

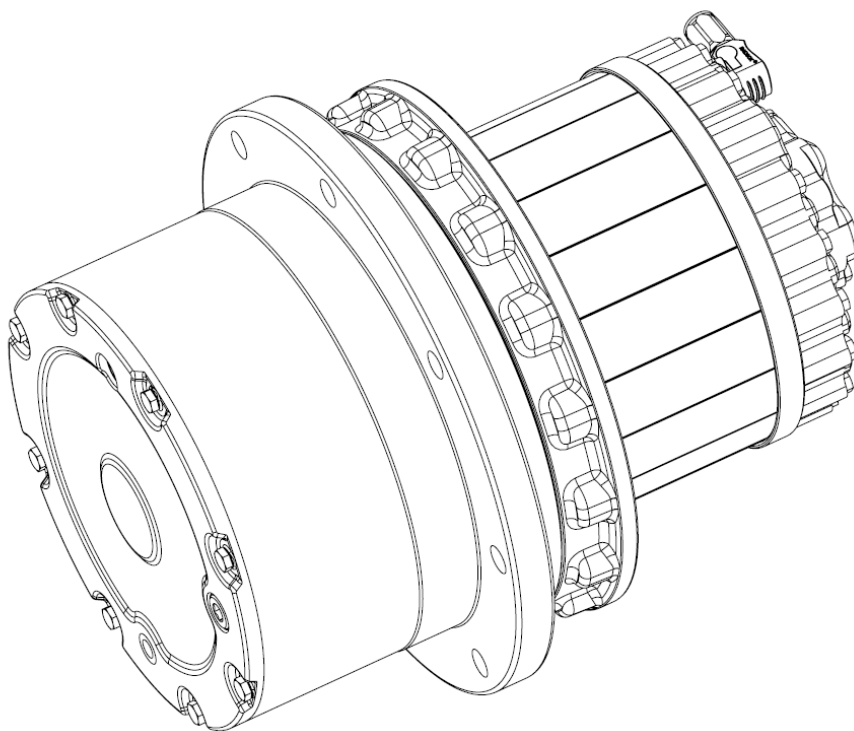


Electric Final Drive

M3 (96V)

Type M3_105_45_i34

Datasheet
v2019.06



Performance Characteristics

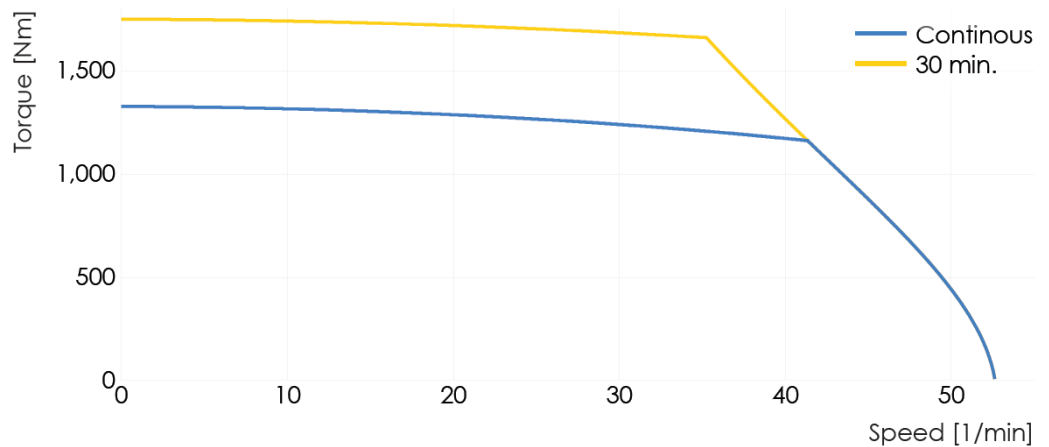
General Information	Ambient Temperature	-20°C to 25°C*
	Insulation Class EN 60034-1	F(155°C)
	Enclosure Type DIN EN 60529	IP68

*Derating for higher Temperatures

Drive	Engine Type	Permanentmagnet-Synchronous
	Number of Poles	12
	Reducer Ratio	34
	Weight	62kg
	Peak Torque(flange)	2420 Nm
	Peak Current (rms)	125 Arms
	Continuous Torque @ 30 1/min (flange)	1240 Nm
	Continuous Current @ 30 1/min (rms, flange)	62 Arms
	Maximum Speed @ 96VDC	49 1/min
	Torque Constant @ motor shaft	0.62 Nm / Arms
	Back EMF Constant (Line to Line, peak, rpm @ motor shaft)	53.6 V / 1000 min ⁻¹
	Electrical Resistance (Rs) @ 25°C	19.8 mΩ
	Electrical Inductance @ 1kHz (L _g /L _d)	460 μH/350 μH

Mechanical Brake	Type	Currentless Brake
	Function Principle	Braked Engine Shaft
	Typ. Braking Torque	2550 Nm
	Typ. Activation Current	1.05A
	Typ. Hold Current	0.25A
	Typ. Resistance	14Ω

**Performance @ 96VDC,
Ambient 25°C
Flange 0.3m²**



Feedback

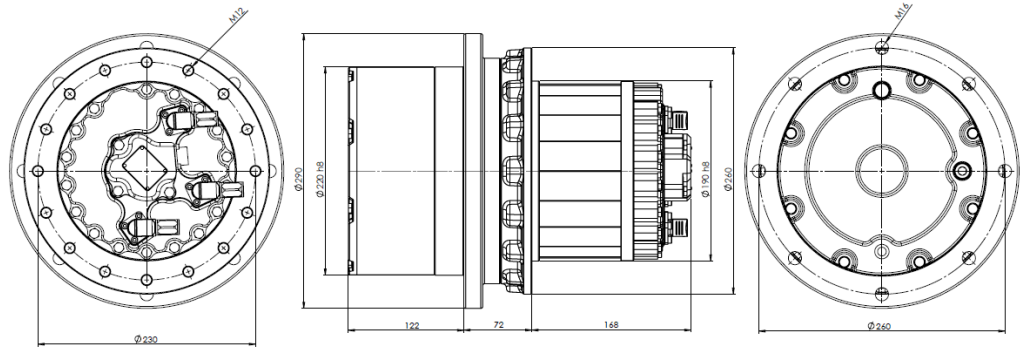
Temperature Sensor

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 _{pp}
Output Offset	$V_{dd}/2$ +/- 5mV
Internal serial Impedance	720Ω

Dimensions and Load

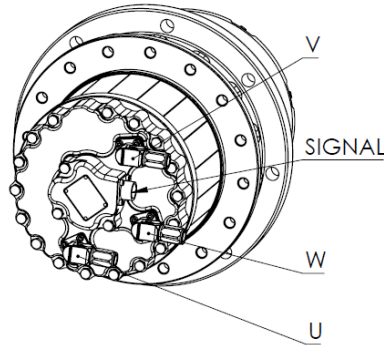


Bearing Capacity

C	2x57500N
C ₀	2x78000N

Connections

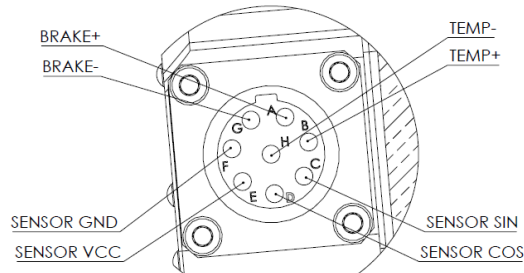
Power connections



Mating Connector	AMPHENOL SURLOCK PLUS
Part number	SLPPA16BSO
Included	No

Cable-size	16mm ²
Cable Dia.	8.1 +/-0.2mm
Included	No

Signal Connections (SIN/COS)



Mating Connector	Amphenol Ecomate RM
Part number (PIN)	RT06128SNH
Part number (PIN)	
Included	No