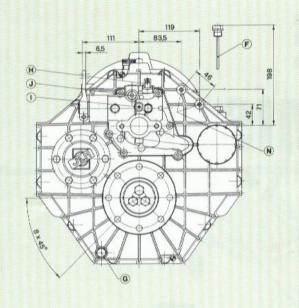
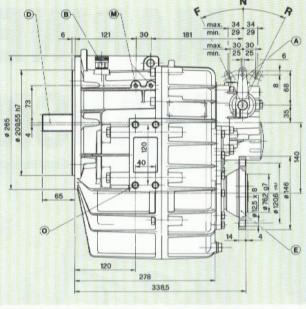
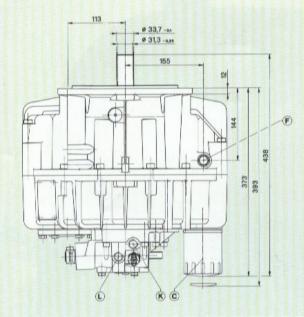
# MARINE TRANSMISSION



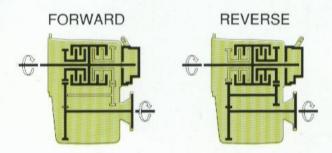
PERKOVIĆ







- A) SHIFT LEVER
- B) OIL VAPOUR BREATHER
- C) OIL FILTER "DONIT" 43 10 75
- D) INPUT SHAFT SPLINE PROFILE: SAE, z=26, DP 20/40, 30°, FLAT ROOT, CLASS t6
- E) PROPELLER SHAFT FLANGE
- F) OLI DIPSTICK, OIL FILLER HOLE, HOLE FOR DRAINAGE BY PUMP(hole dia 15 mm)
- G) OIL DRAIN PLUG
- H) NEUTRAL SWITCH FOR ELECTRIC SIGNAL
- MEASUREMENT CONNECTION FOR SHIFTING OIL PRESSURE M10x1, p<sub>max</sub>=22<sup>+2</sup> bar
- J) CONNECTING THREAD 3/8" NPSF FOR TEMPERATURE PROBE
- K) OIL CONNECTION FROM COOLER R3/8" BSP, 14 mm DEEP
- L) OIL CONNECTION TO COOLER R3/8" BSP, 14 mm DEEP
- M) THREADS FOR REMOTE CONTROL WIRE SUPPORT 2xM8x16
- N) THREADS FOR COOLER MOUNTING 2xM8x16
- O) 2x4 THREADS M12x25 FOR SUSPENSION OF TRANSMISSION



# MARINE TRANSMISSION HBS 600 IN TWIN INSTALLATION

In two engines vessels, twin installations are used requiring counter-rotating propellers. This problem can be solved by using engines and transmissions of different types (one right-handed, the other left-handed).

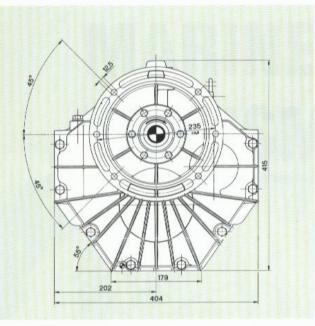
Marine transmission HBS 600 transfers the full engine output in both directions of rotation of propellers. Twin installations can thus be equipped with identical engines and transmissions but with different propellers - one left- and the other right-handed. In this case only the shift lever positions are opposite.

MARINE TRANSMISSION HBS 600 is equipped with helical gearing system and parallel input and output shafts and suitable for the use in different types of vessels where safe and long service life is required: small fishing boats, working boats, excursion crafts and similar applications.

The careful choice of materials, as well as modern manufacturing methods enable the operation of the HBS 800 transmissions within the indicated power range (shaded area in the power diagram).

The housing is made of a special aluminium alloy, bilge and sea water resistant.

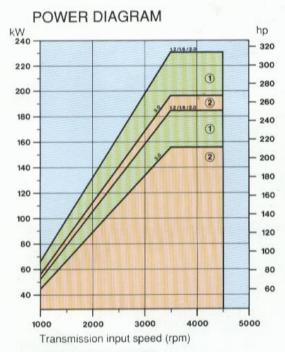
Gears and shafts are made of high-quality heat treated alloy steels. The super-finished toothing enables quiet operations and high efficiency.



The HBS 600 transmission is easily and reliably actuated via the hydraulically operated multiple disc clutch. Shifting is started by actuating the shift lever

An integrated gear pump provides the clutch hydraulic fluid and lubrication oil flow from the oil bath, while a fine mesh filter in the suction line assures a long service life and high dependability in operation. The gear pump is actuated directly by the input shaft. A safety neutral swich to be connected to the engine starter additionally assures that the engine can only be started in the transmission's neutral position. The neutral swich is also connected to a signal lamp for visual control.

Marine transmission HBS 600 has the "Croatian Register of Shipping" certificate for installation on commercial vessels.



1. PLEASURE CRAFT 2. COMMERCIAL CRAFT

#### **SPECIAL FEATURES**

- The HBS 600 Transmission is equipped with forced bearings lubrication and immersion lubrication for other movable parts.
- The connection with the propeller shaft can be achieved by rigid or flexible couplings.
- The inclination of the transmission in the direction of the propeller shaft should not exceed an angle of 20° for continuous safe operation.
- The transmission has to be fixed to the engine and suspended on special supports.
- The transmission is provided with connections for: remote control wire, shafting oil pressure manometer, oil temperature probe and oil cooler.
- The transmission is right-hand propeller.
- Robust tapered roller bearings take over the entire propeller thrust force and thus make an additional thrust bearing unnecessary.

TECHNICAL DATA		1.2	1.6	2.0	3.0
INPUT POWER					
Pleasure Craft	kW	231	231	231	183
Commercial Craft	kW	196	196	196	156
INPUT TORQUE					
Pleasure Craft	Nm	630	630	630	500
Commercial Craft	Nm	535	535	535	425
TRANSMISSION RATIO					
Drive ahead	iA	1:1,225	1:1,618	1:2,068	1:3,04
Drive astern	i <sub>B</sub>	1:1,172	1:1,563	1:2,02	1:3,045
INPUT SPEED (max.)	rpm	4500	4500	4500	4500
PROPELLER THRUST	Ν	20000	20000	20000	17000
WEIGHT	kg	69	70,5	71	72,51
FLUID QUANTITY	Liter	7,7	7,7	7,6	7,6
FLUID GRADE		ATF (Automatic Transmission Fluid)			





## **FEATURES**

Aluminium housing

Full power transfer and same transmission ratios in both shifting positions

Compact design

Fine mesh filter in suction line

Super-finished helical gears

Unified connections toward engine and propeller shaft

## **ADVANTAGES**

Low weight

Same transmissions in twin installations

Little mounting space required

High operating safety

Low noise operation and easy shifting

Easy exchange

