



# PTU1 27/54-108

CJCTM Off-line Filter Separator - D I E S E L

## CJCTM Product Sheet

OIL MAINTENANCE

### APPLICATION

The PTU1 27/- series of CJCTM Filter Separators are used for fine filtration and water separation on **diesel oils** with a specific weight lower than that of water.

### FUNCTION

The filter pump draws oil, e.g. from the settling/bunker tank and presses it through the filter insert. From the centre of the insert the oil flows down into the filter base where water droplets - if any - adhere to the coalescer element, forming larger drops that will settle in the bottom of the filter base. From the top of the filter base the oil will flow to the service tank or back to the settling/bunker tank.

The filter suction pipe should be connected to the bottom of the settling/bunker tank, above the tank drain tap. The filter outlet should be lead to the service tank.

An overflow line from the top of the service tank back to the settling tank should be applied in order to secure that surplus oil flows back to the settling/bunker tank.

On the PTU with automatic water discharge, separated water is drained automatically. The discharge function can be monitored on the unit control box.

The PTU models are also available with manual water discharge.

The pressure drop over the filter - and consequently the contaminant absorption of the filter insert - is monitored on the pressure gauge on the filter top.

In addition the PTU models with automatic water discharge are equipped with an electric pressure guard including automatic malfunction shut-down.

### THE FILTER PUMP

The filter pump is a CJC gear pump. The electric motor can be supplied for all standard AC and DC voltages.

### FILTER INSERT

The CJCTM Filter Inserts consist of several discs bonded together. The material is either cellulose or cotton linters depending on the fluid to be filtered.

### OPTIONS

Preheater      Tank  
Drip pan      Control box

### FILTRATION ABILITY

All CJCTM Filter Inserts have a **filtration degree of 3 m** (micron) absolute, i.e. 98.7% of all solid particles >3 m and approximately 50% of all particles >0.8 m will be retained in one pass. The depth of the CJCTM off-line Filter Inserts creates a highly efficient **oxidation adsorption**

**Preheating the oil** before filter pass may be necessary to prevent segregation of paraffin but only with blended fuels.



The CJCTM Filter Separator  
PTU1 27/54 P-E2PW

### TECHNICAL DATA

| Model PTU1:                    |         | 27/54                 | 27/81     | 27/108    | P/MZ-<br>E2PW |
|--------------------------------|---------|-----------------------|-----------|-----------|---------------|
| Pump flow, std. / per hour     | ltr/gal | 150 - 1260 / 40 - 333 |           |           | -             |
| Pump type                      |         | P / MZ                | P / MZ    | P / MZ    | P / MZ        |
| Filter Inserts 27/27, std.:    |         |                       |           |           |               |
| for diesel oil                 | qty     | 2                     | 3         | 4         | -             |
| Power consumption, aver.       | kW      | 0.25-0.55             | 0.25-0.55 | 0.25-0.55 | 0.25-0.55     |
| Max. pressure drop             | bar/psi | 2.0/29                | 2.0/29    | 2.0/29    | -             |
| Max. fluid temp. *)            | °C / F  | 60/140                | 60/140    | 60/140    | -             |
| Dirt holding capacity, approx. | ltr/gal | 9/2.4                 | 13/3.4    | 17/4.5    | -             |
| Dry weight                     | kg/lb   | 113/249               | 118/260   | 134/295   | + 20/44       |
| Operating weight, wet          | kg/lb   | 140/309               | 165/364   | 190/419   | + 20/44       |
| Design pressure                | bar/psi | 4.0/58                | 4.0/58    | 4.0/58    | -             |
| Max. ambient temp.             | °C / F  | 45/113                | 45/113    | 45/113    | -             |
| Water discharge                |         | Manual                | Manual    | Manual    | Automatic     |
| Pressure control               |         | No                    | No        | No        | Yes           |

\*) The standard filters are designed for a max. temp. of 60 C / 140 F. Other conditions, please contact us.

### APPLICABLE FILTER INSERTS

| Type  | Application for |
|-------|-----------------|
| F:    | Low flow.       |
| BLAT: | High flow.      |

### CJCT™ Product Sheet

OIL MAINTENANCE

| COMPONENTS |                             |
|------------|-----------------------------|
| Item       | Part                        |
| 1          | Pump                        |
| 2          | Control box                 |
| 3          | Filter Insert               |
| 4          | O-ring                      |
| 5          | Stay bolt                   |
| 6          | Spring                      |
| 7          | Spring guide                |
| 8          | Nut for spring              |
| 9          | Pressure gauge              |
| 10         | Top nut                     |
| 11         | Vent screw                  |
| 12         | Filter housing              |
| 13         | Cover                       |
| 14         | Filter base                 |
| 15         | Coalescer element           |
| 16         | Water discharger, automatic |
| 17         | Floater                     |
| 18         | Solenoid valve              |
| 19         | Plug                        |
| 20         | Water discharger, manual    |
| 21         | Drain valve                 |
| 22         | Pressure switch             |
| A          | ø18, Oil inlet              |
| B          | ø18, Oil outlet             |
| C          | 1/4" BSP, Drain valve       |
| D          | 1/4" BSP, Vent              |
| F          | 1/4" BSP, Water outlet      |

