

# TRAVAINI PUMPS USA

## TRSE 32

### Single Stage Medium Vacuum Pumps

<b>PERFORMANCE DATA</b>	: From 100 Torr	<b>CAPACITY:</b>	5 - 35 cfm
<b>FEATURES</b>	: Single-stage rotating pump with externally located bearings grease lubricated.		
<b>SHAFT SEALING</b>	: Mechanical seal - Double mechanical seal.		
<b>OPTIONS</b>	: Bareshaft pump - Coupled to electric motor on baseplate - Monoblock with electric motor.		



<b>TECHNICAL DATA</b>					
<b>PUMP TYPE</b>		<b>TRSE 32-20</b>		<b>TRSE 32-50</b>	
Speed	RPM	2900	3500	2900	3500
Motor - installed power	HP	1.5	2	2	3
Average service liquid flow	GPM	1.2	1.2	1.2	1.2
Noise level at 150 Torr	dB(A)	69	70	69	70
Minimum suction pressure	Torr	100	100	100	100

Pumps are provided with threaded connections for service liquid, pump draining, anticavitation valve and companion flanges. Pumps are also provided, by request, with 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.

<b>Example for Model Designation</b>	
<b><u>T R S E 32 - 50 / C - M / R Z</u></b>	
<b>T</b>	Travaini Pump USA construction
<b>R</b>	Liquid Ring Pump
<b>S</b>	Single impeller pump with valves for medium vacuum
<b>E</b>	Design number
<b>32</b>	Flange size (mm)
<b>50</b>	Nominal capacity (m <sup>3</sup> /h)
<b>C</b>	Shaft sealing C = Mechanical seal C2 = Double mechanical seal
<b>M</b>	Close-coupled construction with lantern (by request)
<b>RZ</b>	Materials of construction RZ-RA-A3 = See table

<b>Standard Materials of Construction</b>				
<b>Part No.</b>	<b>Description</b>	<b>RZ</b>	<b>RA</b>	<b>A3</b>
106	Suction casing	UNI 5007- Cast Iron		Stainless Steel AISI 316
107	Discharge casing			
110	Impeller housing			
210	Shaft	Stainless Steel AISI 420		
357	Bearing housing mech. seal	UNI 5007-69 Cast Iron		
230	Impeller	Stainless Steel AISI 316		

Special Materials Available Upon Request

Indicative table: for further information please consult our Sales Office

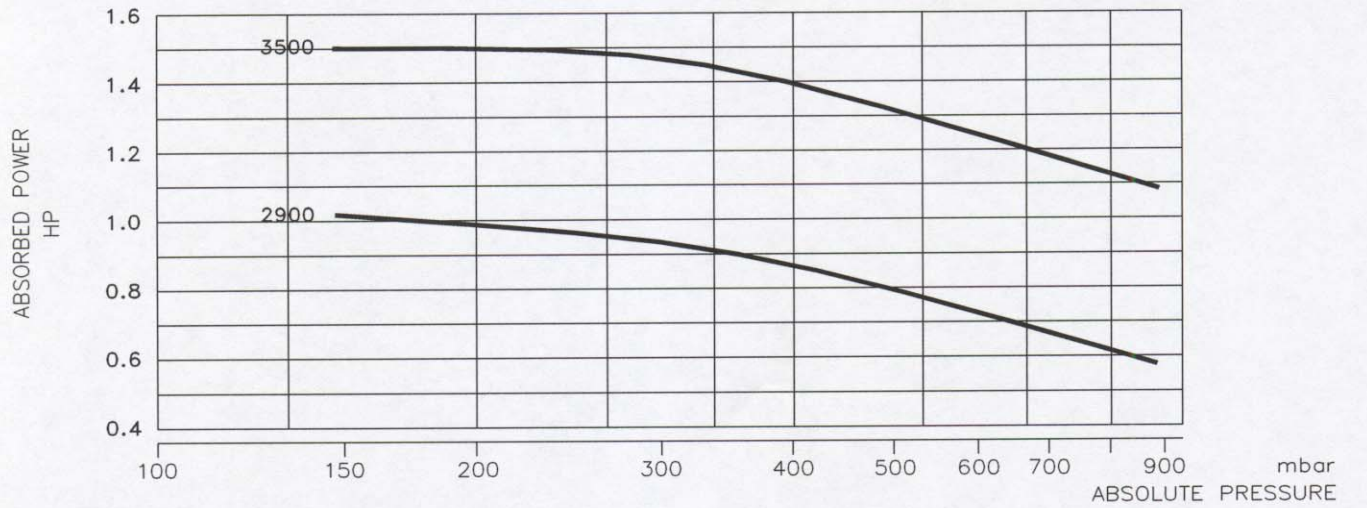
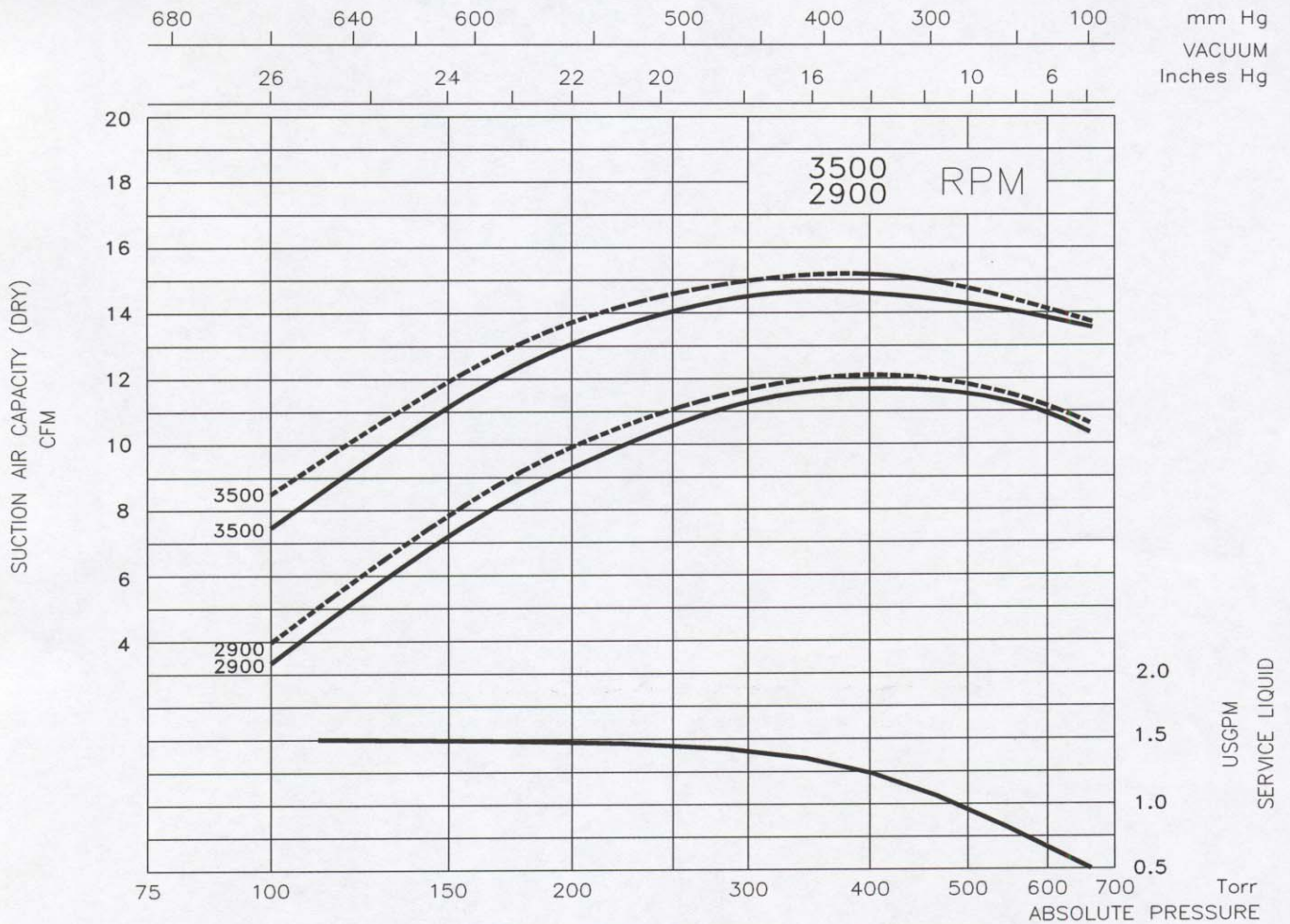
DATA BASED ON :  
 DRY AIR AT 68 °F - 20 °C  
 SATURATED AIR AT 68 °F - 20 °C  
 SERVICE LIQUID WATER  
 SERVICE LIQUID TEMPERATURE 59 °F - 15 °C  
 DISCHARGE PRESSURE

S.S. PUMPS  
 CAPACITY : -10%

PERFORMANCE DATA  
 LIQUID RING VACUUM PUMP  
 PUMP MODEL

**TRSE 32-20**

Tol.: 10%



DATE: APRIL 97

PAGE NO: 3-110



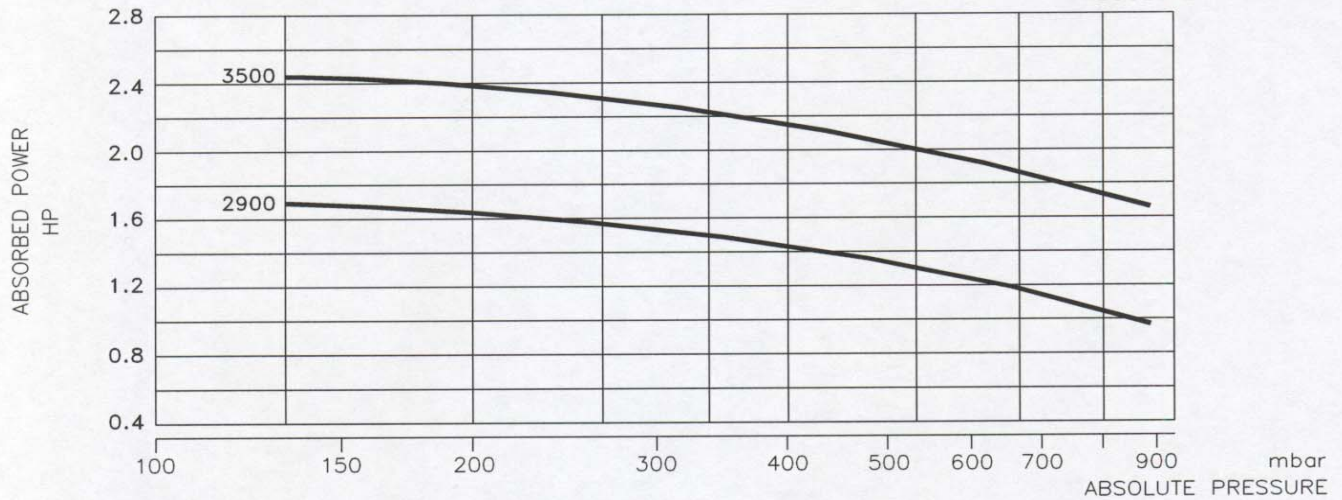
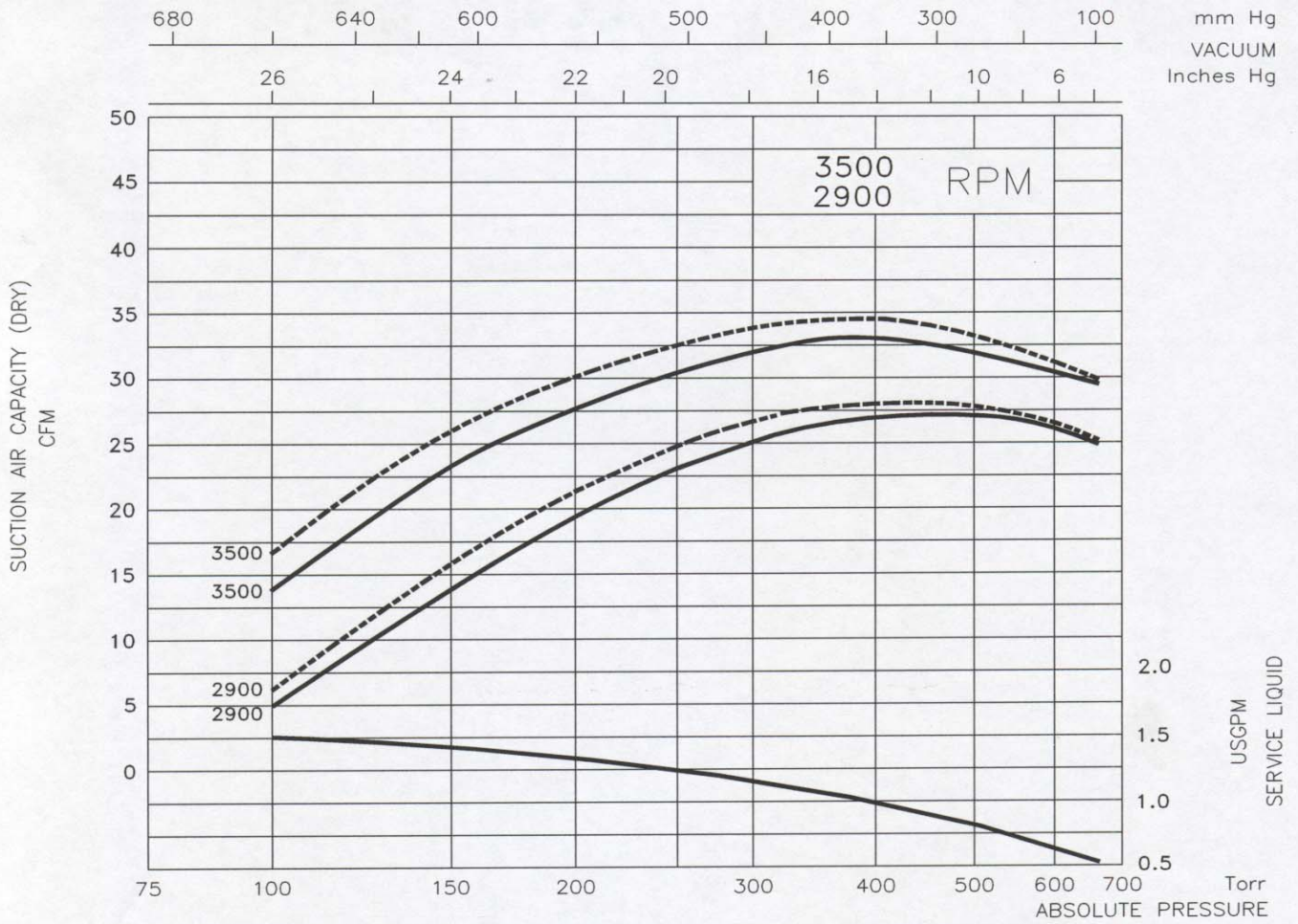
DATA BASED ON :  
 DRY AIR AT 68 °F - 20 °C  
 SATURATED AIR AT 68 °F - 20 °C  
 SERVICE LIQUID WATER  
 SERVICE LIQUID TEMPERATURE 59 °F - 15 °C  
 DISCHARGE PRESSURE 1013 mbar

S.S. PUMPS  
 CAPACITY : -10%

Tol.: 10%

PERFORMANCE DATA  
 LIQUID RING VACUUM PUMP  
 PUMP MODEL

**TRSE 32-50**

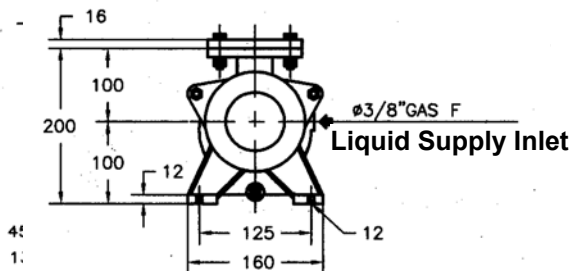


DATE: APRIL 97

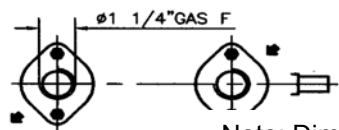
PAGE NO: 3-111

# TRSE 32/C

## Bareshaft Construction with Mechanical Seal

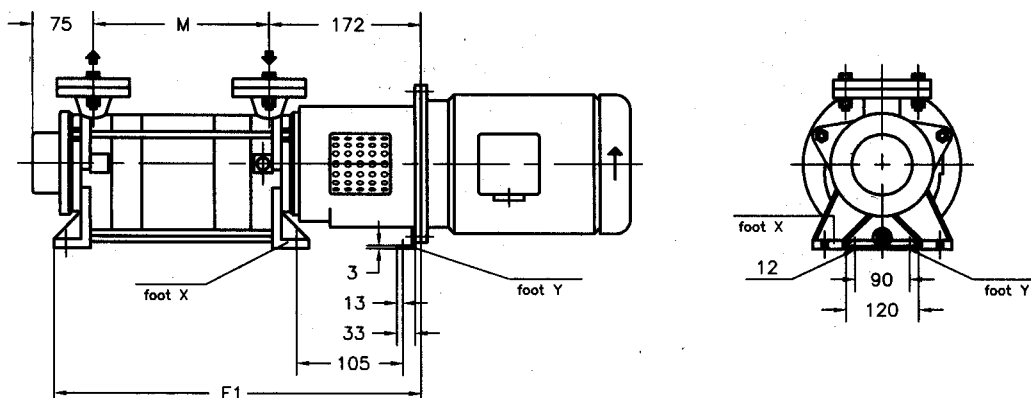


Pump Type	B	E	M	K	Weight
TRSE 32-20/C	144	170	90	278	15
TRSE 32-50/C	179	205	125	313	17

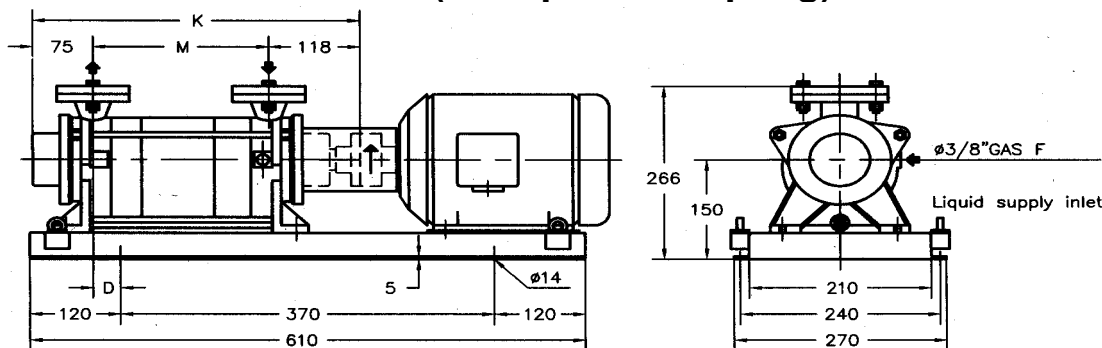


Note: Dimensions in mm.  
(mm to in = /25.4)

## Closed-Coupled Construction with Mechanical Seal



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



PUMP TYPE	2 POLES MOTOR HP	BASE-PLATE	PUMP				WEIGHT <sup>1</sup> lbs.	WEIGHT <sup>2</sup> lbs.
			D	K	M	E1		
TRSE 32-20/C	2	902	30	283	90	302	43	68
TRSE 32-50/C	2		45	318	125	337	47	73
	3							

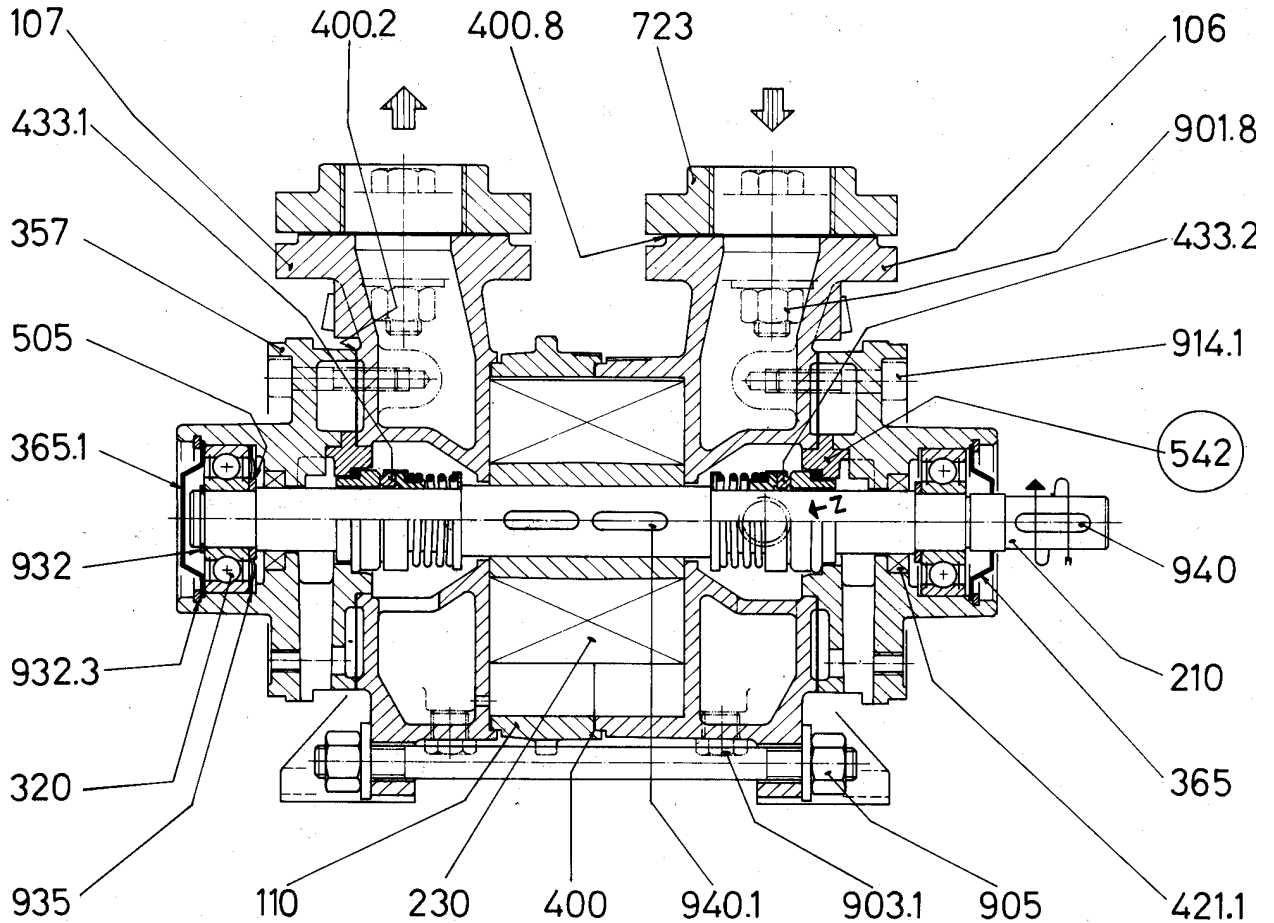
1 Weight without motor (closed-coupled)  
2 Weight without motor (baseplate-coupling)

The weights are referred to RZ construction

Schematic drawings – Dimensions in mm. with tolerances according to EN 725-1995, weights in Kgs. not binding.

# TRSE 32-50/C

## TYPICAL CROSS SECTION WITH MECHANICAL SEAL



### COMPONENTS

Part Number	Description	Part Number	Description	Part Number	Description
106	Suction casing	• 400	Gasket	901.8	Bolt
106	Discharge casing	• 400.2	Gasket	903.1	Plug
110	Impeller casing	• 400.8	Gasket	905	Tie-bolt
• 210	Shaft	421.1	Radial seal ring	914.1	Screw
• 230	Impeller	• 433.1	Mechanical seal c.c.w.	932	Circlip
• 320	Ball bearing	• 433.2	Mechanical seal c.w.	932.3	Circlip
357	Bearing and mech. seal housing	• 505	Shoulder ring	935	Elastic ring
365	Bearing cover	542	Seal bush (A3 construction only)	940	Key
365.1	Bearing cover	723	Companion flange	940.1	Key
				Z	Liquid supply inlet