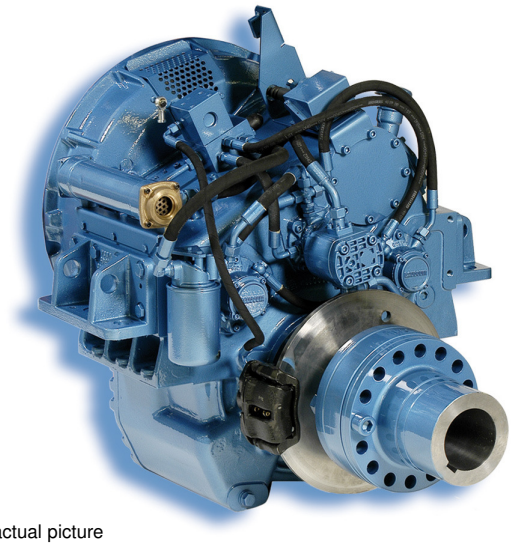
IR4N



Not contractual picture

Continuous duty ratings*

from 202 to 491 kW
from 275 to 668 hp
from 1500 to 1800 rpm

* see capacities file below

TECHNICAL CARACTERISTICS

P1 capacities homologated by BV and RINA
Full capacity only in forward rotation (except IR4N 4.6)
Same reduction ration in the two ways of rotation (except other indication)
Hydraulic clutches multi-discs type
Gears with tempered, hardened and rectified teeth
Line shaft thrust bearings built-in gearbox secondary shaft
Filtration of lubricating oil by a full flow, screw-on cartridge type filter
Oil capacity: 18 liters of SAE 30 or SAE 40 type lube oil

BASIC SPECIFICATION

Standard **Baudouin** coupling housing, bare input shaft, without coupling flange
Mechanically driven oil pump
Oil cooler, for sea water cooling, fitted on gearbox
Clutches control by 24 Vdc electro-distributors with emergency manual control on gearbox
Emergency device by clutches mechanical locking
Clutches oil pressure switch
Coupling flange on output secondary shaft
Rigid mounting feet
Manual oil draining pump supplied in accessories box

CAPACITIES

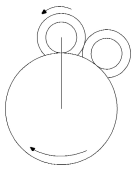
IR4N	exact reduction ratio	**2,393**	**3,307**	**4,600**	**-**
	maximum input speed (rpm)	2000	2000	2000	-
	P/N forward rotation (kW/rpm)	0,1636	0,1636	0,1554	-
IR4NM	exact reduction ratio	**-**	**3,830 (3307)***	**-**	**5,326 (4,600)***
	maximum input speed (rpm)	-	2000	-	2000
	P/N marche avant (kW/rpm)	-	0,1349	-	0,1349
IR4NMD	exact reduction ratio	**2,771 (2,393)***	**3,830 (3,307)***	**4,600**	**5,326 (4,600)***
	maximum input speed (rpm)	2000	2000	2000	2000
	P/N forward rotation (kW/rpm)	0,2453	0,2453	0,2453	0,2453

* the number between brackets corresponds to the reverse rotation reduction ratio.

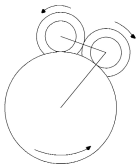
KINEMATIC

IR4N gearbox

Right hand propeller

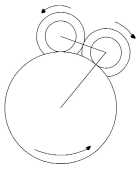


Forward rotation

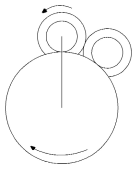


Reverse rotation

Left hand propeller



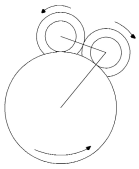
Forward rotation



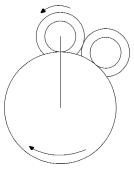
Reverse rotation

IR4NM gearbox

Left hand propeller only



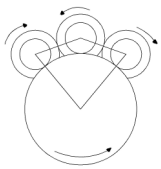
Forward rotation



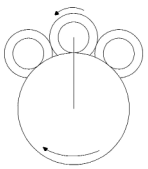
Reverse rotation

IR4NMD gearbox

Left hand propeller only



Forward rotation



Reverse rotation

POWER TAKE OFF

Not clutchable power take off

Pulley 3 grooves profile A, Ø 140 for two and Ø 120 for one, fitted on lateral shaft A or B - Clock wise rotation - PTO rpm = Engine rpm (for IR4N) or 0.864 x engine rpm (for IR4NM and IR4NMD) - Maximum transmissible torque: 8 m.daN

Conical bare shaft end, fitted in C - Clock wise rotation - PTO rpm = 1,266 x engine rpm - Maximum transmissible torque: 14 m.daN (radial) or 60 m.daN (axial)

Clutchable power take off with 24 Vdc electrical control

For driving of one pump in line, fitted in C - Clock wise rotation - PTO rpm = 1,266 x engine rpm - Maximum transmissible torque: 100 m.daN

For driving of two pumps flanged through a repartition gearbox fitted in C - Counter clock wise rotation - PTO rpm = 1,456 x engine rpm - Total transmissible torque 85 m.daN with a maximum of 50 m.daN per output

OPTIONAL EQUIPMENTS

Clutches control by cable instead of electrical device
Propeller brake device fitted on gearbox
Trolling valve device with control and safety device panel
Clutchable or live power take off for hydraulic pump driving (see above)

Line shaft counter flange (machined to propeller shaft tapper or pilot bored)
Spare parts kits according to main Classification Societies requirements
Bureau Veritas or Rina survey

(consult us for other Classification Societies)

DIMENSIONS

Dry weight
IR4N: 490 kg
IR4NM: 490 kg
IR4NMD: 530 kg