

TRAVAINI PUMPS USA

TRHA 150

Two Stage High Vacuum Pump

PERFORMANCE DATA	: From 25 Torr	CAPACITY:	800 – 2200 cfm
FEATURES	: Two-stage rotating pump with externally located bearings grease lubricated.		
SHAFT SEALING	: Mechanical seal - Double mechanical seal – Packing seal.		
OPTIONS	: Bareshaft pump - Coupled to electric motor on baseplate.		



		TECHNICAL DATA					
PUMP TYPE		TRHA 150-2000		TRHE 150-2600		TRHE 150-3100	
Speed	RPM	730	880	730	880	730	880
Motor - installed power	HP	100	125	125	150	150	220
Average service liquid flow	GPM	50	50	60	60	70	70
Noise level at 60 Torr	dB(A)	83	84	84	84	84	84
Minimum suction pressure	Torr	25	25	25	25	25	25

Pumps are provided with threaded connections for service liquid, pump draining, grease, anticavitation valve and weld neck flanges. Pumps are also provided, by request, with auxiliary threaded connections, flanged air-liquid separator tank, non return valve, ejector, vacuum relief valve, flow valve to control the flow of the liquid supply, vacuum gauges, pressure gauges and compound gauges. We can also provide information on our water sealed and oil sealed systems. For more detailed information please contact our Sales Office.

Example for Model Designation	
T R H A 150 – 3100 / C / GH	
T	Travaini Pump USA construction
R	Liquid Ring Pump
H	Double stage pump for high vacuum
A	Design number
150	Flange size (mm)
3100	Nominal capacity (m ³ /h)
C	Shaft sealing C = Mechanical seal C2 = Double mechanical seal B = Packing seal
	Materials of construction GH-F-RA-A3-B2 = See table
GH	

Standard Materials of Construction							
Part No.	Description	GH	F	RA	A3	B2	
106	Suction casing	Cast Iron					Bronze
107	Discharge casing						
137	Port plate						
110	Impeller housing						
210	Shaft	Stainless Steel AISI 420		Stainless Steel AISI 316			
147	Manifold	Steel					
357	Bearing housing mech. Seal	Cast Iron					
230	Impeller	Bronze	Ductile Iron	Stainless Steel AISI 316		Bronze	

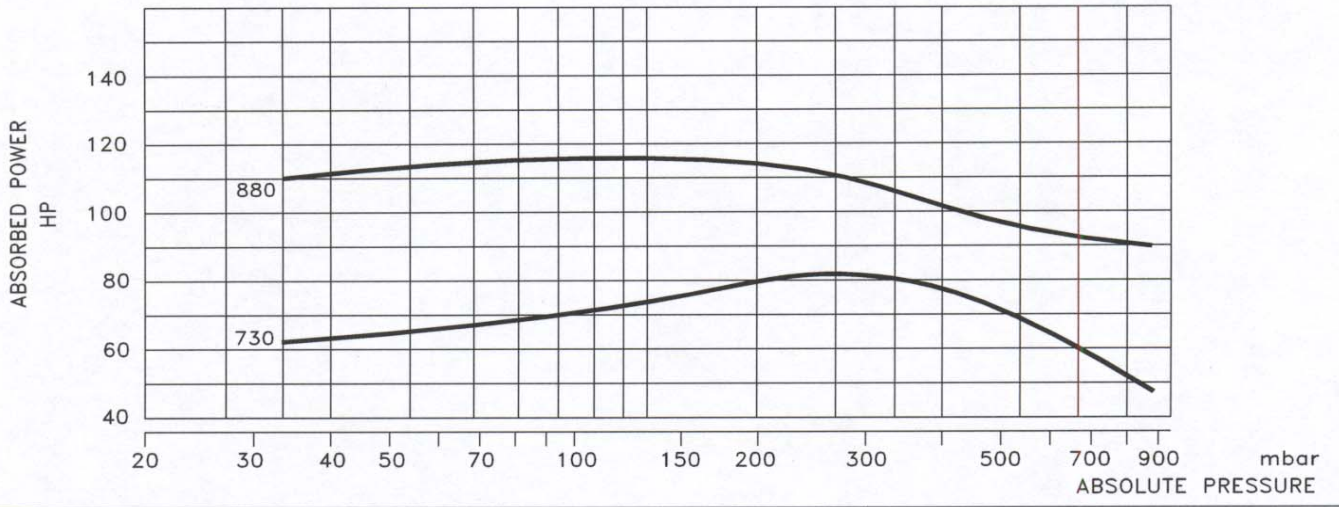
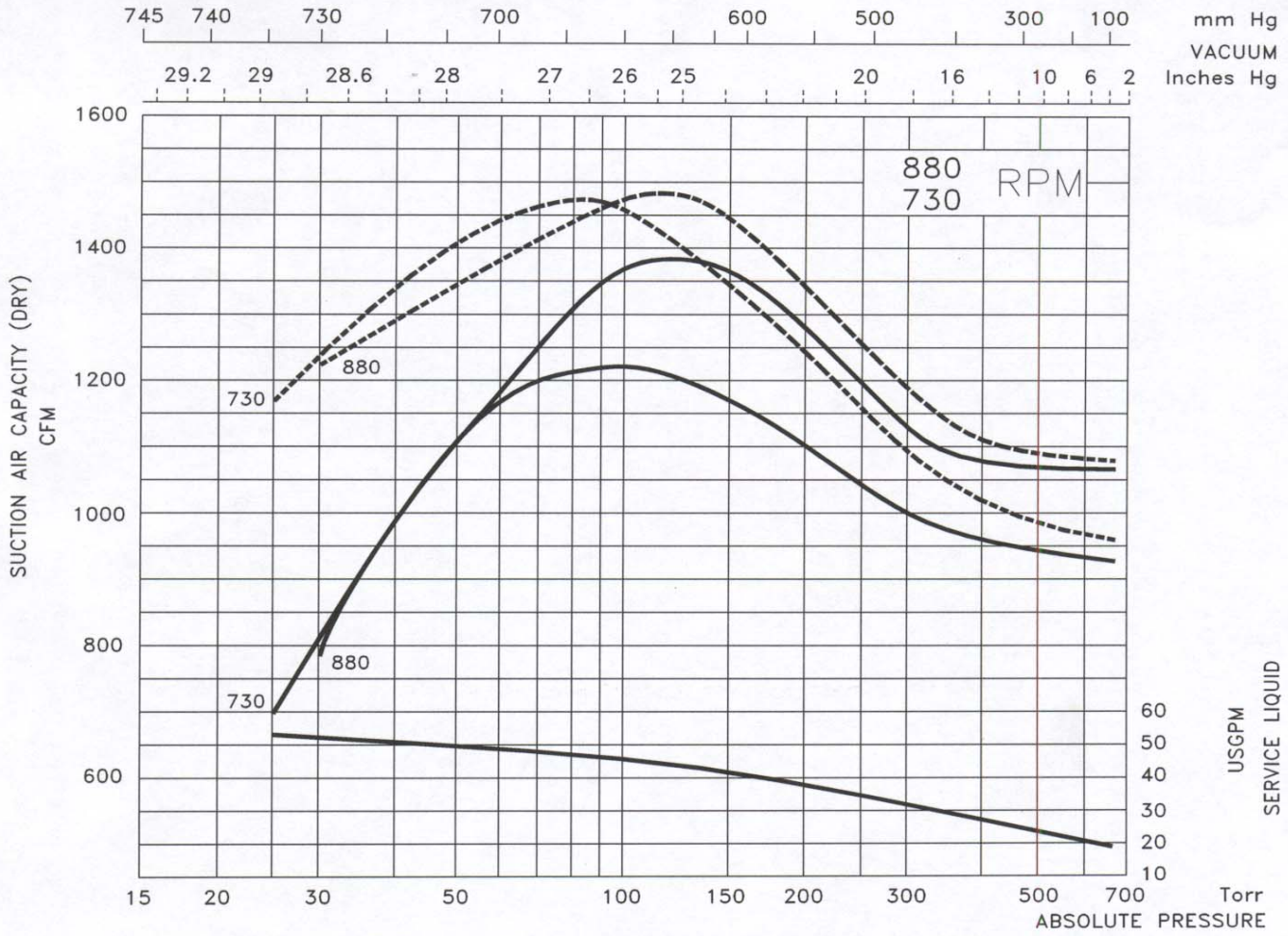
Special Materials Available Upon Request
Indicative table: for further information please consult our Sales Office

DATA BASED ON :
 DRY AIR AT 68 °F - 20 °C
 SATURATED AIR AT 68 °F - 20 °C
 SERVICE LIQUID WATER
 SERVICE LIQUID TEMPERATURE 59 °F - 15 °C
 DISCHARGE PRESSURE 1013 mbar

S.S. PUMPS
 CAPACITY : -10%

PERFORMANCE DATA
 LIQUID RING VACUUM PUMP
 PUMP MODEL
TRHA 150-2000

Tol.: 10%



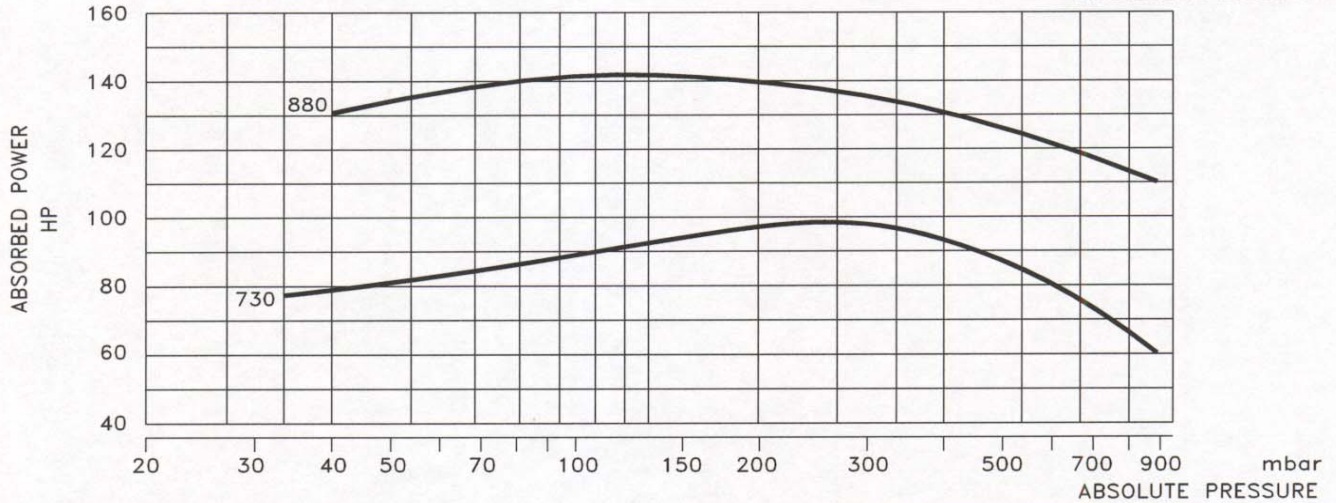
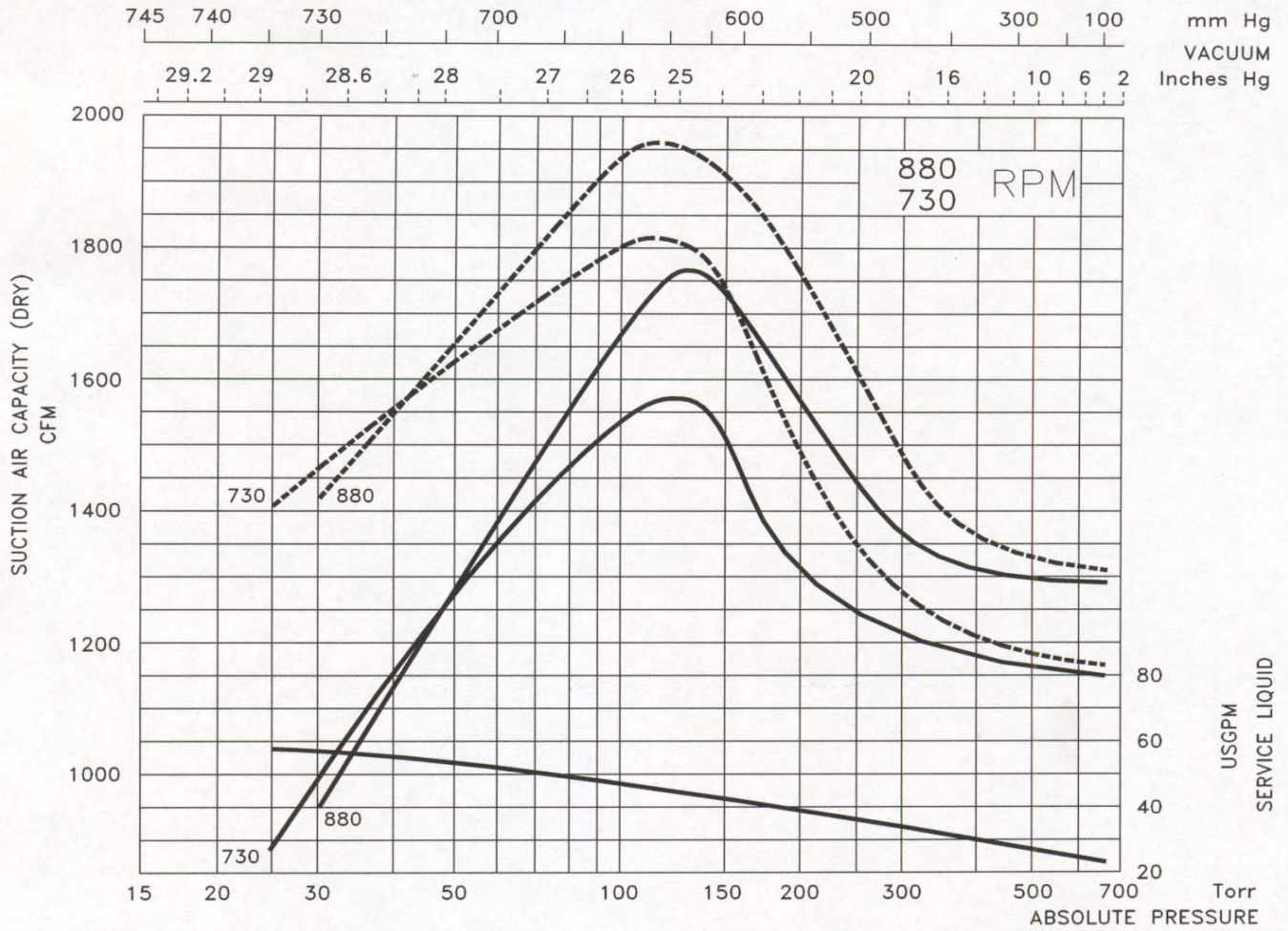
DATE : APRIL 97

DATA BASED ON :
 DRY AIR AT 68 °F - 20 °C
 SATURATED AIR AT 68 °F - 20 °C
 SERVICE LIQUID WATER
 SERVICE LIQUID TEMPERATURE 59 °F - 15 °C
 DISCHARGE PRESSURE 1013 mbar

S.S. PUMPS
 CAPACITY : -10%

Tol.: 10%

PERFORMANCE DATA
 LIQUID RING VACUUM PUMP
 PUMP MODEL
TRHA 150-2600



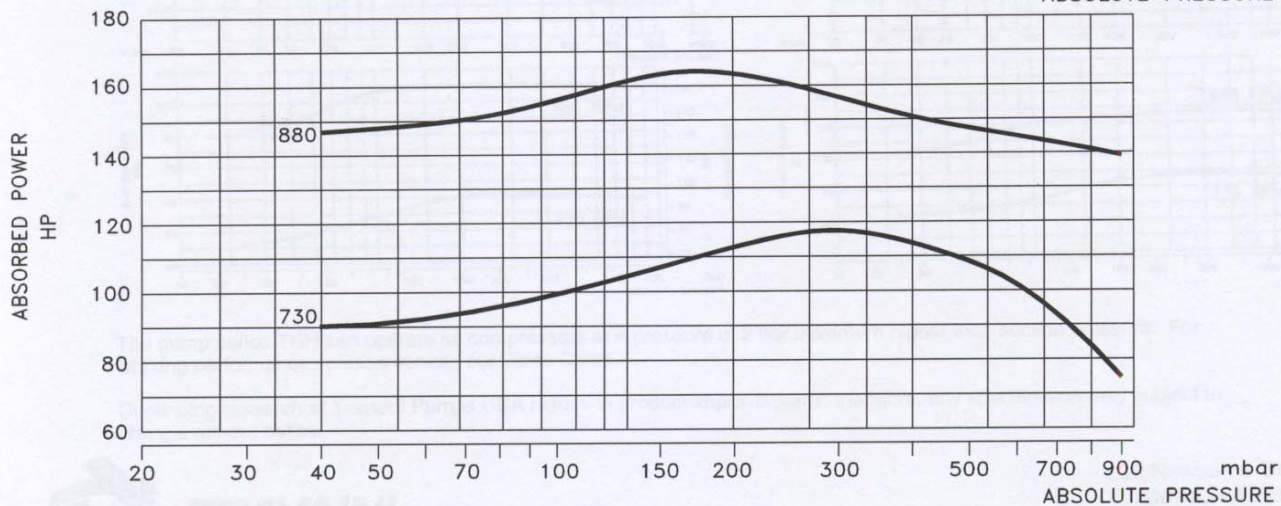
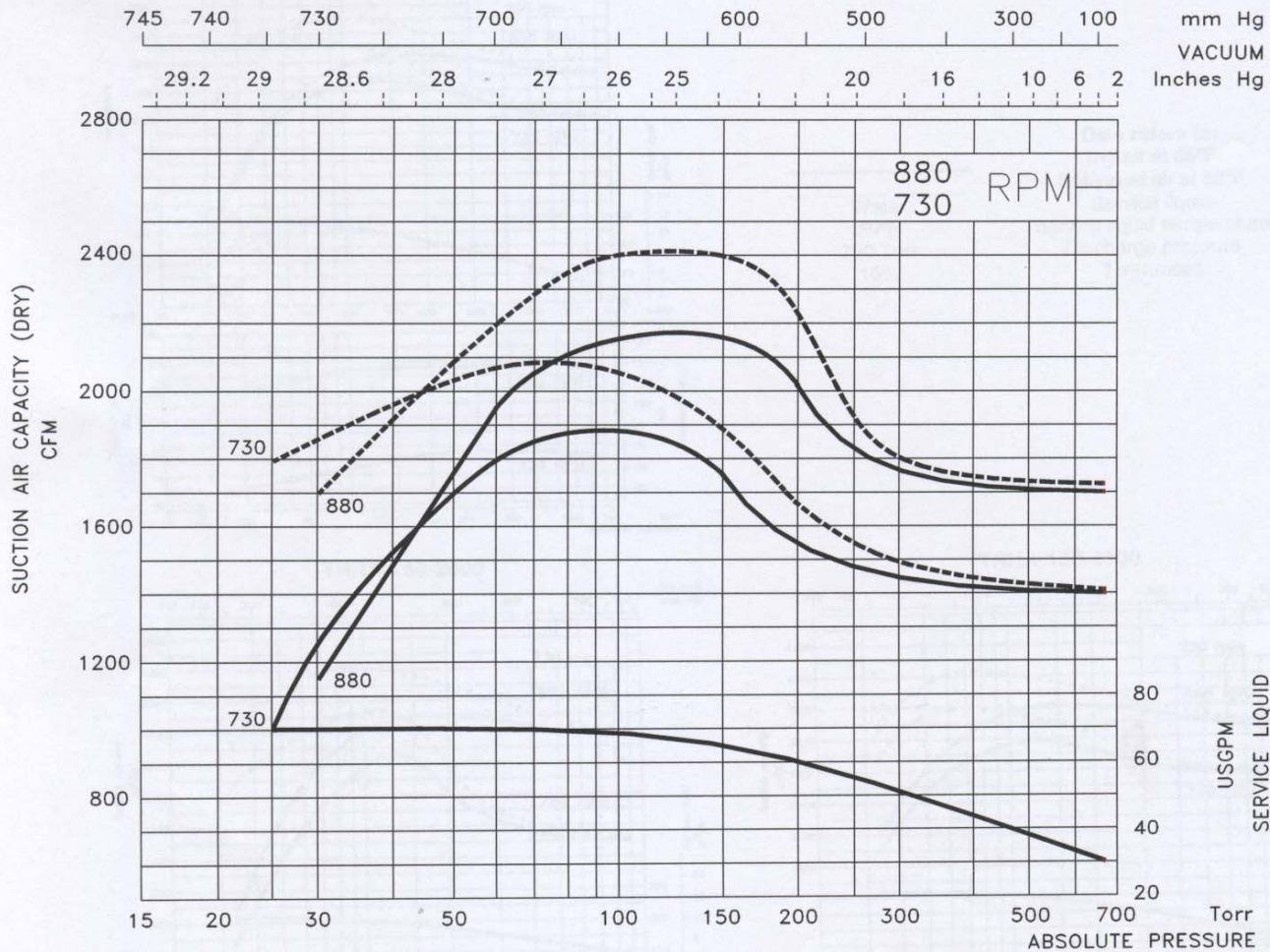
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DATA BASED ON :
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 SERVICE LIQUID WATER
 SERVICE LIQUID TEMPERATURE 59 °F - 15 °C
 DISCHARGE PRESSURE 1013 mbar

S.S. PUMPS
 CAPACITY : -10%

Tol.: 10%

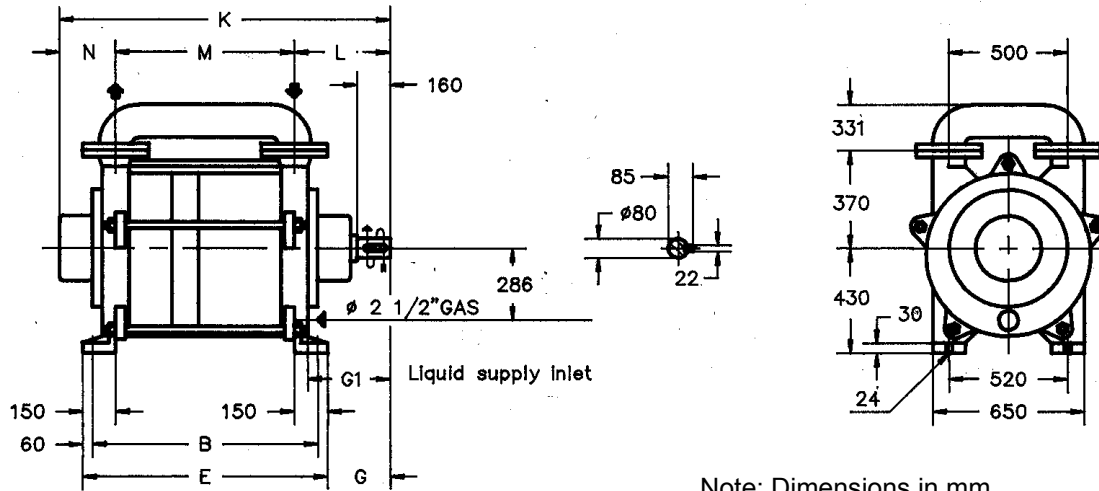
PERFORMANCE DATA
 LIQUID RING VACUUM PUMP
 PUMP MODEL
TRHA 150-3100



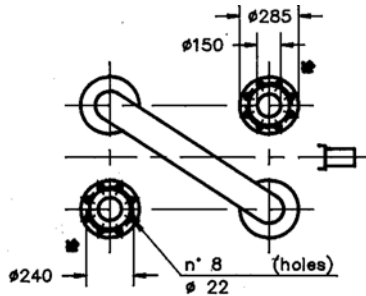
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TRHA 150/C

Bareshaft Construction with Mechanical Seal

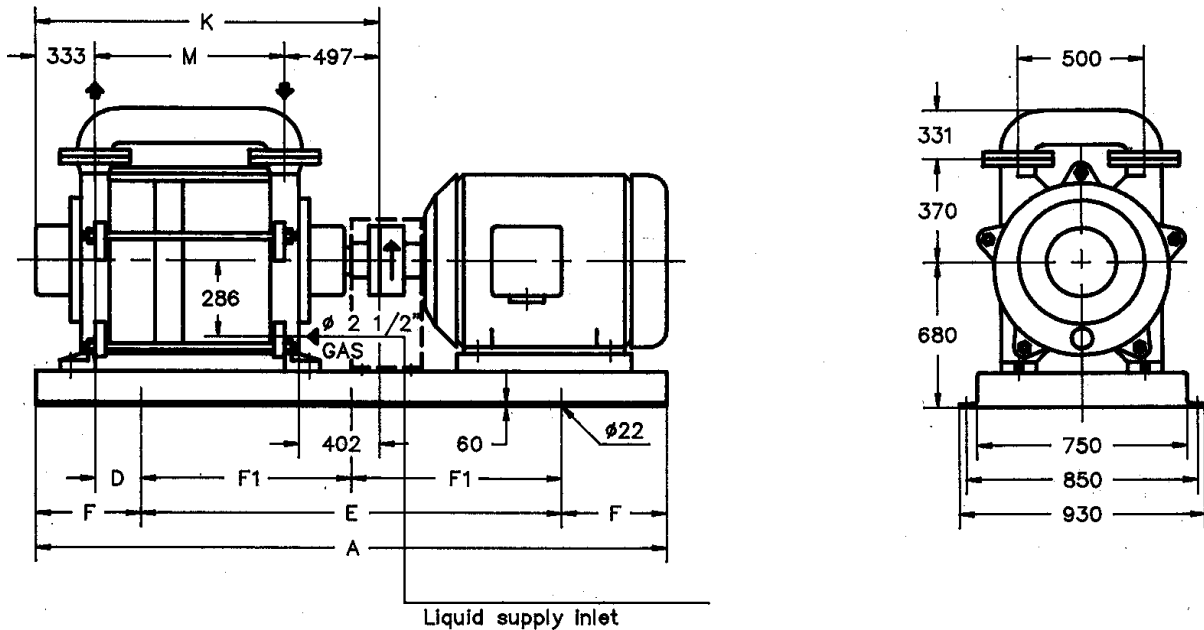


Note: Dimensions in mm.
(mm to in = /25.4)



Pump Type	B	E	G	G1	K	L	M	N	Weight lbs.
TRHA 150-2000/C	960	1080			1660		830		2926
TRHA 150-2600/C	1110	1230	372	402	1810	497	980	333	3256
TRHA 150-3100/C	1210	1330			1910		1080		3586

Base-Mounted Construction (Baseplate-Coupling) with Mechanical Seal



Pump Type	4 Poles Motor HP	Base-plate	Pump						Weight ¹ lbs.	
			A	D	E	F	F1	K		M
TRHA 150-2000/C	100	60F	2400	145	1800	300	900	1660	830	3971
	125			4279						
TRHA 150-2600/C	125	61F	2800	110	1900	450	950	1810	980	4609
	150			225						
	150			250						
TRHA 150-3100/C	215			315				P5/14 0191 0	1080	4939

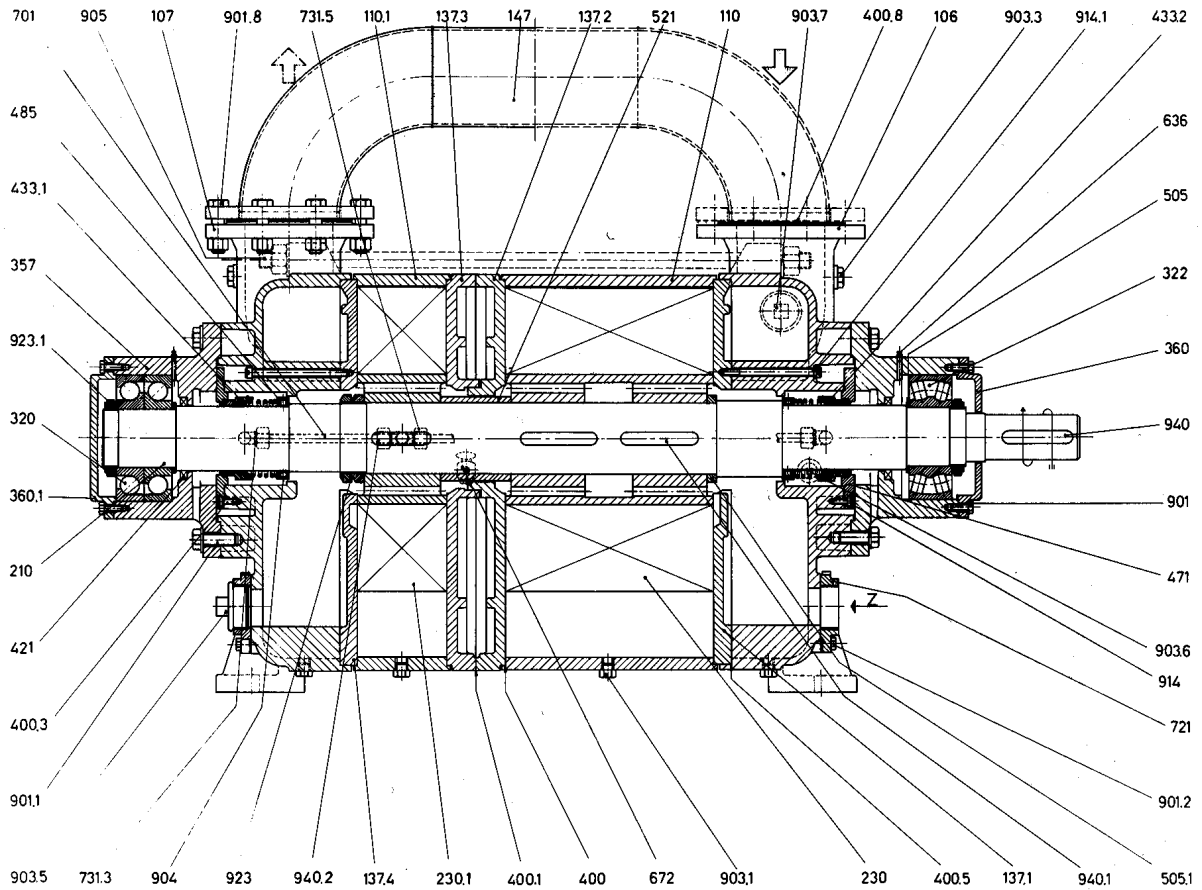
¹ Weight without motor

Dimensions are for reference only. Please consult the factory for certified drawings.

The weights refer to the GH construction

TRHA 150 – 2000/C, 2600/C, 3100/C

Typical Cross Section with Mechanical Seal



COMPONENTS

VDMA No	DESIGNATION	VDMA No	DESIGNATION	VDMA No	DESIGNATION
106	Suction casing	• 400.3	Gasket	901.2	Screw
107	Discharge casing	• 400.5	Gasket	901.8	Bolt
110	Impeller casing	• 400.8	Gasket	903.1	Plug
110.1	Impeller casing	• 421	Radial seal ring	903.3	Plug
137.1	Side element	• 433.1	Mechanical seal c.c.w.	903.5	Plug
137.2	Side element	• 433.2	Mechanical seal c.w.	903.6	Plug
137.3	Side element	471	Mechanical seal cover	903.7	Plug
137.4	Side element	485	Mech. seal locking ring	904	Grub serew
147	Manifold	• 505	Shoulder ring	905	Tie-bolt
• 210	Shaft	• 505.1	Shoulder ring	914	Screw
• 230	Impeller	521	Spacer sleeve	914.1	Screw
• 230.1	Impeller	636	Grease nipple	923	Nut
• 320	Ball bearing	672	Cock	923.1	Nut
• 322	Ball bearing	701	Pipe	940	Key
357	Bearing and mech. seal hous.	721	Liquid supply flange	940.1	Key
360	Bearing cover	731.3	Fitting	940.2	Key
360.1	Bearing cover	731.5	Fitting	Z	Liquid supply inlet
• 400	Gasket	901	Screw		
• 400.1	Gasket	901.1	Screw		

• = Recommended spare parts