

# ***Filtration Unit***

## ***Service Equipment***

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***Global Filtration Technology***

# Service Equipment

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### TYPICAL APPLICATIONS

- Fluid Transfer
- Small Lubrication Systems
- Constant Flushing Loops
- Maintenance Flushing
- Offline Filtration in circuits where pressure and flow pulses are expected

### The Parker Filtration Service Equipment.

Designed to offer both permanent offline cleaning where higher levels of contamination are expected and portable additional clean-up capability as part of your preventative maintenance package.



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### SPECIFICATION

#### ELECTRIC MOTOR

**Frame Size:** IEC Frame 63. Foot and Flange 'D' (Flange IEC.F115). Totally enclosed fan cooled. Shaft Ø 11mm. Keyway 4mm wide no key required.

**Windings:** 380/420 volt 3 ph/50 Hz, 220 Volt 1 ph/50 Hz 110 Volt 1 ph/50 Hz.

**Power:** 0.18 kW (1/4 hp).

**Speed:** 1400 rev/min.

It is recommended that the Unit is wired independently from the main system when permanently installed, to facilitate the simple changing of the filter element without interrupting the main system.

#### FILTRATION UNIT DESCRIPTION

The Parker 'Filtration Unit' consists of an Electric Motor directly coupled to a hydraulic pump, which has a built in bypass fitted and spin on filter element. Fluid drawn in at pump inlet is circulated through the filter element and is thus cleaned before being delivered from the outlet port. A built in bypass valve safeguards the element in the event of blockage and returns oil to the pump inlet, this ensures that all fluid output from the unit is filtered, whatever the operating conditions. A visual element condition indicator is fitted to the pump.

A unit is available without electric motor for customers who prefer to supply their own.

See Installation Notes and Part Number for ordering.

#### PUMP AND BYPASS VALVE

**Pump:** Lobe type for quiet running.

**Flow:** 15 l/min.

**Speed:** 1400 rev/min.

**Connections:** Inlet G<sup>1</sup>/<sub>2</sub> (1 1/2" BSP).  
Outlet G<sup>3</sup>/<sub>8</sub> (3/8" BSP).

**Bypass Valve:** Cracks at 1.5 bar approximately. Bypassed oil is recirculated within the pump. Bypassed oil is reintroduced into the inlet port and does not pass the filter. Bypass operates when the element is contaminated and needs replacing. This condition will be made clear by the visual indicator. The Bypass Valve could also open when being used with high viscosity fluids, thus effectively reducing the unit output.

#### FILTER AND CONDITION INDICATOR

**Filter Type:** Rapid replacement spin-on can with 25 micron cellulose element fitted as standard. Ensure that end clearance (20mm) is available to permit element withdrawal. 10µ Abs. glassfibre canisters are also available as a replacement option.

**25µ Abs. MX.1518.4.10 x 4 (4 element pack)**

**10µ Abs. MXR.8550**

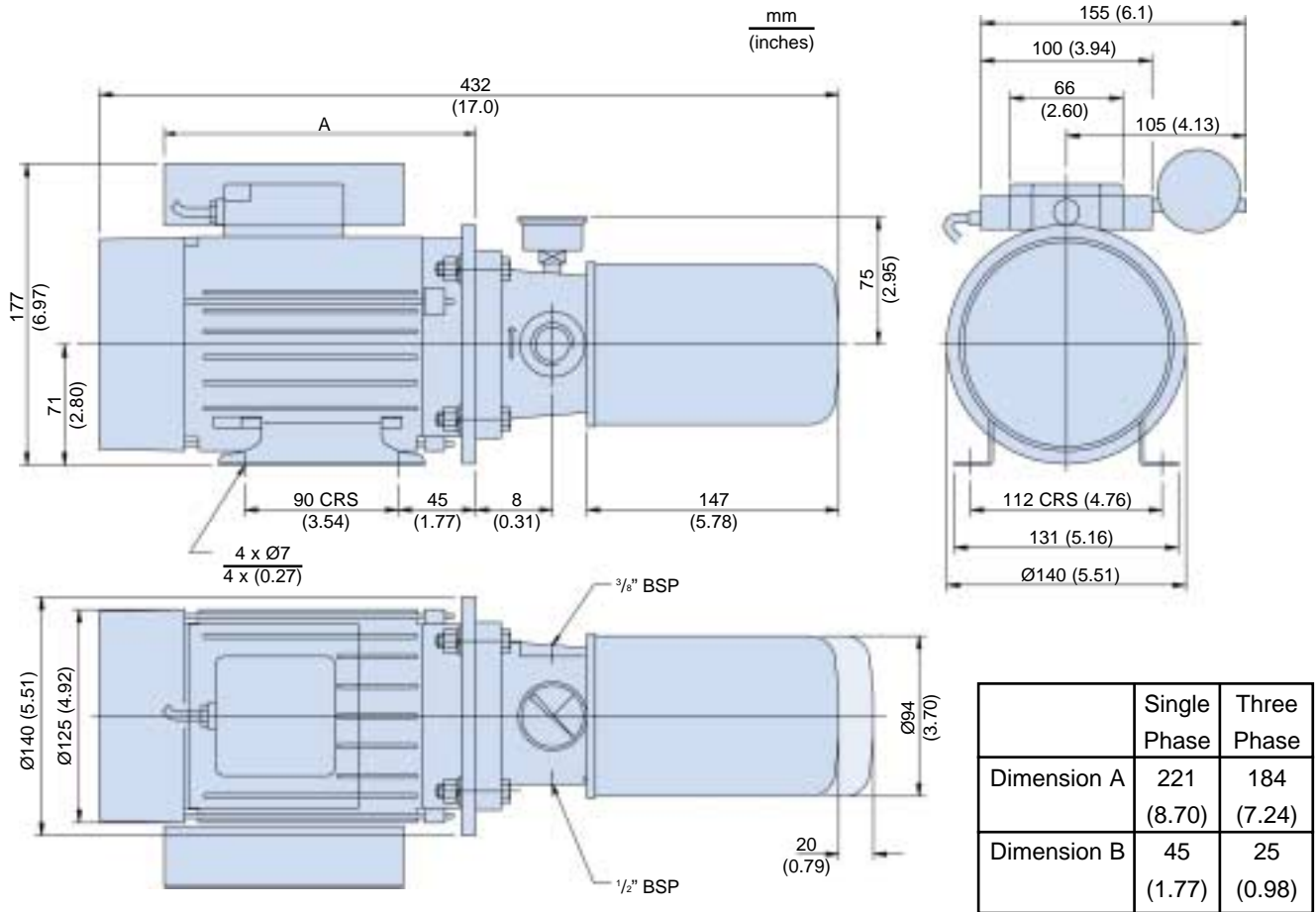
#### VISUAL INDICATOR

Has green and red zones on the dial. Needle in the green zone indicates normal operation. When the needle enters the red zone, the bypass valve will permit a flow of oil to return to the pump inlet – The element will then need to be replaced with a factory clean replacement. The bypass is fully open when the needle is at the extreme of the red sector.

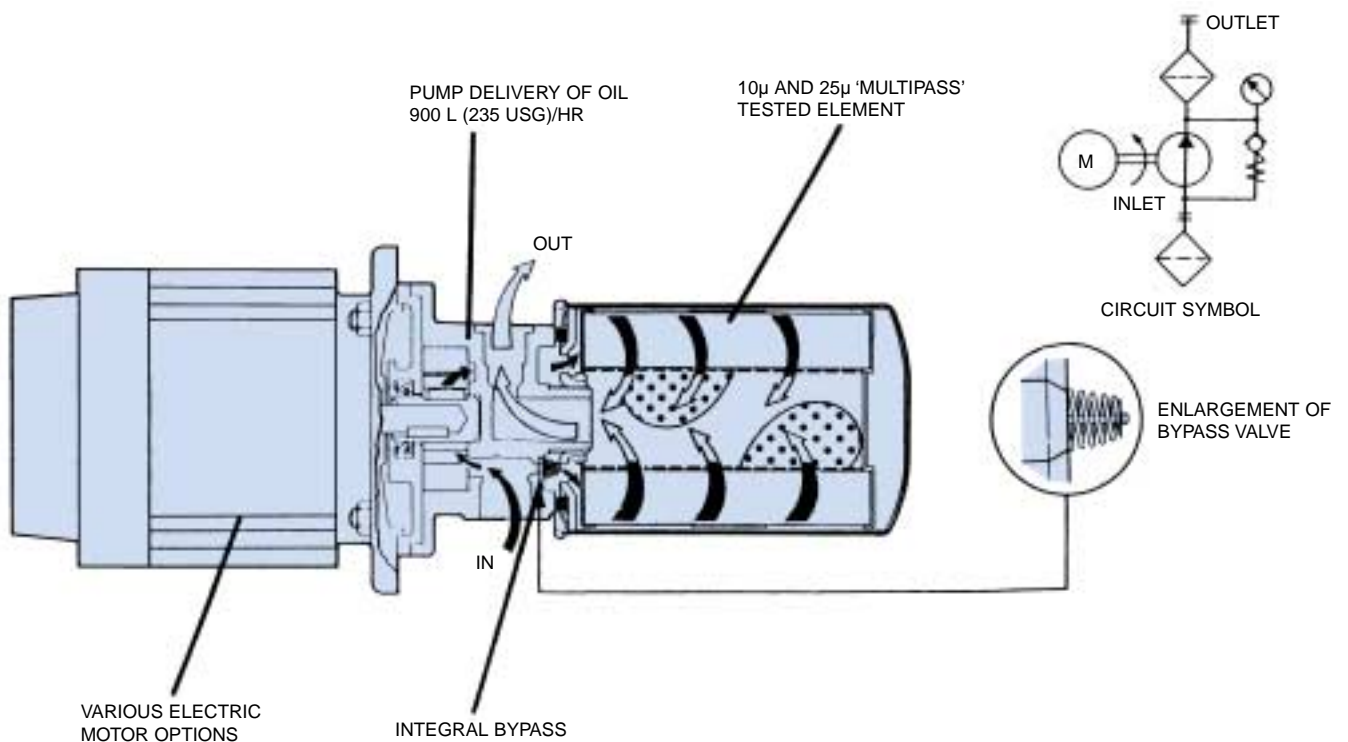
#### SOUND LEVEL

The Filtration Unit under normal conditions will operate at a sound pressure level of approximately 65 dBA.

### INSTALLATION DETAILS



### SECTIONED DETAIL



# Service Equipment

## Filtration Unit

### INSTALLATION AND OPERATION NOTES

The Filtration Unit is suitable for mineral base oils. Maximum viscosity at start up condition 850 centistokes-minimum viscosity 8 centistokes. Note that at 850 centistokes output will be reduced due to opening of bypass. Maximum operating temperature +90°C (194°F).

**The inlet pipe** should be as large and as short as convenient to reduce inlet depression to a minimum. It should not be less than 12mm (0.47") internal diameter. Suction element **S.360006** is supplied with all assemblies and must be installed. Ensure that a minimum 75mm (2.95") head of oil is maintained above the suction element.

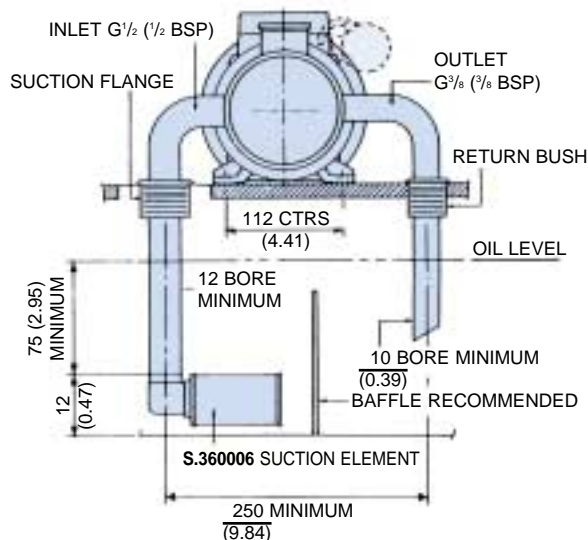
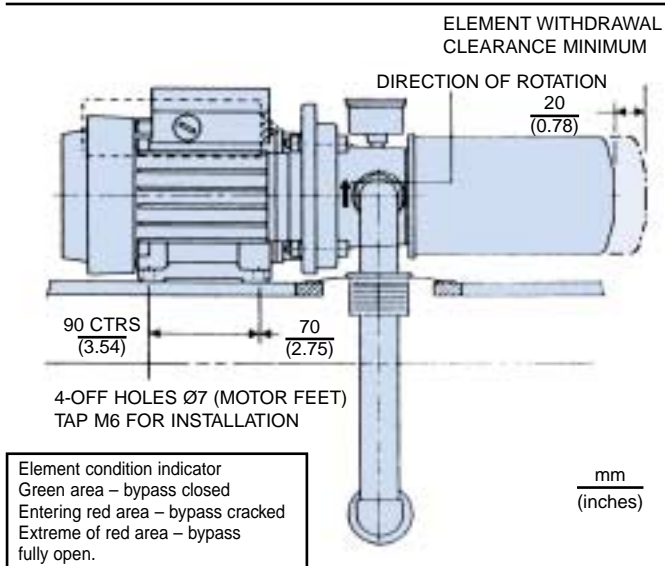
**The outlet pipe** should be as large as possible to reduce the possibility of delivery pressure exceeding the bypass valve setting. It should not be less than 10mm (0.39") internal diameter. The discharge end of this pipe should always be below the oil surface to minimise aeration. It is equally

important, to ensure the ends of the inlet and outlet pipes are as far apart as possible. It is recommended that a baffle be positioned between the suction and return pipes, to give maximum circulation of oil.

#### Installation Details – 2702

The Filtration Unit is available without an electrical motor, any type motor may be used of identical frame, flange and shaft size to that stated in the specification. Remove the key, fitted to electric motor shaft. There are four nuts and bolts M8-1.25mm thread supplied loose, the pump housing is complete with a shaft adaptor with internal drive pin.

To fit pump to electric motor simply insert drive shaft of motor into the pump drive adaptor ensuring the drive pin engages in shaft keyway and that the locating spigot are correctly engaged. Complete the assembly by fitting the four nuts, bolts and washers.



### ORDERING INFORMATION

Part Number	Description	Weight	Replacement Elements
2741	Complete with 3 phase electric motor 380/420/50 Hz T.E.F.C. Class F Visual indication. 10µ Abs. element.	5.92 Kg (13.02 lbs)	<b>MXR.8550</b> <b>(10µ Abs.)</b>
2742	Without electric motor. Supplied with four M8-1.25 nuts, bolts and washers. Visual indication. 10µ Abs. element.	1.50 Kg (3.3 lbs)	
2743	Complete with single phase electric motor 220/50 Hz T.E.F.C. Class F Visual indication. 10µ Abs. element.	6.20 Kg (13.64 lbs)	
2744	Complete with single phase motor 110/50 Hz T.E.F.C. Class F Visual indication. 10µ Abs. element.	6.20 Kg (13.64 lbs)	<b>MX.1518.4.10x4</b> <b>(25µ Abs.)</b> <b>(4 element, pack)</b>
2701	Complete with 3 phase electric motor 380/420/50 Hz T.E.F.C. Class F Visual indication. 25µ Abs. element.	5.92 Kg (13.02 lbs)	
2702	Without electric motor. Supplied with four M8-1.25 nuts, bolts and washers. Visual indication. 25µ Abs. element.	1.50 Kg (3.3 lbs)	
2704	Complete with single phase electric motor 220/50 Hz T.E.F.C. Class F Visual indication. 25µ Abs. element.	6.20 Kg (13.64 lbs)	
2705	Complete with single phase electric motor 110/50 Hz T.E.F.C. Class F Visual indication. 25µ Abs. element.	6.20 Kg (13.64 lbs)	