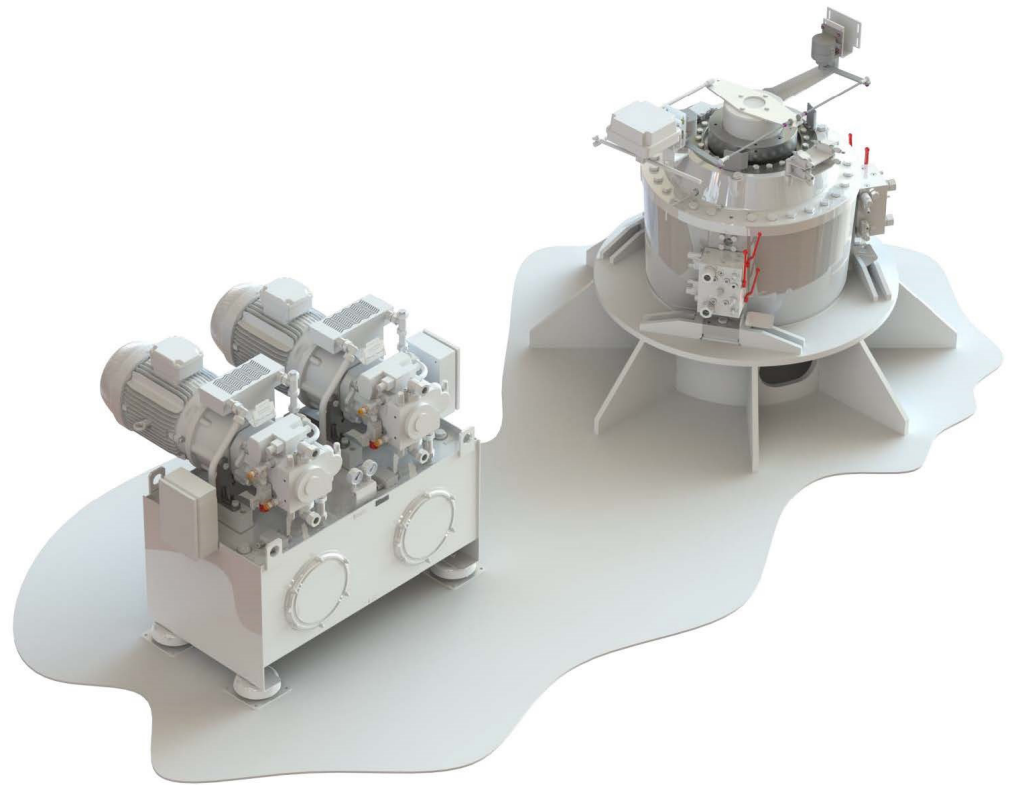


Steering gear

HATLAPA Rotary vane TRITON



Structural features

- Electro-hydraulic driven
- Integrated rudder carrier (axial/ radial)
- Integrated mechanical stoppers
- Conical hydraulic shrinkfit connection to rudder stock
- 2x 45° rudder angle (2x 35° on demand)
- Working torque 130 up to 1100 kNm
- Pump unit with fixed (Triton 130-450) or variable (up Triton 450) displacement
- Working pressure max. 100 bar
- Installation on flexible synthetic material (Hatlapa supply)
- Flexible installation reduced edge loading on the integrated rudder carrier
- Force transfer to the foundation via stopper, no reamer bolts necessary

On request we can deliver

- Rudder controls
- Motor starters
- Alarm
- Automatic switch over
- Rudder angle indicators systems
- etc.

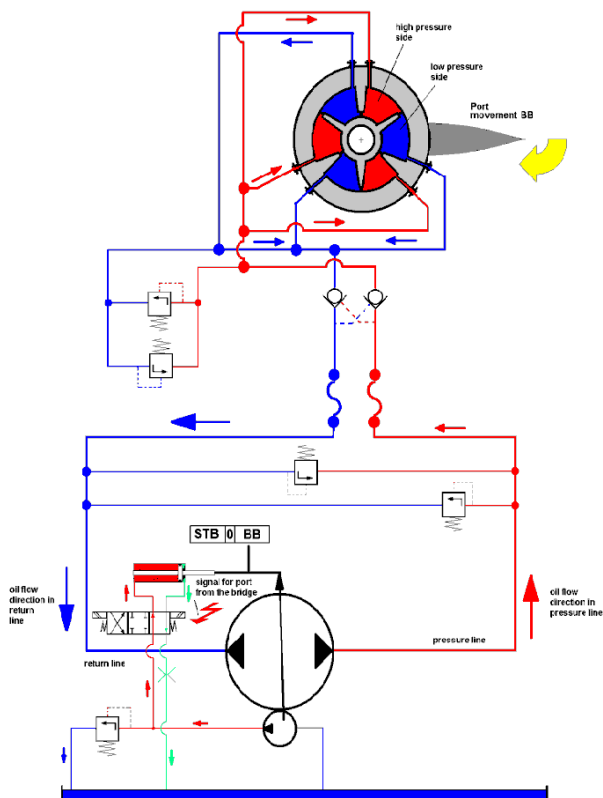
Special design

- Available on request

Technical data

Type		130	200	300	450	600	800	1000	1250
Working torque	kNm	130	200	300	450	545	725	915	1100
Available rudder stock diameter	mm	150 / 160 / 170 / 180 / 190 / 200 / 210 / 215	190 / 200 / 210 / 220 / 230 / 240 / 250	220 / 230 / 240 / 250 / 260 / 270 / 280	250 / 260 / 270 / 280 / 290 / 300 / 310 / 320	280 / 290 / 300 / 310 / 320 / 330 / 340 / 350 / 354	310 / 320 / 330 / 340 / 350 / 360 / 370 / 380 / 390	340 / 350 / 360 / 370 / 380 / 390 / 400 / 410 / 420 /	370 / 380 / 390 / 400 / 410 / 420 / 430 / 440 / 446
Weight	kg	682	1003	1480	2198	2832	3918	4726	5874
Dimensions (DxH)	mm	640 x 660	740 x 740	830 x 820	940 x 930	1030 x 1000	1130 x 1110	1220 x 1170	1290 x 1260
El. motor output*	kW	2 x 11	2 x 18	2 x 24	2 x 32	2 x 40	2 x 50	2 x 76	2 x 95

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



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 the three chambers (red)
- The rotor is turning and the oil of the opposite chambers will be delivered back to the pump (blue, close-loop)

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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