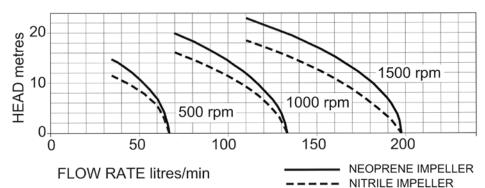
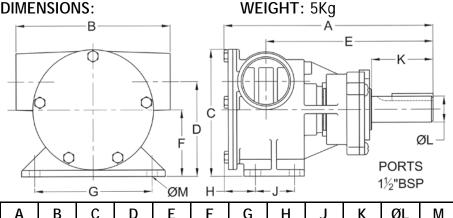
#### PERFORMANCE:



Maximum flow rate Maximum head MODEL I/min gall/min metres feet 52200-2011 195 23 75 43 195 52200-2003 43 18 59

Max Power absorbed 1100 watt at 1500rpm

#### **DIMENSIONS:**



Α	В	С	D	Е	F	G	Н	J	K	ØL	M
203	150	124	93	163	65	114	30	38	60	Ø25	Ø10

#### MATERIALS OF CONSTRUCTION:

Body	Bronze	
Impeller	Neoprene or Nitrile	
Wearplate	Replaceable	
Shaft	Stainless steel type 316	
Shaft seal	Mechanical, Carbon-Ceramic	
Bearings	Twin row, ball type	
Port type	1½" BSP to BS21 (DIN2999)	

#### **MODELS:**

52200-2011 Standard Neoprene Impeller

52200-2003 Oil resistant Nitrile

52200-2021 High pressure Neoprene



# a xylem brand

**BRONZE FLEXIBLE** IMPELLER PEDESTAL **PUMP** 

**52200** SERIES



## **PUMP** with 1½" BSP PORTS

- \* Constructed from marine quality bronze and stainless steel
- \* Self-prime from dry up to
- \* Easy to service and maintain
- \* Will tolerate abrasive wear
- \* Handles hard and soft solids without clogging
- \* Can pump in either direction
- \* Will not airlock



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# BRONZE PEDESTAL PUMPS TECHNICAL MANUAL



Jab	sco
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## STANDARD PRODUCT RANGE

#### COMPACT SERIES







### COMPOSITE PUMPS



#### **DESIGN FEATURES**

#### MODEL 52020-2003

Body

Bronze

Impeller

Jabsco Neoprene Compound

Shaft

Stainless Steel Type 316 S31 to BS970

Shaft Seal

Lip Type Replaceable

Wearplate Bearings

**Ports** Weight

Ball

3/8" BSP to BS21 (DIN2999)

1.4 kg

## MODEL 52040-2001

Body

Bronze

Impeller

Jabsco Neoprene Compound

Shaft

Stainless Steel Type 316 S31 to BS970

Shaft Seal Wearplate Lip Type Replaceable

Bearings

Ball

Ports

3/4" BSP to BS21 (DIN2999)

Weight

1.5 kg

#### MODEL 52080-2001

Body

Bronze

Impeller

Jabsco Neoprene Compound

Shaft

Stainless Steel Type 316 S31 to BS970

Shaft Seal

Lip Type

Wearplate

Replaceable

Bearings

Ball

**Ports** 

1" BSP to BS21 (DIN2999)

Weight

2.1 kg

#### MODEL 52200-2011

Body

Bronze

Impeller

Jabsco Neoprene Compound

Shaft

Stainless Steel Type 316 S31 to BS970

Shaft Seal Wearplate

Replaceable

Bearings

Ball

**Ports** 

1-1/2" BSP to BS21 (DIN2999)

Mechanical, Carbon-Ceramic

Weight

5 kg

#### MODEL 10550-200

Body

**Bronze** 

Impeller

Jabsco Neoprene Compound

Shaft

Stainless Steel Type 431 S29 to BS970

Shaft Seal

Mechanical, Carbon-Ceramic

Wearplate

Replaceable

Bearings

Ball

**Ports** 

3/4" BSP to BS21 (DIN2999)

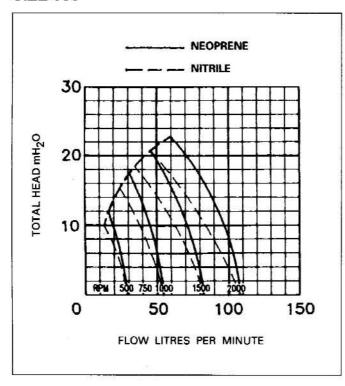
Weight

3 kg



## **PERFORMANCE**

### **SIZE 080**

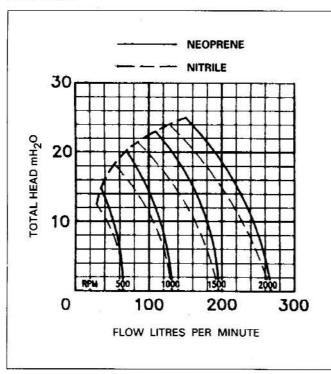


## Performance Note: Power (watts) figures shown are minimum recommended at pumpshaft

total manometric head	500 rpm	750 rpm	1000 rpm	1500 rpm	2000 rpn
	180 watt	180 watt	250 watt	550 watt	750 wat
m/H20	L/m	L/m	L/m	L/m	L/m
3	26.5	40	53	80	107
5	24.5	37.5	57	78	104
9	21	34.5	47.5	74	100
12	16.5	29	42.5	68	94
15	•	23	36	61	86
18		-	29	52.5	77
21	100	÷	8	42	66
Suction Bore	25mm	25mm	25mm	25mm	32mm
Temp°C	Metres	Metres	Metres	Metres	Metres
20	7.2	6.9	6.2	4.1	2.2
30	7	6.7	6	3.9	2
40	6.6	5.3	5.6	3.5	1.6
50	6	5.7	5	2.9	1

Maximum recommended suction head in mH<sub>2</sub>O at water temperature 20°C

## **SIZE 200**



## Performance Note: Power (watts) figures shown are minimum recommended at pumpshaft

5.00		1	40	2
total manometric head	500 rpm	1000 rpm	1500 rpm	2000 rpm
	180 watt	750 watt	1100 watt	1800 watt
m/H20	L/M	L/m	L/m	L/m
3	64.5	130	. 195	261
5	60.5	126	191	256
9	54	118.5	183.5	248
12	45	109	173	236.5
15	33.5	96.5	159	222
18	70	81	142.5	204
21	-	63	123	183
24	25	-	100	159
*Suction Bore	40mm	40mm	40mm	40mm
TempoC	Metres	Metres	Metres	Metres
20	7	5.8	3.6	1
30	6.8	5.6	3.4	0.9
40	6.4	5.2	3	0.5
50	5.8	4.6	2.4	-

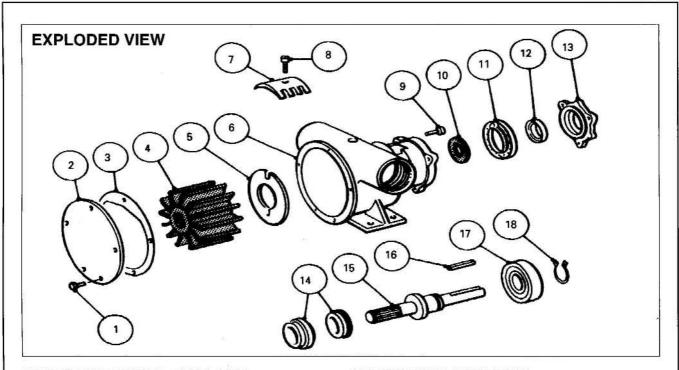
Maximum recommended suction head in mH<sub>2</sub>O at water temperature 20°C

Pump Selection Tables and Graphs show approximate performance for new pumps with neoprene impeller pumping water (specific gravity 1.00) at 20OC, but note that performance can be affected if water temperature and suction head are higher than shown in above tables. If in doubt consult your local Jabsco distributor or factory for application assistance.

\*Minimum nominal recommended bore. Note: SUCTION HEAD = VERTICAL HEIGHT + PIPE LOSSES.



## **52200 SERIES**



#### PARTS LIST MODEL 52200-2011

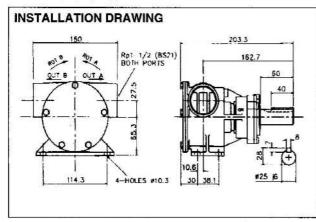
Key	Description	Qty	Part No	Key	Description	Qty	Part No
1	Edncover Screw*	5	X3001-176F	10	Slinger	1	3181
2	Endcover	1	9336	11	Inner Bearing Seal	1	SP2700-50
3	Gasket*	1	816	12	Outer Bearing Seal	1	SP2701-1013
4	Impeller*	1	17935-0001B	13	Outboard Seal Housing	1	52201-0000
5	Wearplate	1	2574	14	Seal Assembly*	1	21849
6	Body	1	50204-2100	15	Shaft	1	52207-0000
7	Cam	1	834	16	Key	1	X4000-567A
8	Cam Screw	1	SP1005-07	17	Bearing	1	SP2600-04
9	Screw -	3	X3003-178F	18	Retaining Ring	1	SP1700-245
T		1			Spline Seal	1	4346

#### Options:-

Std. Pressure Neoprene Impeller High Pressure Neoprene Impeller Nitrile Impeller

1/2 Cam 1/2 Cam Screw Part No 836-0001B Part No 807-1001B Part No 17935-0003B or 836-0003 Part No 2551 Part No SP1005-05

#### Service Kit No SK407-0011 Contains Parts marked\*



#### SERVICE INSTRUCTIONS

Dis-Assembly Inspect all parts for wear or damage and replace if necessary

- 1. Remove endcover screws, endcover and gasket.
- 2. Remove impeller.
- Loosen cam screw and remove cam, (clean off old jointing compound).
- 4. Remove wearplate.
- 5. Remove seal assembly.
- Remove fixing screws and outboard seal housing, together with seal.
- Press shaft on impeller drive end to remove shaft and bearing from pump. Heating outside of body will ease disassembly.
- 8. Remove bearing retaining ring from shaft.
- 9. Supporting bearing inner race, press shaft through bearing.
- 10.Remove inner bearing seal if it needs replacing.

#### Assembly

- Lubricate inner bearing seal with grease and press into body bearing seal bore with lip facing away from bearing bore.
- Press shaft into bearing, supporting inner race of bearing. Fit bearing retaining ring onto shaft.
- Position slinger in body drain area. Insert splined end of shaft through bearing bore and guide slinger over shaft until bearing contacts body.
- Fit new outer bearing seal in outboard seal housing and fit to pump, securing with retaining screws.
- Fit seal seat and cup rubber, with seal seat facing towards impeller bore. Fit seal with carbon face towards face of seal seat. Replace spacer.
- Install wearplate in body bore, aligning slot in wearplate with dowel pin in body.
- Coat cam screw threads, and top of cam with a non setting jointing compound. Install in body.
- 8. Lightly grease impeller bore and start impeller into bore with a rotary motion until splines engage, then push into bore.
- 9. Fit endcover and gasket and secure with endcover screws.

## INSTALLATION/OPERATION AND SAFETY ADVICE

#### INSTALLATION AND OPERATION

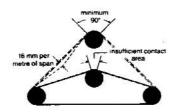
PUMP MAY BE MOUNTED in any position. When installed vertically motor must be above the pump.

THE ROTATION OF THE PUMP SHAFT determines the location of the pump inlet/ports: refer to installation drawing.

BEFORE INSTALLING rotate pump shaft and impeller in the direction of the required operation.

ALL PUMP PIPEWORK must be adequately supported to avoid stress on pump and pump components and consequential leakage.

BELT DRIVEN PUMPS excessive drive belt tension will cause rapid belt wear and may result in premature bearing failure. It should be possible to defect a correctly tensioned belt between pulleys about 16mm per metres of span by applying finger pressure. Ideally, the contact area should be about 120° but not less than 90°.



CRANK SHAFT MOUNTED PUMPS a torque arm must be fitted and designed so that only pure torque reaction will result. Other uncessary loads must be avoided.

Pump should not be operated above its published performance without referring to distributor.

#### **AC MOTOR PUMP UNITS**

ALL ELECTRICAL WIRING should be connected and installed by a competent electrician. A qualified person must ensure that the installation conforms to the Electrical and Mechanical requirements of Local and National Regulations. All equipment operating within a flame proof area must comply with the relevant standards applying to that area. Before using the pump, ensure that your electrical supply corresponds with the voltage range marked on the machine.

WARNING - THIS APPLIANCE MUST BE EARTHED UNLESS SPECIFIED motors are not flame proof and can spark, explosion and death can occur.

LABELS should be attached to all services over 60°C, indicating "Hot Areas". Where capacitors are employed in motor circuits, a charge is retained after the supply has been isolated. This must be discharged before touching motor terminations to avoid the risk of an electrical shock.

TEMPERATURE: Operating range

Neoprene Impellers 4-80°

10-90° Oil resistant impellers

Pumps: are dry self-priming i.e. do not require to be filled with liquid to start up.

Running Dry: Unit depends on liquid pumped for lubrication. A dry running period of up to 30 seconds on initial prime is generally as a safe length of time. If pump has not been primed after 30 seconds, stop and check for airleaks in pipe work, and impeller, seal or gasket damage.

#### SAFETY ADVICE

Ensure that all moving parts are adequately guarded to prevent accidental contact. Leakage from mechanical seal or gland could cause a hazard. If liquids being pumped are toxic or corrosive, use of a drip tray is recommended.

DO NOT USE for Petrol, Toluene, Benzene or light fraction petroleum products such as solvents, thinners or other liquids with flashpoint below 37°C.

FREEZING temperatures - do not permit liquid to freeze in pump body. Drain pump by loosening end cover.

IT IS A REQUIREMENT OF COSHH (1988) REGULATIONS THAT THE MANUFACTURER'S INSTRUCTIONS IN THE HAN-DLING OF HAZARDOUS SUBSTANCES MUST BE **OBSERVED AT ALL TIMES.** 

To confirm with the Health and Safety and COSHH Regulations, ITT Jabsco require that any pump or part of a pump that is returned to this company for repair or examination, or for any reason whatsoever, will be suitably packed and accompanied by a letter stating what the pump/part has been pumping.

If the liquid or product is hazardous or in any way dangerous, this must be stated and the chemical make-up of it must be stated in detail

Unless this procedure is osbserved the unit will not be accepted on our company premises. The only exception to this rule is if the pump returned is new and unused.

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