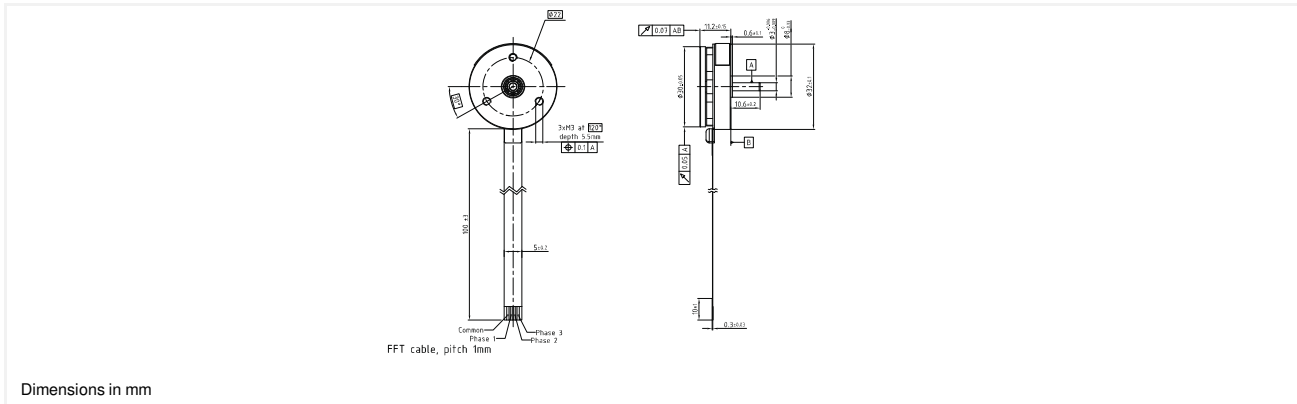


32BF nuvoDisc™

8 pole

Ø32mm

40 W



Dimensions in mm

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	$g.cm^2$
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

