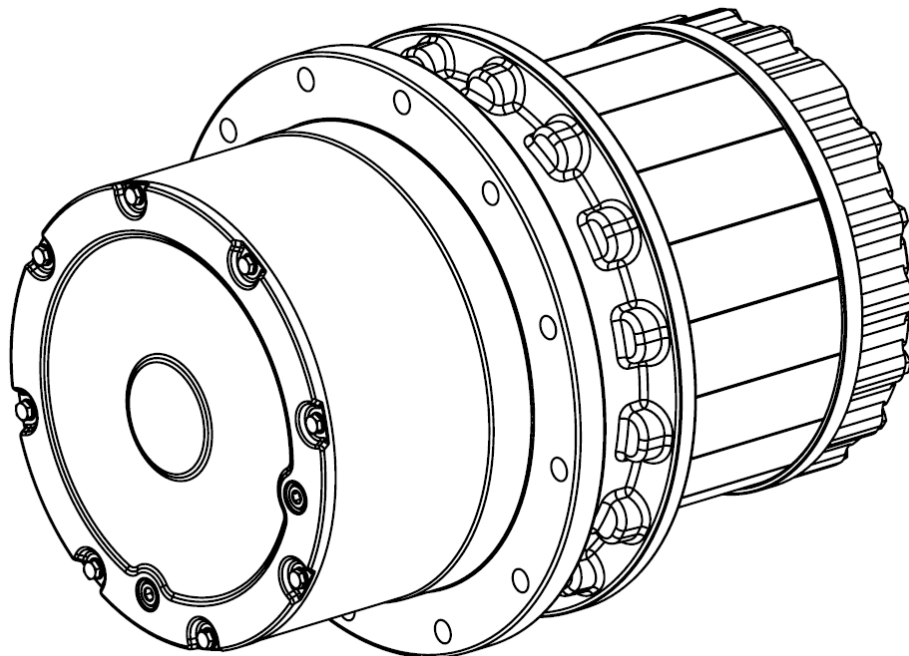


I&W

Electric Final Drive M280 (400V)

Type M280_160_35_i32_B24V

Datasheet
v2019.12



Performance Characteristics

General Information

Ambient Temperature	-20°C to 25°C*
Insulation Class EN 60034-1	F(155°C)
Enclosure Type DIN EN 60529	IP67 (Connector Mated) IP69k optional

*Derating for higher Temperatures

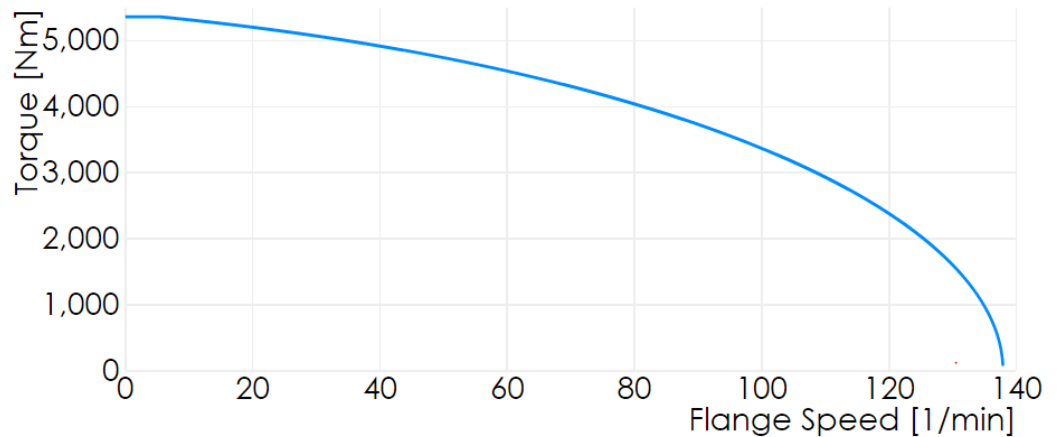
Drive

Engine Type	Permanentmagnet-Synchronous
Number of Poles	12
Reducer Ratio	32
Weight	130kg (est)
Peak Torque(flange)	10750 Nm
Peak Current (rms)	270 Arms
Continuous Torque @ 20 1/min (flange)	5200 Nm
Continuous Current @ 20 1/min (rms, flange)	123 Arms
Maximum Speed @ 400 VAC	149 1/min
Torque Constant @ motor shaft	1.3 Nm / Arms
Back EMF Constant (Line to Line, peak, rpm @ motor shaft)	113 V / 1000 min ⁻¹
Electrical Resistance (Rs) @ 25°C	12 mΩ
Electrical Inductance @ 1kHz (Lq/Ld)	268 mH/220 mH (est)

Mechanical Brake

Type	Currentless Brake
Function Principle	Braked Engine Shaft
Typ. Braking Torque	12000 Nm
Typ. Activation Current	N/A
Typ. Hold Current	

Performance @ 400 VAC, Continuous



Feedback

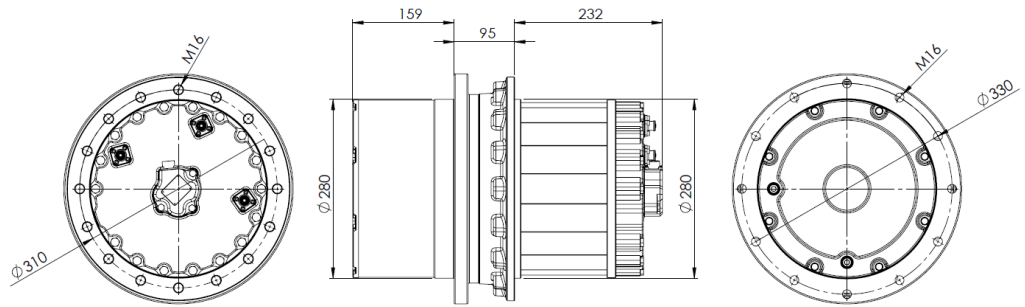
Temperature Sensor

Sensor-Type	PT 1000
-------------	---------

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

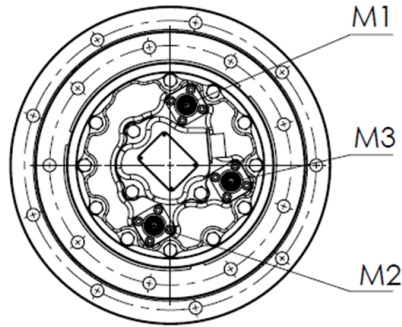


Bearing

F _{DYN}	133 kN
F _{STAT}	177 kN

Connections

Power connections

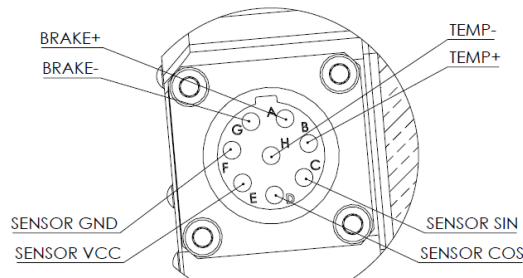


Connector	AMPHENOL SURLOCK PLUS
Part number	SLPPA16BSO
Included	No

Cable-size	25mm ²
Cable Dia.	8.1 +/-0.2mm
Included	No

Signal Connections

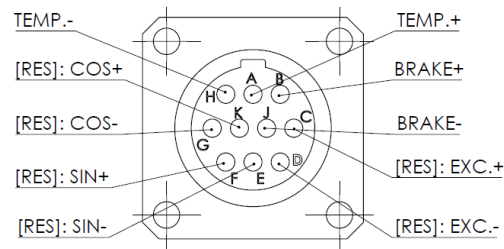
-Standard
(SIN/COS)



Connector	Amphenol Ecomate RM
Part number	RT06128SNH
Included	No

Signal Connections

-Not Standard
(Resolver)



Connector	Amphenol Ecomate RM
Part number	RT0W61210SNH
Included	No