



Situata immediatamente a ridosso del Porto di La Spezia, terzo in Italia per la movimentazione delle merci e importantissimo punto di accesso per le vie del centro-nord europa, nonché sede di storici cantieri navali, MICROTEM progetta e realizza da anni tenute meccaniche e sistemi di tenuta.

Proprio la vicinanza con il porto ci ha dato la possibilità di riparare e ricondizionare a nuovo tenute meccaniche per assi elica proveniente da tutto il mondo e installate su imbarcazioni di ogni tipologia, dai pattugliatori delle forze dell'ordine, alle grandi navi transoceaniche, sino alle navi da crociera.

Dopo aver fatto bagaglio delle esperienze in questo settore, MICROTEM ha sviluppato un prodotto che potesse sopprimere a tutte le "failure" delle tenute meccaniche assi elica esistenti.

La serie MTM900, progettata e realizzata dal diametro 20 mm (0.75 inch) sino al diametro 150 (6 inch), è un prodotto innovativo che assicura una elevata capacità di compensazione ai disallineamenti angolari e radiali.

Realizzata con materiali all'avanguardia, si propone come prodotto ad elevatissima affidabilità. Grazie al suo design compatto, risulta di facile installazione, dando la possibilità ai progettisti di ridurre al massimo lo spazio nella sala macchine, dedicato al sistema di tenuta della propulsione.

Grazie alla tecnologia di simulazione FEM e ai numerosi test compiuti, sia in laboratorio che direttamente in mare aperto, abbiamo potuto realizzare particolari geometrie degli anelli striscianti, capaci di sviluppare un bassissimo coefficiente di attrito e quindi un ridotto sviluppo di calore che assicura che la tenuta meccanica serie MTM900, riesca ad arrivare a performance superiori alle 25.000 ore di funzionamento.

La versione MTM901 è stata progettata per poter permettere l'installazione del sistema di tenuta meccanica anche su "astucci flangiati", in cui le dimensioni della flangia di interfaccia vengono "customizzate" dall' Ufficio Tecnico Microtem di volta in volta, adattandosi al disegno dell'imbarcazione.

Grazie alla configurazione "a cartuccia" la tenuta meccanica arriva già pronta per l'installazione e l'operatore non deve preoccuparsi di dover calcolare difficili misure, azzerando così il rischio di errori di montaggio.

Il Kit di manutenzione (repair kit), sempre disponibile pronto a magazzino, garantisce una riduzione del tempo di intervento e del costo che fanno delle MTM900 un prodotto da scegliere per la serenità delle vostre vacanze.

Located just close to the Port of La Spezia, third Italian main port in the movement of goods and important access point to north-central Europe and home of historical shipyards, MICROTEM designs and manufactures mechanical seals and mechanical seal systems.

Its proximity to the port gave us the opportunity to repair and re-condition mechanical seals for propeller shafts coming from all over the world and installed on boats of all types, from law enforcement patrol boats to large ocean-going vessels, up to cruise ships.

After having gained experience in this field, MICROTEM has developed a product that could compensate for all the "failures" of all existing mechanical seals for propeller shafts.

The series MTM900, designed and produced from the diameter 20 mm (0.75 inch) to the diameter 150 (6 inch), is an innovative product that provides high capacity to compensate for angular and radial misalignment.

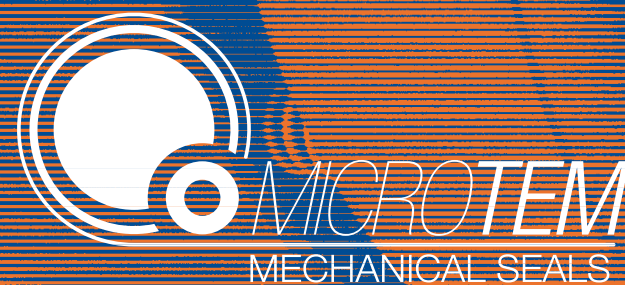
Made from advanced materials, it is a product with a very high reliability. Thanks to its compact design, is easy to install, giving to designers the possibility to minimize the space in the engine room, dedicated to the sealing system of propulsion.

Thanks to the technology of FEM simulation and to the numerous tests done, both in the laboratory and directly in the open sea, we were able to achieve a particular geometry of the sliding rings, able to develop a very low coefficient of friction and then a low heat development that ensures that the MTM900 series manages to get superior performance at 25,000 hours of operation.

The version MTM901 has been designed in order to allow the installation of the mechanical seal system also on "flanged boxes", in which the dimensions of the flange interface are "customized" from our Technical Office from time to time, adapting to the design of the boat.

Due to the "cartridge" configuration the mechanical seal is already ready for the installation and the operator does not have to worry about having to calculate difficult measures, thus eliminating the risk of installation errors.

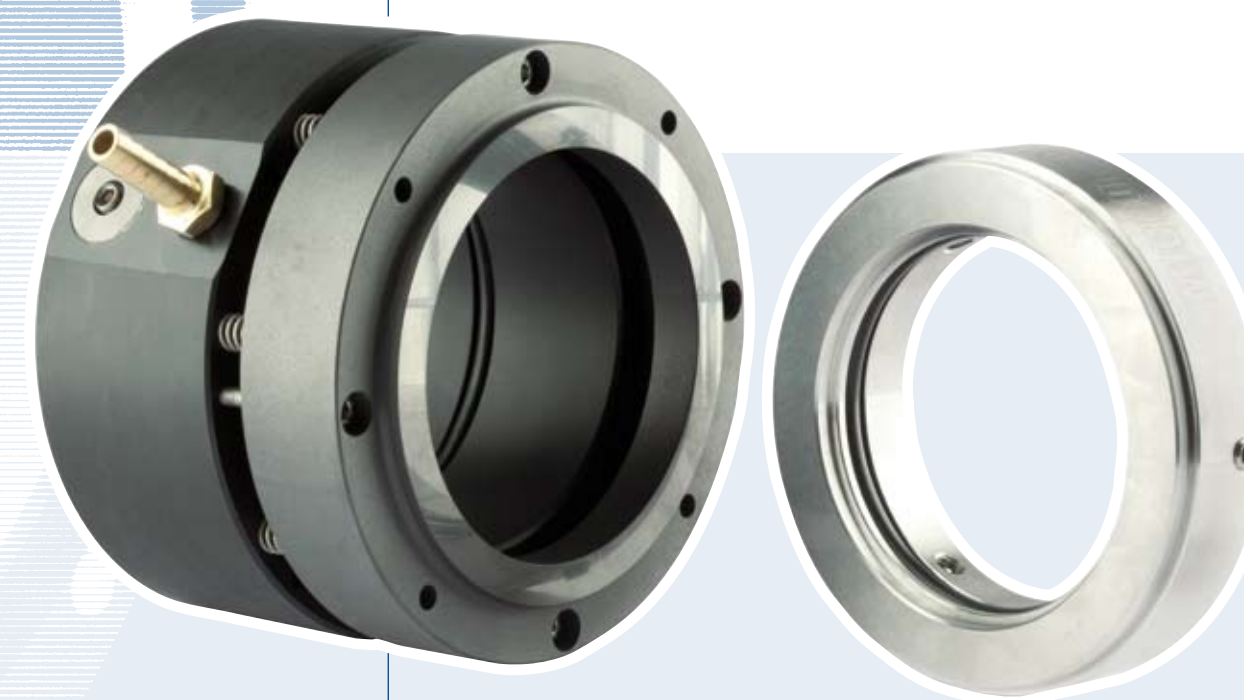
The kit of maintenance (repair kit), always available in stock, warrants a reduction of both operating time and cost, making the MTM900 a product to choose for the serenity of your holidays. .



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COMPONENTS & SOLUTIONS FOR FLUID HANDLING



Made in Italy

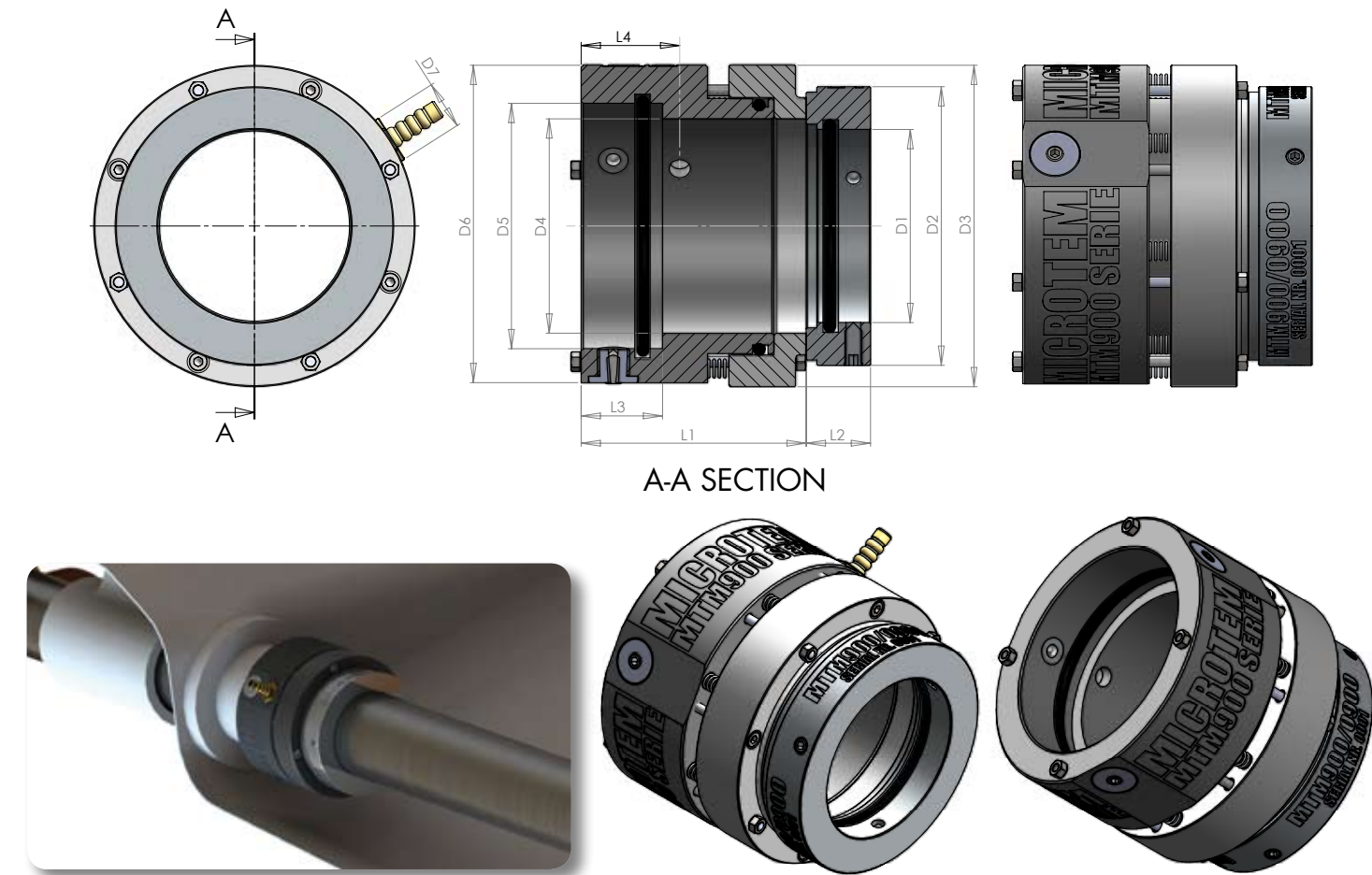
INCHES



MM900
SERIES

TENUTE SETTORE NAVALE
MECHANICAL SEALS FOR NAVAL SECTOR

MM900 SERIES



TIPO	D1 (H7)	D2	D3	D4	D5 (min)	D5 (max)	D6	D7	L1	L2	L3	L4
MTM900/1	1	2 1/2	3 1/4	1 1/2	1 4/4	2 1/4	3 1/4	1/4	4 1/4	1 1/4	1 1/2	1 3/4
MTM900/1,25	1 1/4	2 3/4	3 2/4	1 1/2	2 1/4	2 1/4	3 1/2	1/4	4 1/4	1 1/4	1 1/2	1 3/4
MTM900/1,5	1 1/2	3 1/4	3 4/4	1 4/4	2 2/4	2 3/4	3 4/4	1/4	4 1/4	1 1/4	1 1/2	1 3/4
MTM900/1,75	1 3/4	3 1/4	4 1/4	2 1/4	2 3/4	2 3/4	4 1/4	1/4	4 1/4	1 1/4	1 1/2	1 3/4
MTM900/2	1 4/4	3 1/2	4 1/4	2 1/4	2 4/4	3 1/4	4 1/4	1/4	4 1/4	1 1/4	1 1/2	1 3/4
MTM900/2,25	2 1/4	3 4/4	4 3/4	2 3/4	3 1/4	3 1/2	4 3/4	1/4	4 1/4	1 1/4	1 1/2	1 3/4
MTM900/2,5	2 1/2	4 1/4	4 4/4	2 4/4	3 1/2	3 1/2	4 4/4	1/4	4 1/4	1 1/4	1 1/2	1 3/4
MTM900/2,75	2 3/4	4 1/4	5 1/4	3 1/4	3 3/4	3 3/4	5 1/4	1/4	4 1/4	1 1/4	1 1/2	1 3/4
MTM900/3	2 4/4	4 1/2	5 1/4	3 1/4	3 4/4	4 1/4	5 1/4	1/4	4 1/4	1 1/4	1 1/2	1 3/4
MTM900/3,25	3 1/4	4 3/4	5 1/2	3 1/2	4 1/4	4 1/4	5 1/2	1/4	4 1/4	1 1/4	1 1/2	1 3/4
MTM900/3,5	3 1/2	5 1/4	5 4/4	3 4/4	4 2/4	4 1/2	5 4/4	1/4	4 1/4	1 1/4	1 1/2	1 3/4
MTM900/3,75	3 3/4	5 1/4	6 1/4	4 1/4	4 3/4	4 1/2	6 1/4	1/4	4 1/4	1 1/4	1 1/2	1 3/4
MTM900/4	3 4/4	5 1/2	6 1/4	4 1/4	4 4/4	5	6 1/4	1/4	4 1/4	1 1/4	1 1/2	1 3/4
MTM900/4,25	4 1/4	5 4/4	6 3/4	4 3/4	5 1/4	5 1/2	6 3/4	1/4	4 3/4	1 1/2	1 4/4	2 1/4
MTM900/4,5	4 1/2	6 1/4	6 4/4	4 4/4	5 1/2	5 1/2	6 4/4	1/4	4 3/4	1 1/2	1 4/4	2 1/4
MTM900/4,75	4 3/4	6 1/4	7 1/4	5 1/4	5 3/4	5 3/4	7 1/4	1/4	4 3/4	1 1/2	1 4/4	2 1/4
MTM900/5	5 1/4	6 3/4	7 1/2	5 1/2	6 1/4	6 1/4	7 1/2	1/4	4 3/4	1 1/2	1 4/4	2 1/4
MTM900/5,25	5 1/4	6 4/4	7 3/4	5 3/4	6 1/4	6 1/2	7 3/4	1/4	4 3/4	1 1/2	1 4/4	2 1/4
MTM900/5,5	5 1/2	7 1/4	7 3/4	5 4/4	6 1/2	6 1/2	7 3/4	1/4	4 3/4	1 1/2	1 4/4	2 1/4
MTM900/5,75	5 3/4	7 1/4	8 1/4	6 1/4	6 3/4	6 3/4	8 1/4	1/4	4 3/4	1 1/2	1 4/4	2 1/4
MTM900/6	5 4/4	7 1/2	8 1/4	6 1/4	6 3/4	6 4/4	8 1/4	1/4	4 3/4	1 1/2	1 4/4	2 1/4

Main Dimensions (inches)

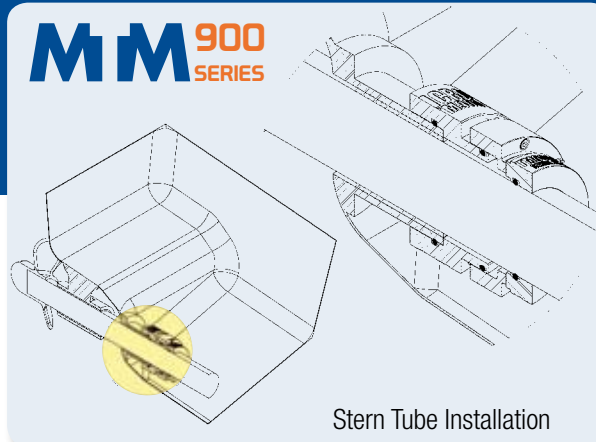
- high capacity to compensate for vibration hull/propeller shaft
- water circulation device

Part list

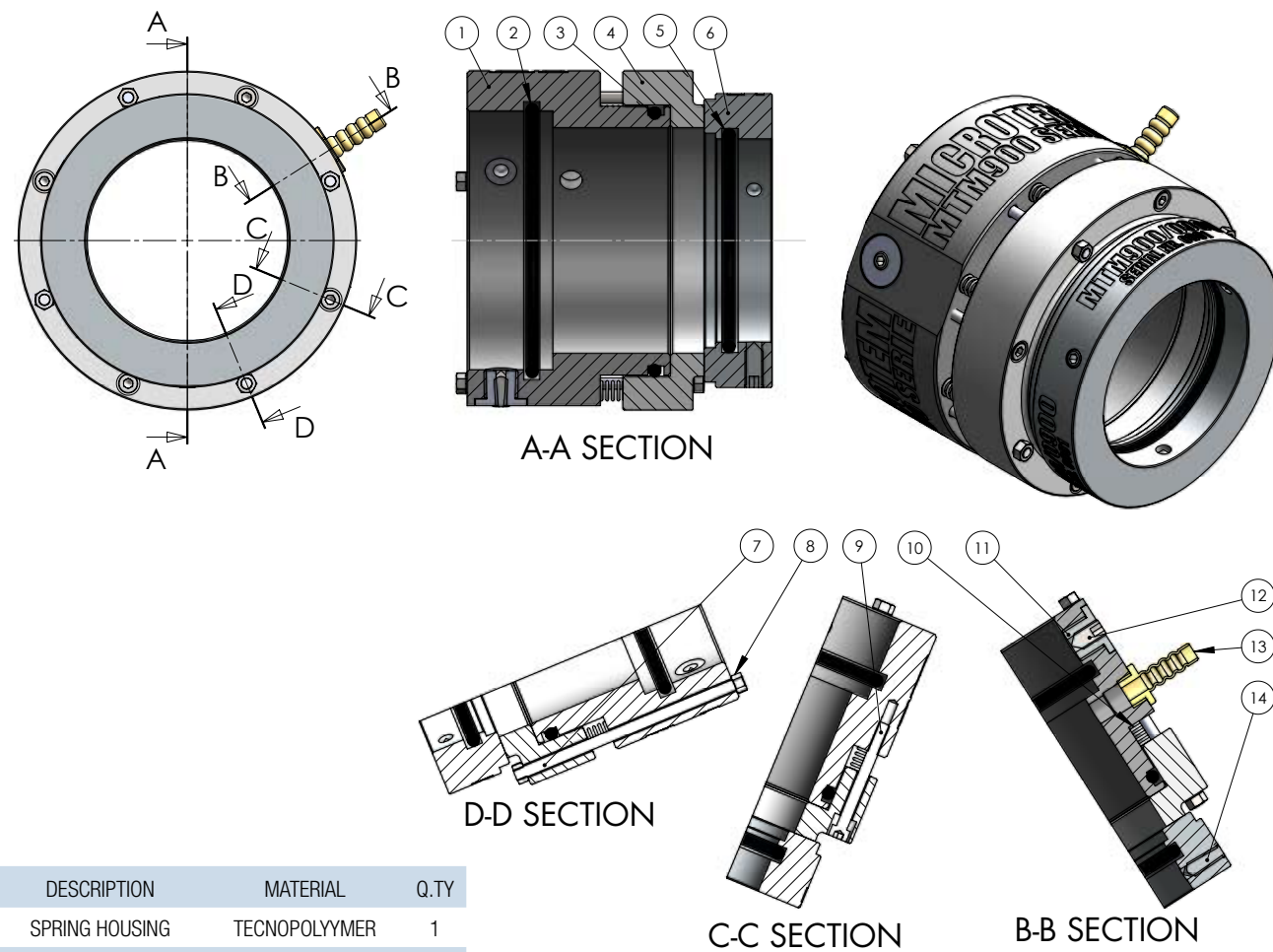
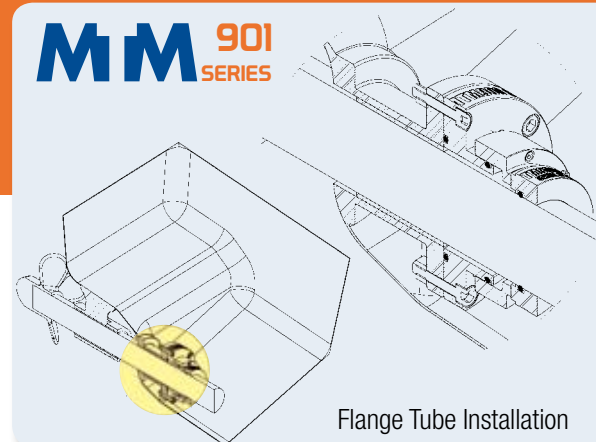
POS.	DESCRIPTION	MATERIAL	Q.TY
1	SPRING HOUSING	TECNOPOLYMER	1
2	OR	NBR	1
3	OR	NBR	1
4	STATIONARY RING	STAINLESS STEEL	1
5	OR	NBR	1
6	ROTATING RING	CARBON GRAPHITE	1
7	PRE-LOAD SCREW	STAINLESS STEEL	4
8	PRE-LOAD NUT	STAINLESS STEEL	4
9	SCREW	STAINLESS STEEL	1
10	SPRING	STAINLESS STEEL	3
11	BUSHING	STAINLESS STEEL	3
12	SCREW	STAINLESS STEEL	4
13	FLEXIBLE PIPE SUPPORT	STAINLESS STEEL	1
14	SCREW	STAINLESS STEEL	3

REMARKS:
OTHER SHAFT SIZES (D1) ON REQUEST
OTHER STERN TUBE SIZES (D5) ON REQUEST
ALL DIMENSIONS CAN HAVE CUSTOMIZATIONS ON REQUEST

MM901 SERIES



MM901 SERIES

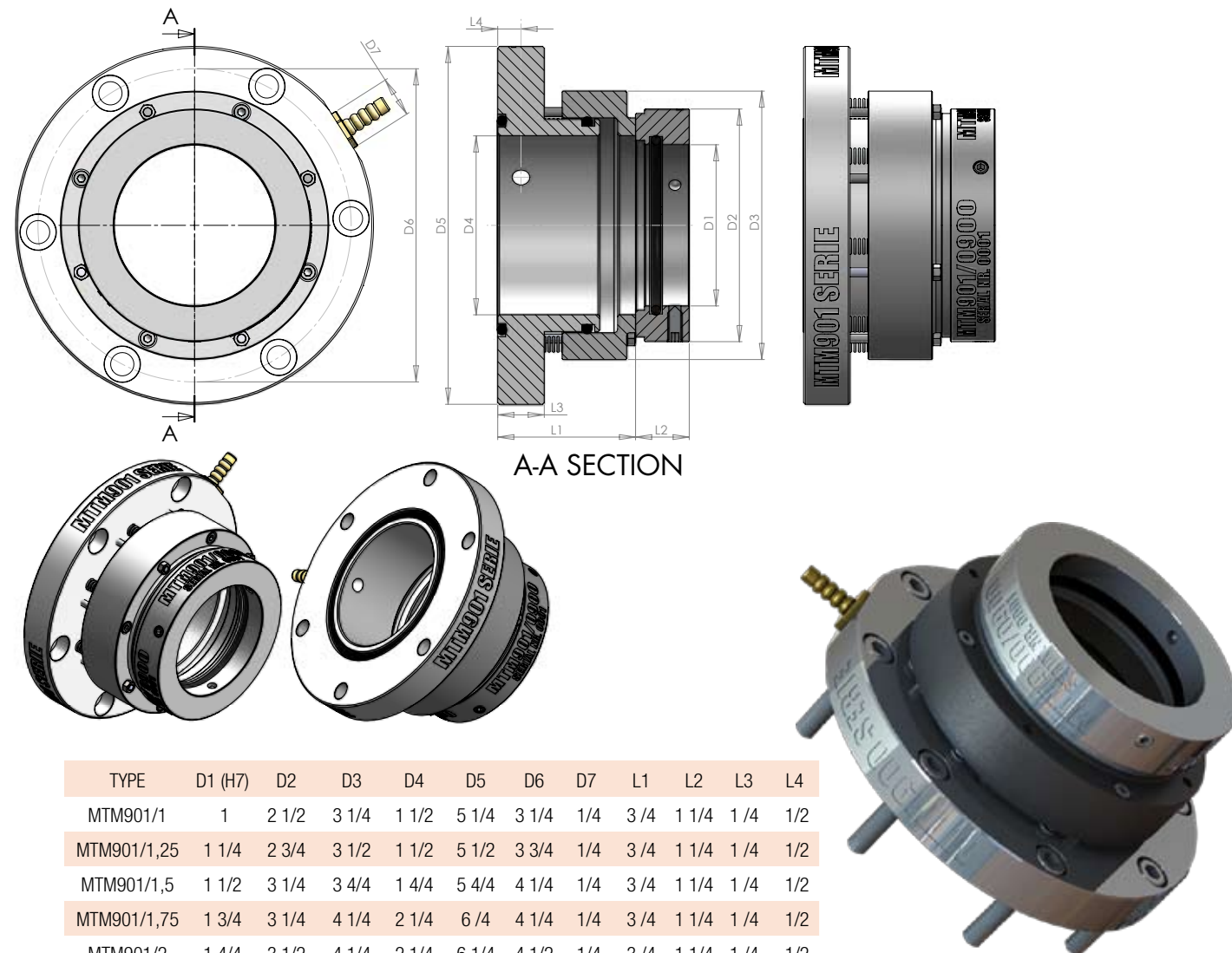


- high capacity to compensate for radial misalignment between propeller shaft and hull passage, high capacity to compensate for angular misalignment between the propeller shaft and hull passage

Materials:
any type of materials are available on request

MTM900_mml_Flyer-Rev.01/Nov.2013

MM901 SERIES



TYPE	D1 (H7)	D2	D3	D4	D5	D6	D7	L1	L2	L3	L4
MTM901/1	1	2 1/2	3 1/4	1 1/2	5 1/4	3 1/4	1/4	3/4	1 1/4	1/4	1/2
MTM901/1,25	1 1/4	2 3/4	3 1/2	1 1/2	5 1/2	3 3/4	1/4	3/4	1 1/4	1/4	1/2
MTM901/1,5	1 1/2	3 1/4	3 4/4	1 4/4	5 4/4	4 1/4	1/4	3/4	1 1/4	1/4	1/2
MTM901/1,75	1 3/4	3 1/4	4 1/4	2 1/4	6 1/4	4 1/4	1/4	3/4	1 1/4	1/4	1/2
MTM901/2	1 4/4	3 1/2	4 1/4	2 1/4	6 1/4	4 1/2	1/4	3/4	1 1/4	1/4	1/2
MTM901/2,25	2 1/4	3 4/4	4 3/4	2 3/4	6 3/4	4 4/4	1/4	3/4	1 1/4	1/4	1/2
MTM901/2,5	2 1/2	4 1/4	4 4/4	2 4/4	6 4/4	5 1/4	1/4	3/4	1 1/4	1/4	1/2
MTM901/2,75	2 3/4	4 1/4	5 1/4	3 1/4	7 1/4	5 3/4	1/4	3/4	1 1/4	1/4	1/2
MTM901/3	2 4/4	4 1/2	5 1/4	3 1/4	7 1/4	6 1/4	1/4	3/4	1 1/4	1/4	1/2
MTM901/3,25	3 1/4	4 3/4	5 1/2	3 1/2	7 1/2	6 1/2	1/4	3/4	1 1/4	1/4	1/2
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MTM901/3,75	3 3/4	5 1/4	6 1/4	4 1/4	8 1/4	6 4/4	1/4	3/4	1 1/4	1/4	1/2
MTM901/4	3 4/4	5 1/2	6 1/4	4 1/4	8 1/4	7 1/4	1/4	3 1/2	1 1/2	1 1/2	4/4
MTM901/4,25	4 1/4	5 4/4	6 3/4	4 3/4	8 3/4	7 1/4	1/4	3 1/2	1 1/2	1 1/2	4/4
MTM901/4,5	4 1/2	6 1/4	6 4/4	4 4/4	8 3/4	7 3/4	1/4	3 1/2	1 1/2	1 1/2	4/4
MTM901/4,75	4 3/4	6 1/4	7 1/4	5 1/4	9 1/4	7 3/4	1/4	3 1/2	1 1/2	1 1/2	4/4
MTM901/5	5 1/4	6 3/4	7 1/2	5 1/2	9 1/2	8 1/4	1/4	3 1/2	1 1/2	1 1/2	4/4
MTM901/5,25	5 1/4	6 4/4	7 3/4	5 3/4	9 3/4	8 1/4	1/4	3 1/2	1 1/2	1 1/2	4/4
MTM901/5,5	5 1/2	7 1/4	7 3/4	5 4/4	9 3/4	8 1/2	1/4	3 1/2	1 1/2	1 1/2	4/4
MTM901/5,75	5 3/4	7 1/4	8 1/4	6 1/4	10 1/4	8 1/2	1/4	3 1/2	1 1/2	1 1/2	4/4
MTM901/6	5 4/4	7 1/2	8 1/4	6 1/4	10 1/4	8 3/4	1/4	3 1/2	1 1/2	1 1/2	4/4

REMARKS:
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