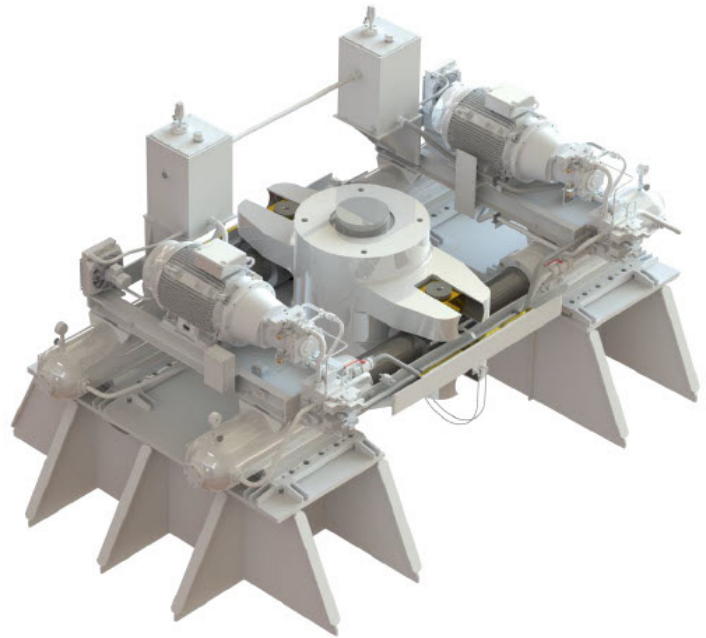


Steering gear

HATLAPA RAM type POSEIDON ST



Structural features

- Electro-hydraulic driven
- 4 cylinders
- 2 rams
- Rudder stock diameters 550 - 1,100mm
- Working torque 2130-12012 kNm
- Hydraulic pumps of variable displacement (ST)
- Conical hydraulic shrinkfit connection to rudder stock (keyway on demand)
- Delivery in 5 transportable pieces
- Installation on steel or epoxy resin chocks
- Fastening by stopper or reamer bolts
- In emergency case easily separation and operation with 2 cylinders (manually, automatically)

On request we can deliver

- Rudder carriers
- Motor starters
- Alarm
- Automatic isolation
- Rudder control
- Rudder angle indicator systems
- etc.

Special designs

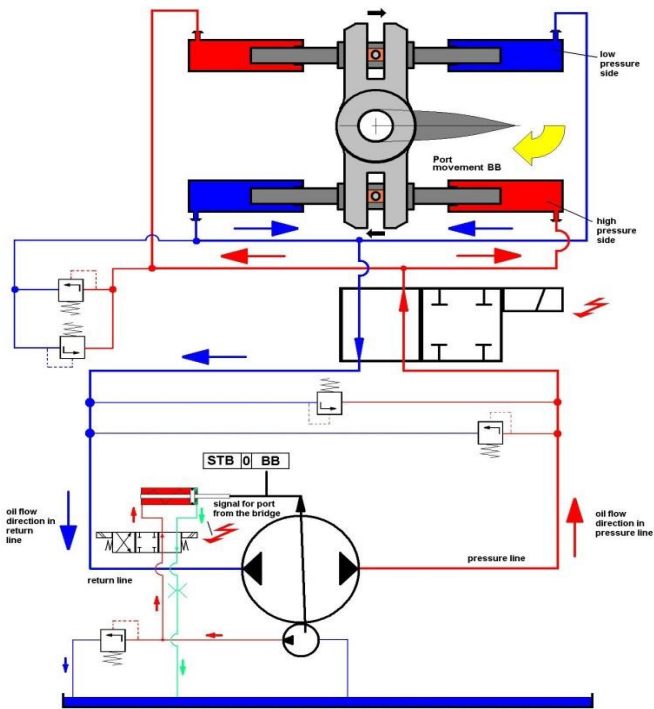
- Available on request

Technical data

Type		2000	2500	3000	3500	4000	6000	7000	10000	12000
Working torque* at 35°	[kNm]	2130	2558	3111	3548	4304	6010	6988	8893	12012
Max rudder stock diameter	[mm]	550	600	650	700	750	850	900	1000	1100
Length	L [mm]	4700	5100	5320	5430	6060	6550	6950	7330	9456
Width	B [mm]	2750	2800	2915	3355	3090	3500	3600	3600	3760
Height	H [mm]	1730	1750	2100	2100	2100	2250	2000	1800	1854
El. Motor output**	[kW]	2 x 96	2 x 117	2 x 145	2 x 160	2 x 190	2 x 265	4 x 155	4 x 196	4 x 270
Oil charge (approx)	liter [l]	400	480	500	650	700	1000	1100	1250	1600
Weight(approx)	[kg]	17000	19000	22000	30000	30500	41000	45000	50000	75000

* at working pressure

** according to IEC 92-204: duty S 6-25%.



Features

- Pump is switched on (bridge panel, starter cabinet)
- As soon as the e-motor is running, the isolation valve is switched in open position
- According to the control signal the hydraulic oil will be delivered to two cylinders (red).
- The ram is getting out and the oil of the opposite cylinder will be delivered back to the pump (blue, close-loop)
- The to and fro going movement of the ram will be transferred via the ram pin and the sliding block into a rotating movement of the tiller.

MacGregor shapes the offshore and marine industries by offering world-leading engineering solutions and services with a strong portfolio of MacGregor, Hatlapa, Porsgrunn, Pusnes and Triplex brands.

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