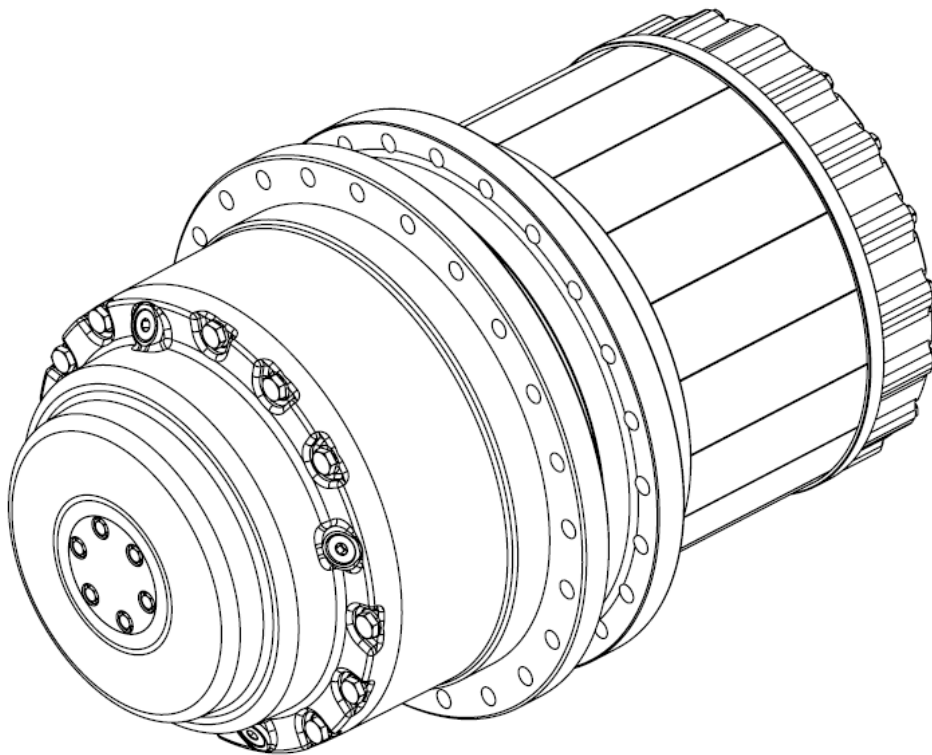


# I&W

## Electric Final Drive M350

Datasheet  
v2021.11



## Performance Characteristics

<b>General Information</b>	Ambient Temperature	-20°C to 25°C*
	Insulation Class EN 60034-1	F(155°C)
	Enclosure Type DIN EN 60529	IP67 IP69K Optional

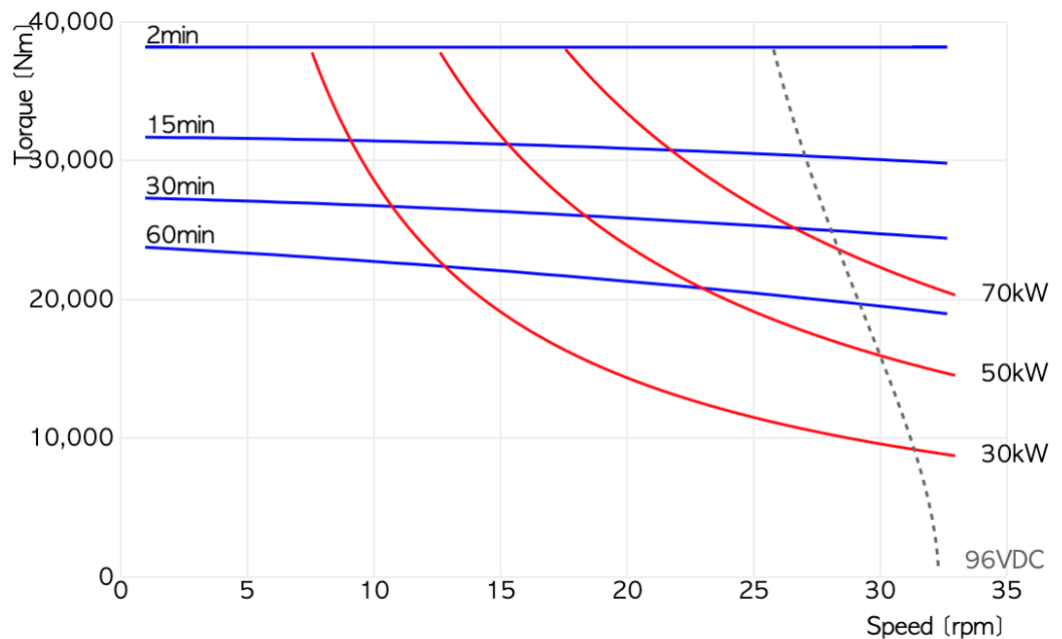
\*Derating for higher Temperatures

<b>Drive</b>	Engine Type	Permanentmagnet-Synchronous
	Number of Poles	12
	Reducer Ratio	101.8
	Weight	263kg
	Peak Torque(flange)*	38000 Nm
	Peak Current (rms)*	1131 Arms
	S2 Rated Speed	20 rpm
	S2 60min. Torque (flange)	20500 Nm
	S2 60min. Current (rms)	642 Arms
	Torque Constant @ motor shaft	0.33 Nm / Arms
	Back EMF Constant (Line to Line, peak, rpm @ motor shaft)	28.3 Vrms / 1000 min <sup>-1</sup>
	Electrical Resistance (Rs) @ 25°C	0.5 mΩ
	Electrical Inductance @ 1kHz (L <sub>q</sub> /L <sub>d</sub> )	17μH / 15μH

<b>Mechanical Brake</b>	Type	Currentless Brake
	Nominal Voltage	80VDC
	Typ. Braking Torque*	38000 Nm
	Typ. Activation Voltage	80V
	Typ. Hold Voltage	40V

### Performance

- ■ ■ Speed limit at DC-link Voltage without field weakening



## Feedback

### Temperature Sensor

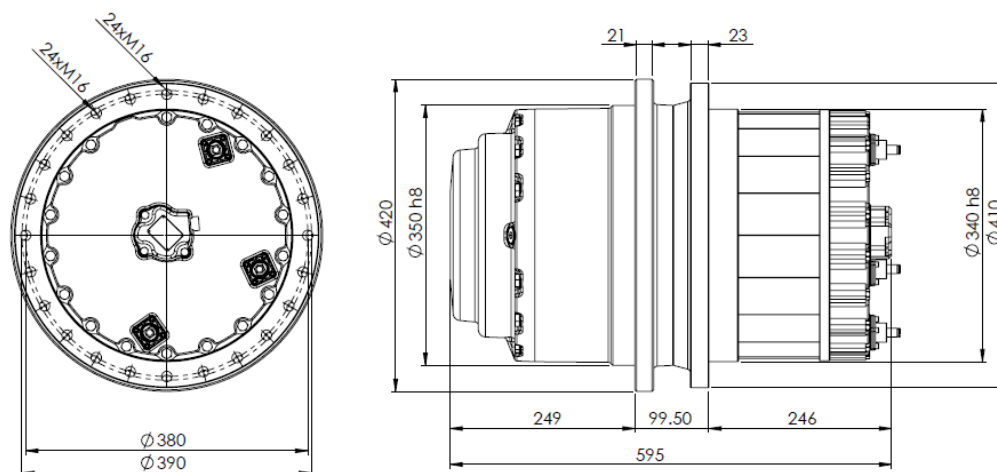
Sensor-Type	PT 1000
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### Angle Sensor

Sensor-Type	SIN/COS-Encoder
Power Supply ( $V_{dd}$ )	5V +/-5%
Power Consumption	20mA
Output Amplitude	1.1 +/-0.2V <sub>pp</sub>
Output Offset	$V_{dd}/2$ +/- 5mV
Internal serial Impedance	720Ω

## Dimensions and Load

### Dimensions

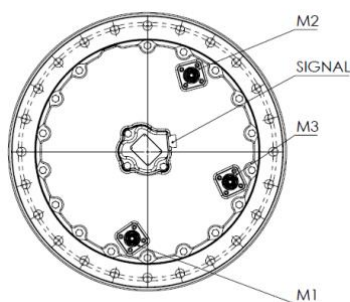


### Bearing Capacity

C	2x315kN
C <sub>0</sub>	2x570kN

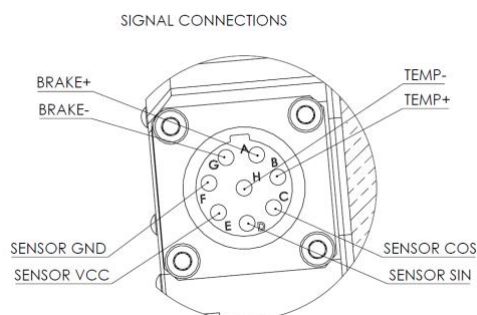
## Connections

### Power connections



Mating Connector	AMPHENOL SURLOCK PLUS/ RADLOCK
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### Signal Connections (SIN/COS)



Mating Connector	Amphenol Ecomate RM
Connector	RT06128SNH
Backshell	RT0L-12CG-S1 (6-10.5mm cable)
Socket (8x)	SS20M1F (0.34-0.5 mm <sup>2</sup> )
Included	No