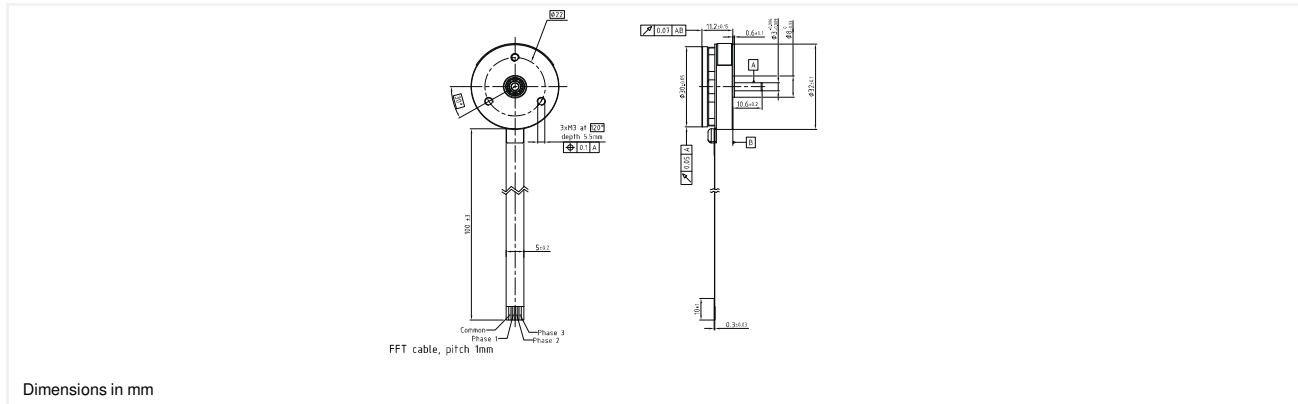


32BF nuvoDisc™

8 pole

Ø32mm

40 W



32BF 3C - **

32BF 8B - **

Electrical Data	**	K	
1 Nominal Voltage	U_N	12	Volt
2 Optimization Direction	-	Symmetrical	-
3 No-Load Speed	n_0	13,600	rpm
4 Typical No-Load Current	I_0	100.0	mA
5 Max Continuous Mechanical Power (@25°C)	P_{max}	40.0	W
6 Max Continuous Current	$I_e max$	1.5	A
7 Max Continuous Torque	$M_e max$	13 (1.85)	mNm (oz-in)
8 Back EMF Constant	K_E	0.87	V/1000 rpm
9 Torque Constant	k_M	8.3	mNm/A
10 Motor Regulation	R/k^2	57.5	$10^3/Nms$
11 Motor Regulation	$k/R^{1/2}$	4.2 (0.6)	$mNm/W^{1/2}$ (oz-in/ $W^{1/2}$)
12 Internal Resistance - phase to phase	R_I	3.95	ohms
13 Line to Line Resistance at Connectors	R_L	3.95	ohms
14 Inductance Phase to Phase	L	0.12	mH
15 Mechanical Time Constant	t_m	64.9	ms
16 Electrical Time Constant	t_e	0.03	ms

General Data			
17 Maximum Motor Speed	n_{max}	30,000	rpm
18 Ambient Working Temperature Range	-	-30 to +80 (-22 to +176)	°C (°F)
19 Ambient Storage Temperature Range	-	-40 to +80 (-40 to +176)	°C (°F)
20 Ball Bearings Preload	-	2.7	N
21 Axial Static Force w/o Shaft Support (max)	-	27.0	N
22 Maximum Winding Temperature	-	125 (257)	°C (°F)
23 Thermal Resistance	R_{th}	13.0	°C/W
24 Thermal Time Constant	t_w	550	s
25 Weight	-	27 (0.96)	g (oz)
26 Rotor Inertia	J	11.300	$g \cdot cm^2$
27 Hall Sensor Electrical Phasing	-	120	Electrical °

with hall effect sensors	
Wire	Description
VDD connection	3.5 to 27V DC
sensorless	
Wire	Description
Common connection	center point of Y winding

