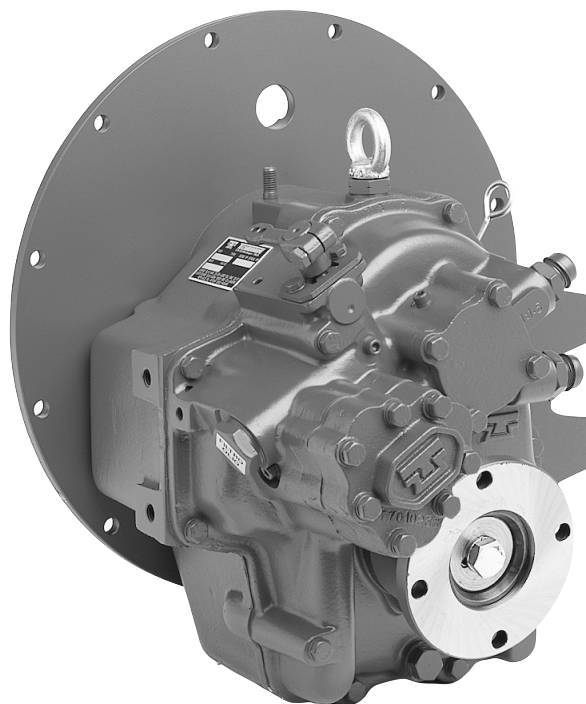


Invertitore Marino Marine Transmission Inverseur Marin

TM 93



CARATTERISTICHE

L'invertitore TM 93 dispone di frizioni a dischi multipli a comando idraulico. Le frizioni e gli ingranaggi sono dimensionati in modo da poter trasmettere la piena potenza, con lo stesso rapporto, sia in marcia avanti che in retromarcia.

DESCRIPTION

TM 93 marine gearbox is equipped with multiple-disc clutches hydraulically operated. Clutches and gears are properly constructed to transmit the full power, with the same ratio, both in forward and reverse running.

CARACTERISTIQUES

L'inverseur marin TM 93 est équipé avec embrayages multidisques à commande hydraulique. Embrayages et pignons sont propres pour transmettre pleine puissance et même rapport tant en marche avant qu'en arrière.

OPTIONAL

- Campana SAE 3 - SAE 4 - BW
- Giunti 10" - 11,5"
- Staffa supporto cavo di comando
- Scambiatore
- Trolling valve
- Controflangia
- Selettore elettrico

OPTIONS

- SAE 3, 4, BW bell housings
- Torsional couplings 10" - 11,5"
- Cable bracket
- Heat exchanger kit
- Trolling valve
- Propeller shaft flange
- Electric control valve

OPTIONS

- Cloches SAE 3 - SAE 4 - BW
- Accouplements 10" - 11,5"
- Support cable
- Echangeur
- Trolling valve
- Contreturteau
- Selecteur électrique

The technical drawing consists of two views of the Bosch Rexroth 3000 series hydraulic pump. The left view is a front view showing the pump housing with a circular flange. Key dimensions include a total width of 378 mm, a central mounting hole diameter of 12 mm, and a flange diameter of 335 mm. Callouts A, B, C, and D point to specific features on the front. The right view is a side view showing the pump's profile. Key dimensions include a total height of 297 mm, a mounting flange diameter of 115 mm, and a base width of 257.5 mm. Callouts E, F, G, and H point to specific features on the side. The drawing also includes a list of dimensions and callouts in both Italian and English.

Dimensions:

- 378 (Total width)
- 235.5 (Distance from center to bottom edge)
- 87.5 (Distance from center to top edge)
- 55 (Distance from center to top flange edge)
- 78 (Distance between mounting holes A and B)
- 335 (Flange diameter)
- 12 (Mounting hole diameter)
- 85 (Distance from center to bottom flange edge)
- 78.5 (Total height)
- 297 (Total height)
- 201.5 (Distance from center to top flange edge)
- 119 (Distance from center to top flange edge)
- 30 (Distance from center to top flange edge)
- 115 (Mounting flange diameter)
- 257.5 (Base width)
- 12 (Base thickness)
- 110.5 (Distance from center to bottom flange edge)
- 108 (Distance from center to bottom flange edge)
- 106 (Distance from center to bottom flange edge)
- 115 (Distance from center to bottom flange edge)

Callouts:

- A - Indicatore di folle - Neutral indicator - Indicateur point mort
- B - Ritorno olio da scambiatore - Oil from cooler - Retour huile de l'échangeur (1/2" gas)
- C - Asta livello olio - Oil dipstick - Bouchon de niveau
- D - Mandata olio allo scambiatore - Oil to cooler - Refoulement huile ou échangeur
- E - Tappo scarico olio - Oil drain plug - Bouchon de vidange
- F - Tappo carico olio - Filling plug - Bouchon de remplissage
- G - Campana - Mounting flange - Cloche: SAE 3, SAE 4 (X=12, 5/33), BW (X=13,5)
- H - Leva comando - Actuating lever - Levier de commande

RAPPORTO RATIO RAPPORT	POTENZA MAX MOTORE - INPUT RATINGS - PUISSANCE MAXI MOTEUR KW					
	DIORTO - PLEASURE - PLAISANCE		INTERMEDIO-INTERMEDIATE-INTERMEDIAIRE		CONTINUO - CONTINUOUS - CONTINU	
	2600 RPM	3300 RPM	2100 RPM	2800 RPM	1800 RPM	2400 RPM
1,51	139	176	93	124	73	98
2,09	120	152	80	107	64	85
2,40	106	135	71	95	57	77
2,77	93	117	62	83	50	66

Per la definizione dei tipi di servizio vedere "Tabelle di Potenza"
Duty classification definition: see "Marine Transmissions Capacity Table"
Definition du type de service: voir "Tableau des puissances"

Le mariage des divers éléments de la transmission peut occasionner des vibrations de torsion. En cas d'incompatibilité torsionnelle, les effets peuvent détériorer des composants et détruire l'inverseur. Cette compatibilité peut dans les bas régimes du moteur provoquer des bruits de denture. TWIN DISC n'est pas responsable des éventuels dommages, bruits et rupture qui résulteraient de cette incompatibilité torsionnelle. L'analyse des vibrations de torsion est de la responsabilité du metteur en groupe.

I dati tecnici possono subire variazioni senza preavviso - Subject to technical change without notice - Les caractéristiques techniques sont susceptibles d'être modifiées sans préavis