

**CARDEV**

Oil Filtration and Coolant Handling Specialists



# SDUH350

***Removes Contaminants***

***Extends Oil Life***

***Reduces Component Wear***

***Removes all Water***

***Saves Machine Downtime***

***Reduces Oil Disposal Costs***

***Simple to Install & Use***

***Low Maintenance Costs***

***Accepts Input Pressures  
Of Up To 350bar***



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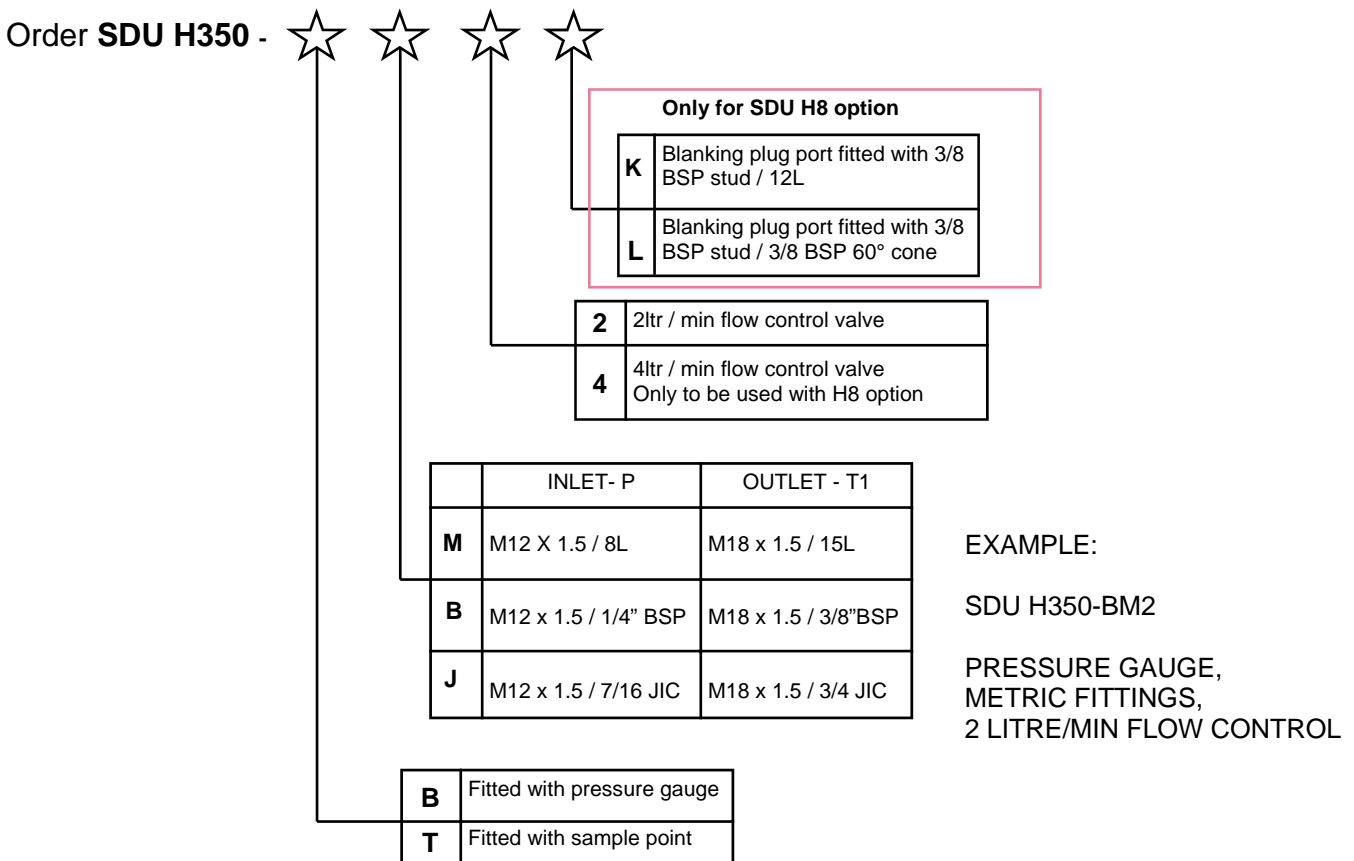


The SDU H350 is a by-pass hydraulic oil filter using an SDFC cartridge with built-in pressure reduction valve. The unit can accept between 5 & 350 bar inlet pressure and 0 - 0.5 bar back pressure, operating on systems of up to 400 litres capacity.

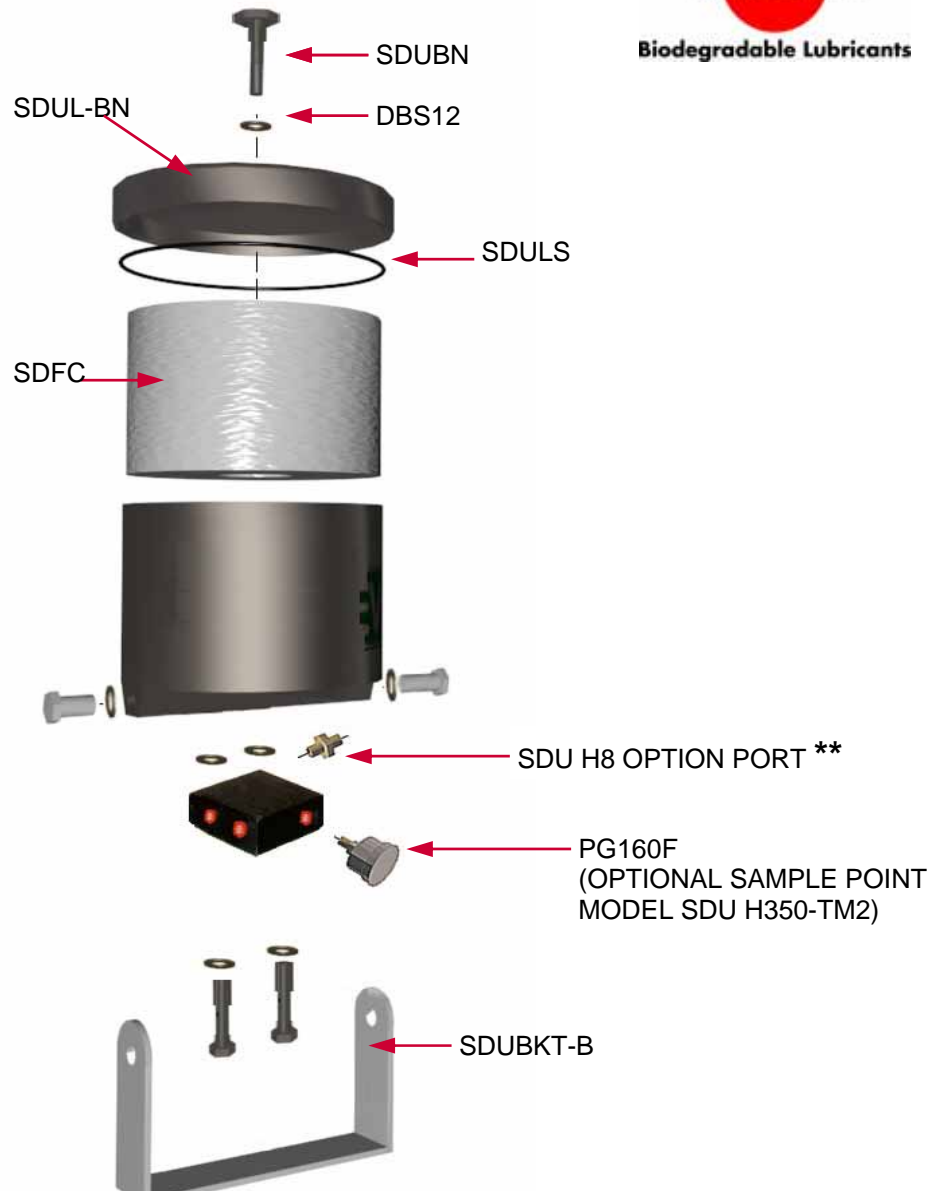
The system operates at 2 litres per minute and is controlled by a 3.5 bar pressure relief valve.

There is an option to increase the filtration capability by the addition of an SDU H8 unit, in these cases a 4ltr / min flow valve can be fitted.

**SDU H350 OPTIONS**



SDU H350—BM2



Note:

The SDU H350 housing and block are not provided separately as spares.

SDU H350-BM2 example

The **INLET** port P is tapped M12 x 1.5 mm and is fitted with:

M12 x 1.5 mm x 8L adaptor

The **OUTLET** port T1 is tapped M18 x 1.5 mm and is fitted with:

M18 x 1.5 mm x 15L adaptor

See options for alternative configurations.

\*\* To add on SDU H8, the SDU H8 Option Port above requires:

K. 3/8" BSP stud x 12L adaptor

L. 3/8" BSP stud x 3/8" BSP 60° Int. cone adaptor

## Introduction

The unit should be mounted close to the feed' preferably above the level of the oil tank and be accessible, to facilitate cartridge changes.

The return line is connected to the oil tank either directly or via a 'T' connector in an existing low pressure return line.

## Operating Pressures

The high pressure feed should not exceed 350 bar and ideally should be on a stable low pressure circuit such as a servo or cooling circuit, see Drawing M1127 and the back pressure on return line should not exceed 1 bar.

The purpose of the gauge on -B models is to indicate the working pressure through the filter, and should read between 1 and 3 bar for working conditions at normal operating temperatures.

Higher readings up to 5 bar (which includes the 1 bar back pressure) are acceptable on start-up but further increases must be avoided.

**Do not alter the return line fitting to accommodate small bore sizes. Keep return line short to avoid excessive back pressure.**

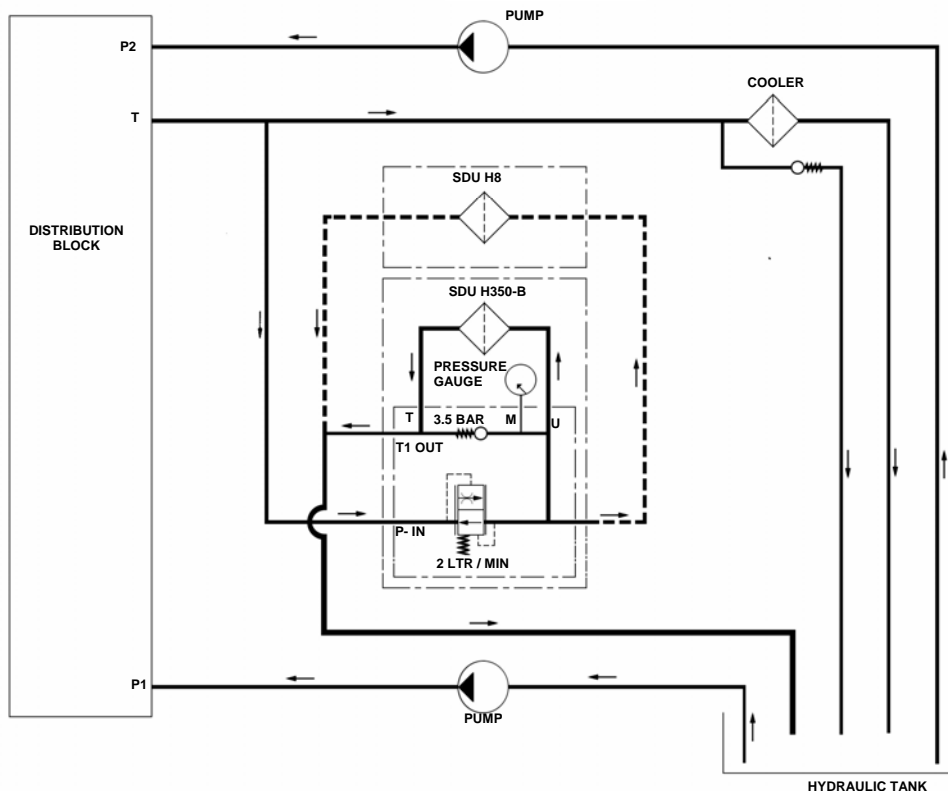
## Operating Flow

The system has a built-in, variable pressure flow control valve set at 2 litres per minute. This is based on ISO 46 grade oil at 40°C. Flow from the unit will vary dependent on input pressure, temperature and the base viscosity of the oil. The length of hoses used and the installation of non-return valves and T-junctions on the outlet will all have an effect on the pressures and therefore the flow rate through the unit. Customers are advised, therefore, that the flow rate quoted is a nominal figure to be used as a guide only. The performance of the cartridge will not alter under these varied operating conditions.

## Note

For hydraulic systems with large volume tanks in excess of the operating capability of the SDU H350 unit, it is possible to mount a second filter SDU H8 utilising the 3/8" blank port opposite the P "IN" port. In this instance a common return line may be used and the attached drawing M1127 shows a typical installation. An adaptor reference K or L must be ordered to enable this option to be installed.

DWG M1127

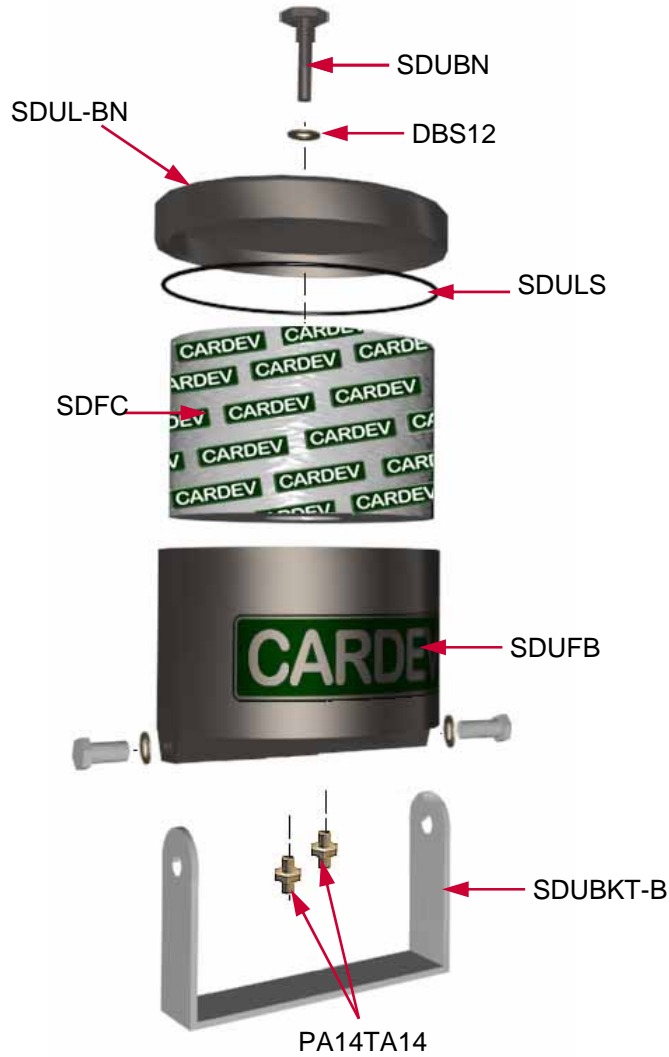


## Cartridge Change Intervals

Taking into consideration the high dirt and water retention capacity, the filter change intervals can be individually determined according to the contamination and volume of the oil. With a normal machine installation the recommended cartridge change frequency is 500 operating hours or 6 mths whichever comes first. Where the machine operates in adverse conditions this change frequency should be reduced to 250 operating hours. The maximum life of the cartridge is 6 months.

**SDU H350—H8 OPTION**

**SDU H8**



CODE	PARTS LIST DESCRIPTION
<b>SDUBN</b>	SUPER DUTY UNIT BLIND NUT
<b>SDUL-BN</b>	SUPER DUTY UNIT LID
<b>DBS12</b>	DOWTY WASHER 1/2"
<b>SDULS</b>	SUPER DUTY UNIT LID SEAL
<b>SDFC</b>	SUPER DUTY FILTER CARTRIDGE
<b>SDUFB</b>	SUPER DUTY UNIT
<b>SDUBKT-B</b>	SUPER DUTY UNIT BRACKET
<b>PA14TA14</b>	ADAPTORS
<b>PG160F</b>	PRESSURE GAUGE

If additional adaptors are required, the following part numbers should be ordered separately.

The **INLET** port P is tapped M12 x 1.5 mm to take either:

M.	M12 x 1.5 mm x 8L adaptor	Part No: PGEV8LM
B.	M12 x 1.5 mm x 1/4" BSP adaptor	Part No: BA12MM04BM
J.	M12 x 1.5 mm x 7/16" JIC adaptor	Part No: BA12MM07JM

The **OUTLET** port T1 is tapped M18 x 1.5 mm to take either:

M.	M18 x 1.5 mm x 15L adaptor	Part No: PGEV15LM
B.	M18 x 1.5 mm x 3/8" BSP adaptor	Part No: BA18MM06BM
J.	M18 x 1.5 mm X 3/4" JIC adaptor	Part No: BA18MM12JM

### **SDU H8 OPTION**

The **BLANKING PLUG** port on the SDU H350 block is tapped 3/8" BSP and takes one of the following adaptors to feed the optional SDU H8 (See DWG M1127):

K.	3/8" BSP stud x 12L adaptor	Part No: PGEV12LRFOA
L.	3/8" BSP stud x 3/8" BSP 60° Int. cone adaptor	Part No: BA06BM06BMDW

### **ATTENTION**

The INLET & OUTLET adaptors are sized to provide an optimum flow configuration through the unit. It is essential, therefore, that only the recommended adaptors are used and that the appropriate hoses related to the adaptor sizes are installed. Hose lengths should always be as short as possible, particularly on the OUTLET. It is also important that wherever non-return valves or T-adaptors are fitted in the OUTLET hose, that these are of a comparable bore to the hose specification used. Any departure from this could cause excess pressure to build up in the unit.

Type	Recommended Installation	Ltr/hr	Lid Bolt Torque	Filter element type	Dimensions		Connections		Weight (kg)
					Height (mm)	Dia (mm)	INLET	OUTLET	
SDU H350	By-pass with max. 350 bar inlet and 0.5 bar back pressure up to 400 litres	120	50 Nm	SDFC or SDFC-P	325	238	M12 x 1.5/8L	M18 x 1.5/15L	7.5
SDU H8	Tandem option for systems up to 600 litres	240 total	50 Nm		325	238	1/4" BSP	1/4" BSP	6