

Castano Primo 29/07/10

TRMX 257/1-C/RX-A3 PRESENTATION

The new monoblock single stage vary port design liquid ring vacuum pump TRMX 257/1 introduces a new and innovative design that improves the characteristics of the previous TRMB 32-50, which has been considered an excellent pump in the market. The monoblock construction results to be much more compact, the ergonomic construction facilitate the maintenance, the actual softened noise level, the new performances and warranted reliability are the result from Pompetravaini experience and the end users opinions and suggestions.

TRMX 257/1-C/RX-A3

Replaces: TRMB 32-50

Competitors: look Commercial information

Threaded connections - G 1

Service liquid connection - G 1/4

Anticavitation connection - G 1/8

Mechanical seal UNI EN 12756 - Ø24

Max capacity at 50 Hz – 54 m³/h

Max capacity at 60 Hz – 65 m³/h

E-motor IEC B34 frame 90 L

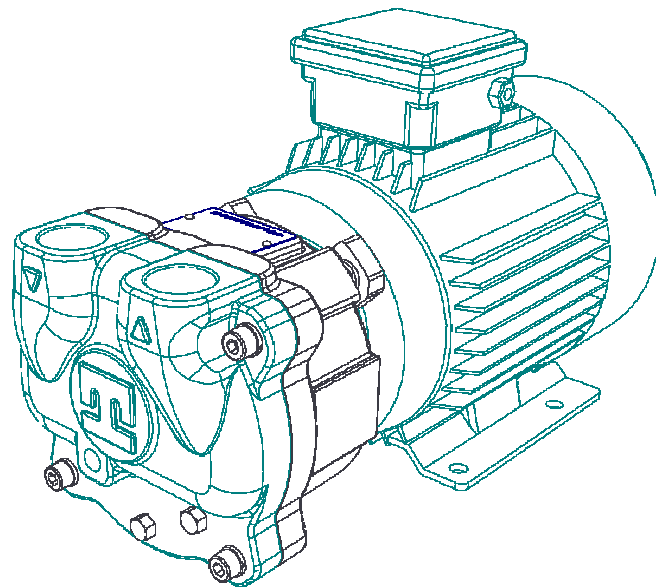
Installed power 2.2 kW (3 Hp) – 2 poles

Multi cycles at 50 /60 Hz

RPM a 50 Hz 2900 (Voltage see point 19-20)

RPM a 60 Hz 3500 (Voltage see point 19-20)

Average service liquid consumption 0.21 m³/h



Volume width x height x length including e-motor (only of our supply)

170 mm x 228 mm x 406.5 mm

The complete pump volume is 15% lower compared to the previous liquid ring vacuum pump TRMB 32-50.

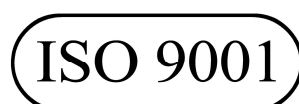
Volume width x height x length of pump only

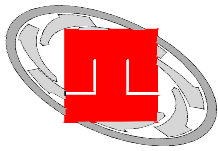
159.5 mm x 156.5 mm x 141.5 mm

The pump self volume is 50% lower compared to the previous liquid ring vacuum pump TRMB 32-50.

Total pump weight 25 Kg

The pump weight is 10% lower compared with the previous liquid ring vacuum pump TRMB 32-50.





COMMERCIAL INFORMATION : COMPETITORS

Brand	Pompa	Brand	Pompa
SIHI	LEM 50/51	NASH ELMO	2BV2061
ROBUSCHI	RVS 3	NASH ELMO	2BV7061
FINDER	MEX 50	SPECK	V55

FUNCTIONAL INFORMATION

High performances - 10 al 20% over the TRMB 32-50 performance curve

Performances are higher on entire diagram curve compared to our pump TRMB 32-50. This result is consequence of improving the hydraulic design and the impeller blades profile.

Low service liquid consumption – 40% less compared to TRMB 32-50

The service liquid consumption is lower on the entire diagram curve compared to our pump TRMB 32-50 while the liquid suction capabilities content with in suction gases remains unchanged.

Low noise level – xx db less compared to TRMB 32-50

The noise level is lower because the new hydraulic design permits a gas flow through the pump more smooth and reduces greatly the turbulences. This data will be available in September.

Duty and operation at 50 e 60 Hz with only one Multi cycles e- motor

The duty is warranted for 1.5 and 2.2 kW power, supplied by only one multi cycles e-motor (50 e 60 Hz) frame IEC 90 L and installed power of 2.2 kW. Specifically the pump supplies the following standard characteristics:

Pump	Hz=50	Q=54 m3/h	P=1.5 kW (2 Hp)	RPM=2900	e-motor IEC 90 L
Pump	Hz=60	Q=65 m3/h	P=2.2 kW (3 Hp)	RPM=3500	e-motor IEC 90 L

CONSTRUCTIVE PUMP INFORMATION

Monoblock construction. Impeller is mounted directly on shaft e-motor reducing overall dimensions.

Pump less components permits and easy and fast assembly during maintenance

Hydraulic port plate is not part of the front casing casting and is always in stainless steel, also for standard materials of construction version. Enhanced performance increase reliability, longevity and warrants stable performances through time.

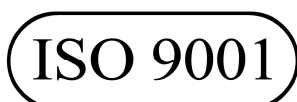
Hydraulic port plate is mounted inserted on the impeller housing permits a better sealing of liquid gaskets.

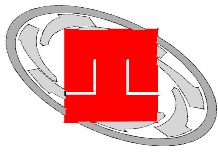
A Nord-Lock washer permits an ultra safe impeller locking by means of an hexagonal nut.

Mechanical seal diameter 24mm is mounted directly on ground shaft and is to ISO 3069/UNI EN 12756 standards.

Burgmann MG12-G60 standard mechanical seal and standard materials of construction Viton/Silicium Carbide/Carbon (A.Q1.V.GG) is suitable for the most common duties.

Axial rotor clearance settings is done easily and precisely through external screws, locking the pump/e-motor assembly, by means of inserting shims between the impeller housing and e-motor flange.





E-MOTOR CHARACTERISTICS

E-motor IEC B34, with dimensions standardized according to IEC 72-1 norm, with longer shaft and and locked bearing on drive end.

One e-motor IEC B34 frame 90L 2.2KW(3Hp) for both 50 and 60Hz - 2900 rpm and 3500 rpm.

E-motor IEC B34 frame 90L multi cycles and multi tensions. It may operates at 50 and 60Hz as per nameplate tensions. Specifically the, normally in use, Lafert brand e-motor has following characteristics:

Volt:230/400-2.2kW 50Hz

Volt:230/400-2.3kW 60Hz

Volt:265/460-2.5kW 60Hz

E-motor IEC B34 fram 90L according to norm IEC 60034-30 and Efficiency Class IE2 (compulsory starting from June 2011 in Europe). Available for e-motors with shaft in AISI 420 and AISI 316.

E-motor IEC B34 frame 90L according norm IEC 60034-30 and Efficiency Class IE2 and constructive characteristics in conformity with UL – CSA – cURus norms. This is available only for e-motor with shaft in AISI 316. This means that A3 and RA versions fulfil already the UL-CSA-cURus norms, rather than the RZ and, RX versions that will need to be offered on request with extra costs to have the AISI 316 shaft e-motor in conformity with UL – CSA – cURus norms.

E-motor IEC B34 frame 90L compatible with the foot print of 90S e-motor. 90L is 2.2KW and 90S is 1.5KW. This permits an easy replacement of the former TRMB 32-50 1.5KW.

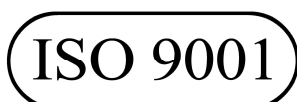
ACCESSORIES CHARACTERISTICS

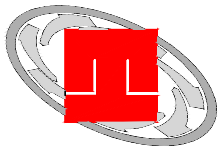
Hydraulic optimization of a better anticavitation system. The anticavitation connection is closer to suction side and enhances the compression cycle ensuring a better efficiency at higher vacuum.

Anticavitation valve is available on request.

Anticavitation valve for cast iron pumps (RX) and similar is always in brass.

Anticavitation valve for stainless steel pumps (A3) and similar is always in stainless steel.

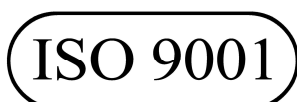


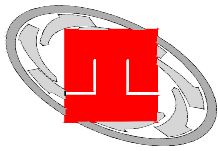


MATERIALS OF CONSTRUCTION

Pump in standard materials RX and A3

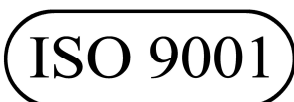
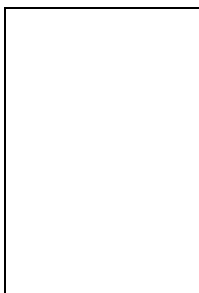
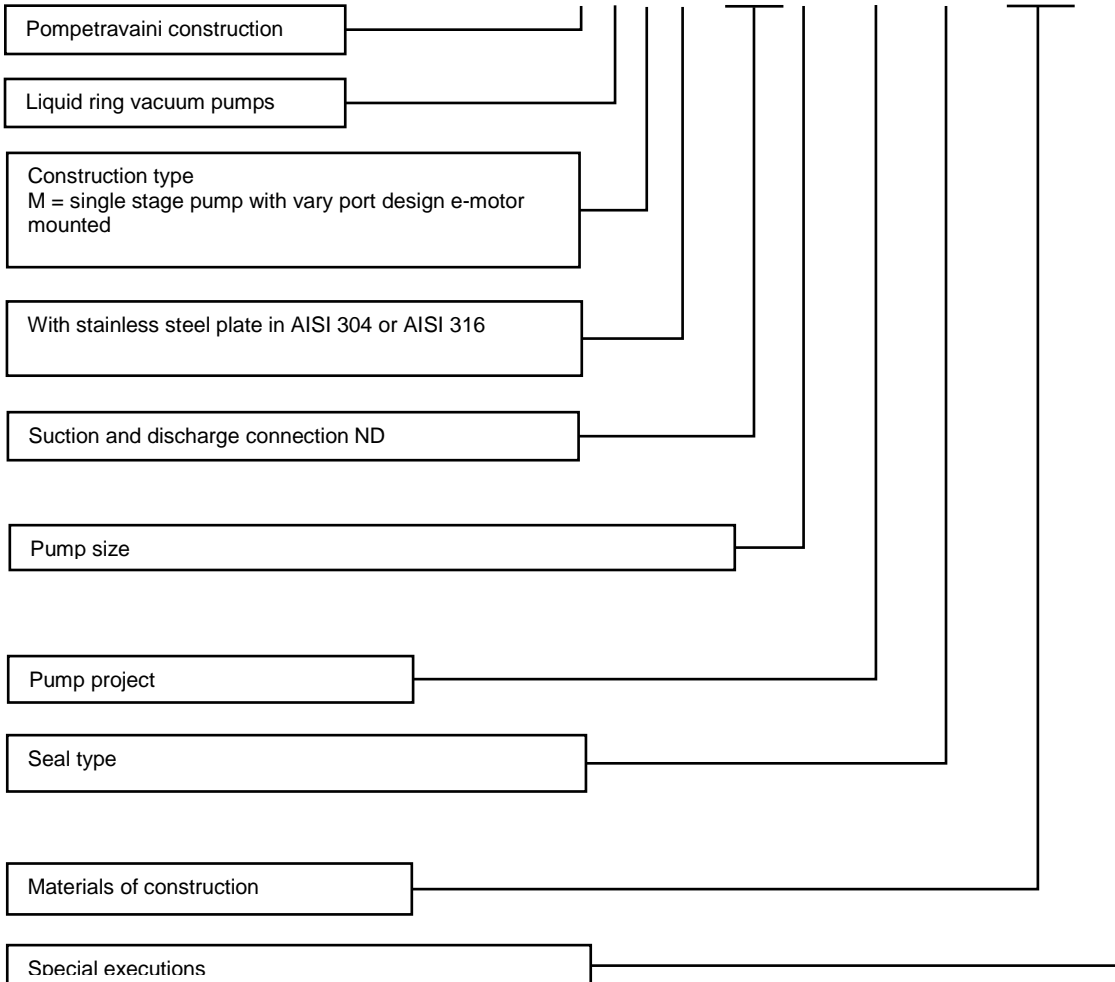
Part	RX material	A3 material
E-MOTOR SHAFT	AISI 420	AISI 316
SHAFT KEY	AISI 316	AISI 316
IMPELLER LOCKING NUT	AISI 316	AISI 316
NORD-LOCK WASHER	AISI 316L	AISI 316L
SEAL RING	NITRILIC RUBBER	NITRILIC RUBBER
CASING	CAST IRON	AISI 316
CASING COVER	CAST IRON	AISI 316
HYDRAULICI PORTS PLATE	STAINLESS STEEL AISI 304	STAINLESS STEEL AISI 316
IMPELLER	STAINLESS STEEL AISI 304	STAINLESS STEEL AISI 316
VALVE PLATE	STAINLESS STEEL AISI 316	STAINLESS STEEL AISI 316
VALVE	TEFLON	TEFLON
VALVE SCREWS	STAINLESS STEEL AISI 316	STAINLESS STEEL AISI 316
LIQUID GASKET	SUPERBOND 539	SUPERBOND 539
CILINCRIC PIN	STAINLESS STEEL AISI 316	STAINLESS STEEL AISI 316
PLUGS	ACCIAIO AL CARBONIO	STAINLESS STEEL AISI 316
CASING SCREWS	CARBON STEEL	CARBON STEEL
E-MOTOR SCREWS	CRBON STEEL CLASS 10.9	CARBON STEEL CLASS 10.9
E-MOTOR	IE2 IEC 60034-30 NORM	IE2 IEC 60034-30 UL – CSA – URUS NORMS

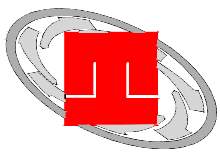




PUMP NOMENCLATURE

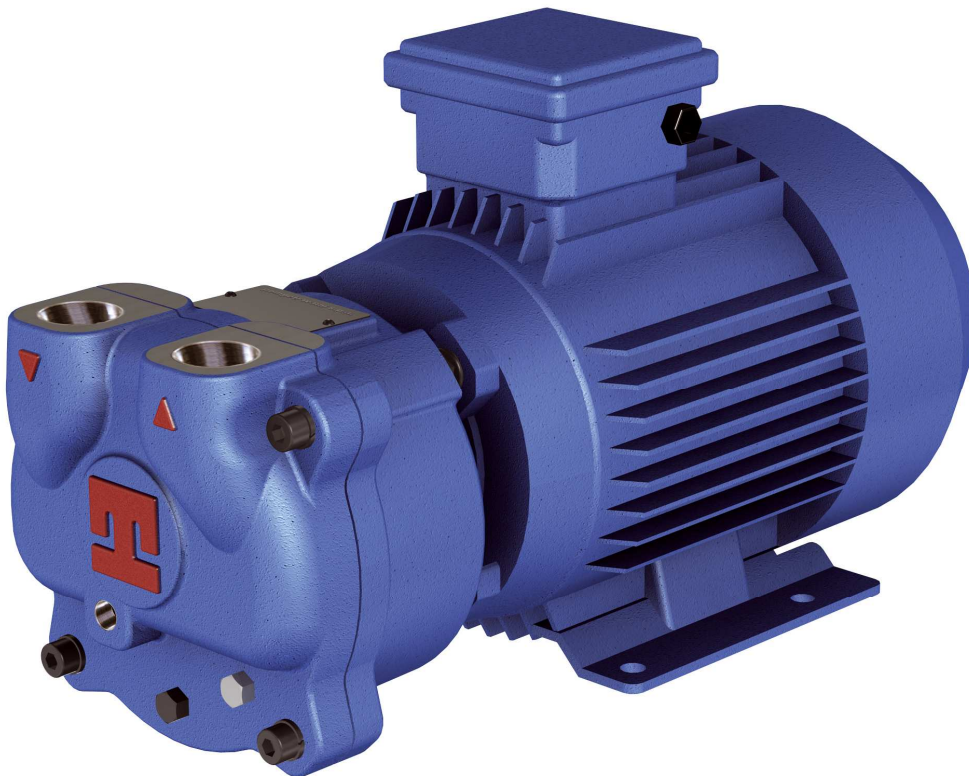
TRMX 25 7 / 1 - C / RX / Z





pompetravaini S.p.A.

www.pompetravaini.it



ISO 9001



Domicilio Fiscale – Direzione – Stabilimento – Uffici:
20022 CASTANO PRIMO (MI) Italy – Via per Turbigo, 44 – Zona Industriale
Tel. 0331 889000 – Fax 0331 889090 – E-Mail sales@pompetravaini.it

Capitale Sociale. € 2.000.000. I.V. C.F. e Partita IVA IT 00692920150
REA n. 720774 della C.C.I.A.A. di Milano