

# AXM3

## PRODUCT DATA SHEET

### Overview

With unmatched continuous power and torque density, our next-generation axial flux technology is the best choice for the automotive, marine, heavy machinery, and aerospace EVs of the future.

### Why Beyond Motors?

#### 1 SUPERIOR STRENGTH AND DURABILITY

Engineered to cope with high mechanical loads and work in the most robust applications.

#### 2 UNMATCHABLE CONTINUOUS POWER DENSITY

The best continuous power-to-weight ratio on the market.

#### 3 PATENT PENDING WATER COOLING SYSTEM

High heat extraction from the motor enables high efficiency, high continuous power and torque.

#### 4 STACKABLE DESIGN FOR UP TO 3 FULL MOTORS

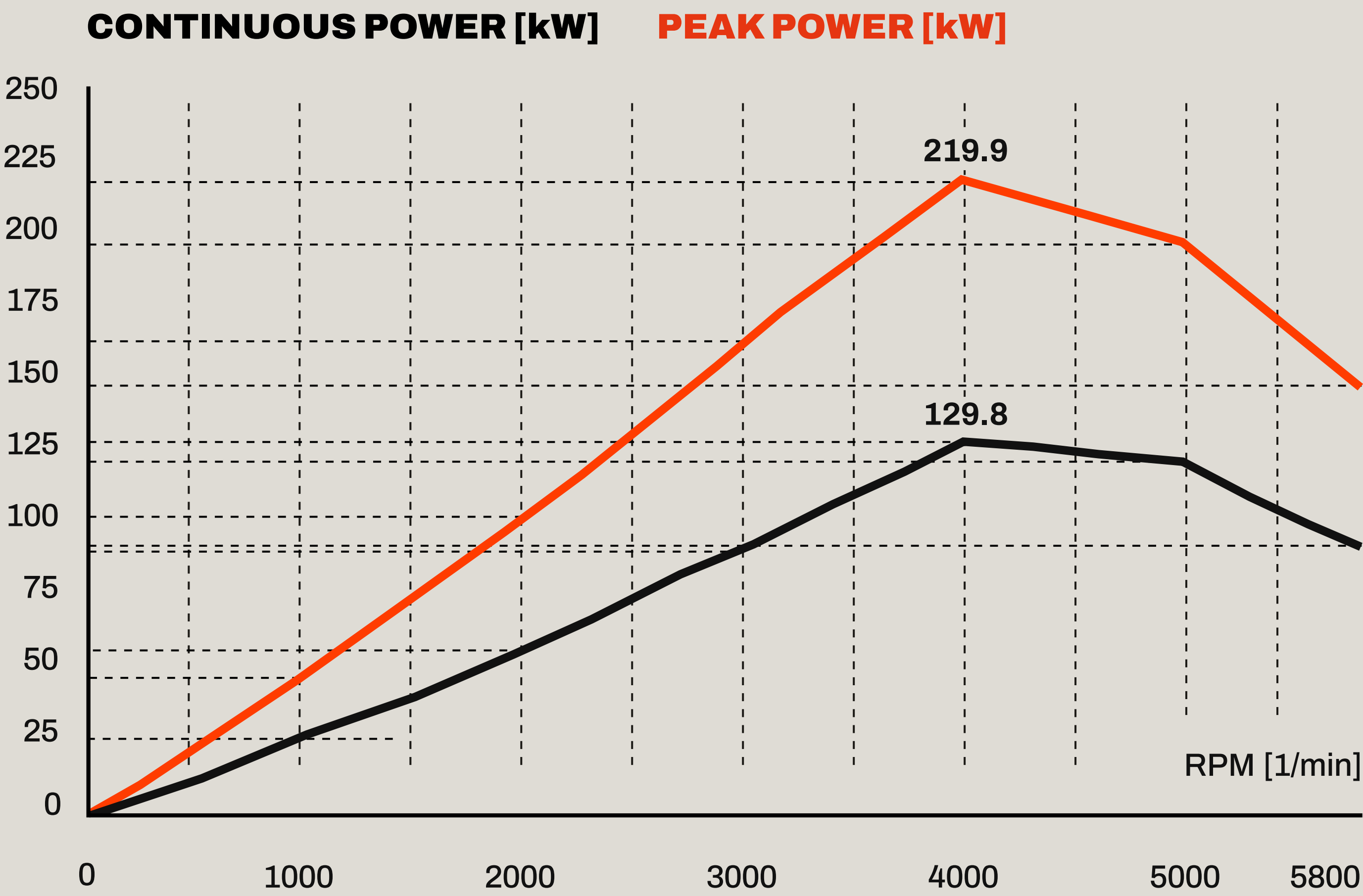
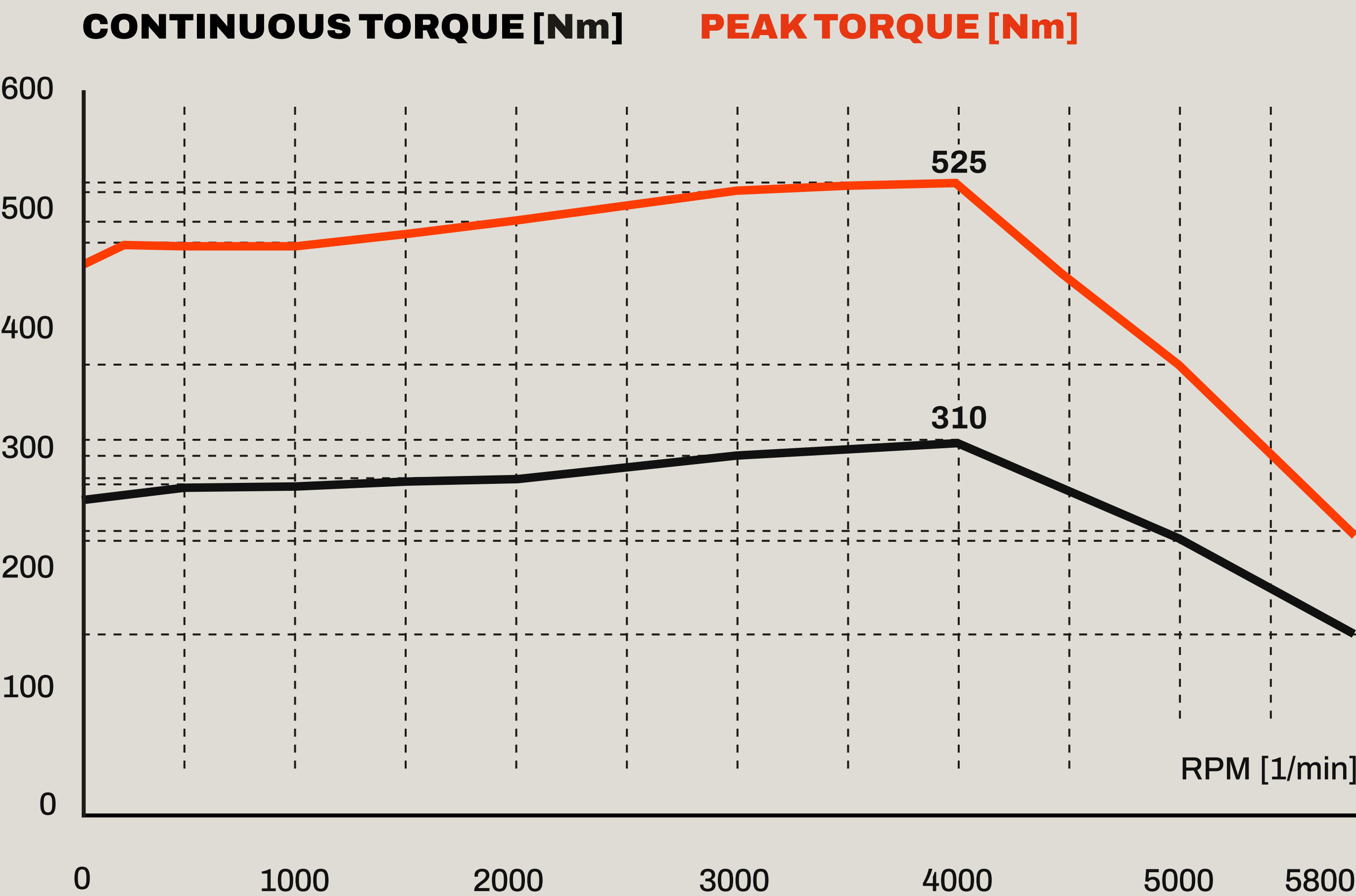
Motor design offers a quick and simple solution to multiply the power up to 3 times with the same diameter.



Key Data Points

AXM3

Peak power	220 kW
Continuous power	130 kW
Peak torque	525 Nm
Continuous torque	310 Nm
Mass	27 kg
Stator cooling	Water cooling
Maximum speed	5800 RPM
Stacking option	Up to 3



All motors can be made with redundancy option - 2xUVW phase connectors. Phase connectors can be cable lugs (standard option) or EMI IP67 Amphenol connectors (additional option).

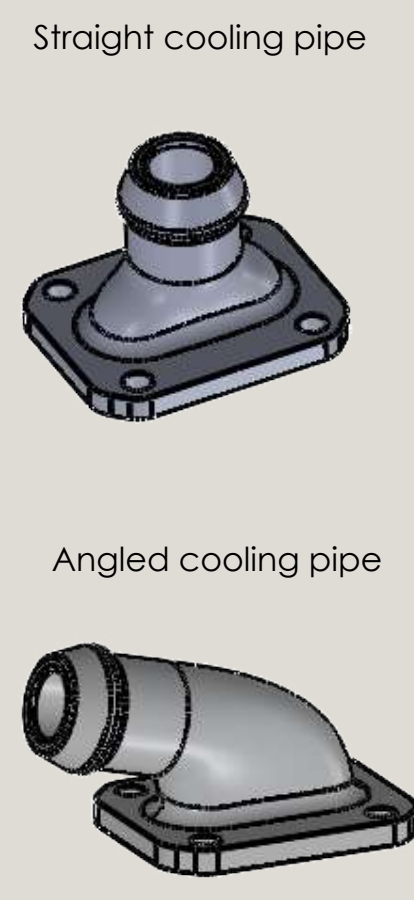
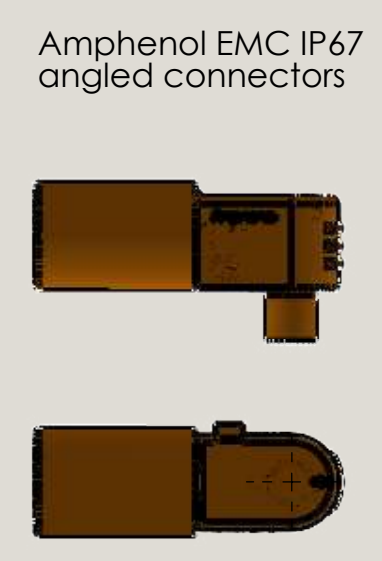
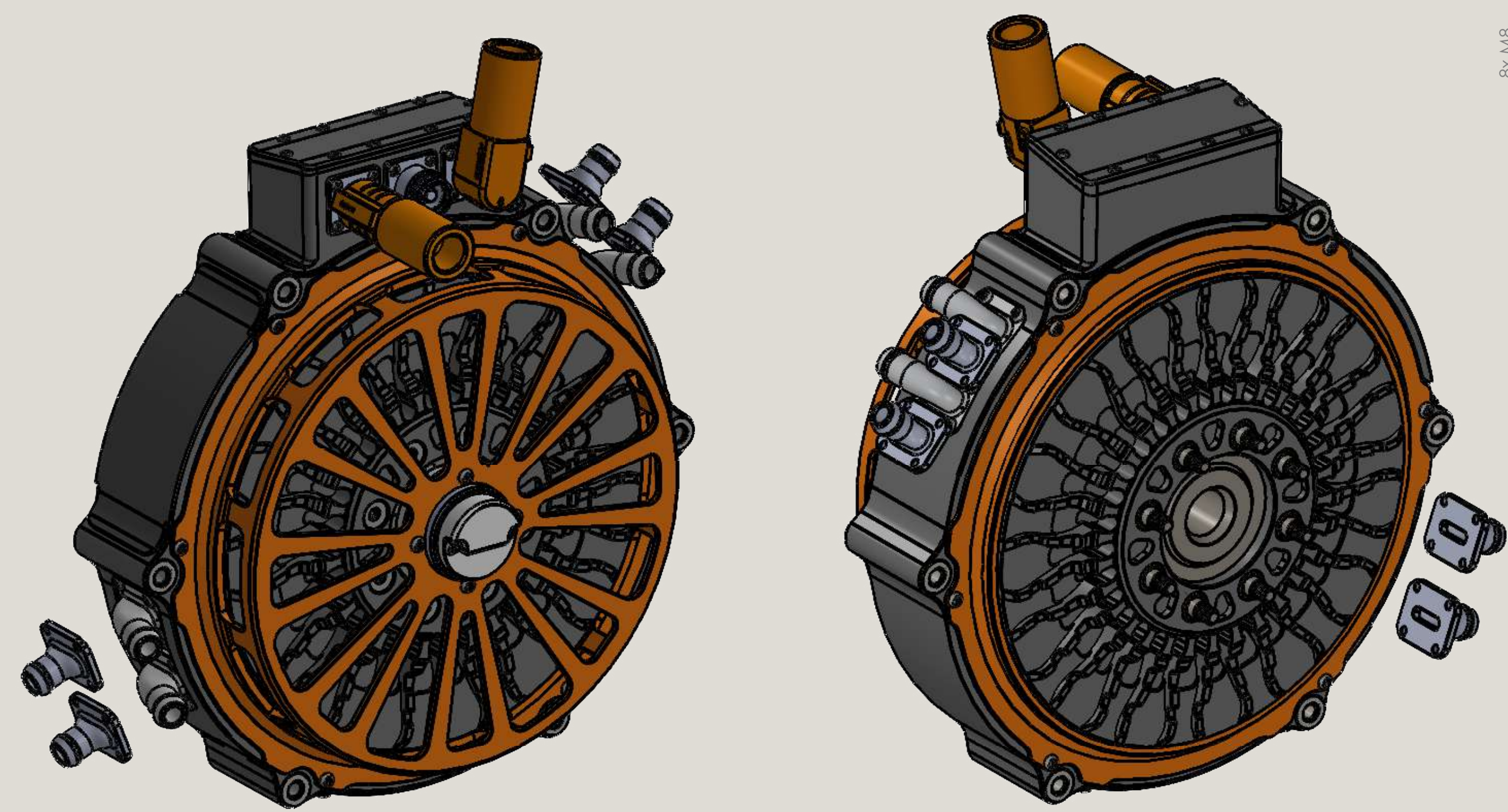
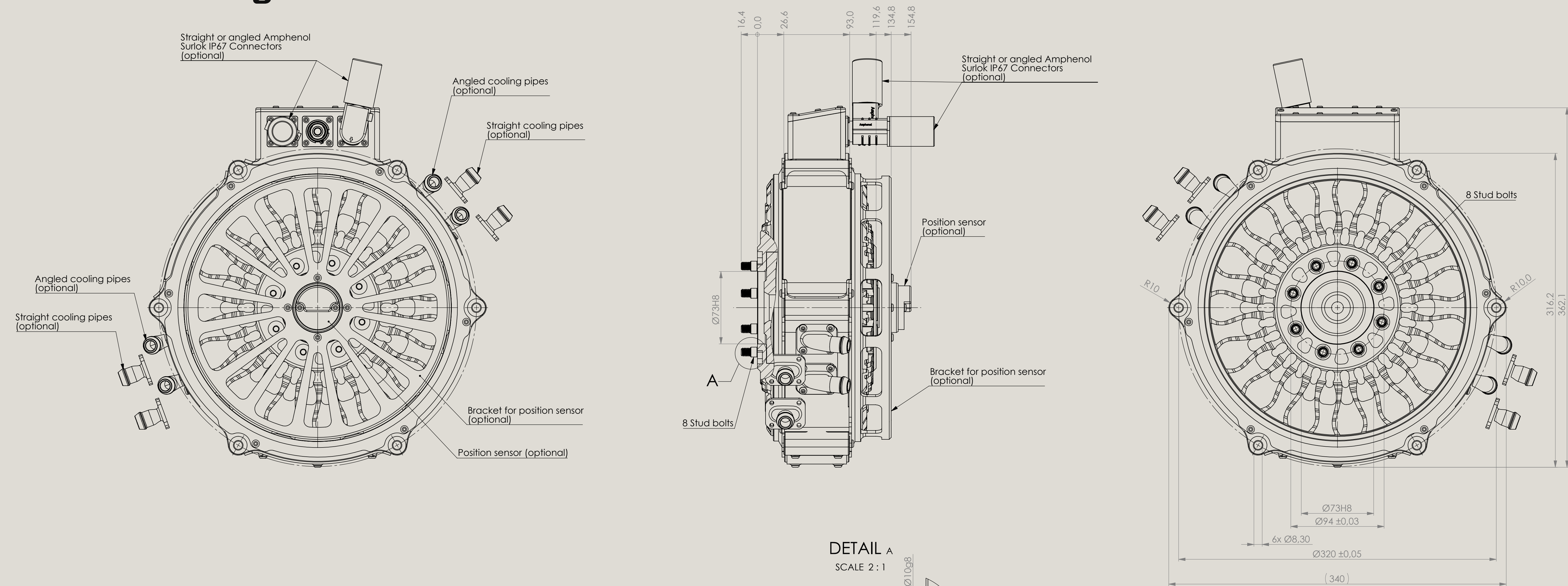
Extended Data Sheet

AXM3

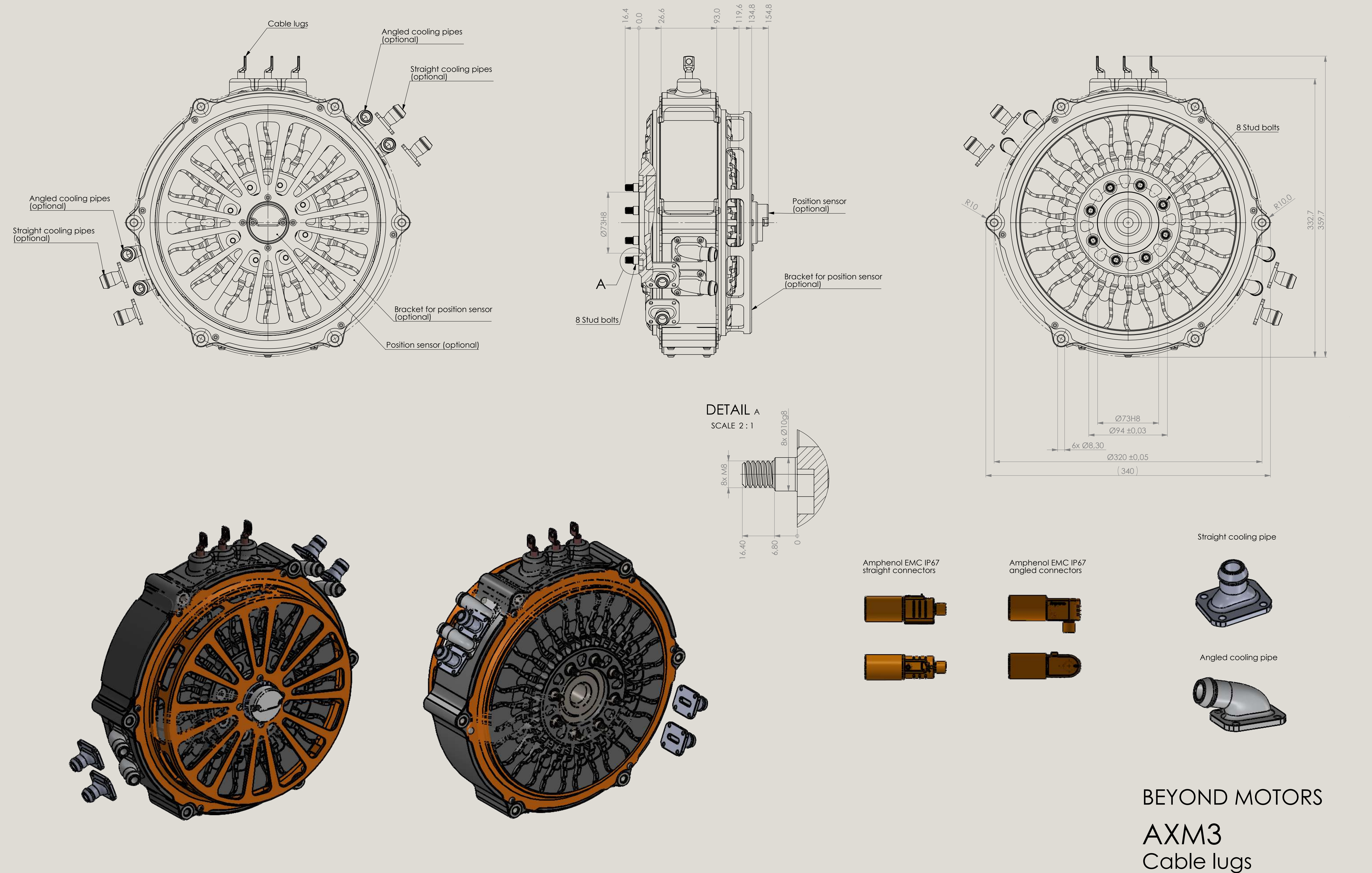
Winding type	HIGH Voltage (800Vdc)	MEDIUM Voltage (550Vdc)	LOW Voltage (400Vdc)
Peak power	220 kW	220 kW	220 kW
Continuous power	130 kW	130 kW	130 kW
Peak torque	525 Nm	525 Nm	525 Nm
Continuous torque	310 Nm	310 Nm	310 Nm
Maximum motor speed	5800 RPM	5800 RPM	5800 RPM
Continuous motor speed	4000 RPM	4000 RPM	4000 RPM
Weight	27 kg	27 kg	27 kg
Kv at no load	8.3	12	16.3
Kv at continuous torque	6.5	9.5	12.9
Kv at peak torque	5.8	8.4	11.45
Torque constant	1,22 Nm/Arms	0,84 Nm/Arms	0,62 Nm/Arms
Motor type	3-phase AC PM Nm/Arms	3-phase AC PM Nm/Arms	3-phase AC PM Nm/Arms



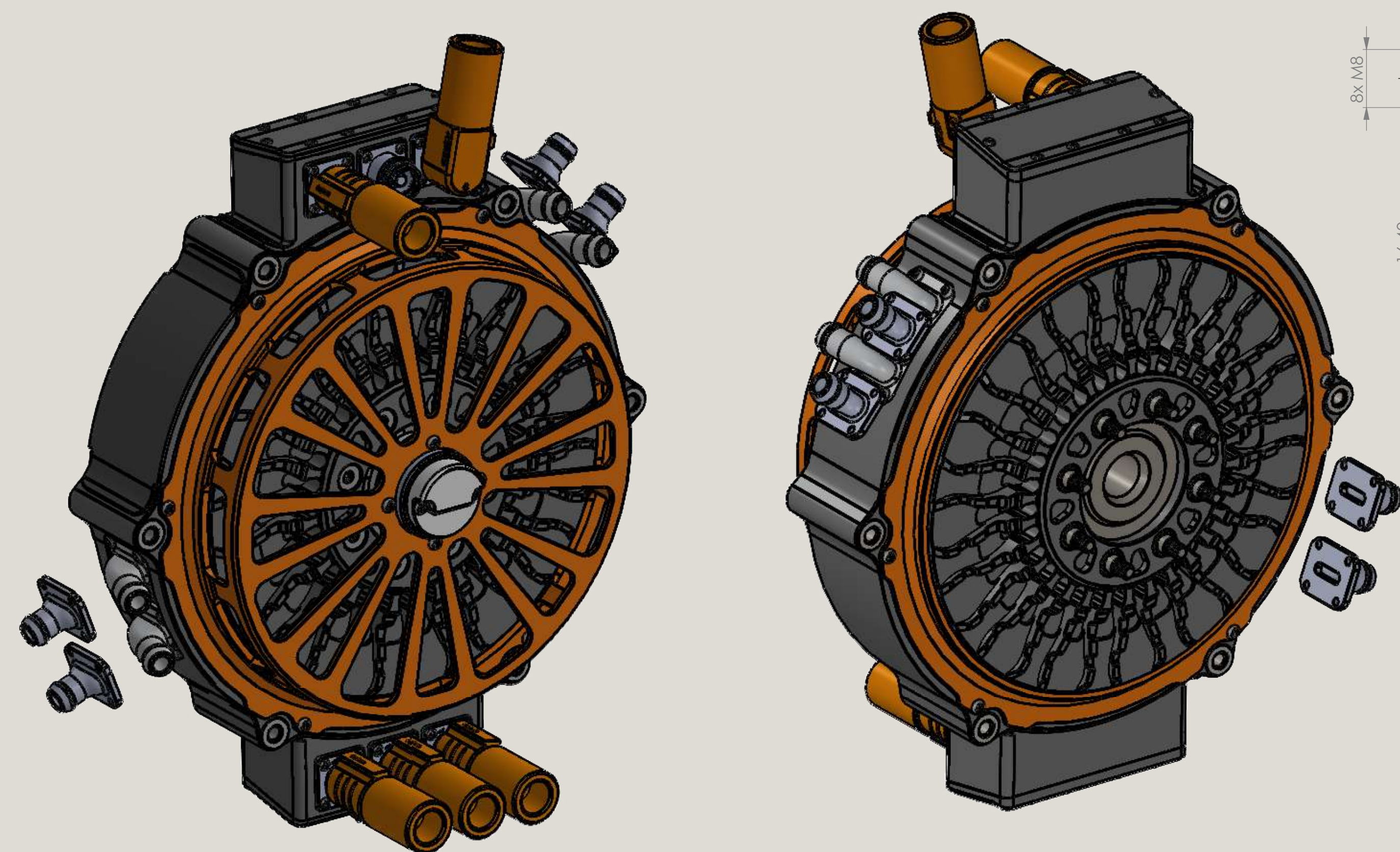
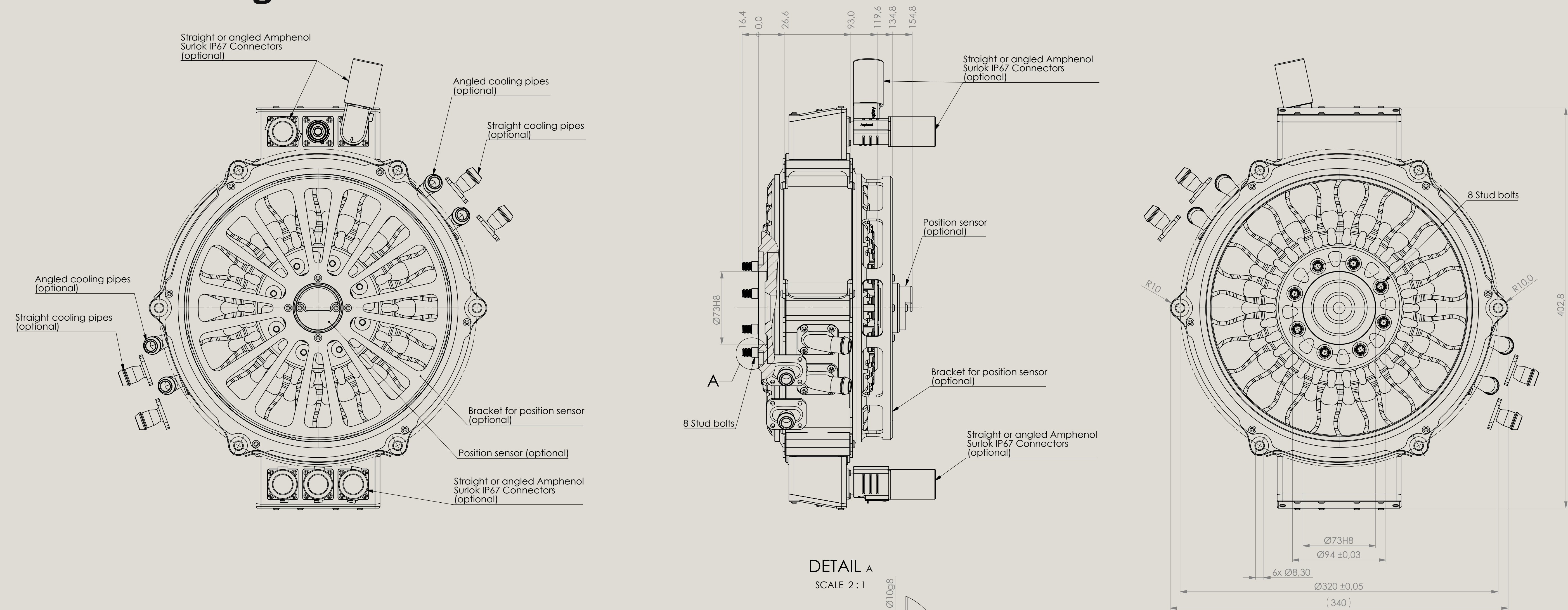




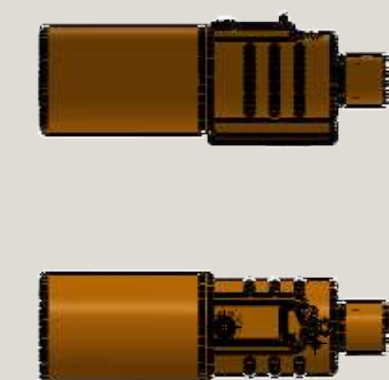




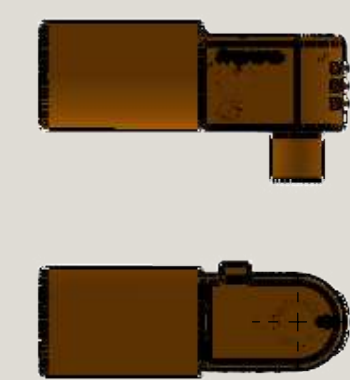




Amphenol EMC IP67 straight connectors



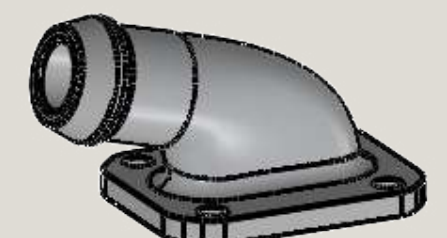
Amphenol EMC IP67 angled connectors



Straight cooling pipe

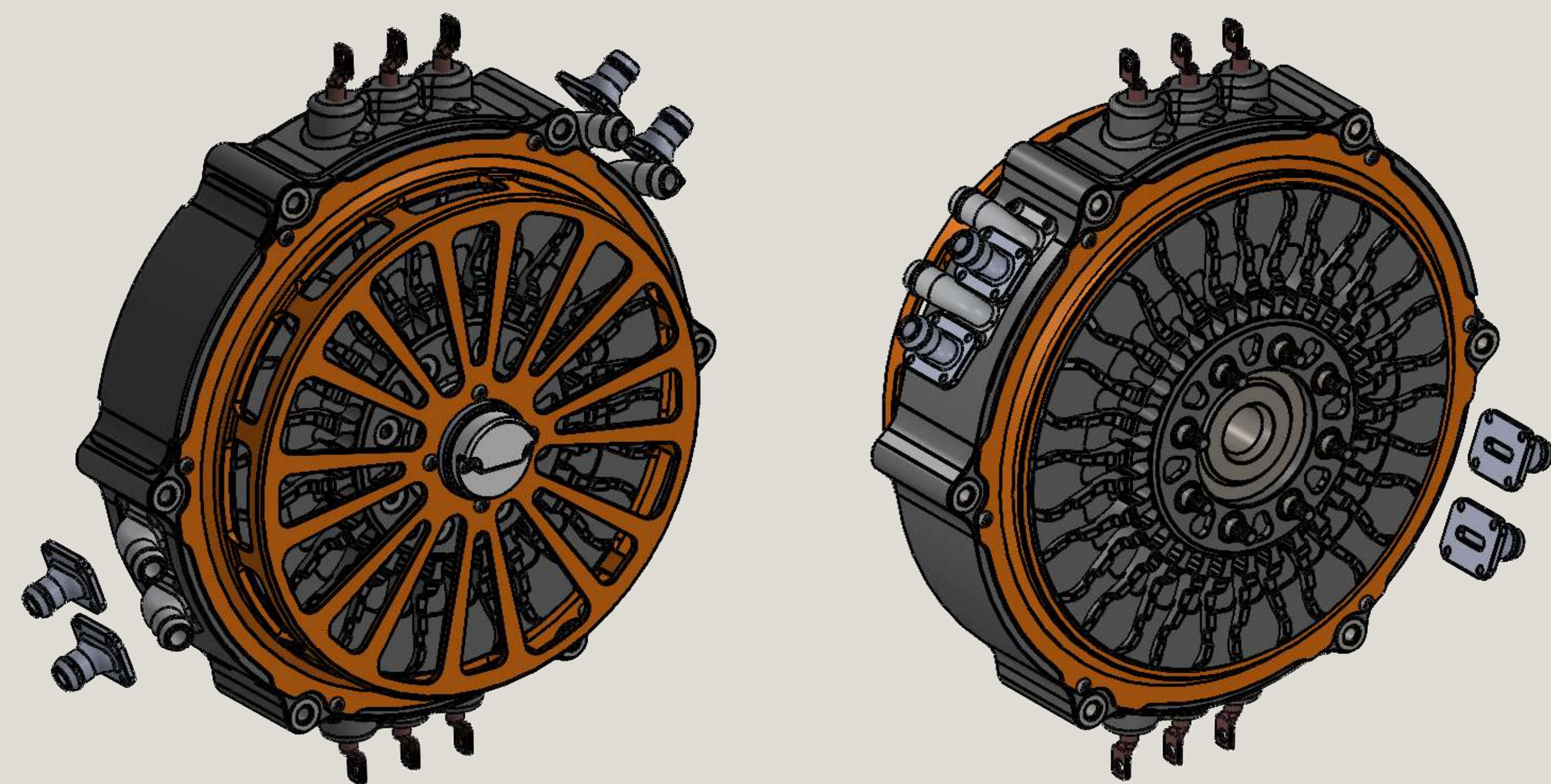
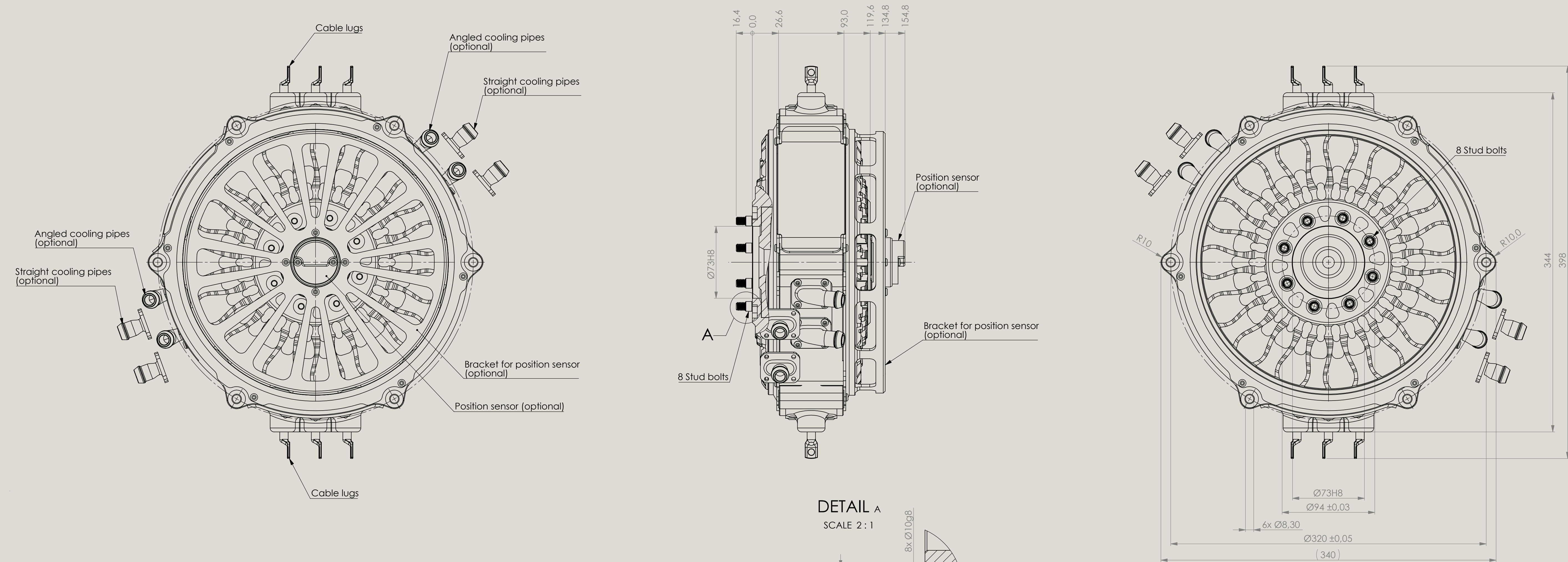


Angled cooling pipe

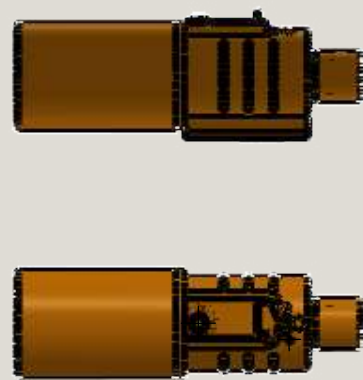


BEYOND MOTORS  
AXM3  
2xUVW

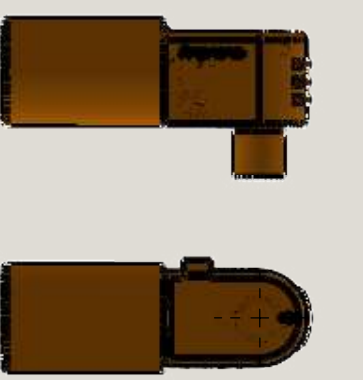




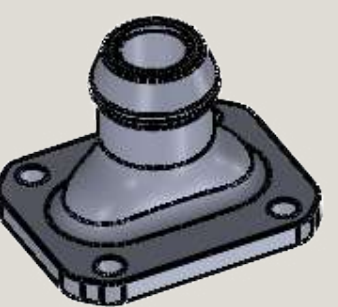
Amphenol EMC IP67 straight connectors



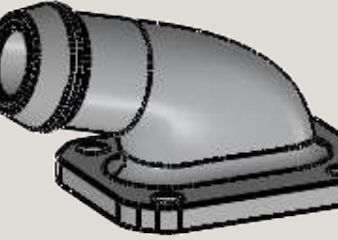
Amphenol EMC IP67 angled connectors



Straight cooling pipe



Angled cooling pipe



BEYOND MOTORS  
AXM3  
Cable lugs 2xUVW



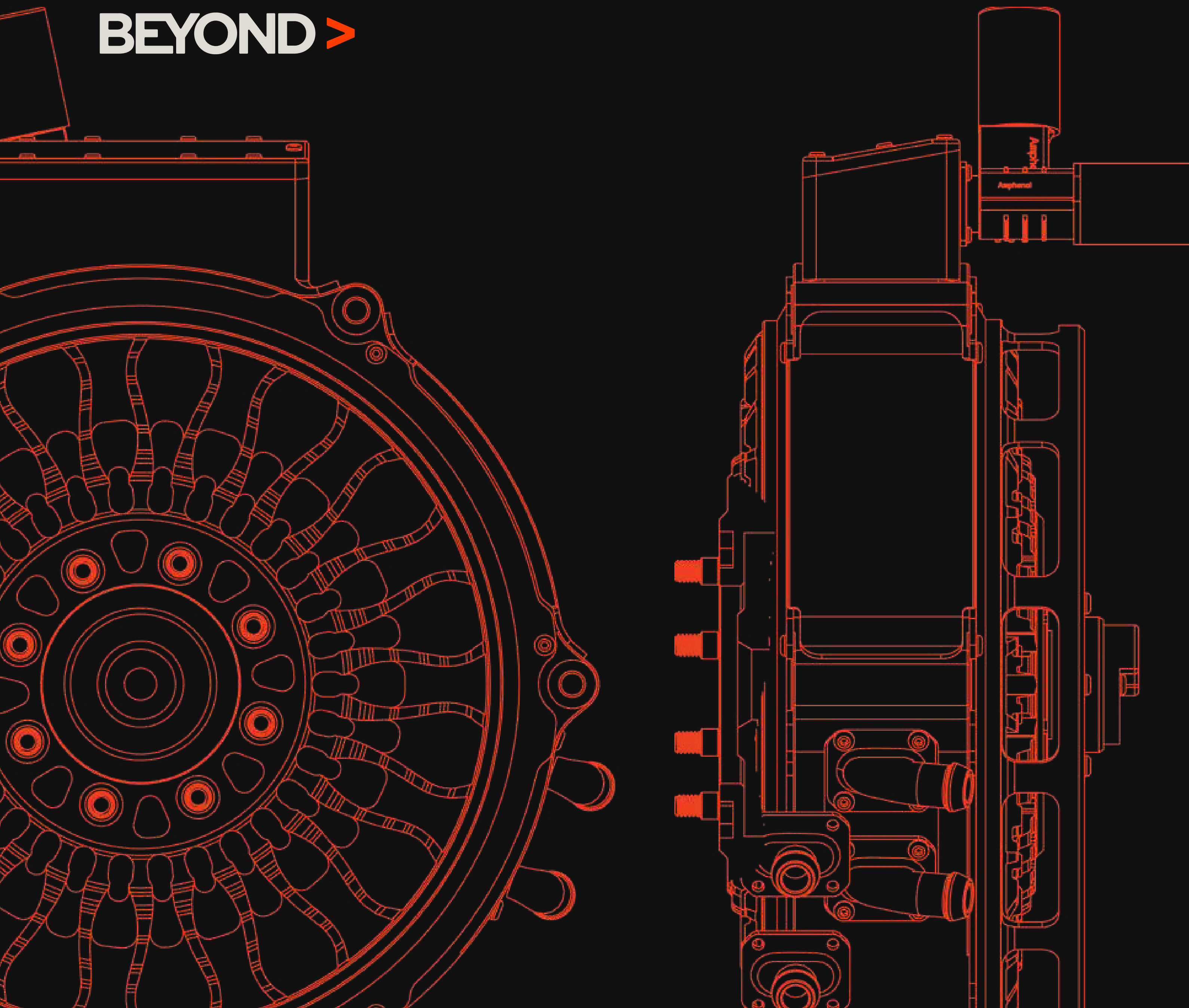
# NEED MORE INFORMATION?

For additional product information or other questions, please contact us at [info@beyondmotors.io](mailto:info@beyondmotors.io) or schedule a call with us through the [following link](#).

**BEYONDMOTORS.IO**

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**BEYOND >**



## Other Models

### AXM2

P<sub>peak</sub> **130 kW**

P<sub>cont</sub> **75 kW**

Mass **14,5 kg**

[See full Data Sheet →](#)



### AXM4

P<sub>peak</sub> **430 kW**

P<sub>cont</sub> **230 kW**

Mass **48 kg**

[See full Data Sheet →](#)



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