



CLEAN OIL
BRIGHT IDEAS

PTU1 27/54-108

CJC™ Filter Separator - DIESEL

CJC™ Product Sheet

APPLICATION

The PTU1 27/- series of CJC™ Filter Separators are used on diesel oils with a specific weight lower than that of water. The PTU1 27/54-108 is ideal for **separation of water, removal of particles and degradation products.**

FUNCTION

The filter pump draws oil 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 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 switch including automatic malfunction shut-down.

THE FILTER PUMP

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

FILTER INSERT

The CJC™ 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
- Automatic water discharger
- Pressure switch

FILTRATION ABILITY

- **Water Removal by Separation**
The CJC™ Filter Separator removes water from oil to very low levels. The efficiency of water removal depends on the oil type and temperature.
- **Particle Removal**
All CJC™ Filter Inserts have the following filtration degree:
 - 3 µm abs.: 98.7% of all solid particles > 3 µm
 - 0.8 µm nom: 50% of all solid particles > 0.8 µm are retained in each pass.**The dirt holding capacity** is 8-16 litres of evenly distributed solids.
- **Degradation Products**
Oxidation products, resin / sludge, and varnish are retained by the cellulose material, which will retain appr. 8-16 kgs of oil degradation products.

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



The CJC™ Filter Separator
PTU1 27/54 P-E2PW

TECHNICAL DATA

Model PTU1:		27/54	27/81	27/108	P/MZ-E2PW
Pump flow, per hour (std.)	ltr/gal	150 - 1260 / 40 - 333			-
Pump type		P / MZ			P / MZ
Pump inlet pressure, max.	bar/psi	0.5 / 7			0.5 / 7
Filter Inserts 27/27, aver.	pcs.	2	3	4	-
Power consumption, aver.	kW	0.25-0.75			0.4-1.0
Pressure drop, max.	bar/psi	1.8 / 26			-
Oil temperature, max. *)	°C / °F	60 / 140			-
Dirt holding capacity, app.	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, filter	bar/psi	4 / 58			-
Ambient temp., max.	°C / °F	40/104			-
Water discharge		Manual			Automatic
Pressure control		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.



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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

