

# A X I M A

## 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.

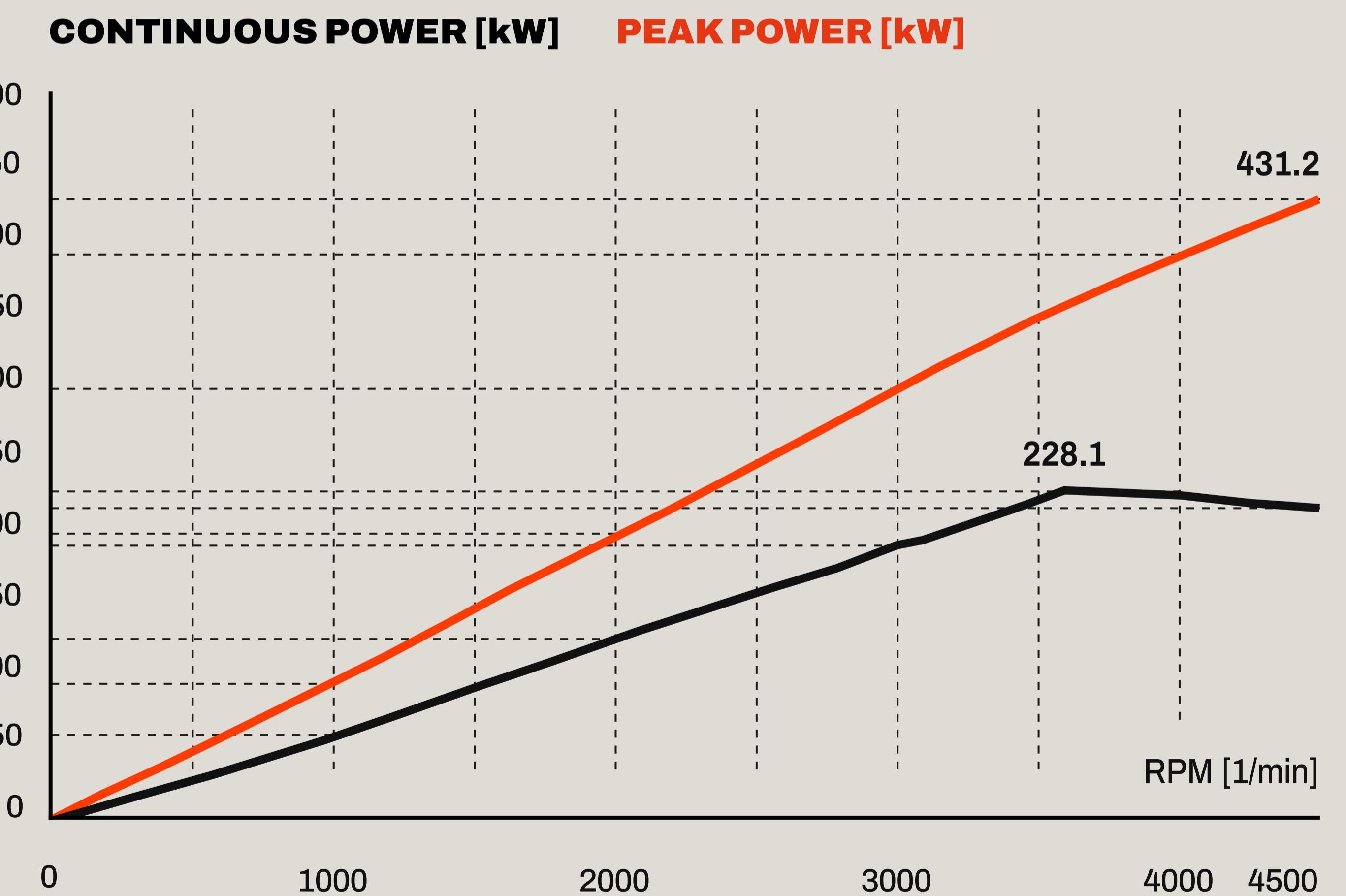
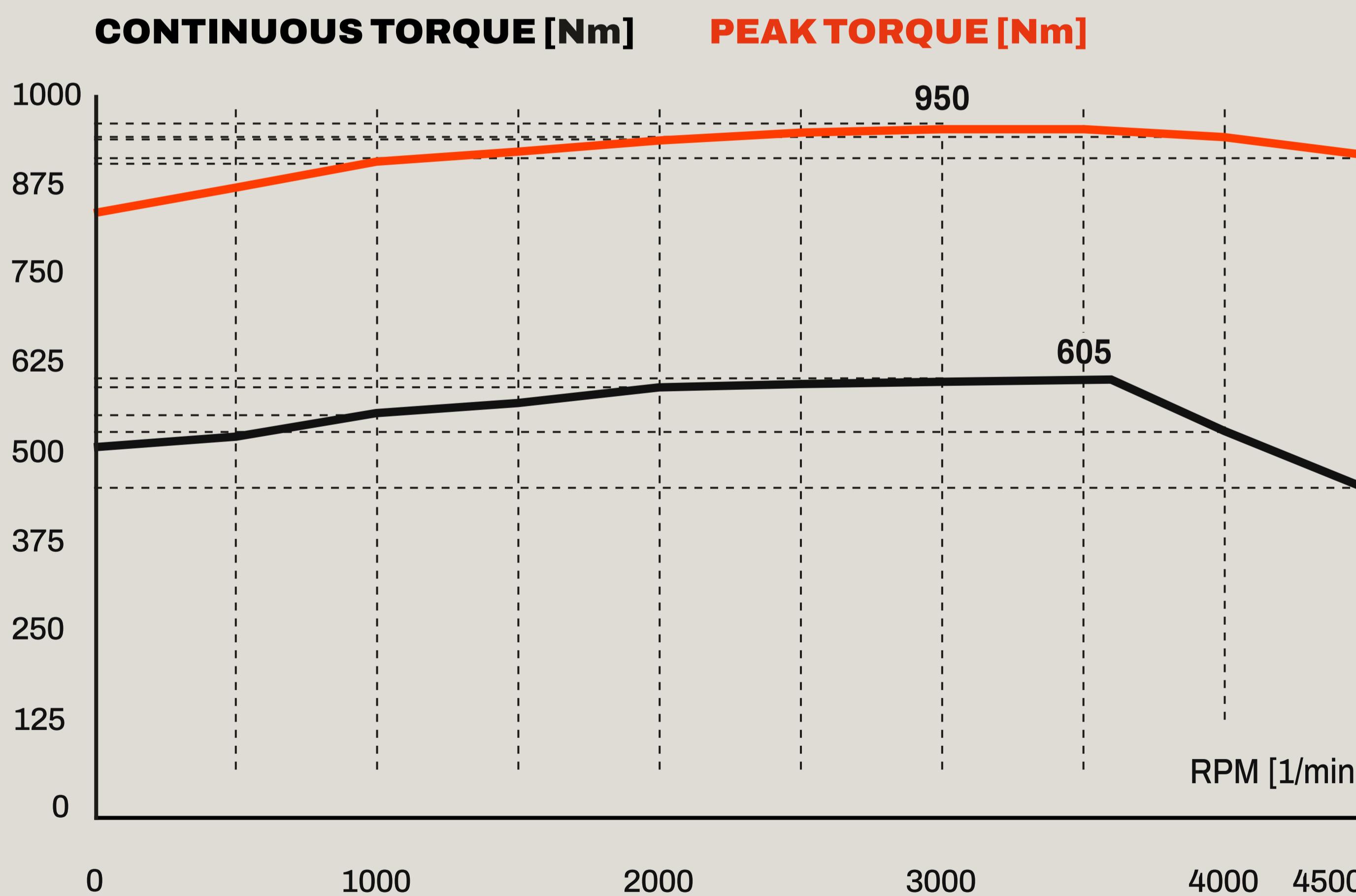


BEYOND >

## Key Data Points

**AXM4**

Peak power	<b>430 kW</b>
Continuous power	<b>230 kW</b>
Peak torque	<b>950 Nm</b>
Continuous torque	<b>600 Nm</b>
Mass	<b>48 kg</b>
Stator cooling	<b>Water cooling</b>
Maximum speed	<b>4500 RPM</b>
Stacking option	<b>Up to 3</b>



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

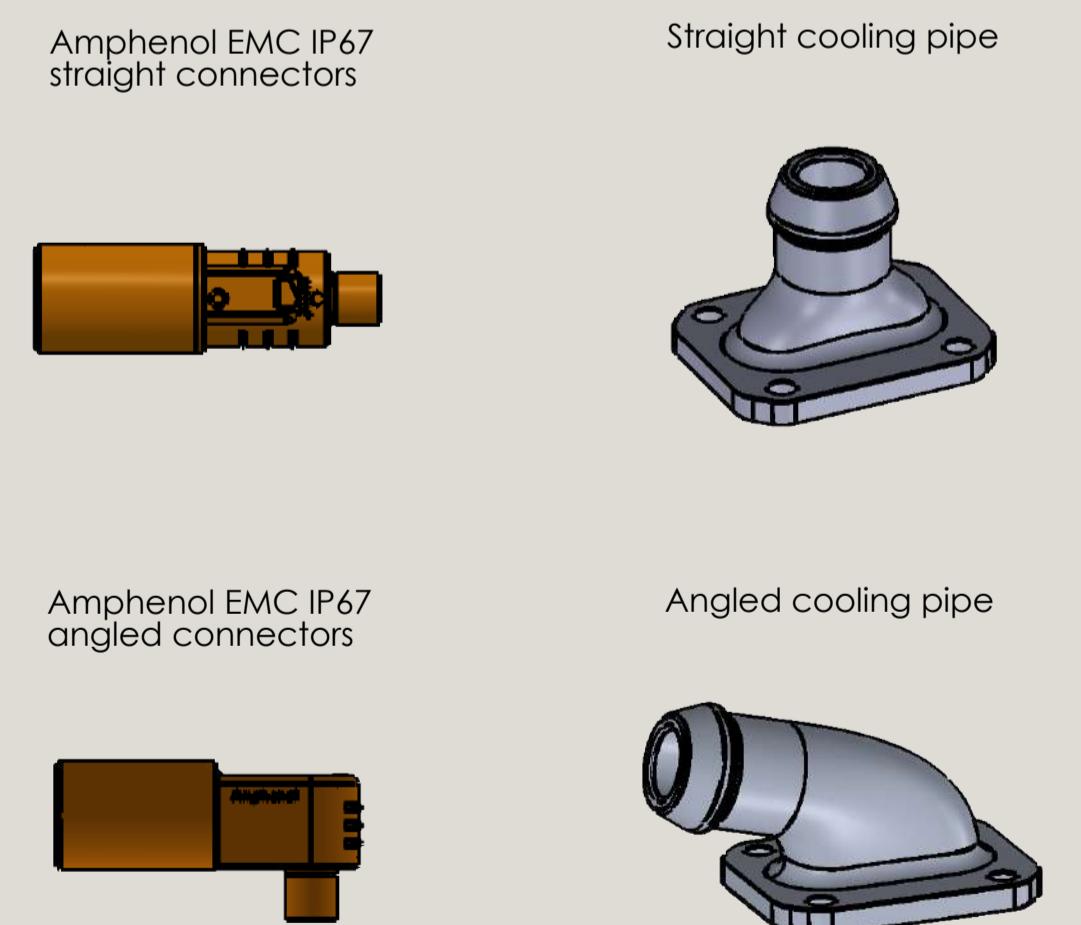
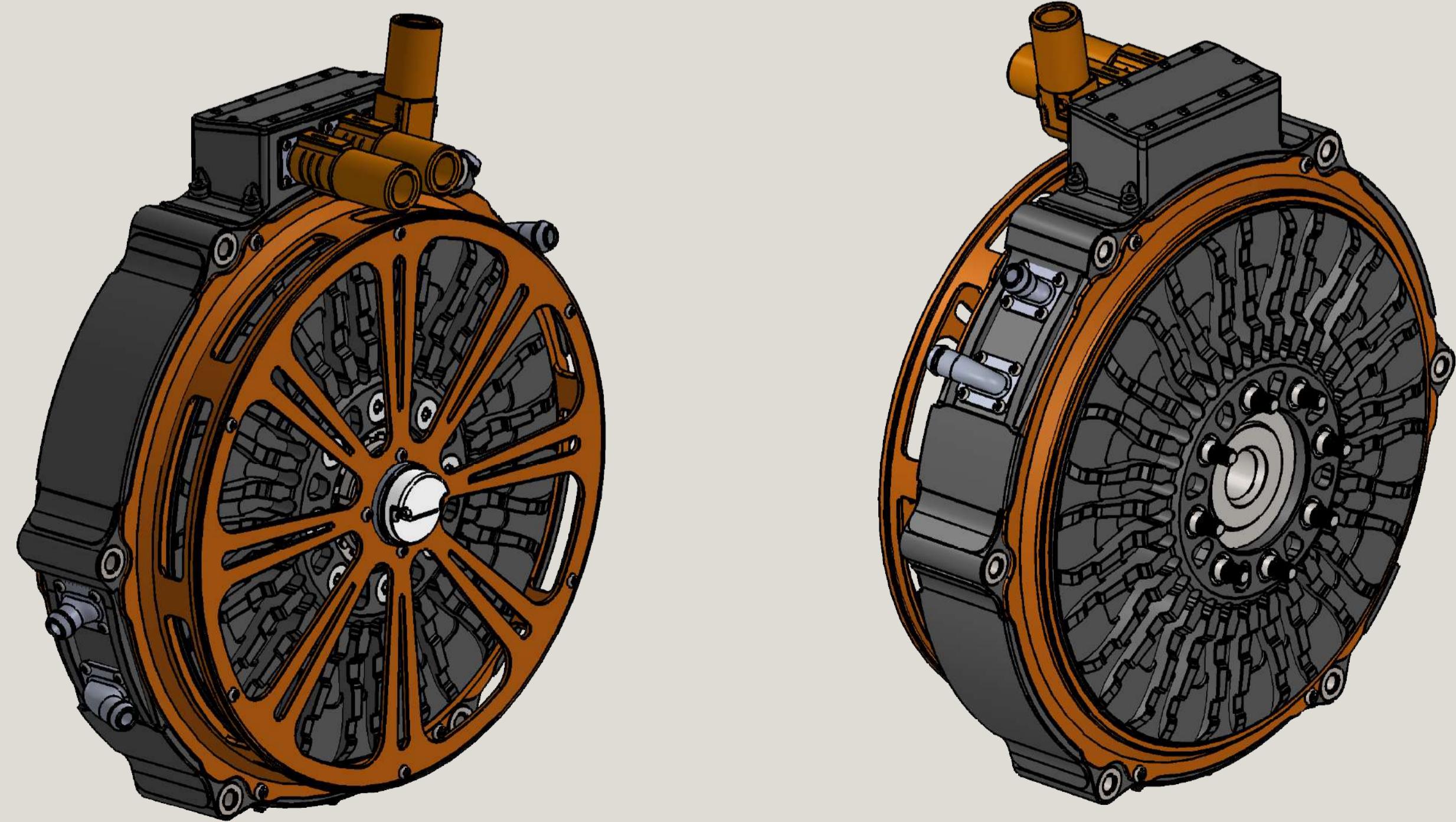
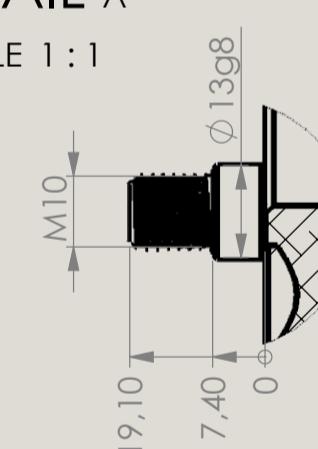
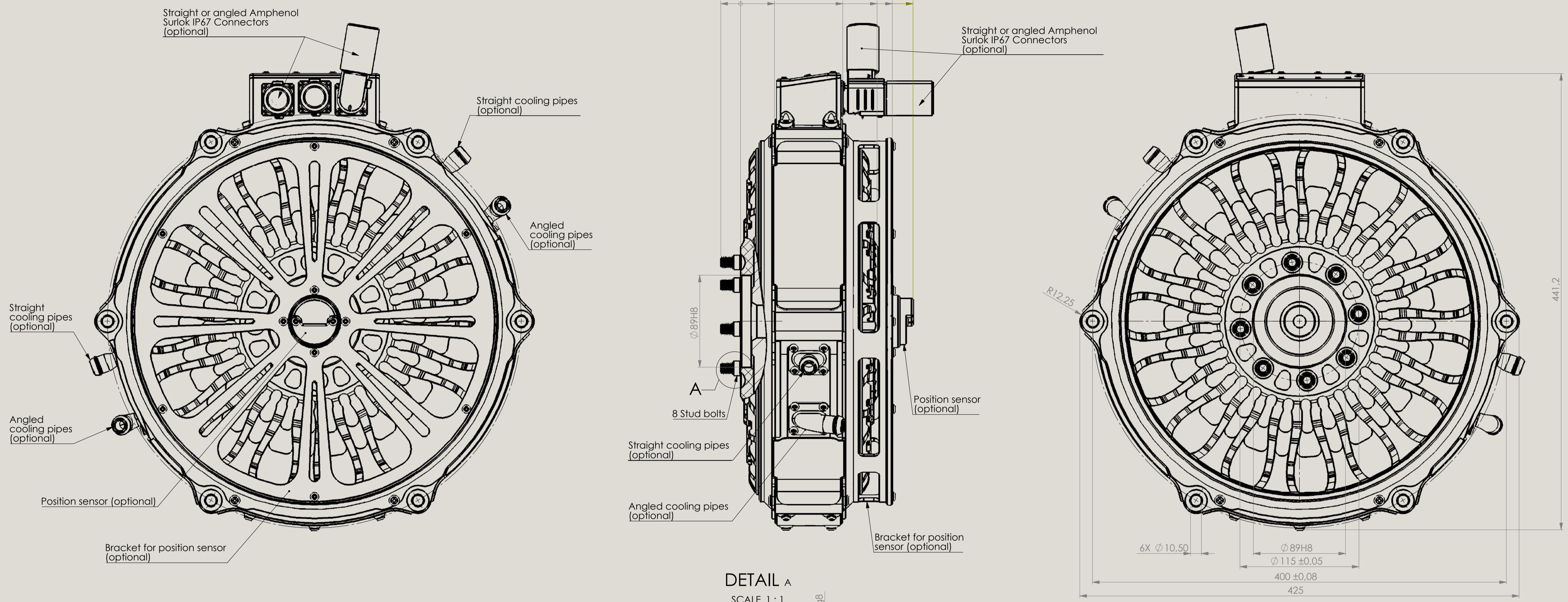
AXM4

Winding type	HIGH Voltage (850Vdc)	MEDIUM Voltage (750Vdc)	LOW Voltage (550Vdc)
Peak power	<b>300kW</b>	<b>430 kW</b>	<b>430 kW</b>
Continuous power	<b>230 kW</b>	<b>230 kW</b>	<b>230 kW</b>
Peak torque	<b>950 Nm</b>	<b>950 Nm</b>	<b>950 Nm</b>
Continuous torque	<b>600 Nm</b>	<b>600 Nm</b>	<b>600 Nm</b>
Maximum motor speed	<b>4500 RPM</b>	<b>4500 RPM</b>	<b>4500 RPM</b>
Continuous motor speed	<b>3600 RPM</b>	<b>3600 RPM</b>	<b>3600 RPM</b>
Weight	<b>48 kg</b>	<b>48 kg</b>	<b>48 kg</b>
Kv at no load	<b>5.6</b>	<b>8</b>	<b>10.5</b>
Kv at continuous torque	<b>4.35</b>	<b>6.15</b>	<b>8.25</b>
Kv at peak torque	<b>3.85</b>	<b>5.55</b>	<b>7.3</b>
Torque constant	<b>2,07 Nm/Arms</b>	<b>1,45 Nm/Arms</b>	<b>1,1 Nm/Arms</b>
Motor type	<b>3-phase AC PM Nm/Arms</b>	<b>3-phase AC PM Nm/Arms</b>	<b>3-phase AC PM Nm/Arms</b>



# Technical drawings

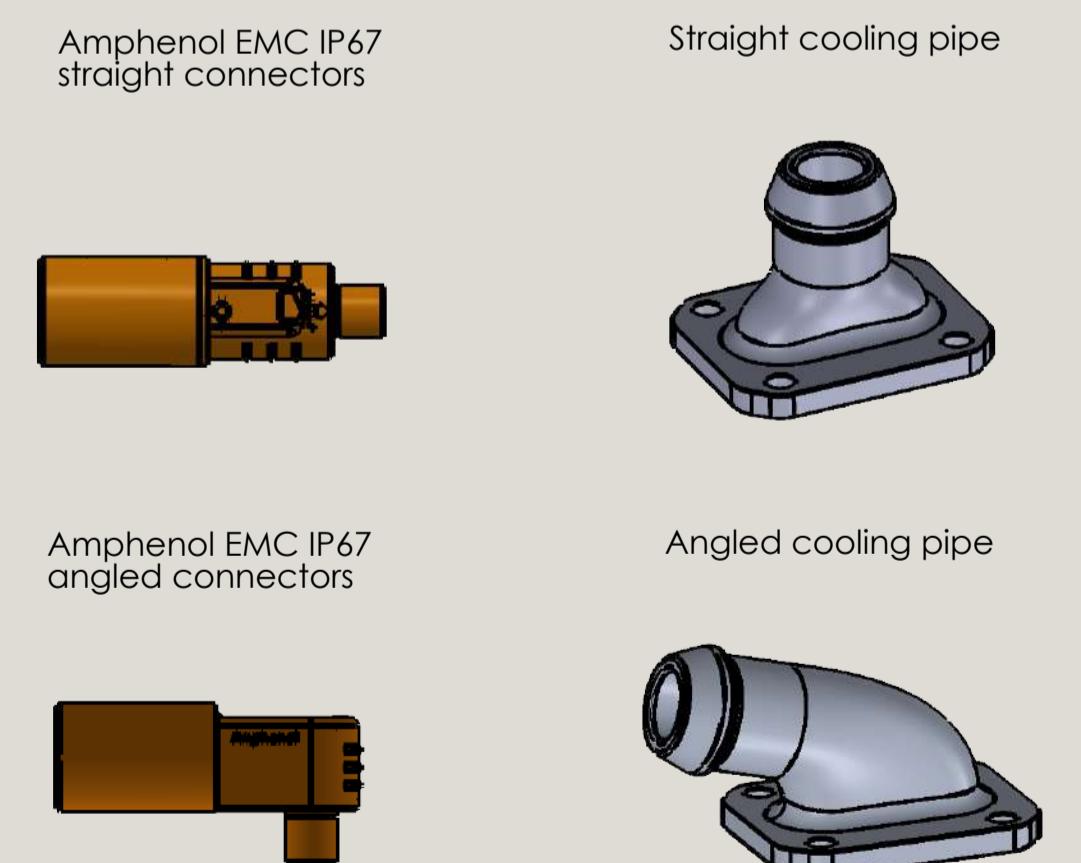
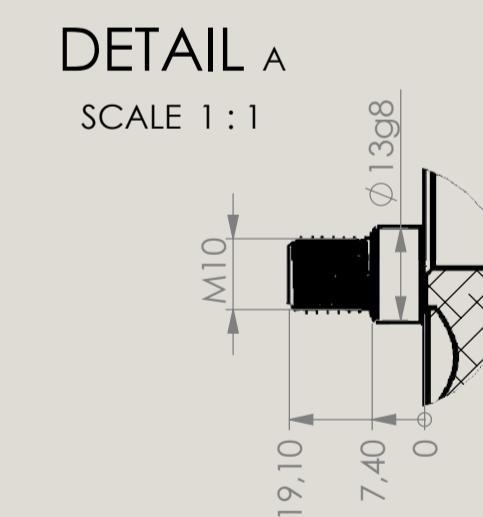
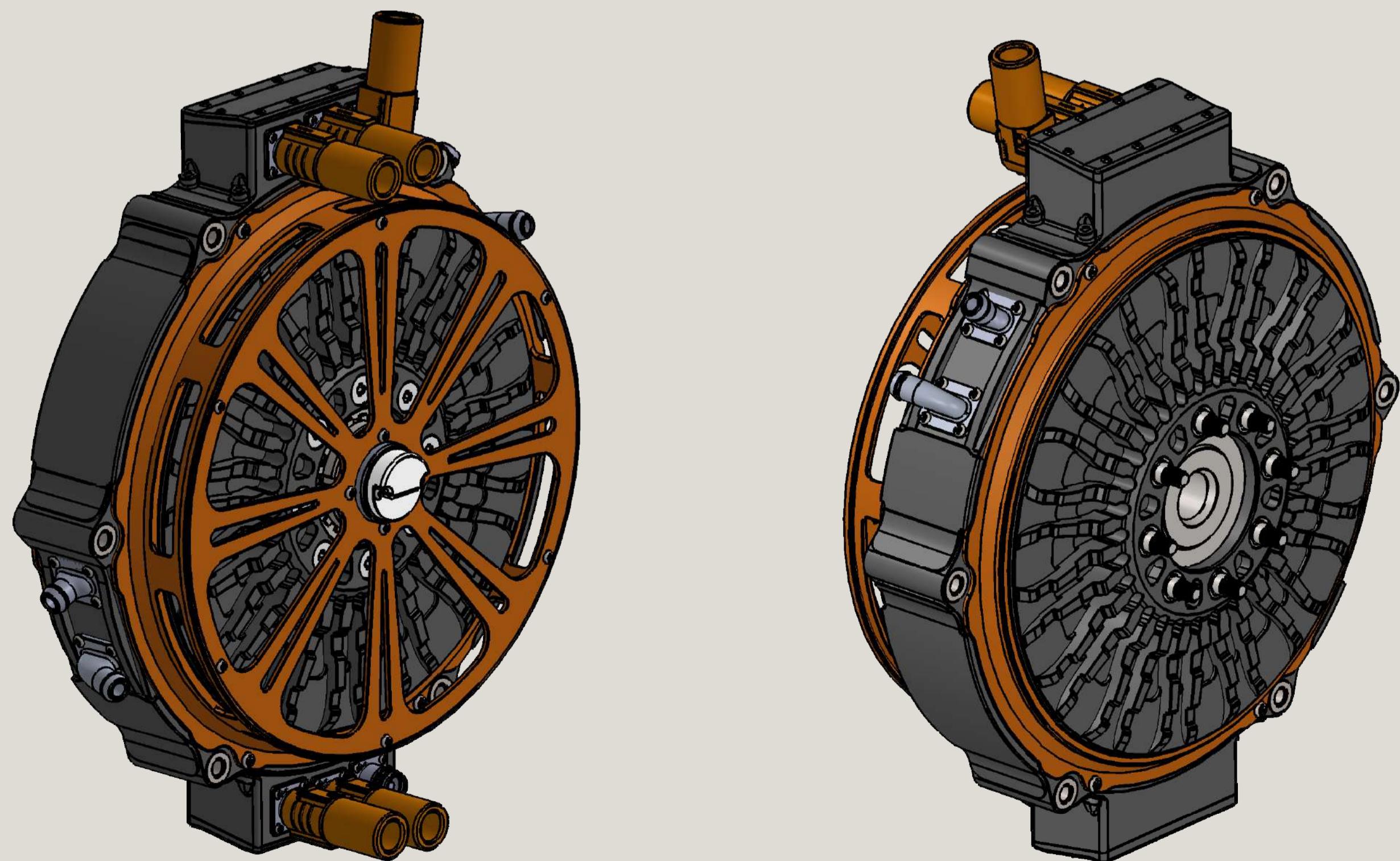
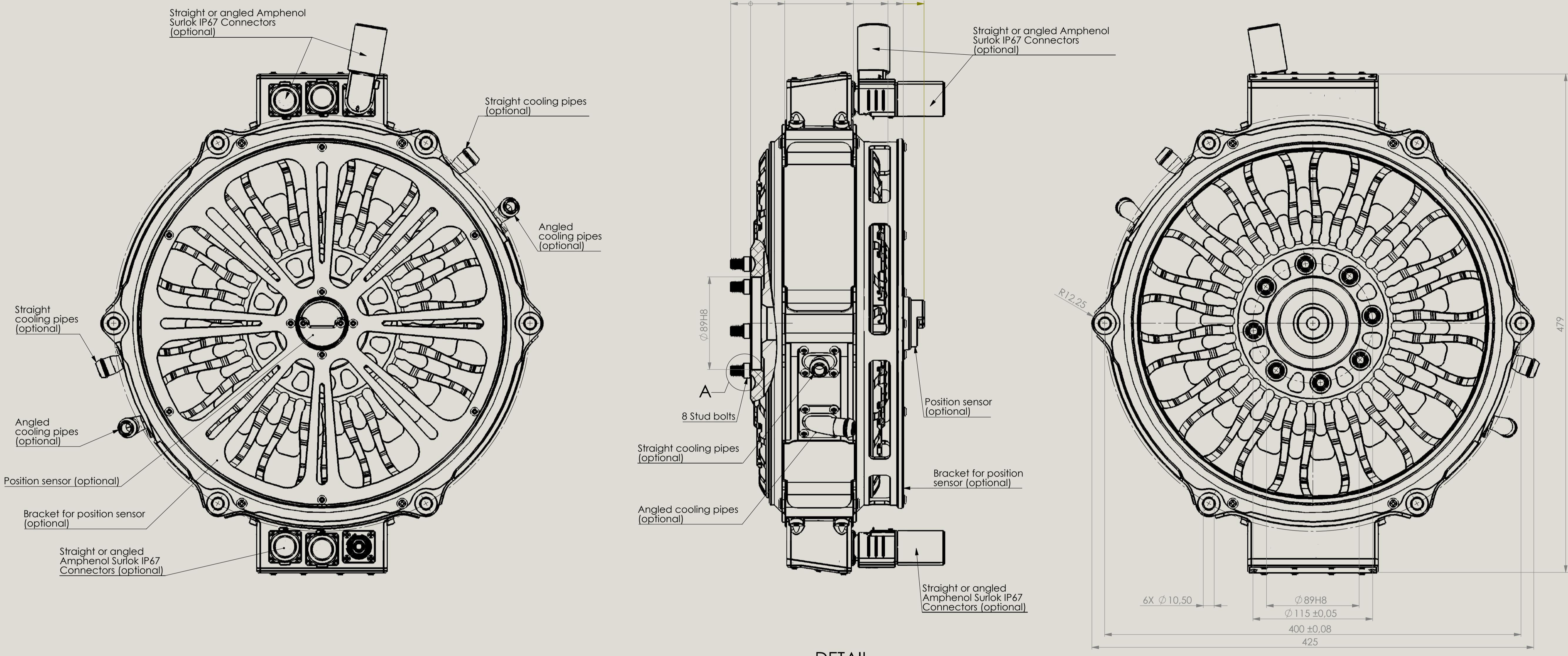
**AXM4**



BEYOND MOTORS  
**AXM4**

## Technical drawings

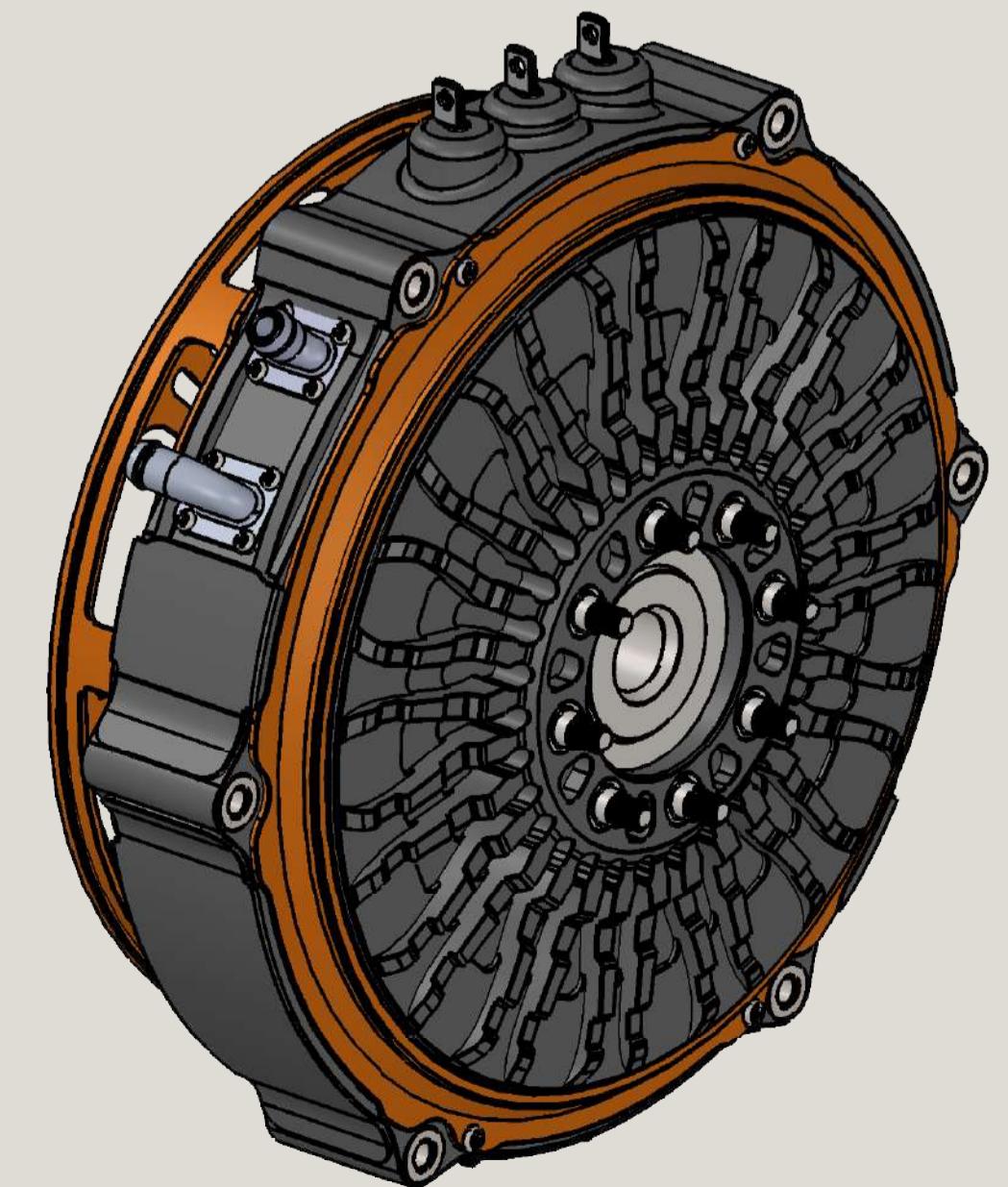
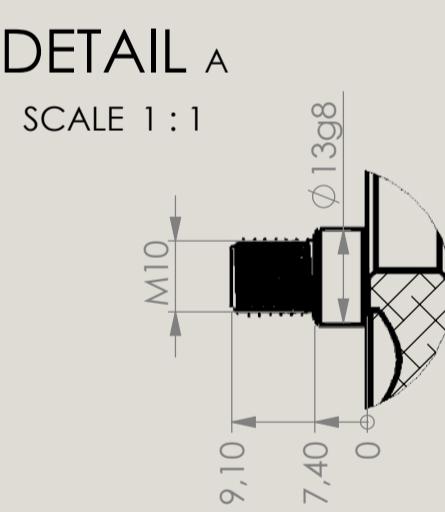
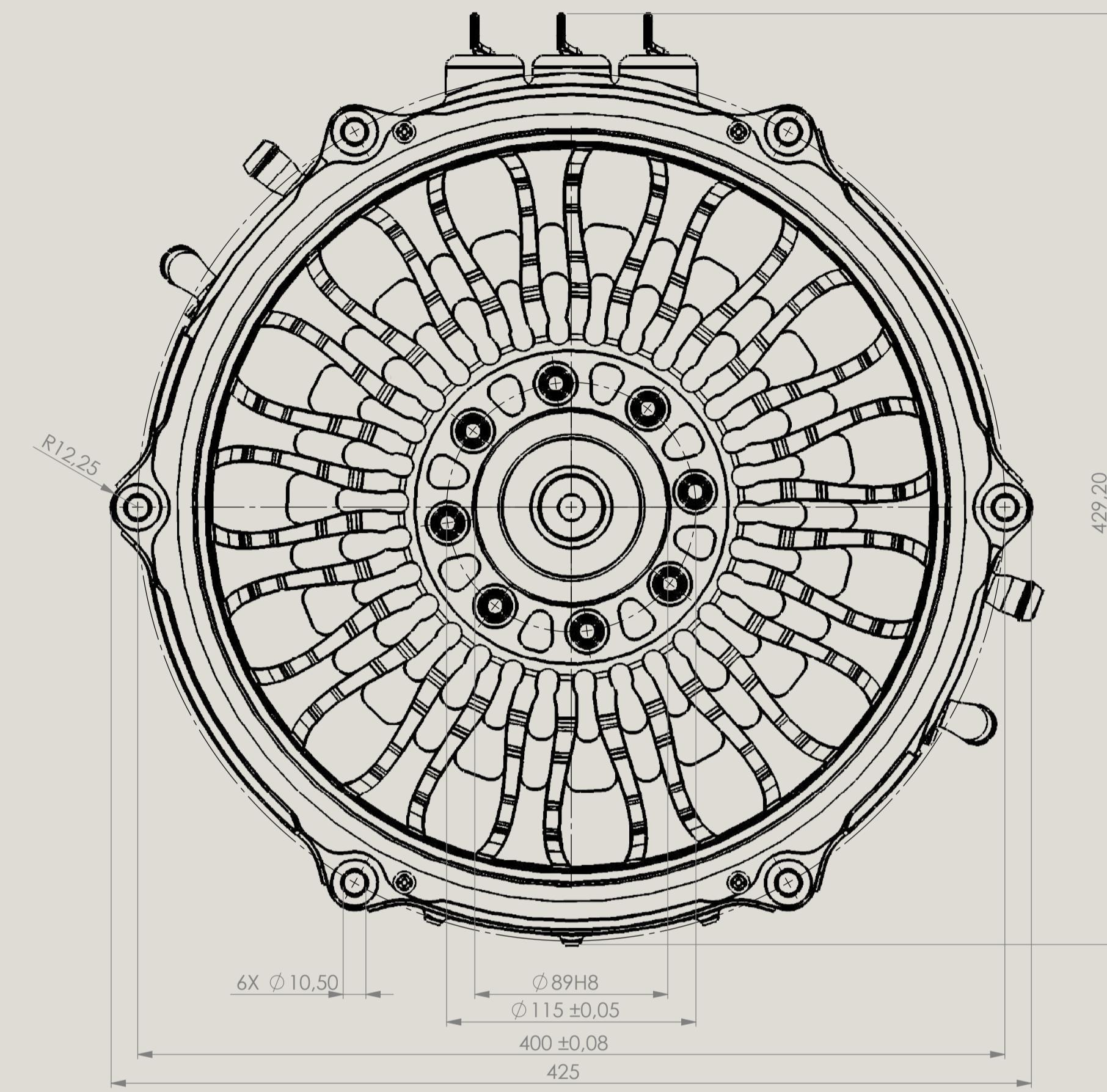
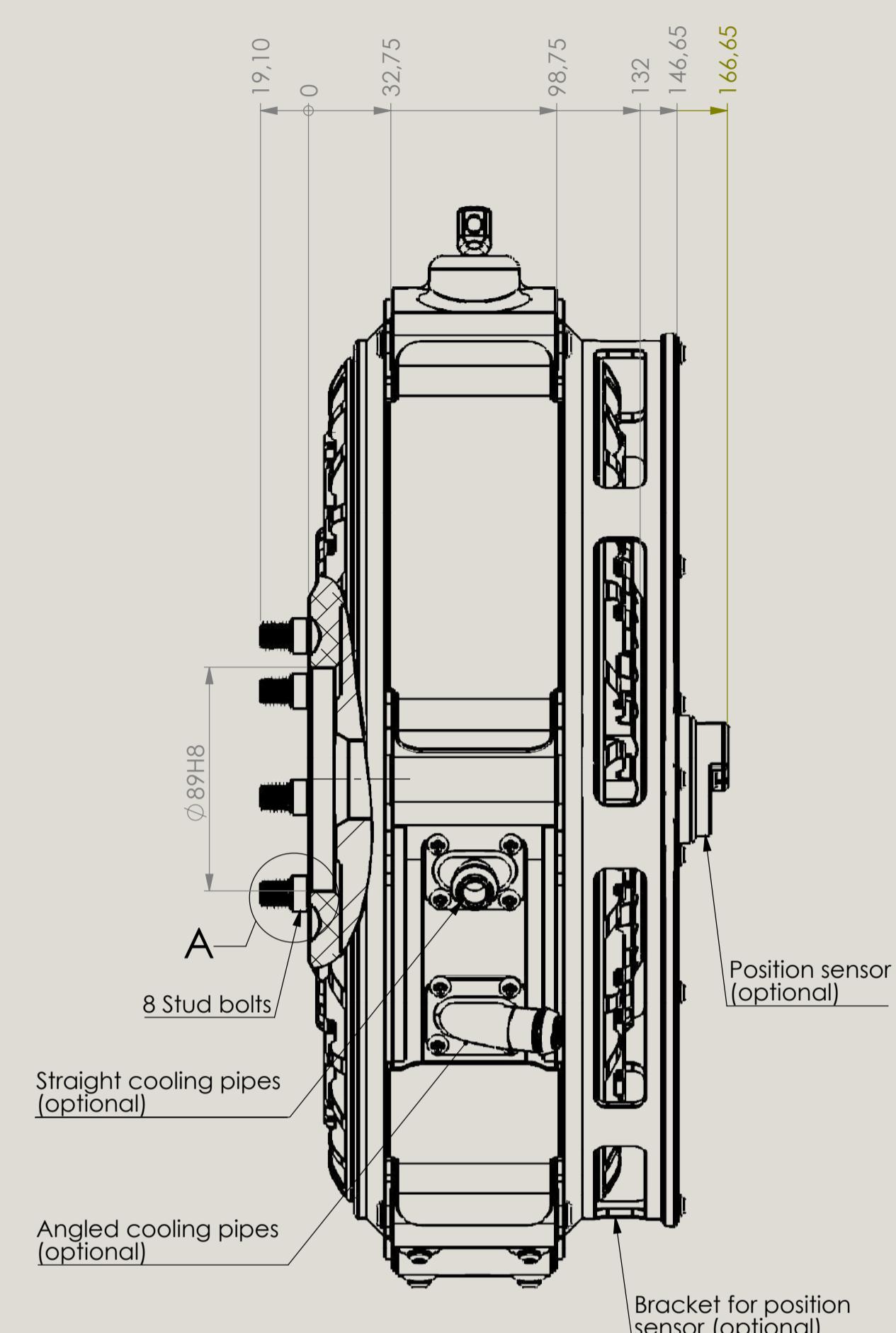
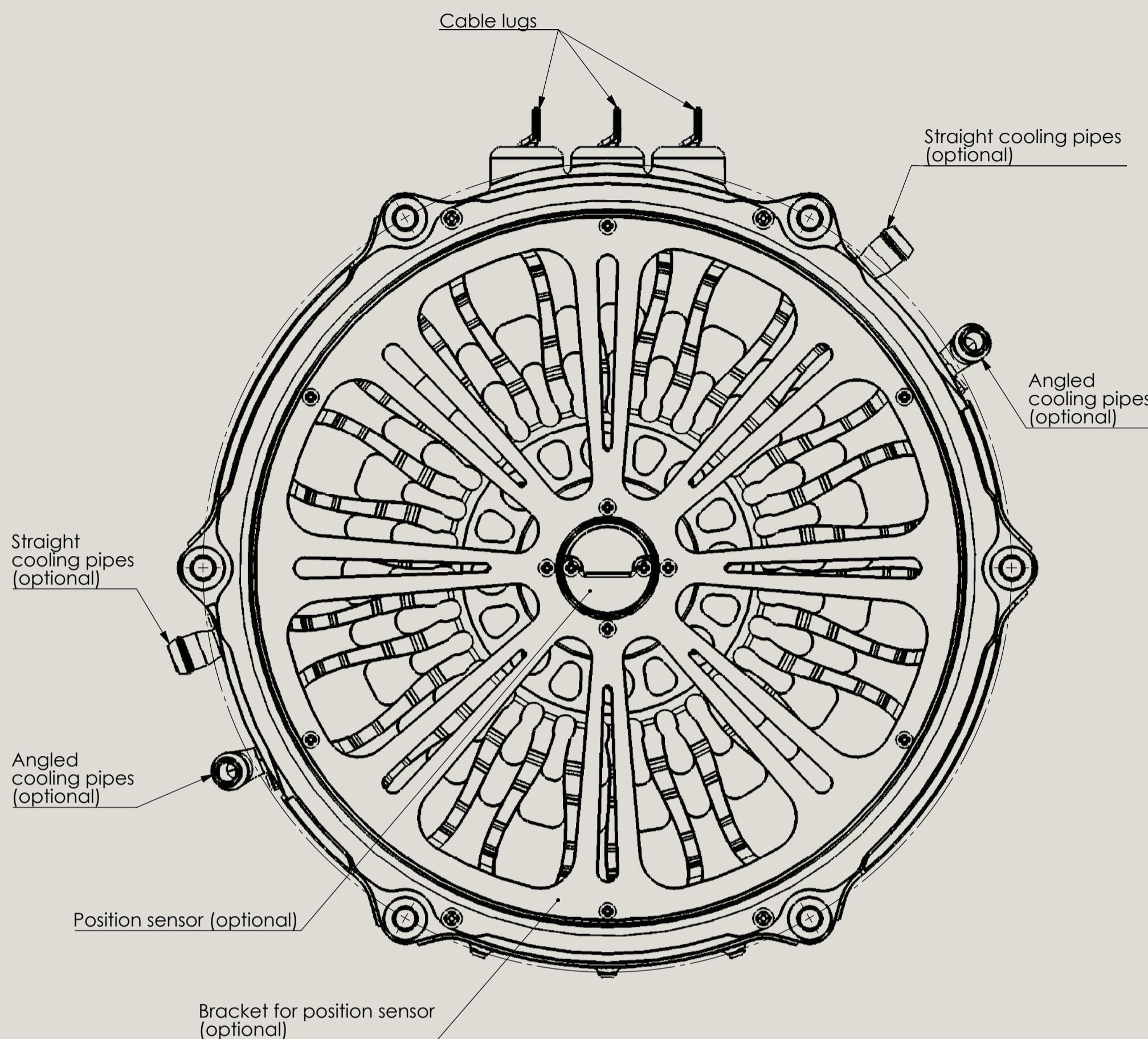
**AXM4**



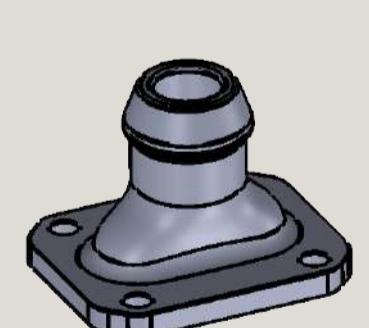
**BEYOND MOTORS**  
**AXM4**  
2xUVW

# Technical drawings

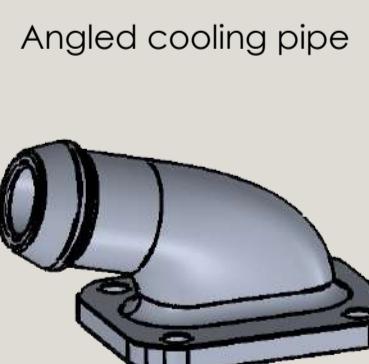
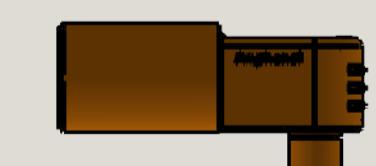
**AXM4**



Amphenol EMC IP67  
straight connectors



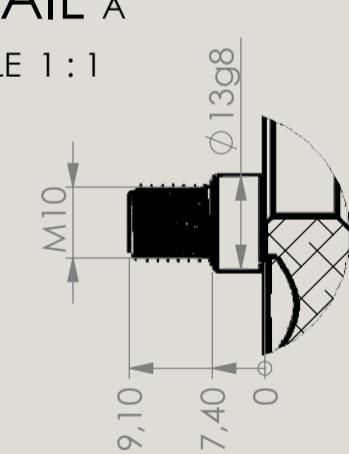
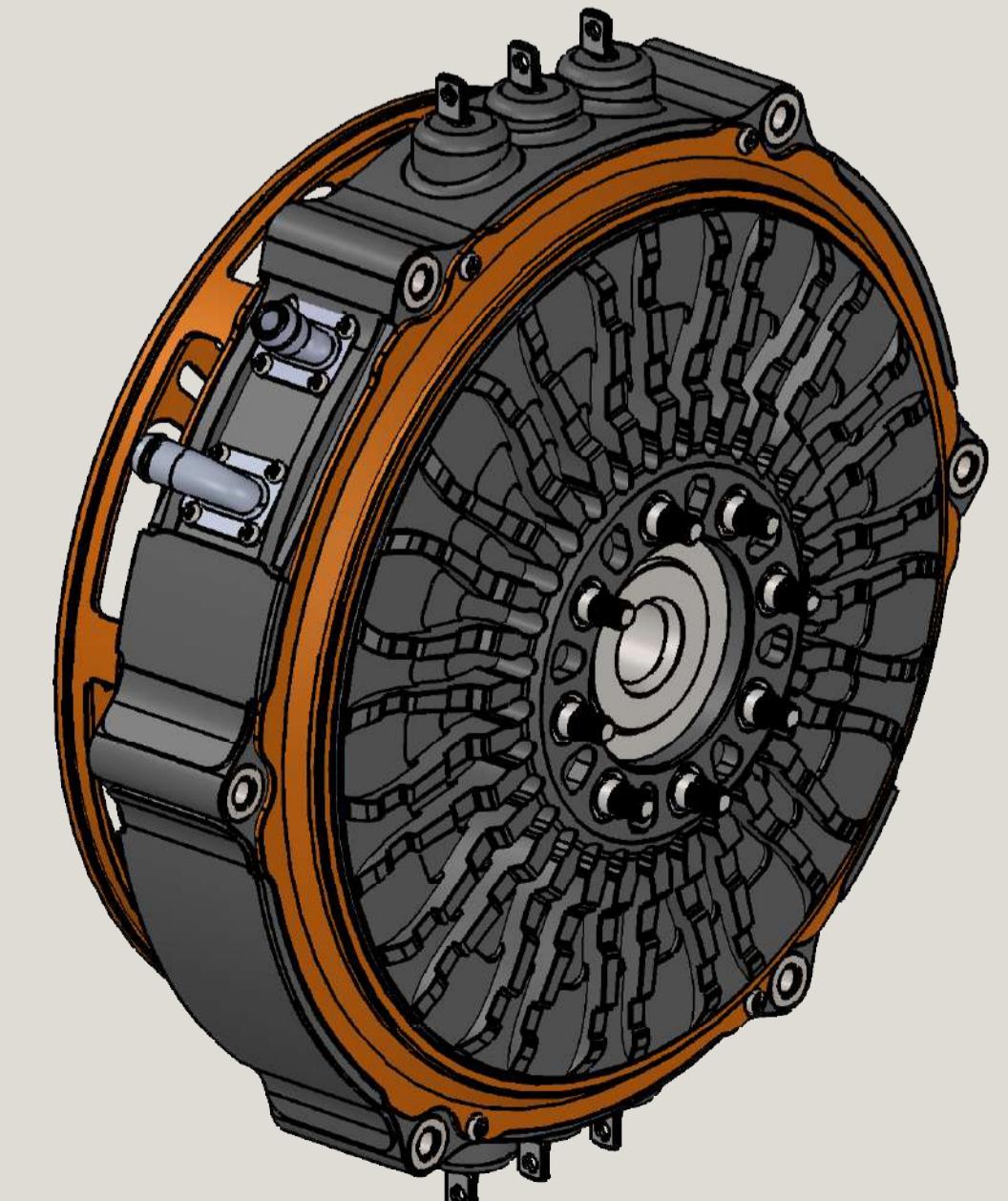
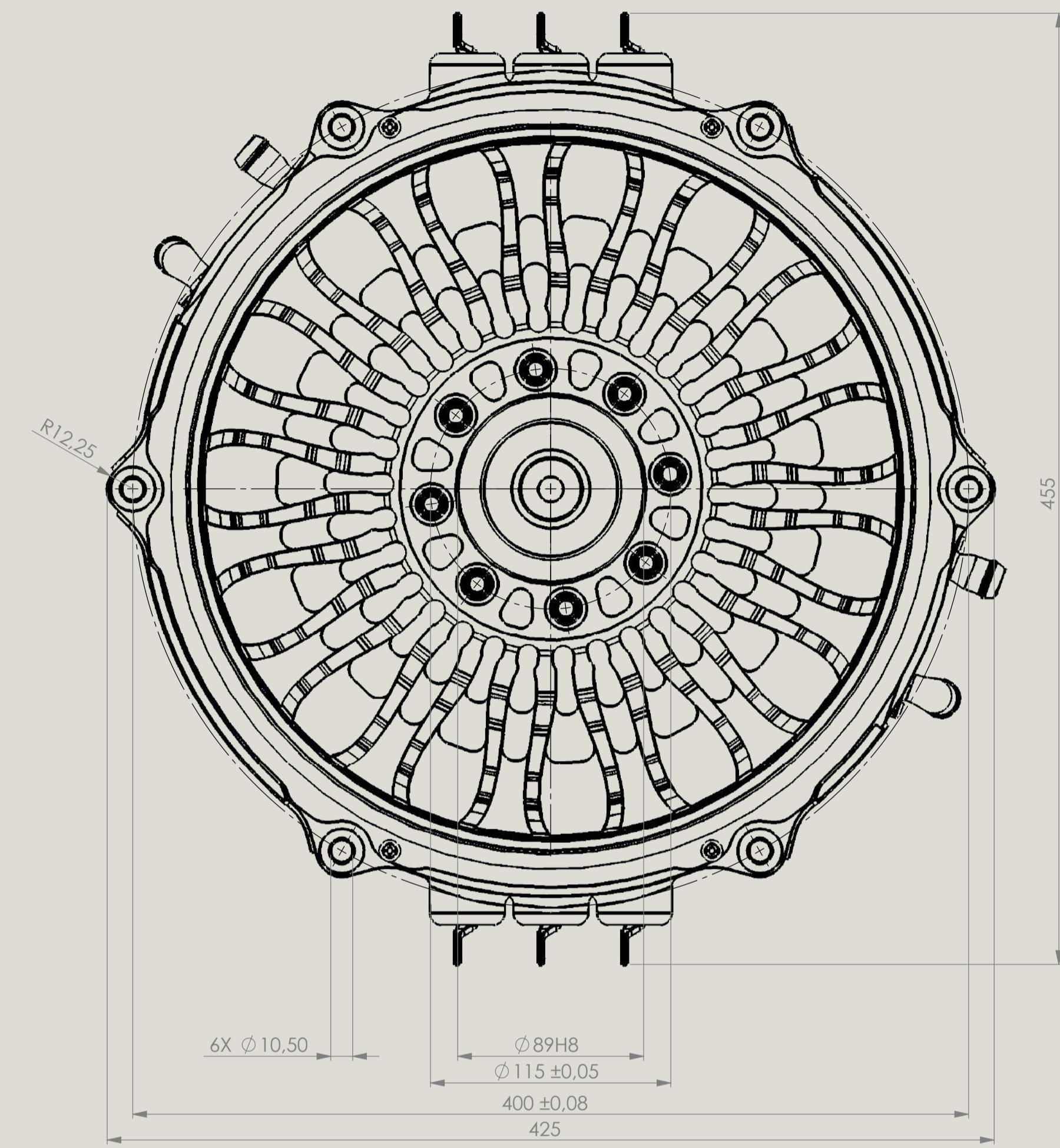
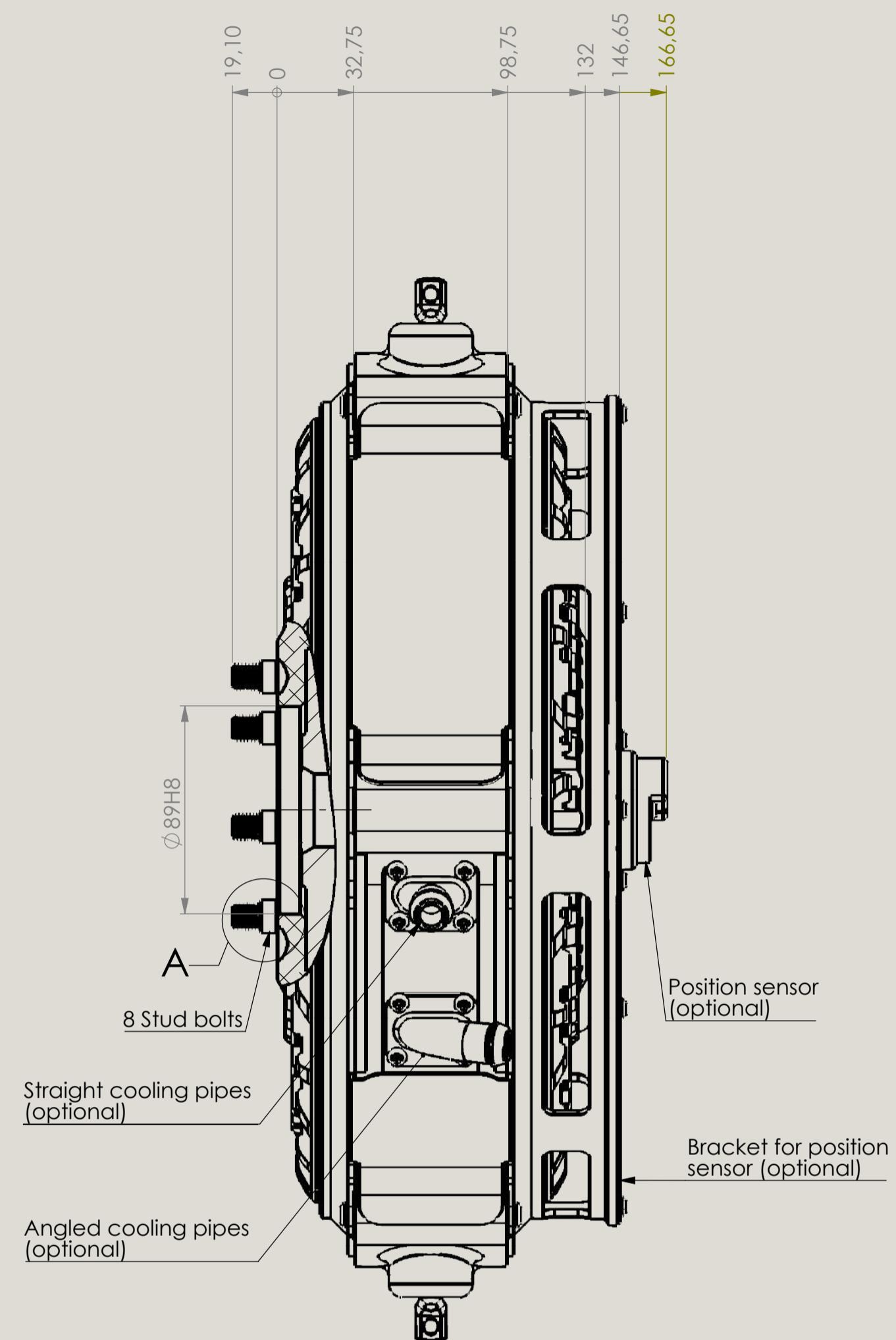
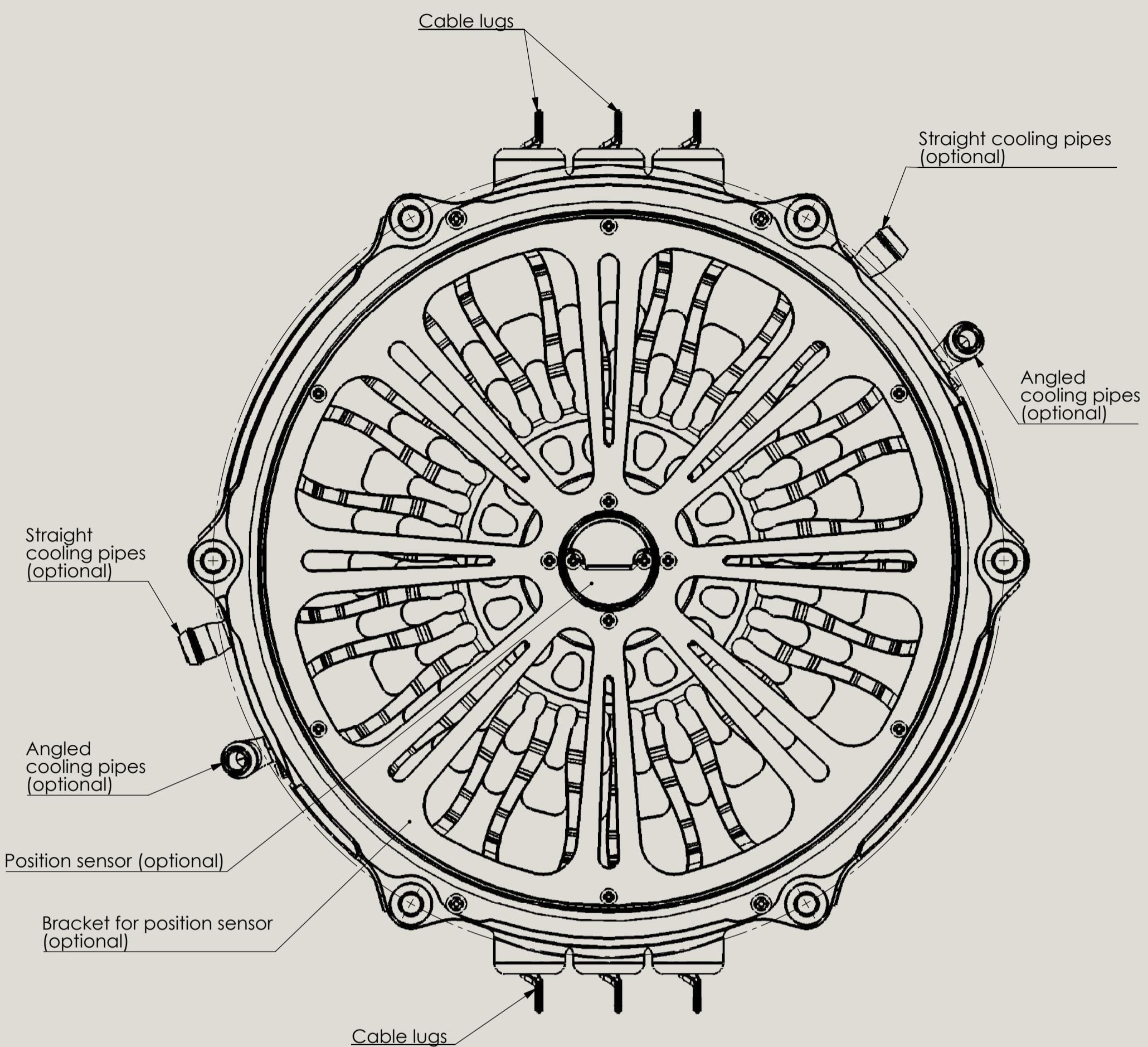
Amphenol EMC IP67  
angled connectors



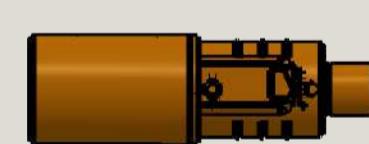
BEYOND MOTORS  
**AXM4**  
Cable lugs

## Technical drawings

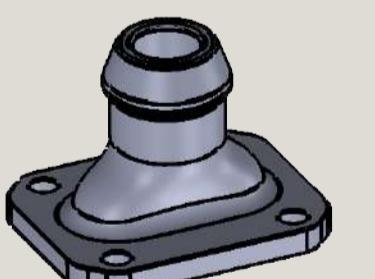
**AXM4**



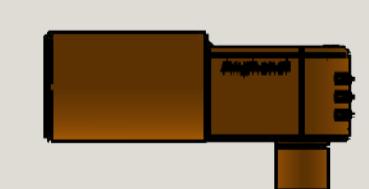
Amphenol EMC IP67 straight connectors



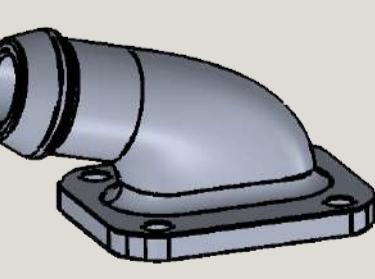
Straight cooling pipe



Amphenol EMC IP67 angled connectors



Angled cooling pipe



BEYOND MOTORS  
**AXM4**  
Cable lugs 2xUVW

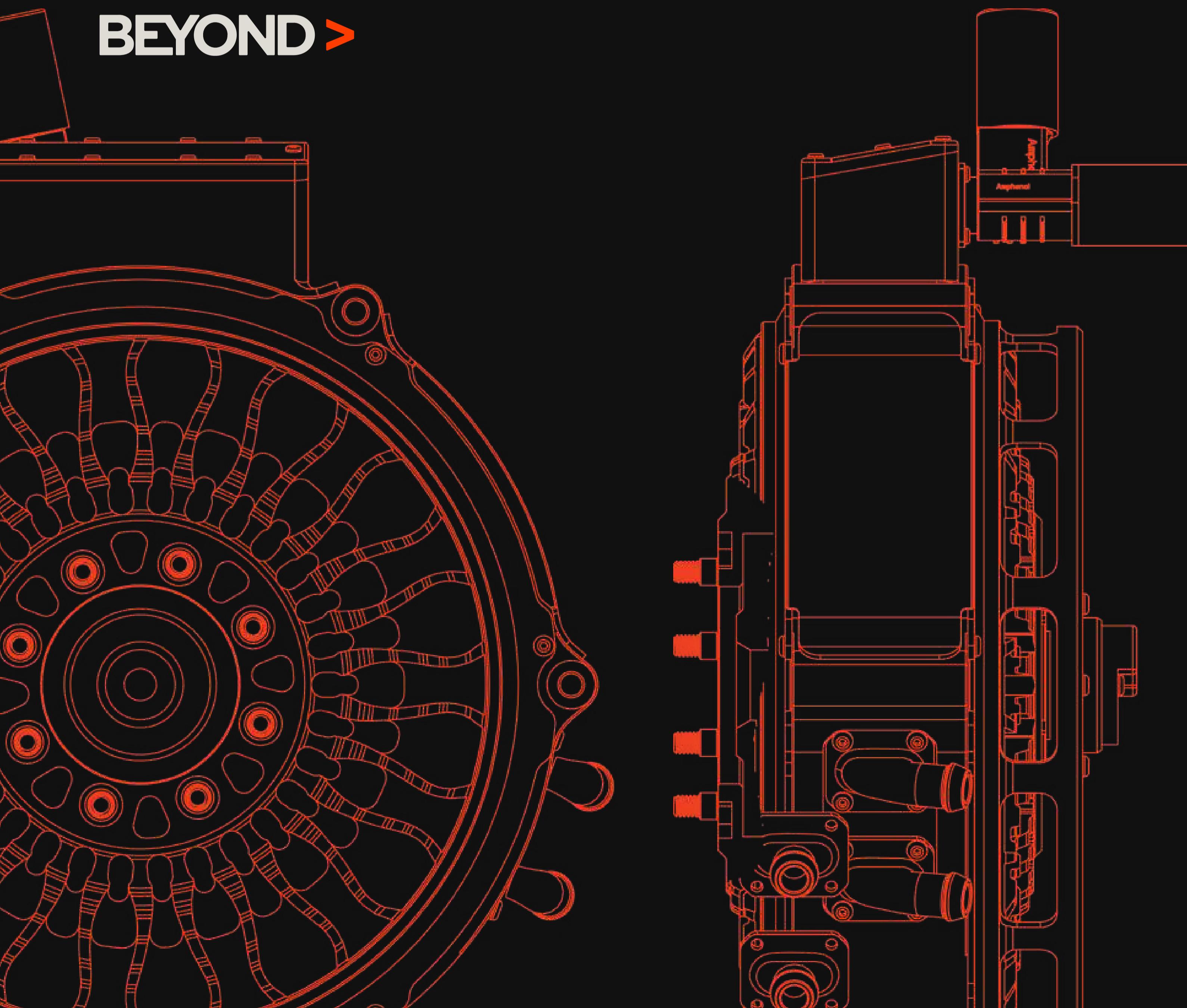
# NEED MORE INFORMATION?

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

Ppeak **130 kW**

Pcont **75 kW**

Mass **14,5 kg**

[See full Data Sheet →](#)



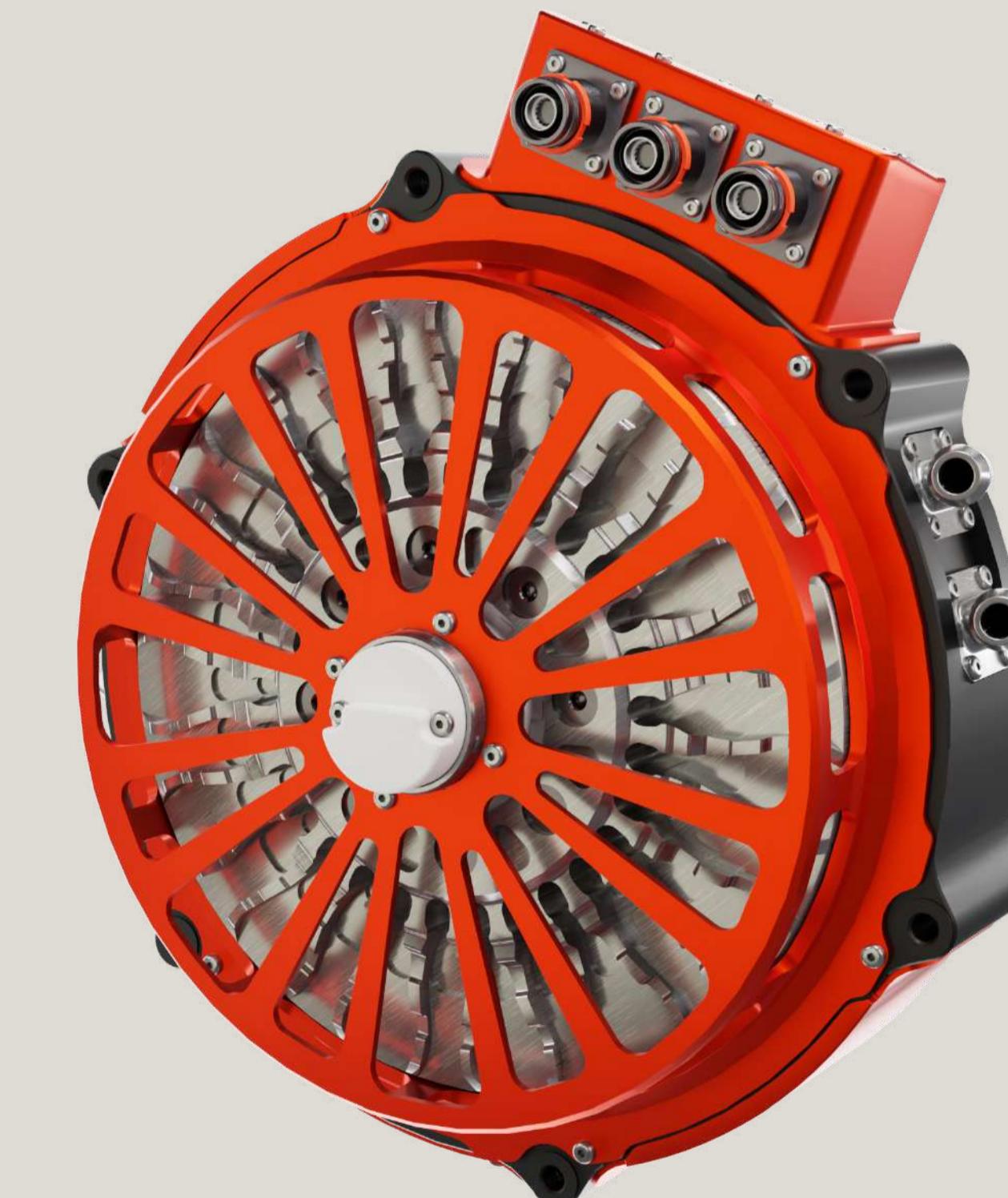
### AXM3

Ppeak **220 kW**

Pcont **130 kW**

Mass **27 kg**

[See full Data Sheet →](#)



E N E R G I S I N G   T H E   F U T U R E