeller:

Max force = 1500 kN

Max stroke = 175 mm

PTO/PTI:

PTO/PTI with free shaft

PTO ratios: 0,31:1-0,66:1

PTI ratios: 1,51:1-3,21:1

Max power PTO 540 kW @ 1200 rpm

Max power PTI 1068 kW @ 1200 rpm

Weight:

Approx. 7000 kg

Gearbox:

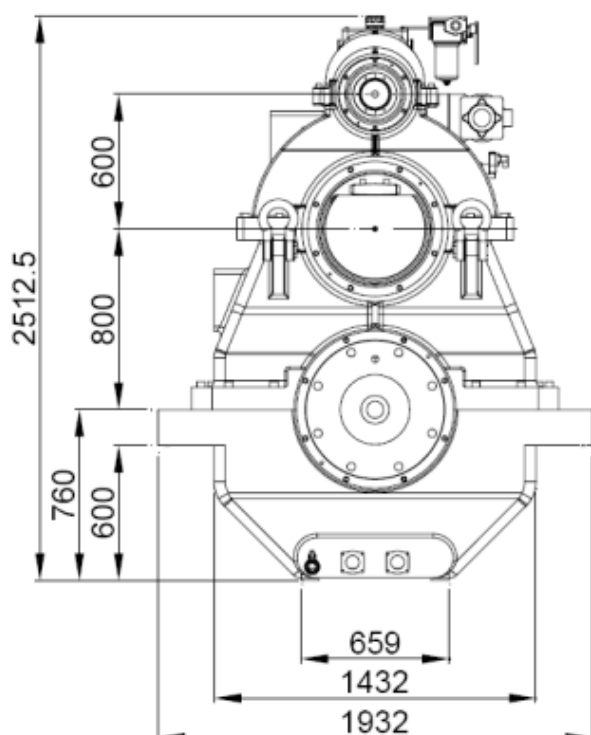
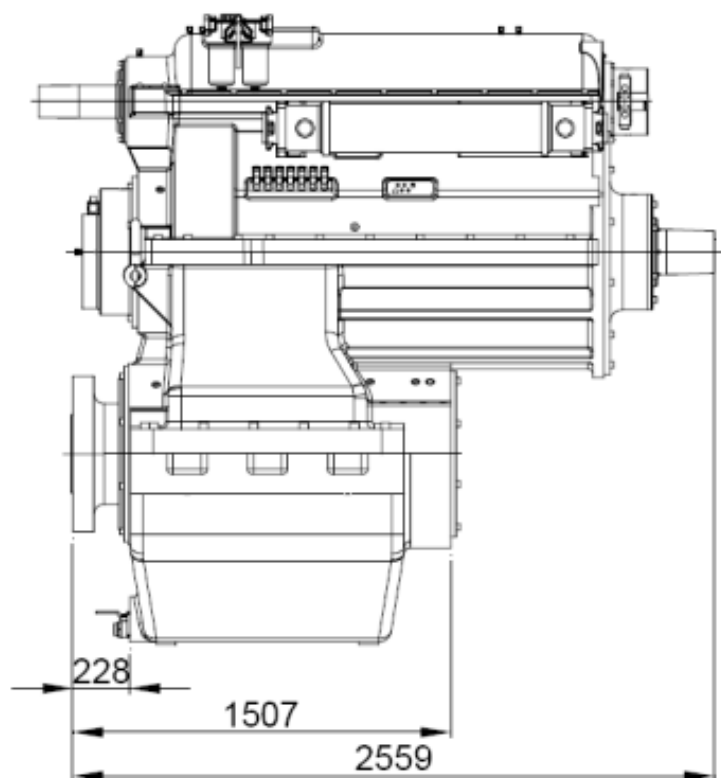
- Hybrid gearbox gives different running modes
- Compact design
- Large economical reduction ratio
- Option of PTO/PTI with individual hydraulic clutches
- Rigid cast iron housing
- Helical ground gearwheels in casehardened and highly alloyed steel
- Hydraulic multi-plate clutch
- Oil system with direct driven oil pump, cooler, filter, valves etc.
- Pressure lubricated spherical roller bearings
- Designed according to the rules of the classification societies
- Each gearbox is tested and approved in test bed

Variants:

70HS with built-in servo system for CP propeller

70OD prepared for OD system

800D - MARINE GEARBOX



Assembly Type 800D PTO/PTI

Reduction Ratio	Power Factor kW/RPM	Input Shaft Diameter mm
2,95-3,58:1	9,90	180
4,16:1	8,80	180
4,33:1	7,60	180
4,95:1	7,00	180
5,59:1	5,80	180
6,15:1	4,50	180

Servo for CP Propeller:

Max force = 1500 kN

Max stroke = 175 mm

PTO/PTI:

PTO/PTI with free shaft

PTO ratios:

PTI ratios:

Max power PTO 540 kW @ 1200 rpm

Max power PTI 1068 kW @ 1200 rpm

Weight:

Approx. 14300 kg

Gearbox:

- Hybrid gearbox gives different running modes
- Prepared for OD system
- Compact design
- Large economical reduction ratio
- Option of PTO/PTI with individual hydraulic clutches
- Rigid cast iron housing
- Helical ground gearwheels in casehardened and highly alloyed steel
- Hydraulic multi-plate clutch
- Oil system with direct driven oil pump, cooler, filter, valves etc.
- Pressure lubricated spherical roller bearings
- Designed according to the rules of the classification societies
- Each gearbox is tested and approved in test bed

Variants:

800D prepared for OD system