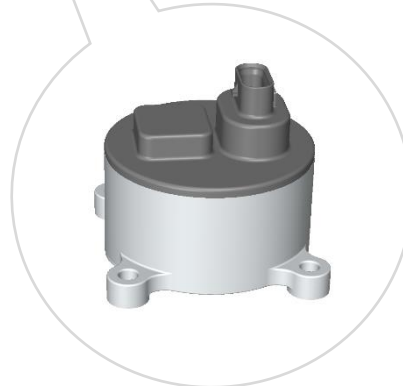


High Precision Electric Oil Pump



May. 2024

eOP (cooling and lubricating) introduction

KIEP

(Patent File No. 202311034365.1)

Class	9-16V 300W
Weight	920g
Pressure	200KPa
Flow Rate	30L/min



QIEP

(Patent File No. 202311608228.4)

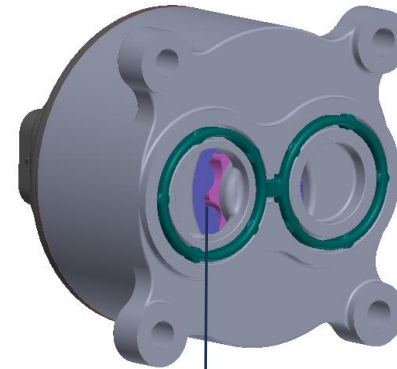
Class	9-16V 120W
Weight	570g
Pressure	150KPa
Flow Rate	15L/min



Next generation Electrical Oil Pump - King fisher

eMP (electric Motorcycle oil Pump) specification

- Working and Oil temperature: -40 ~ 135°C
- Flow rate: 3 ~ 5Lpm@ 1~3bar
- Voltage : 9 ~ 16V
- LIN communication
- Speed, Pressure and Volume control
- Temperature measurement accuracy +/- 0.3°C
- NVH < 50dB



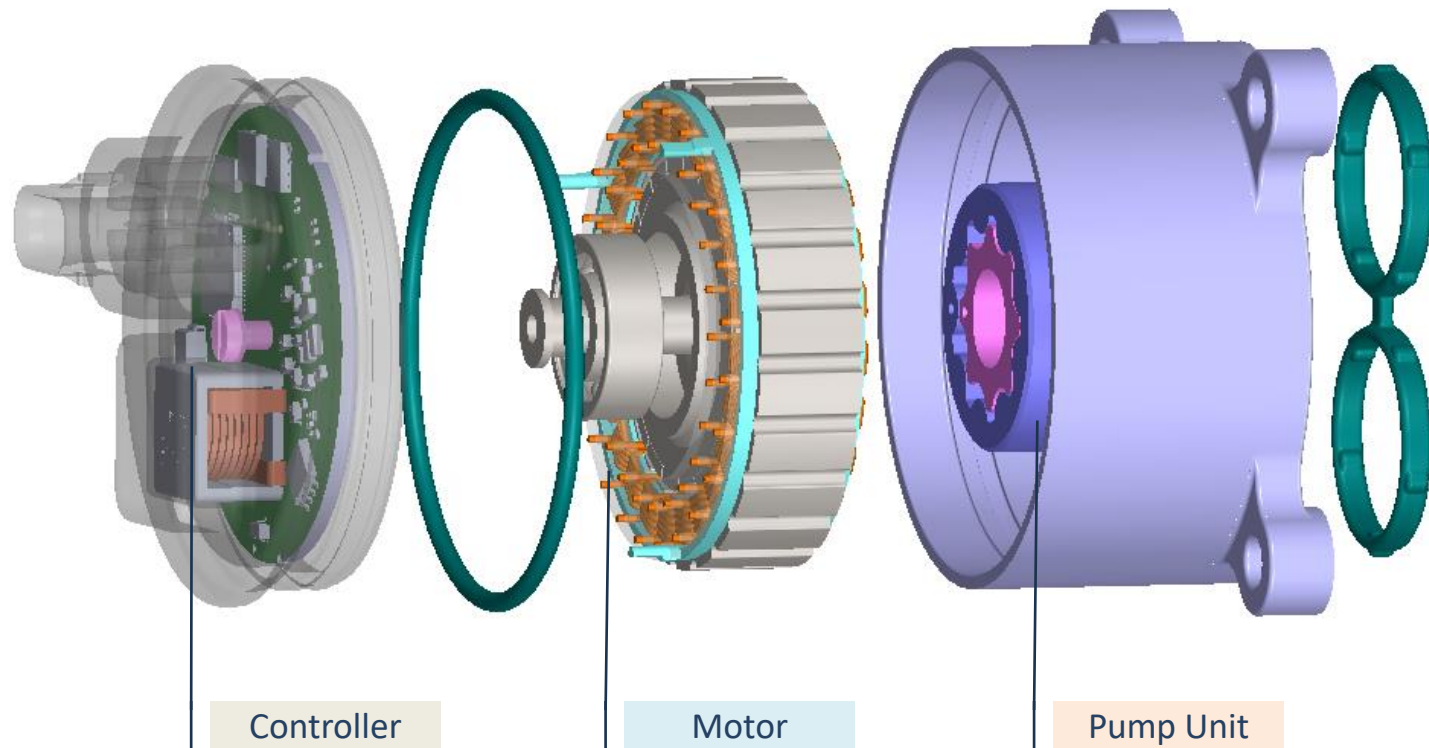
Pump Unit integrated
inside the motor rotor

[US patent application number: 18/650,258](#)

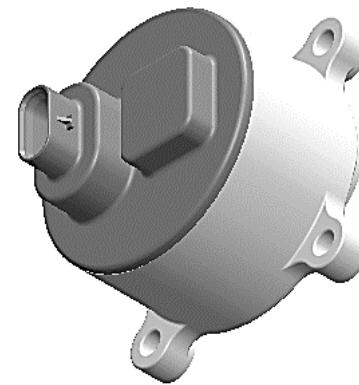
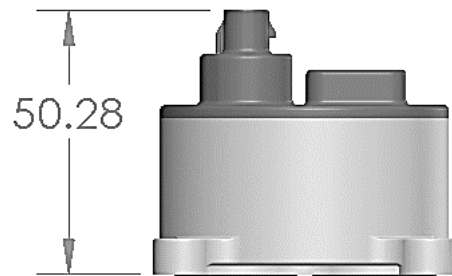
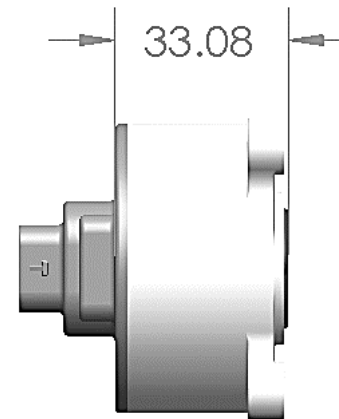
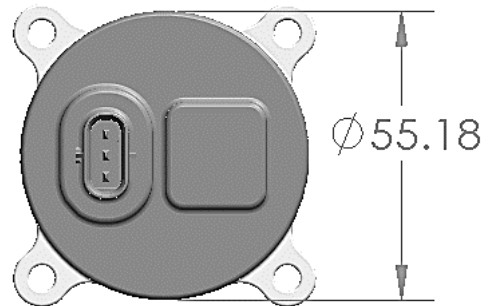
[China patent application number: 202410535651.4](#)

eMP system layout

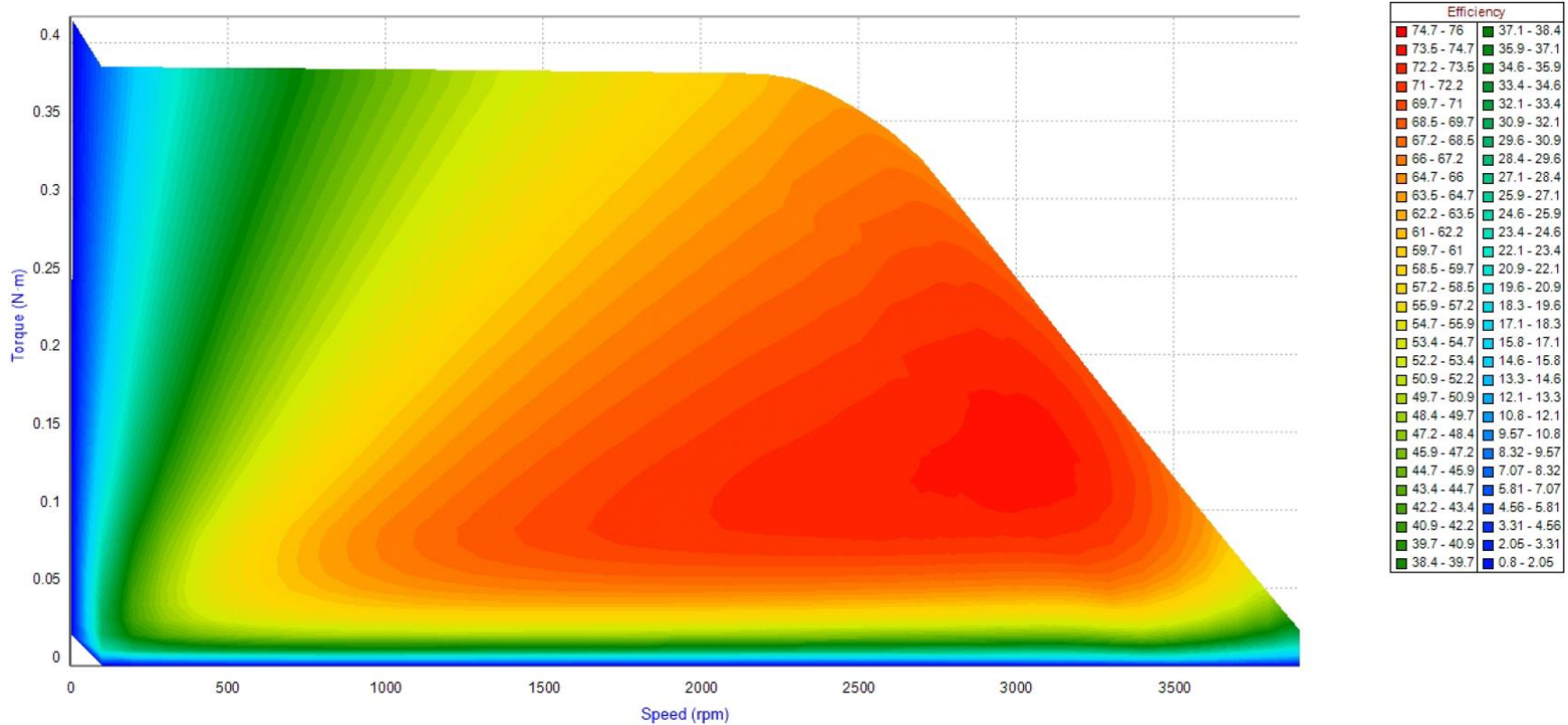
Gerotor Pump displacement: 1.3cc/rev (8/9 gear configuration)



eMP Weight : < 250g



Performance Map of 50mm diameter BLDC motor



Motor BEMF and cogging torque simulations

