

# TRAVAINI PUMPS USA

## TRHC 80

### Two Stage High Vacuum Pump

PERFORMANCE DATA	: From 25 Torr	CAPACITY:	225 – 520 cfm
FEATURES	: Two-stage rotating pump with externally located bearings grease lubricated.		
SHAFT SEALING	: Mechanical seal – Double mechanical seal – Stuffing box.		
OPTIONS	: Bareshaft pump – Coupled to electric motor on baseplate – Monoblock with electric motor		



TECHNICAL DATA					
PUMP TYPE		TRHC 80-600		TRHC 80-750	
Speed	RPM	1450	1750	1450	1750
Motor – installed power	HP	25-30	40	30-40	50
Average service liquid flow	GPM	10	10	12.5	12.5
Noise level at 60 Torr	dB(A)	76	79	76	79
Minimum suction pressure	Torr	25	25	25	25

Pumps are provided with threaded connections for service liquid, pump draining, grease anticavitation valve and companion flanges. Pumps are also provided, by request, with auxiliary threaded connections, companion flanges, 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	
<b><u>T R V A 65 – 450 / C – M / GH</u></b>	
<b>T</b>	Travaini Pump USA construction
<b>R</b>	Liquid Ring Pump
<b>V</b>	Single impeller pump with valves for medium and high vacuum
<b>A</b>	Design number
<b>65</b>	Flange size (mm)
<b>450</b>	Nominal capacity (m <sup>3</sup> /h)
<b>C</b>	Shaft sealing C = Mechanical seal C2 = Double mechanical seal B = Packing seal
<b>M</b>	Closed-coupled construction with lantern (by request)
<b>GH</b>	Materials of construction GH-F-RA-A3 = See table

Standard Materials of Construction						
Part No.	Description	GH	F	RA	A3	
106	Suction casing	Cast Iron				
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		

Special Materials Available Upon Request

Indicative table: for further information please consult our Sales Office

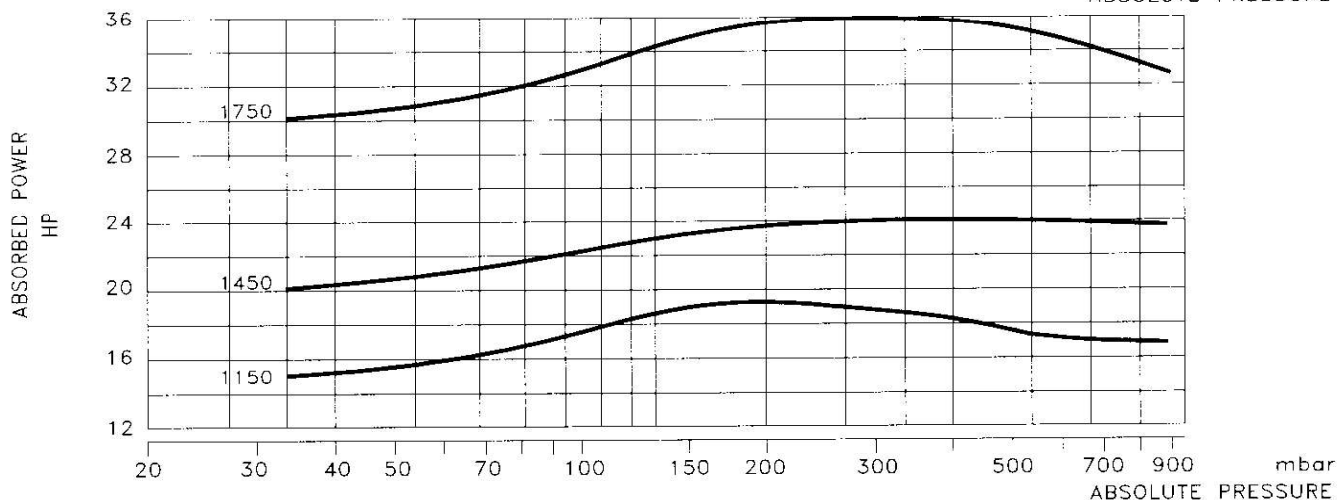
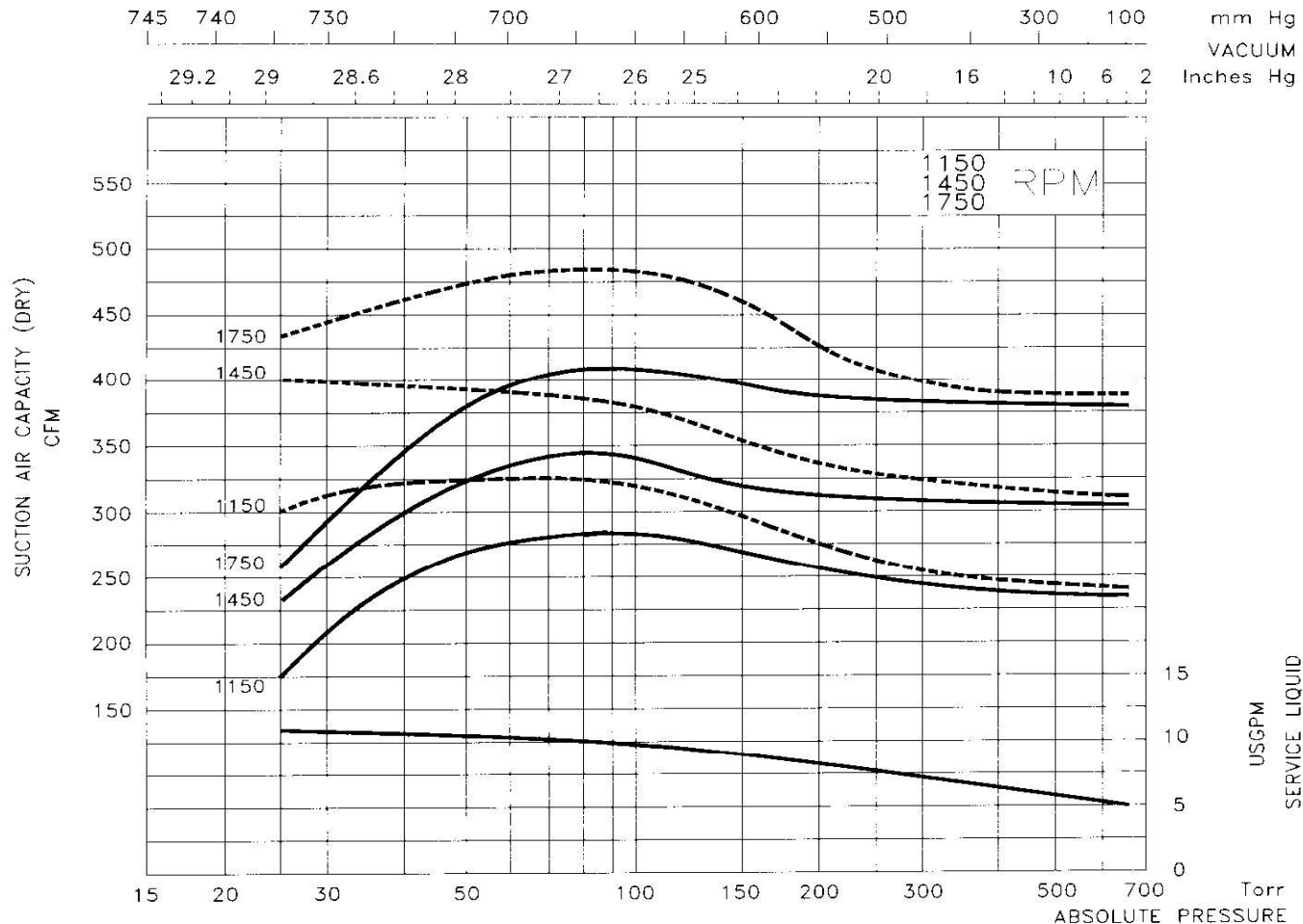
DATA BASED ON :  
 DRY AIR AT 68 °F - 20 °C  
 SATURATED AIR AT 68 °F - 20 °C  
 SERVICE LIQUID WATER  
 SERVICE LIQUID TEMPERATURE 59 °F - 15 °C  
 DISCHARGE PRESSURE 1013 mbar

S.S. PUMPS  
 CAPACITY : -10%

Tol.: 10%

PERFORMANCE DATA  
 LIQUID RING VACUUM PUMP  
 PUMP MODEL

**TRHC 80-600**



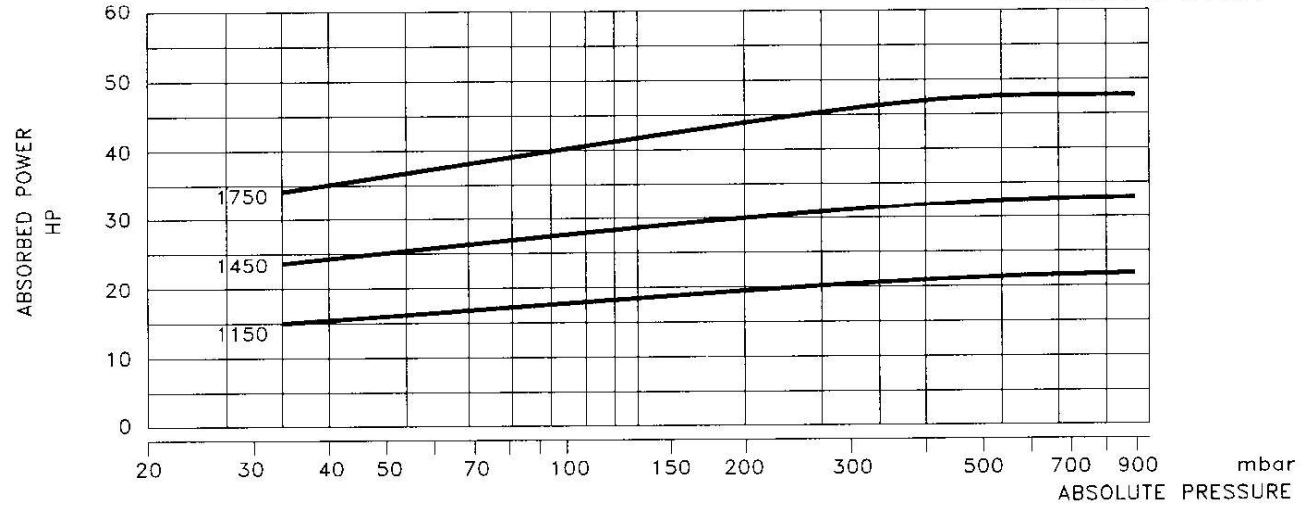
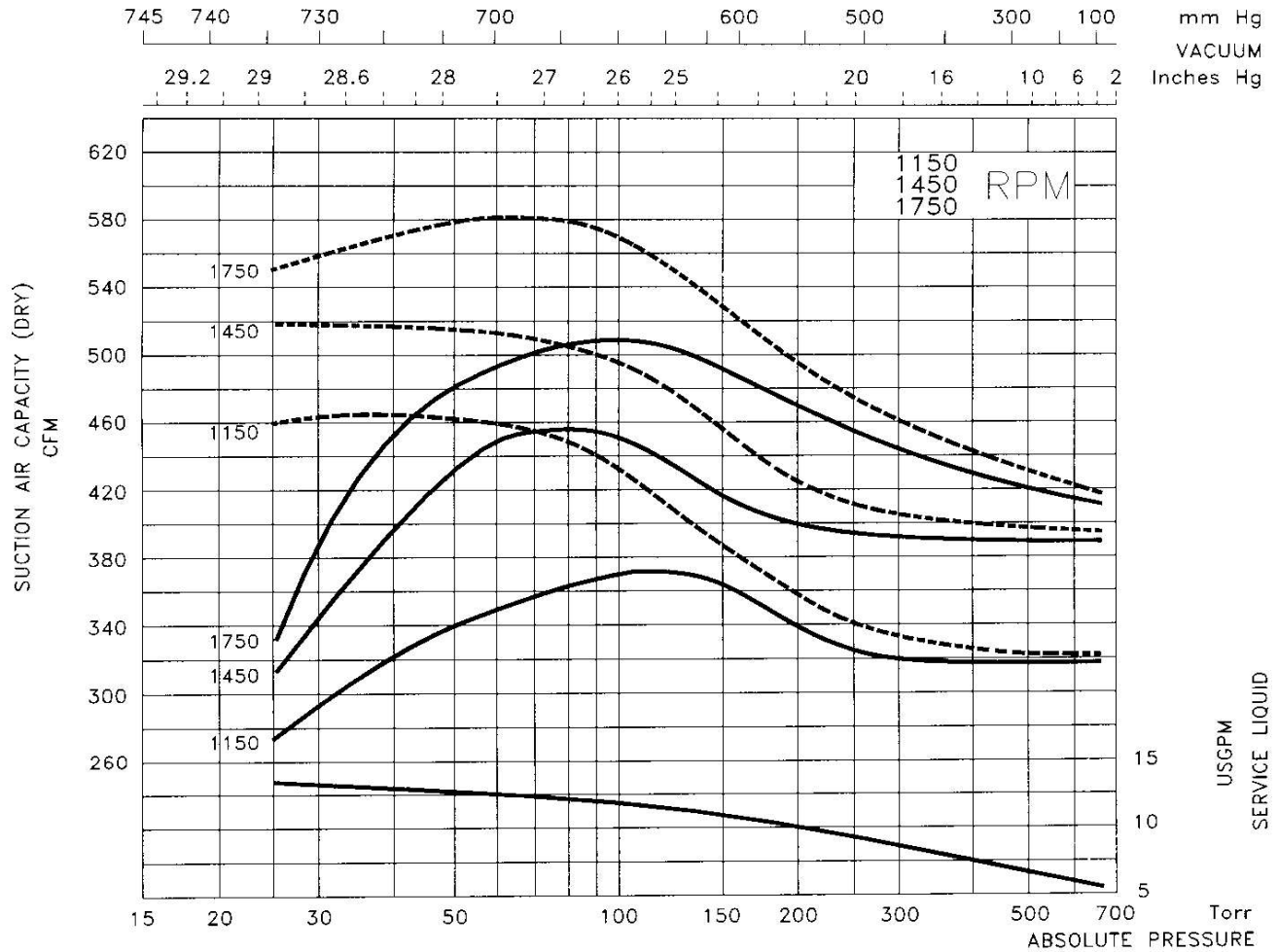
DATE: APRIL 97

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S.S. PUMPS  
 CAPACITY: -10%

PERFORMANCE DATA  
 LIQUID RING VACUUM PUMP  
 PUMP MODEL  
**TRHC 80-750**

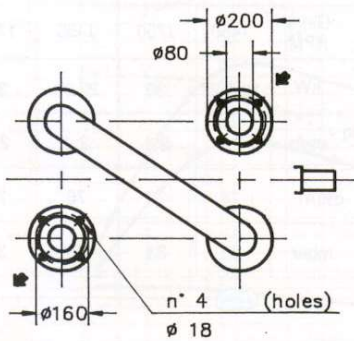
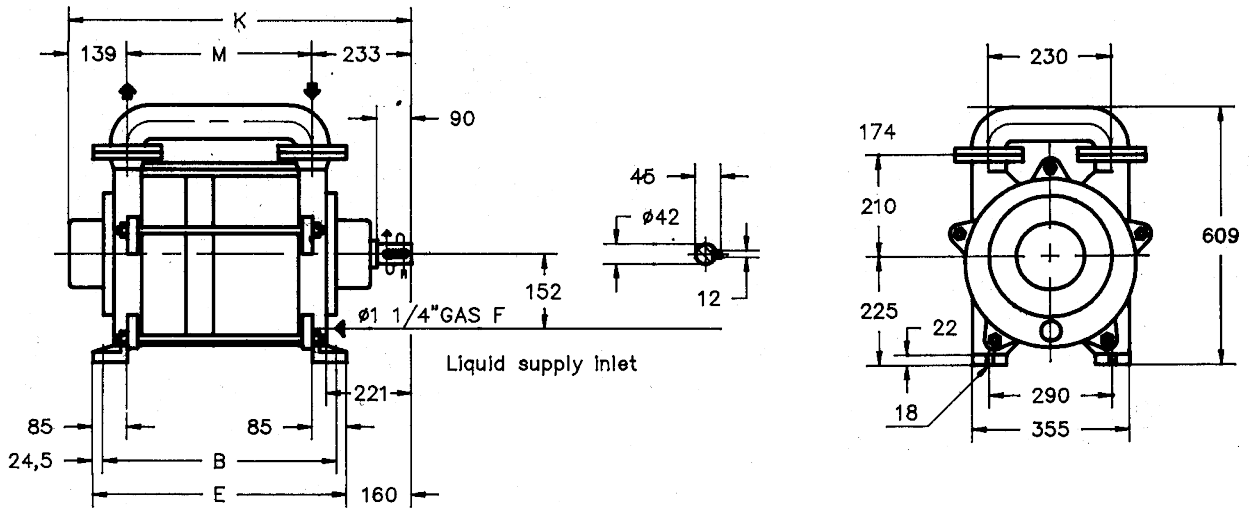
Tol.: 10%



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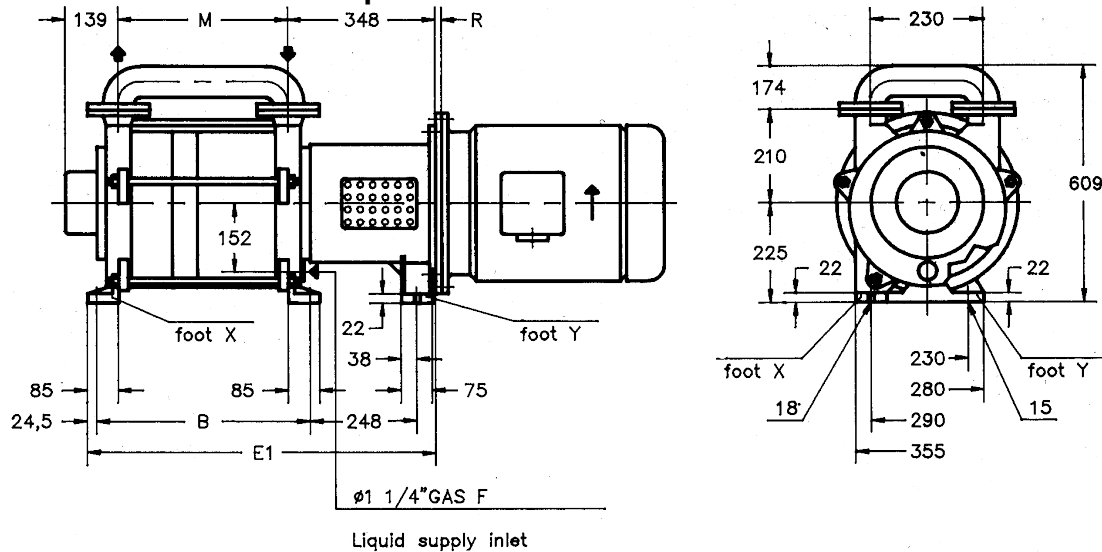
## TRHC 80/C Bareshaft Construction with Mechanical Seal



Pump Type	B	E	M	K	Weight lbs.
TRHC 80-600/C	575	624	475	847	484
TRHC 80-750/C	660	709	560	932	528

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

## Closed-Coupled Construction with Mechanical Seal



Pump Type	4 Poles Motor HP	Pump				Weight <sup>1</sup> lbs.
		B	E1	M	R	
TRHC 80-600/C	20	575	899	475	-	539
	25					
	30					
TRHC 80-750/C	40	660	984	560	24	583
	616					

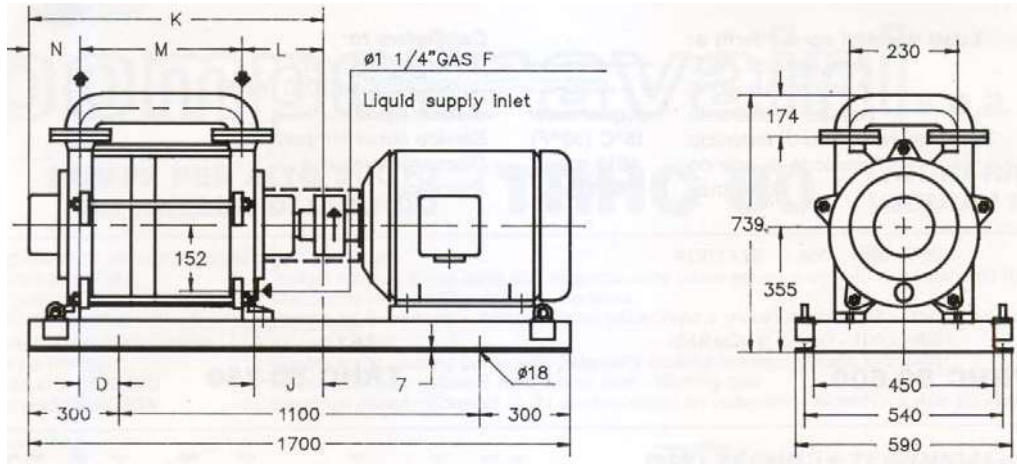
<sup>1</sup> Weight without motor

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

The weights refer to the GH construction

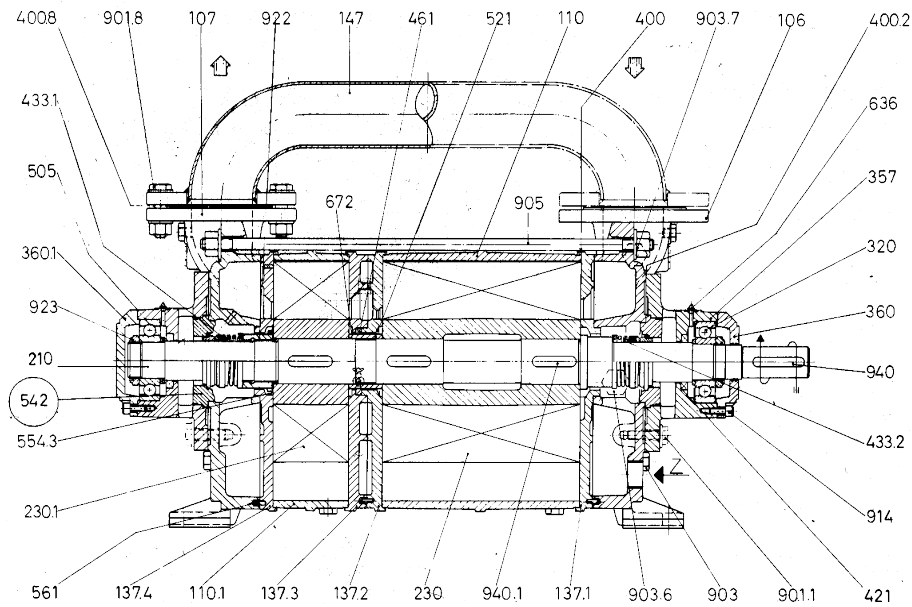
# TRHC 80/C

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



Pump Type	4 Poles Motor HP	Base-plate	Pump						Weight <sup>1</sup> lbs.
			D	J	K	L	M	N	
TRHC 80-600/C	20	034	0	221	847	233	475	139	792
	25								807
	30								818
	40								829
TRHC 80-750/C	30		90	932	560	814			
	40								
	50								
	60								

<sup>1</sup> Weight without motor



Typical Cross Section with Mechanical Seal **TRHC 80 – 600/C, 750/C**

**COMPONENTS**

VDMA No	DESIGNATION	VDMA No	DESIGNATION	VDMA No	DESIGNATION
106	Suction casing	360.1	Bearing cover	672	Anticavitation valve
107	Discharge casing	400	Gasket	901.1	Screw
110	Impeller casing	400.2	Gasket	901.8	Bolt
110.1	Impeller casing	400.8	Gasket	903	Plug
137.1	Side element	421	Radial seal ring	903.6	Plug
137.2	Side element	433.1	Mechanical seal c.c.w.	903.7	Plug
137.3	Side element	433.2	Mechanical seal c.w.	905	Tie-bolt
137.4	Side element	461	Gland packing	914	Screw
147	Manifold	505	Shoulder ring	922	Nut
210	Shaft	521	Spacer sleeve	923	Nut
230	Impeller	542	Seal bush	940	Key
230.1	Impeller	554.3	Washer (A3 construction only)	940.1	Key
320	Ball bearing	561	Cylinder pin	Z	Liquid supply inlet
357	Bearing and mech. seal housing	636	Grease nipple		
360	Bearing cover				

○ = A3 construction only

● = Recommended spare parts