

CARDEV

Oil Filtration and Coolant Handling Specialists



1S200

Removes Contaminants

Extends Oil Life

Reduces Component Wear

Removes all Water

Saves Machine Downtime

Reduces Disposal Costs

Simple to Install & Use

Low Maintenance Costs

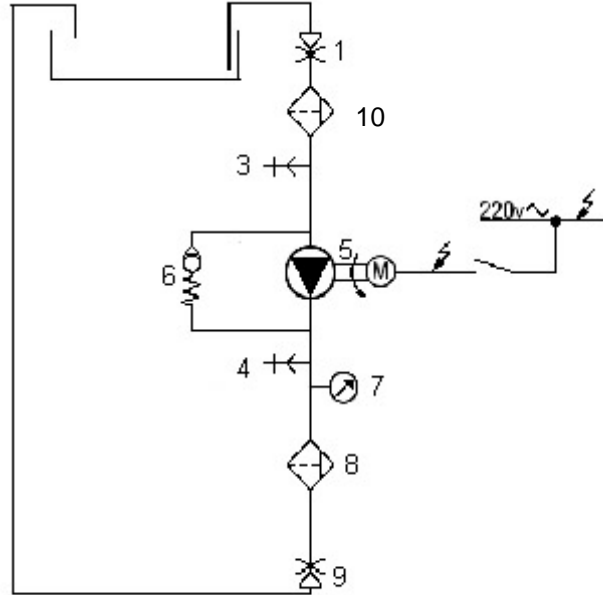
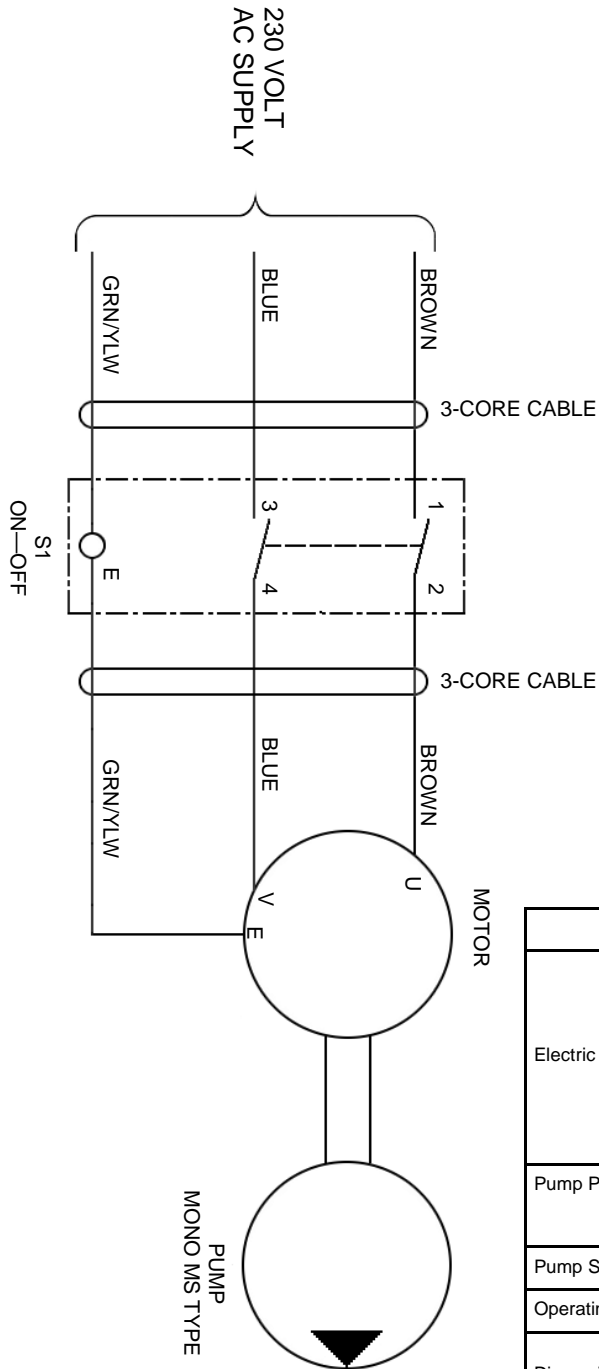
Built in Sampling Points



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1S200 - SPECIFICATION				
Electric Motor	VOLTS	110	230	
	Kws	0.18	0.18	
	Amps	5.1	2.2	
	RPM	1425	1425	
	Protection	IP55		
Pump Performance	120 litres/hour @ 2.8 bar (ISO 46 Hydraulic oil at 40°C)			
Pump Suction Lift	Self priming to 5.5 metres			
Operating Temperature	10-90°C			
Dimensions	Length	780mm		
	Width	225mm		
	Height			
Weight	22 kg			
Filtration System	1 x SDU H8			
Cartridge Type	1 x SDFC—Fitted as standard. Supplied in boxes of 6			
Accessories	6 metres of reinforced 3/4" hose with couplings Plug to suit voltage (UK only)			
Options	110V / Flow Meter SDFC-P Cartridges for water based fluids			

Description

The 1S200 Micron Filtration System is a compact free standing off line oil cleaning and filtration system, capable of removing fine dirt particles and totally removing water. Filter cartridges are also available for use on water based fluids

Set Up Operation

1. Cut hose to suit IN or OUT requirements. Insert in oil.
2. Prime pump before use—pour oil down inlet hose.

Starting

1. Turn ON/OFF switch to position 1.

Cold Starting

If oil is thick, pressure may rise and the oil will by-pass through the pressure control valve at approximately 4 Bar. As the oil warms up, the pressure control valve will automatically close.

Performance Guide

To achieve optimum cleanliness, the contents of each tank should pass through the filter a minimum of 4-5 times.

E.g. a 200 litre tank at 40°C will take approximately 4-5 hours to clean.

Note: The above is a guide only, and results will depend on the contamination level in each tank.

Cartridge Change Intervals

- When oil pressure is 1.5 Bar above normal
- When the pressure control valve is continuously open
- 200 hours or monthly

Cartridge Change Procedure

1. Switch off motor
2. Remove "IN" hose
3. Depress nodule on inlet coupling and run motor for 30 secs. to purge the units of oil.
4. Release lid securing bolt.
5. Remove cartridge using attached straps.
6. Change the cartridge and replace lid seal.
7. Replace lid and tighten firmly by hand.
8. Check for leaks.
9. Run for 10 mins. and confirm lid bolt secure.

Electrical Switch

Position "1" - system running

Position "0" - system stopped

Protection

1. Thermal cut-out in motor.
2. Pressure relief valve 4 bar.

TROUBLE SHOOTING

1. Reduced flow from rig:-

- a. Check hose is below oil but not sucking against the floor or wall of tank.
- b. Clean pre-filter and check "o" ring seal is secure.
- c. Check inlet hose for leaks & blockages.
- d. Check quick release coupling—remove to clean.
- e. Ensure cartridge has been changed.
- f. If none of the above, check pump stator.

Contamination Monitoring

The 1S200 is fitted with 2 sample points for use with portable UCC CM20 particle counter or similar device. Connect the appropriate pipes:

RED - high pressure in

YELLOW - low pressure return

This will enable an ISO rating/particle count to be taken whilst the system is in operation.

Oil Sampling

To take an oil sample, connect only to the red sample point—wait for a steady flow before sampling.

Filtration Levels

Through a CARDEV filter SDFC, the level of filtration is ISO4406, ISO <13/9 and the equivalent NAS 1638 class 4/5. Water is removed to below 0.05%

Guarantee

The 1S200 system carries a 12 month warranty on all parts. Full details are given on the guarantee card attached to the system.

1S200

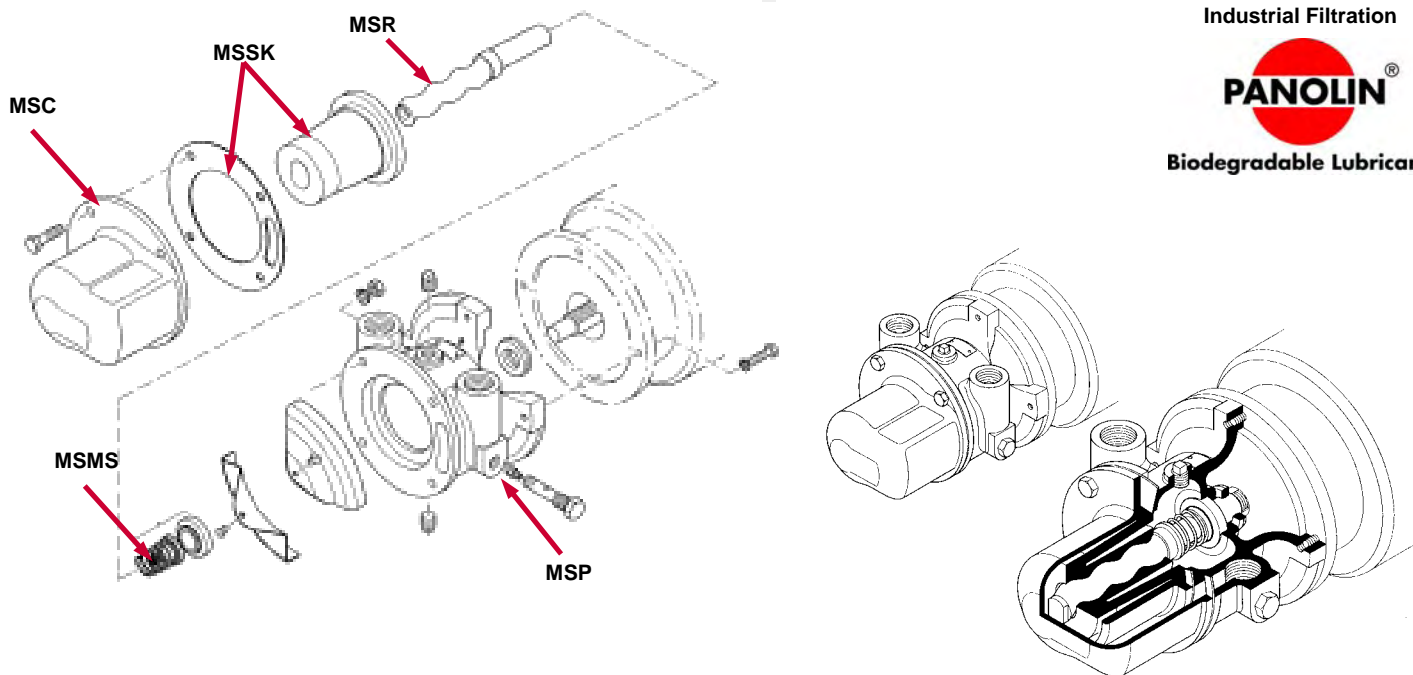
PUMP / MOTOR

CARDEV

Industrial Filtration



Biodegradable Lubricants



Stator

This is removed by undoing the four nuts and bolts securing the barrel which is then pulled off the body. This exposes the stator which can then be removed from the rotor.

Rotor

This is removed by holding the motor shaft with a spanner on the two flats on the shaft and unscrewing the rotor with the aid of a second spanner on the flats on the end of the rotor. The threads are LEFT HAND and so the rotor should be screwed in a clockwise direction (when looking at the end of the rotor.) Removal of the rotor also releases the mechanical seal and care should be taken not to damage the mating sealing edges.

Seal

If this is disturbed or removed because of damage, when replacing or fitting a new seal, ensure it is correctly assembled before re-fitting into the pump. The rubber seal and stationary seat should be pressed into the body housing and the rotating portion assembled on to the rotor shaft before screwing the rotor back on to the motor shaft which is then locates the mechanical seal with its correct tension.

To Re-Fit

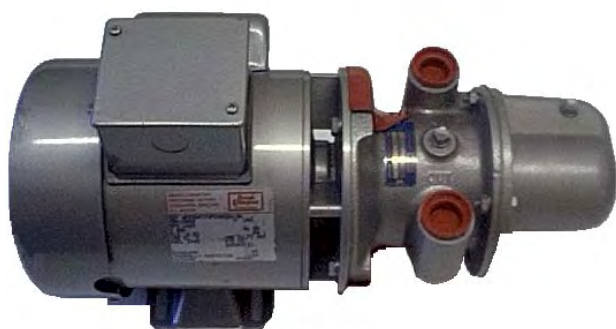
The reverse procedure is used to that of dismantling.

START-UP PROCEDURE

Pumps must be filled with liquid before starting. The initial filling is not for priming purposes, but to provide the necessary lubrication of the stator until the pump primes itself.

When the pump is stopped, sufficient liquid will normally be trapped in the rotor/stator assembly to provide lubrication upon re-starting.

If, however, the pump has been left standing for an appreciable time, moved to a new location, or has been dismantled and re-assembled, it must be refilled with liquid and given a few turns before starting.



PUMP & MOTOR

MS 110V

MS 230V

MOTOR

MSM110V

MSM 230V

CAPACITOR

MSC110V

MSC 230V

1S200

SPARE PARTS LIST



Industrial Filtration

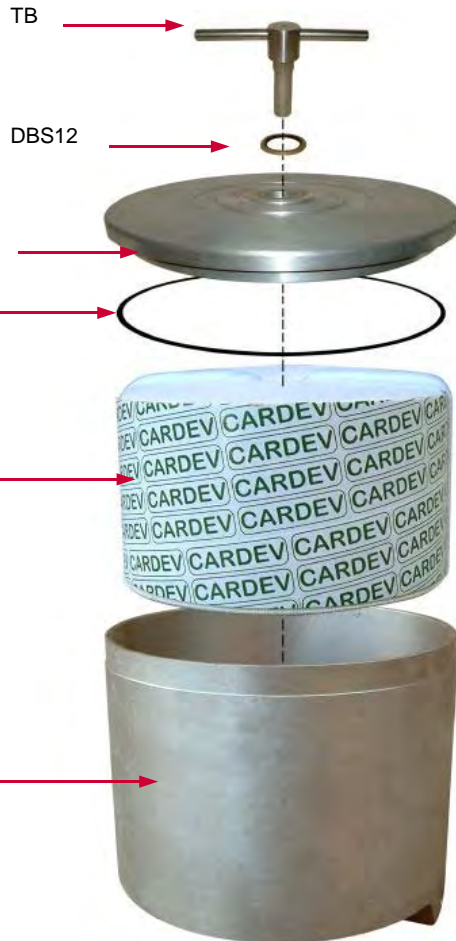


Biodegradable Lubricants



ELECTRICAL CONTROL ASSEMBLY—COMPLETE
SW200

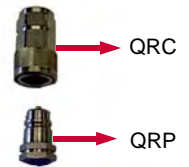
SDUH8



PRESSURE GAUGE
PG160F



DUMP VALVE
DV38 4.0BAR



QUICK RELEASE COUPLING SET
QRS08



PRE-FILTER (10)
PFY34NPT



FLOW METER (OPTION)
FLOWK400



HOSE AND COUPLING SET (COMPLETE)
OST1/2DRS