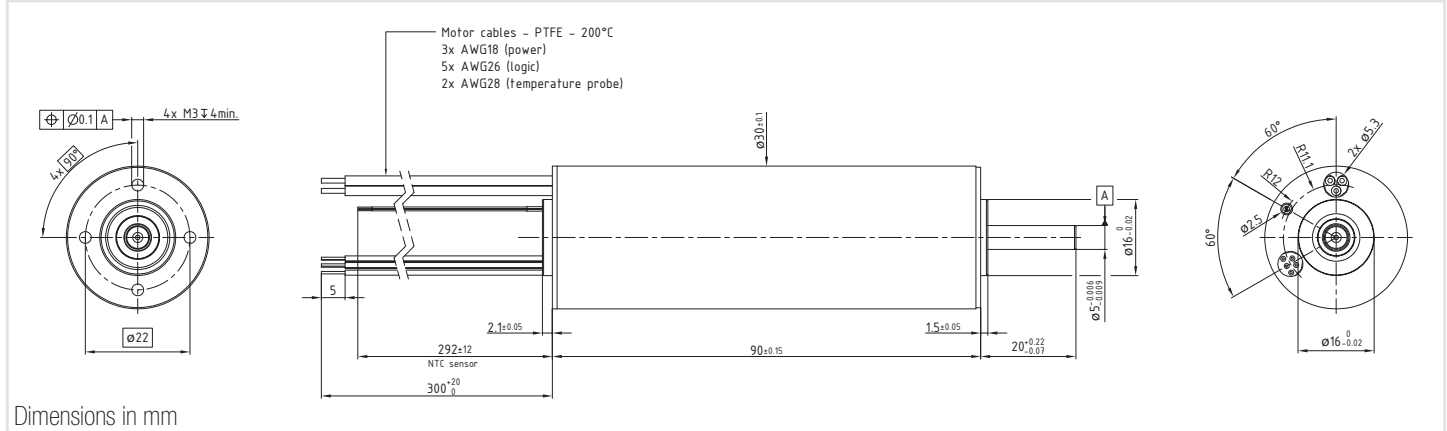


30ECT90 Ultra ECT™

4 pole

∅30mm

244W



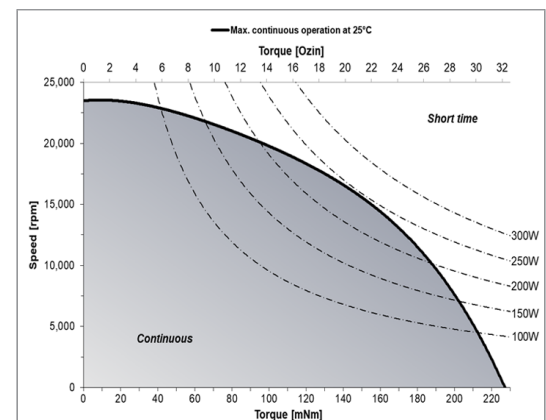
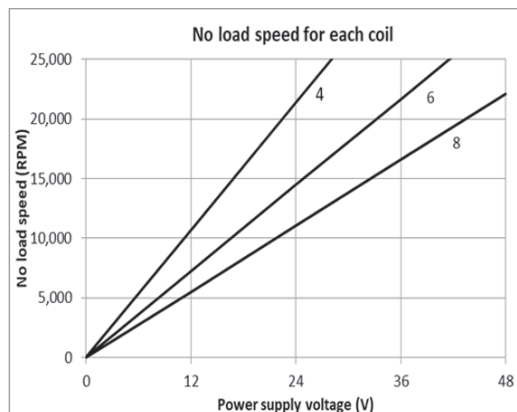
30ECT90 - 10B - **

Electrical Data	**	4	6	8	
1 Nominal Voltage	U_N	24	36	48	Volt
2 Optimization Direction	-	Symmetrical	Symmetrical	Symmetrical	-
3 No-Load Speed	n_0	21,370	21,690	22,100	rpm
4 Typical No-Load Current	I_0	1050	640	575	mA
5 Max Continuous Mechanical Power (@25°C)	P_{max}	244.0	244.0	244.0	W
6 Max Continuous Current	$I_{e max}$	21.0	14.0	10.4	A
7 Max Continuous Torque	$M_{e max}$	225 (31.86)	221 (31.3)	219 (31.02)	mNm (oz-in)
8 Back EMF Constant	K_E	1.12	1.66	2.21	V/1000 rpm
9 Torque Constant	k_M	10.7	15.8	21.1	mNm/A
10 Motor Regulation	R/k^2	0.25	0.26	0.26	10 ³ /Nms
11 Motor Regulation	$k/R^{1/2}$	63.5 (9)	62.3 (8.83)	61.4 (8.69)	mNm/W ^{1/2} (oz-in/W ^{1/2})
12 Internal Resistance - phase to phase	R_l	0.029	0.065	0.118	ohms
13 Line to Line Resistance at Connectors	R_L	0.044	0.080	0.133	ohms
14 Inductance Phase to Phase	L	0.008	0.017	0.029	mH
15 Mechanical Time Constant	t_m	1.1	1.2	1.2	ms
16 Electrical Time Constant	t_e	0.27	0.26	0.25	ms

General Data			
17 Maximum Motor Speed	n_{max}		25,000 rpm
18 Ambient Working Temperature Range	-		-30 to +100 (-22 to +212) °C (°F)
19 Ambient Storage Temperature Range	-		-40 to +100 (-40 to +212) °C (°F)
20 Ball Bearings Preload	-		13.5 N
21 Axial Static Force w/o Shaft Support (max)	-		134 N
22 Maximum Winding Temperature	-		150 (302) °C (°F)
23 Thermal Resistance	R_{th1}/R_{th2}		0.7/5.9 °C/W
24 Thermal Time Constant	t_w		1,659 s
25 Weight	-		380 (13.41) g (oz)
26 Rotor Inertia	J		45.00 g.cm ²
27 Hall Sensor Electrical Phasing	-		120 Electrical °

* Available without hall sensor

With hall effect sensors	
Wire	Description
Grey	Phase 1
Violet	Phase 2
Blue	Phase 3
Green	VDC (4 to 24V)
Yellow	GND
Orange	Sensor 1
Red	Sensor 2
Brown	Sensor 3
Black	Thermistor (+)
White	Thermistor (-)



V03062018