VDO Oil Pump

Technical Specs

Gearbox Oil Pump p/n 405.040/001/001

Leak Test

Leak proof up to:	3 Bar
Test medium:	Diesel CEC-RF-03-A-84 (Test Diesel)

Working temperature:	+100ºC to +150ºC
Storage temperature:	-40ºC to +150ºC
Material continued usageTemperature:	-40ºC to +150ºC

Vibration Test

Not carried-out

RF Suppression

The pump has RF suppression for:

LW
MW
KW
UKW

According to:	VDON 4.3232.1 up to 10 dB
Test medium:	Diesel CEC-RF-03-A-84 (Test Diesel)

Reference Specs

Drawing:	K 405.040/001/001
Gearbox Oil SAE 90	DIN 51 512
Diesel	CEC-RF-03-A-84
RF suppression	VDON 4.3232.1
Vibration Test	Not performed

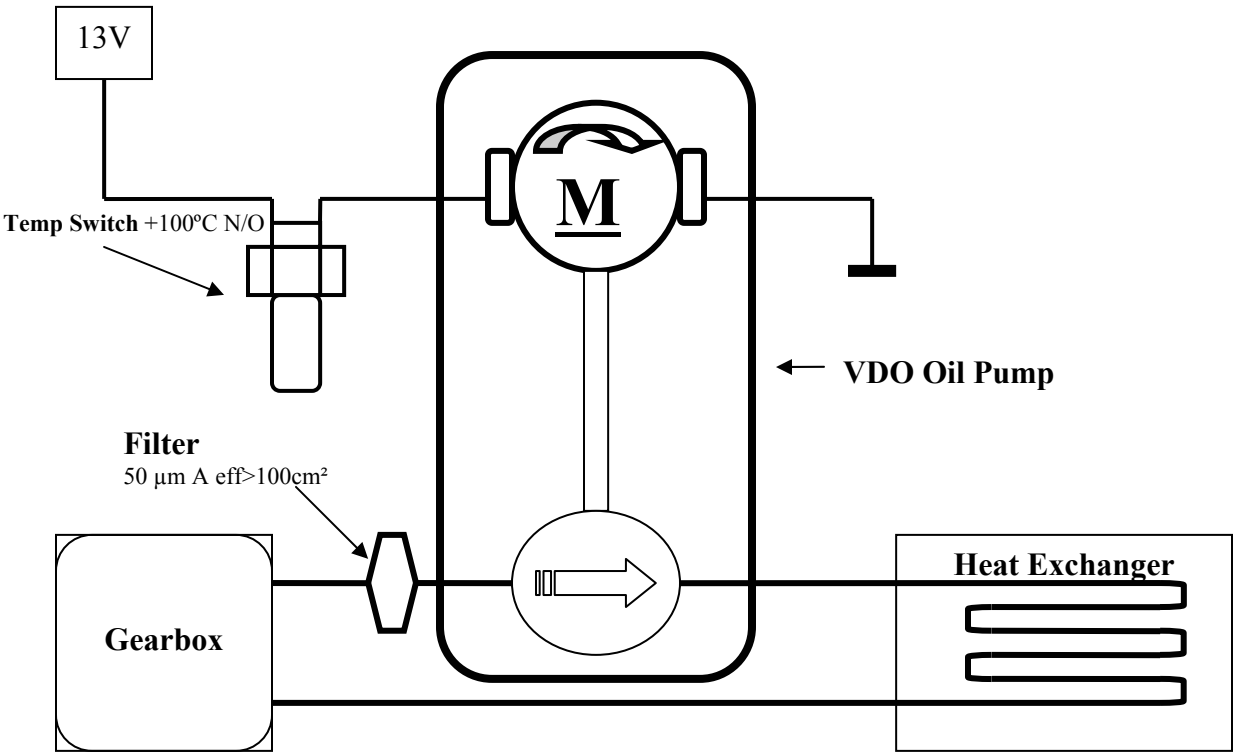
System Description

Electric pump designed to circulate gearbox oil through a cooling system.

Pump operation temperature +100ºC to +150ºC

Block diagram:

Transmission gearbox oil with oil cooler temperature switch



Inside Ø Heat exchanger + pipes: d = 6.5 mm

Length of feed pipe: c.a. = 1700 mm

Length of return pipe: c.a. = 1700 mm

Effective heat exchanger pipe length: c.a. = 1800 mm

Total = 5200 mm

Main Functions

When the gear box oil temp has reached 100ºC, the temp switch closes its contact and the electric pump starts the oil flow through the heat exchanger to prevent overheating.

Pump Specs

Hydrostatic gear pump with oil immersed motor and integrated RF suppression.

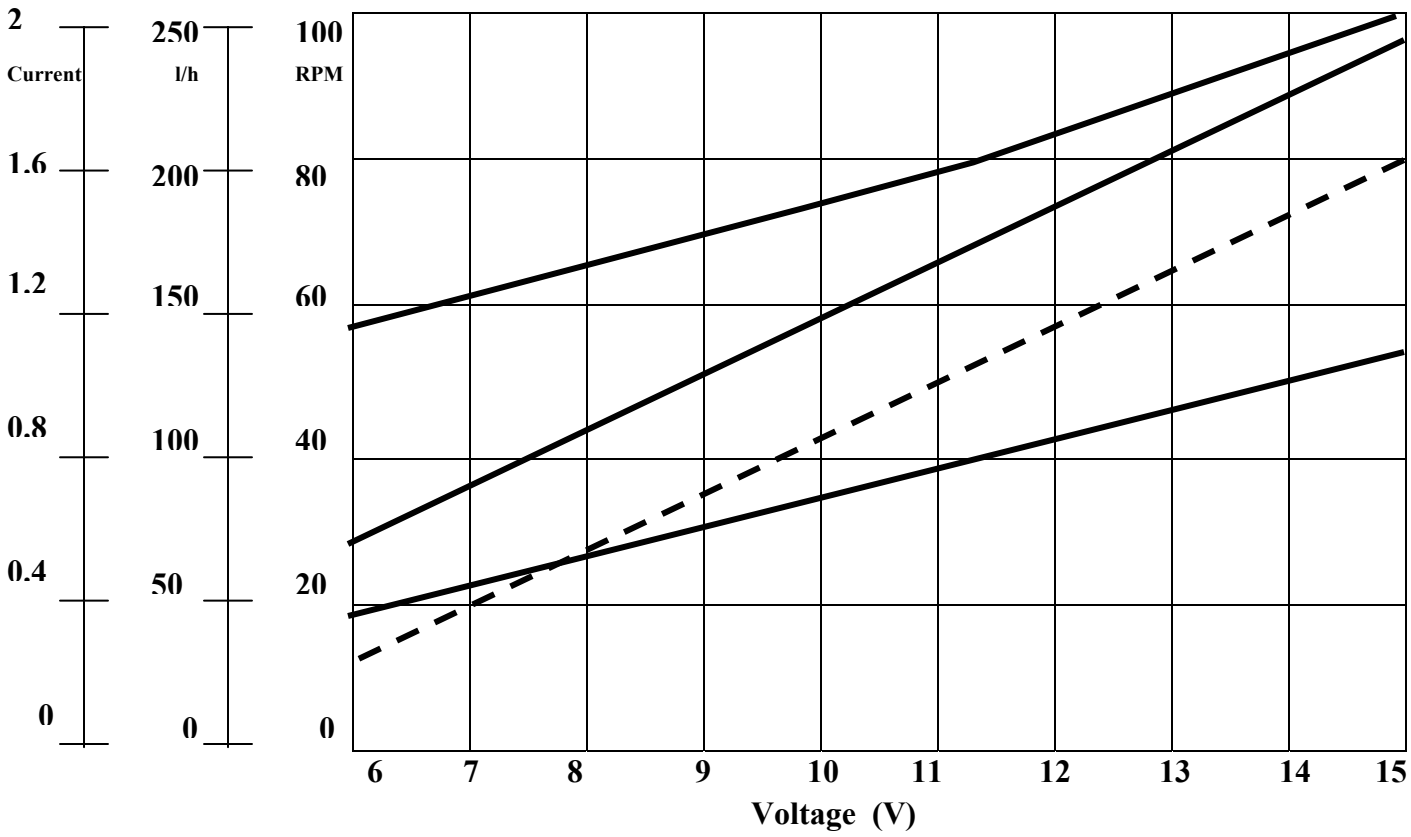
Electrical Specs

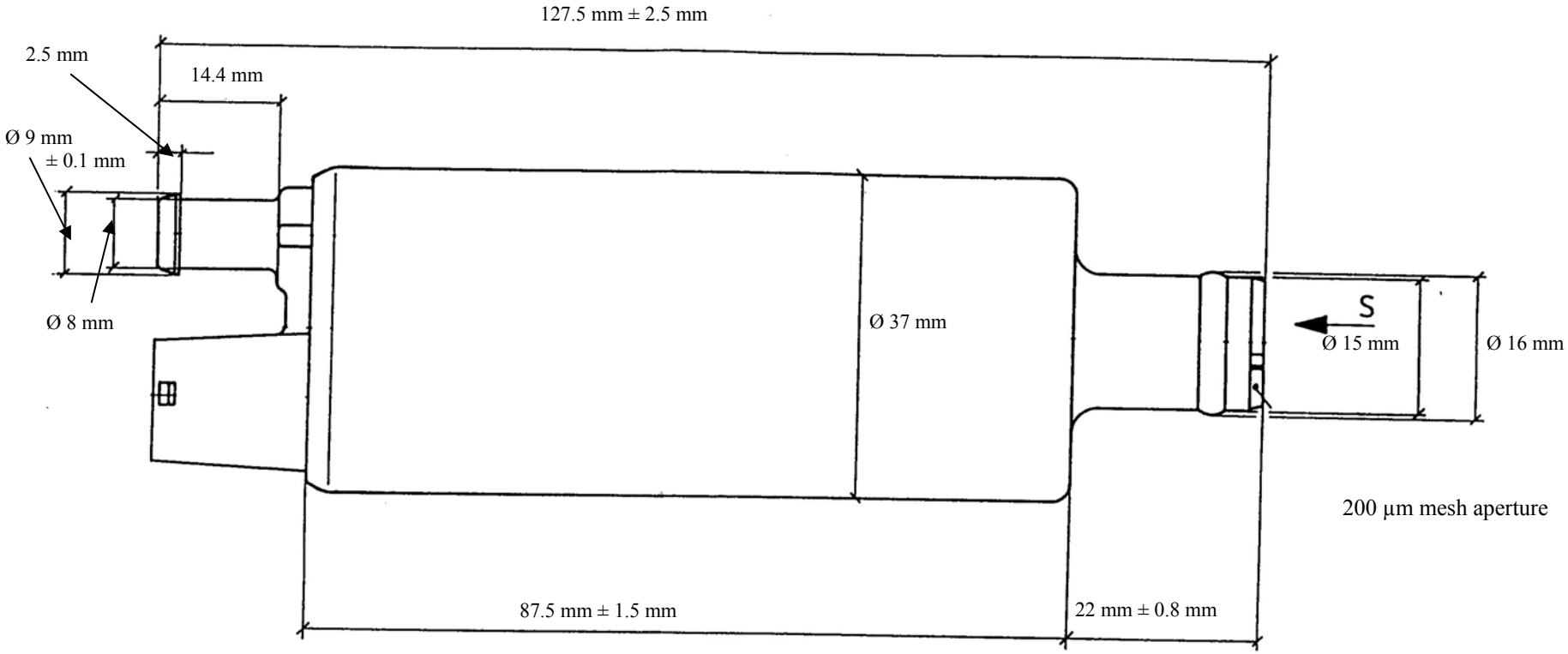
Test Voltage	13 V ± 0.1V
Operating Voltage	6 – 15V
Over-voltage Test	16.5 V for 1 hour
	20 V for 2 minutes

Test Values

The viscosity test at +20ºC equals that of a gearbox oil SAE 90 at +150ºC

Test	Unit	Value
Voltage	V	13 V ± 0.1V
Temperature	ºC	20 ±5
Pressure	Bar	0.5
Volume	l/h	> 160
Current	A	< 2.5
RPM	RPM	4600




127.5 mm ± 2.5 mm
2.5 mm
14.4 mm
Ø 9 mm
± 0.1 mm
Ø 8 mm
Ø 37 mm
S
Ø 15 mm
Ø 16 mm
200 µm mesh aperture
87.5 mm ± 1.5 mm
22 mm ± 0.8 mm