

**JABSCO**

**ELECTROMAGNETIC CLUTCH  
DRIVEN FLEXIBLE IMPELLER PUMP**

**FEATURES**

- Carbon / Ceramic mechanical seal
- Sealed for life spaced bearings
- 1" NPT or 1" BSP ports
- Multi position mounting foot
- Standard pressure Jabsco neoprene impeller
- Automotive electromagnetic clutch

**MODEL RANGE**

Pump Model	Port Size	Clutch Voltage	Pulley Section
50580-2001	1" BSP	12V	2A
50580-2101	1" BSP	24V	2A
50580-2201	1" BSP	12V	1B
50580-2301	1" BSP	24V	1B
50580-9001	1" NPT	12V	2A
50580-9101	1" NPT	24V	2A
50580-9201	1" NPT	12V	1B
50580-9301	1" NPT	24V	1B

**APPLICATION**

**Marine;** engine cooling, bilge pumping, washdown and deck flooding, ballast transfer, general purpose pump, fire fighting.

**Industrial;** circulation and transfer of water, sump drainage, cellar drainage, emergency pumping.

**Farming/Agriculture;** waste water removal, shallow well pump, ditch drainage.



Models 50580-Series



**WARNING:** Do not use any Jabsco pump for petrol, petroleum products or any products with a flash point below 37°C (98°F), explosion or death may occur.



**WARNING:** Injury hazard. Exposed pulleys and belts can cause injury. Install shield around pulleys and belts. Stay clear while machinery is operating.



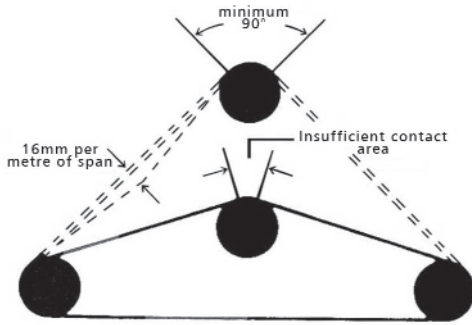
Do NOT run dry.

**INSTALLATION**

Pumps must be securely mounted on a rigid surface. Pumps can be mounted in any position. If mounted vertically, ensure the bearings are above the pump head to ensure long life.

The rotation of the pump shaft determines the location of the inlet and outlet port. All pipework must be supported to avoid stress on the pump. Suitable fittings must be used to connect the piping to the pump and sealed accordingly. Inlet pipework must be either rigid or reinforced to avoid collapsing under vacuum.

Excessive belt tension will result in premature bearing failure. The belt should be set to allow 16mm (1/2") of movement over 1m (3ft) of span when pushed.



Ideal belt contact area should not be less than 90° of the pulley circumference.

Ensure that all moving parts are adequately guarded to prevent accidents. Ensure all wiring is of adequate size conforming to ABYC wiring recommendations and connected securely in a dry location.

Maximum voltage drop allowed is 20% of rated voltage. Inadequate voltage will result in blown fuses and/or clutch failing to engage.

Do not place equipment which can be affected by magnetic fields near the pump.

## OPERATION

Pumps are dry self priming. If fluid does not enter pump after 30 seconds, stop pump, and check inlet hose for leaks and/or blockages.

Maximum speed for these pumps is 2200 rpm, do not operate pump outside the published limits without consulting the factory appointed distributor.

Do NOT allow liquid to freeze in the pump, drain pump by loosening end cover screws.

## SERVICE INSTRUCTIONS

Inspect all parts for wear or damage and replace as necessary.

1. Ensure power is switched off to pump.
2. Remove central screw and washer holding on pulley.
3. Remove pulley and key.
4. Remove 3 screws holding field coil to pump body.

## Jabsco Pumps 50580-2103

### DIS-ASSEMBLY PUMP

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1. Remove end cover screws, end cover, and o-ring.
2. Remove spline seal and impeller using impeller removal tool.
3. Remove cam screw, cam, and wearplate.
4. Remove seal retaining ring.
5. Remove bearing dust seal (if fitted) and bearing retaining ring (if fitted)
6. Carefully push shaft from pump end to remove shaft/bearings assembly.
7. Remove seal from body.
8. Remove slinger o-ring and press off bearings.

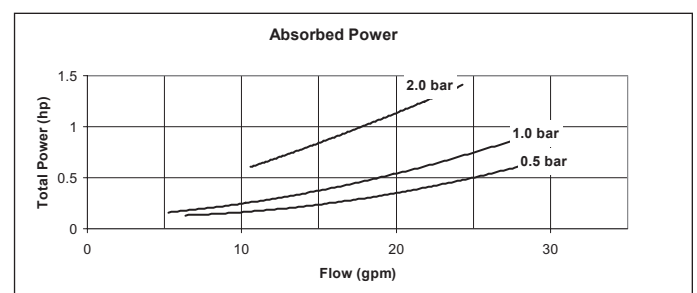
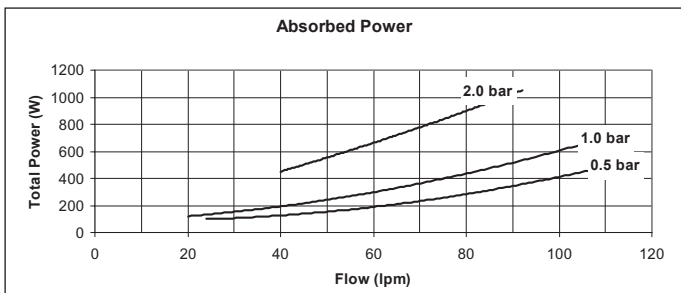
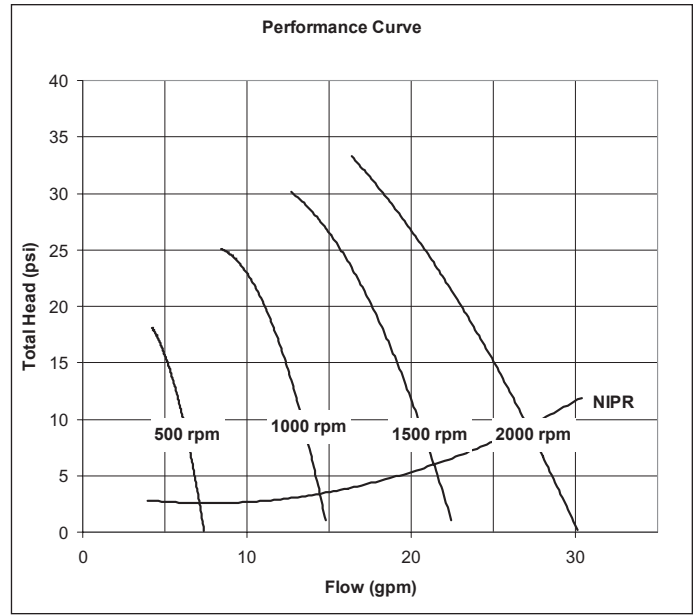
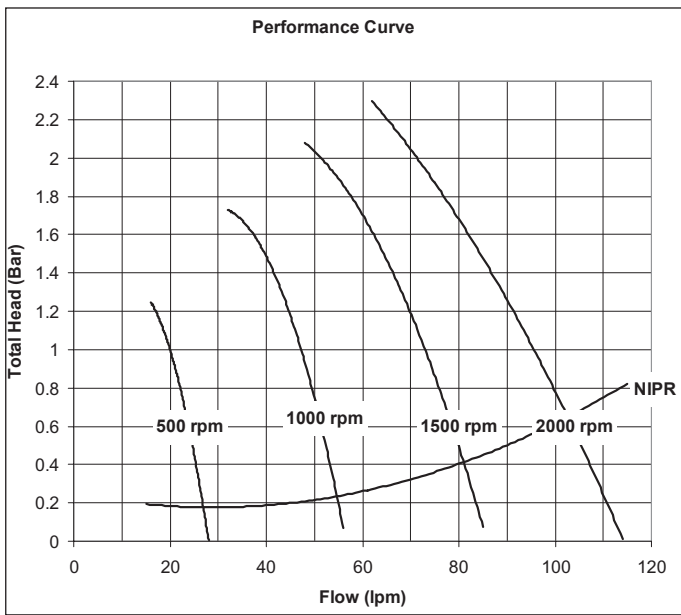
### RE-ASSEMBLY PUMP

1. Press bearing onto shaft and fit into body.
2. Replace bearing retaining ring (if fitted) and dust seal (if fitted).
3. Fit o-ring slinger.
4. Carefully install seal in pump body ensuring seal faces are clean and fit seal retaining ring.
5. Fit wearplate, cam, and cam screw ensuring cam screw o-ring seal is in place.
6. Fit impeller using a small amount of suitable grease.
7. Fit spline seal, o-ring, end cover, and end cover screws.

### RE-ASSEMBLY CLUTCH

1. Fit field coil using 3 screws.
2. Fit key into shaft, and push on pulley.
3. Fit washer and bolt and tighten to desired torque.
4. Reconnect power to clutch.

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**PERFORMANCE (UK & US Versions)**  
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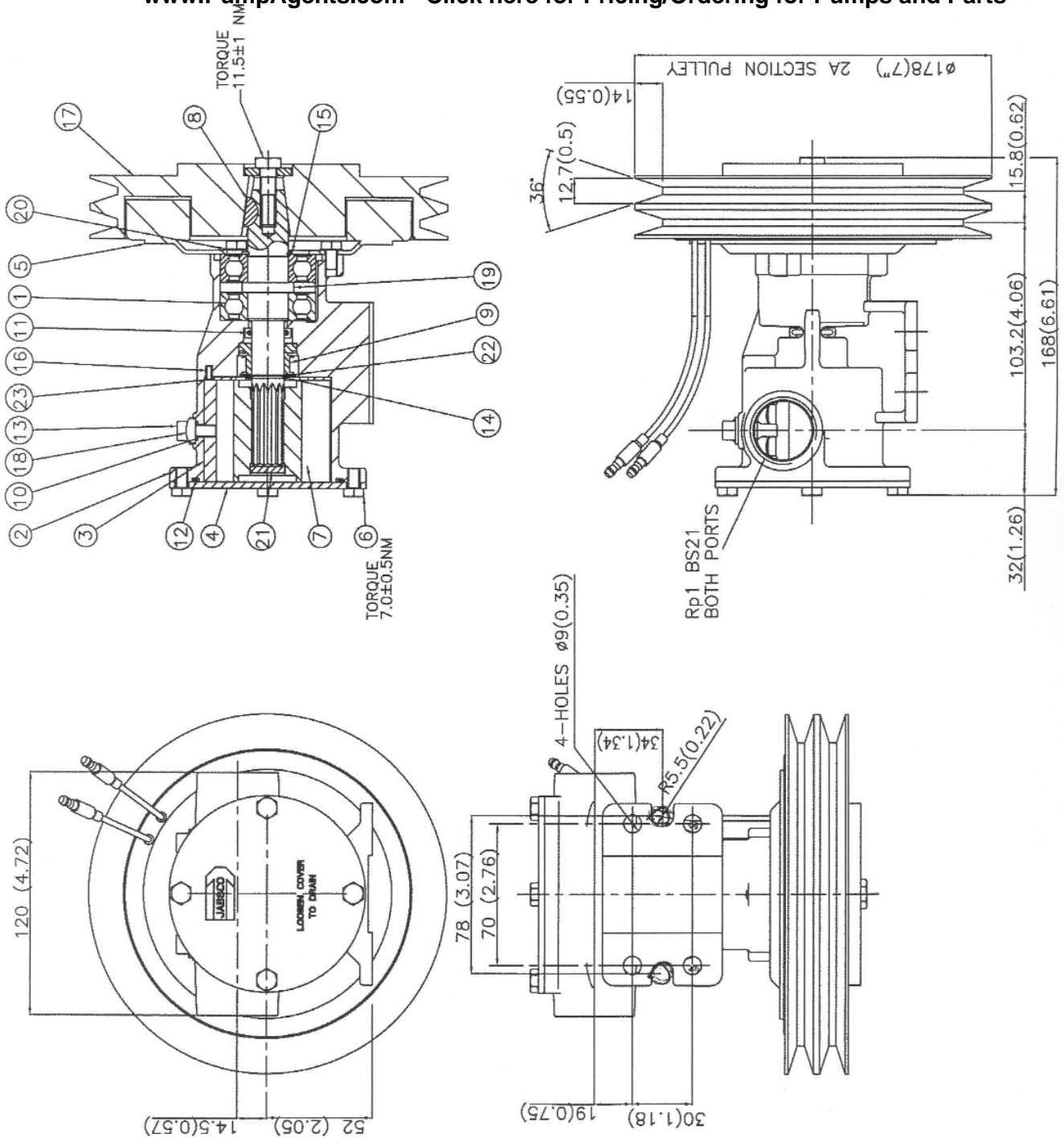


**PARTS LIST**

KEY	DESCRIPTION	PART NUMBER	QTY
1	BEARING, BALL	SP2601-0468	2
2	BODY Ø80	51584-2100	1
3	CAM	53082-0000	1
4	ENDCOVER	50355-0000	1
5	FIELD COIL 12V	SP2300-0063FC	1
6	HEX HEAD SCREW	X3001-176F	7
7	IMPELLER Ø80	920-0101	1
8	KEY - WOODRUFF	SP1401-10	1
9	MECH SEAL	96080-0620	1
10	O-RING	X4020-106A	1
11	O-RING	X4020-215A	1
12	O-RING	X4020-269A	1
13	PIPE PLUG	92650-6070	2
14	RETAINING RING	SP1700-62	1
15	RETAINING RING	SP1700-247	1
16	ROLL PIN	SP3100-10	1
17	ROTOR ARM 2A	SP2300-0061RA	1
18	SCREW	X3003-176F	1
19	SHAFT Ø80	50587-0000	1
20	SHAKEPROOF WASHER	X3083-291F	3
21	SPLINE SEAL	4345	1
22	SUPPORT WASHER	29706-0000	1
23	WEARPLATE	4156	1

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