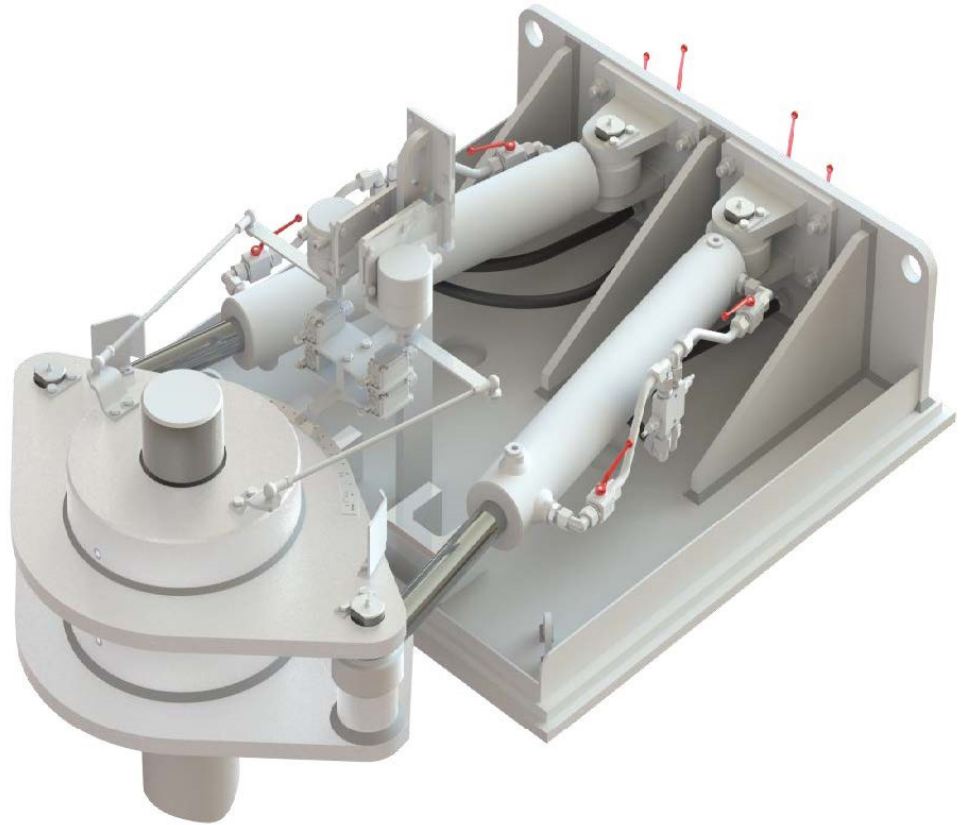


Steering gear

HATLAPA Piston type NEPTUNE



Structural features

- Electro-hydraulic driven
- 2 differential piston type cylinder
- Working torque 25 – 950 kNm
- For 2x 35°/ 2x 45° rudder angle (larger rudder angle on demand)
- Support and stopper unit welded to the deck
- Independent pump unit with fix or variable displacement
- Connection to rudder stock by conical hydraulic shrinkfit or cylindrical clamping device
- Application for single-screw or for twin-screw-vessels
- For twin rudder electrical or mechanical synchronisation possible

On request we can deliver

- Motor starters
- Alarm
- Rudder control
- Rudder angle indicator systems

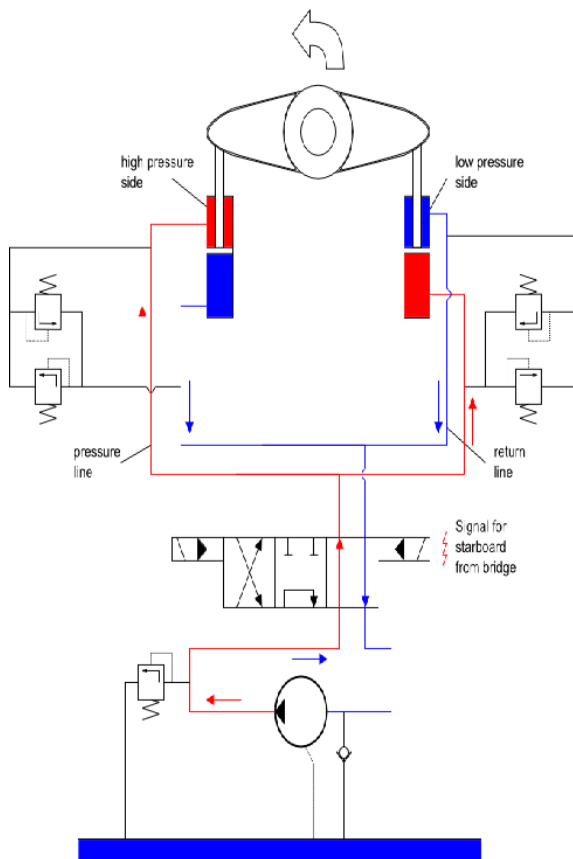
Special design

- Available on request, for example NEPTUNE steering gear for rudder angle up to +/-60 degrees

Technical data

Type		25	30	40	50	80	100	130	160	250	300	550	730	850	950
Working torque*	kNm	24	29	39	47	80	98	130	159	248	302	550	730	850	950
Length	L [mm]	1700	1700	2100	2100	2200	2200	2400	2400	2800	2500	2909	3295	3348	3348
Width	B [mm]	1000	1000	1000	1000	1250	1250	1350	1300	1600	1500	1710	1900	1900	1900
Height	H1 [mm]	600	600	750	750	800	800	850	850	900	900	1254	1395	1415	1415
El. motor output** at 50/60 Hz	[kW]	2 x 2.1	2 x 2.6	2 x 3.3	2 x 4.5	2 x 6.2	2 x 7.7	2 x 11.5	2 x 12.2	2 x 23	2 x 23.5	2 x 32.2	2 x 42	2 x 49.5	2 x 53.9
Rudder angle		45°	35°	45°	35°	45°	35°	45°	35°	45°	35°	35°	35°	35°	35°

* according to IEC 92-204: duty S6-25%



Features

- Pump is switched on (bridge panel, starter cabinet)
- Without a control signal the directional valve is in the neutral (middle) position
- According to the control signal the directional valve is switching in the working position
- The hydraulic oil will delivered to one cylinder piston side and one cylinder rod side (red)
- One piston is getting out and one is getting in. The oil from the opposites will be delivered back to the pump (blue, close-loop)
- The to and fro going movement of the piston will be transferred via the ram pin into a rotating movement of the tiller

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