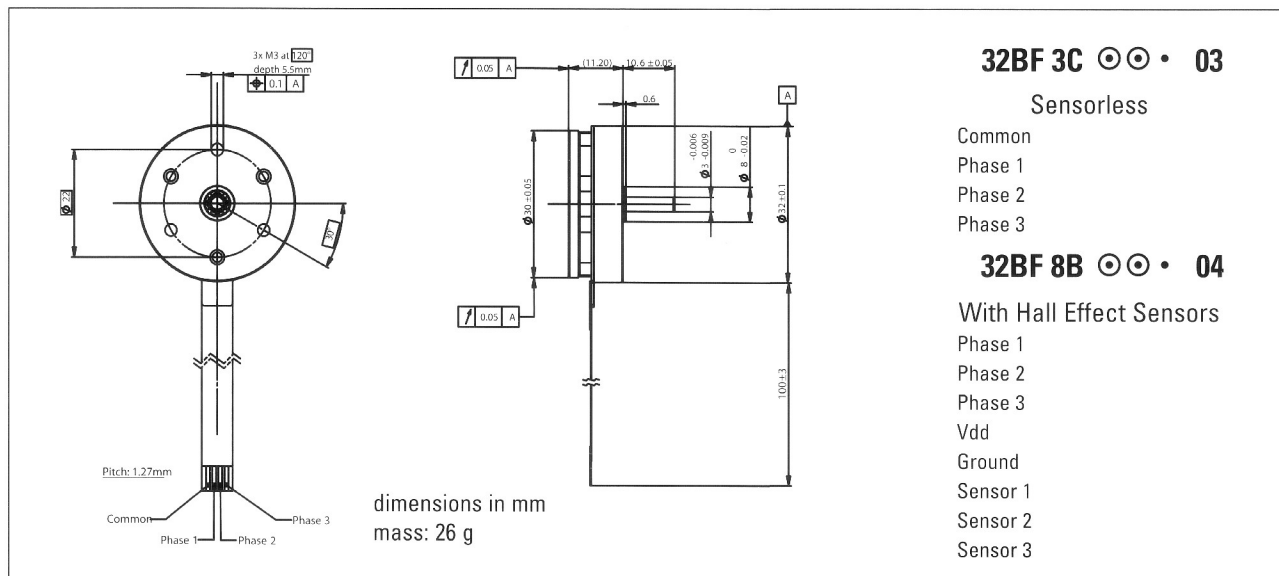


nuvoDisc™ 32BF

Flat Brushless DC motor



Winding Type



-K

Coil Dependent Parameters

Phase/phase resistance	ohm	3.70
Phase/phase inductance	mH	0.36
Back-EMF constant	V/1000 rpm	0.82
Torque Constant	mNm/A (oz.-in/A)	7.8 (1.10)

Dynamic Parameters

Rated Voltage	V	12
No-load Current	mA	65
No-load Speed	rpm	12800
Max. continuous stall torque	mNm (oz-in)	10.4 (1.47)
Max. continuous stall current	A	1.3
Max. continuous torque at 10 krpm & 25 °C	mNm (oz-in)	9.4 (1.33)
Max. continuous current at 10 krpm & 25 °C	A	1.3
Max. continuous power at 10 krpm & 25 °C	W	9.8
Max. recommended speed	rpm	50,000

Intrinsic Parameters

Motor constant	mNm/W ^{1/2} (oz-in/W ^{1/2})	4 (0.57)
Rotor inertia	kgm ² 10 ⁻⁷	11.3
Mechanical time constant	ms	67.8
Electrical time constant	ms	0.10
Thermal resistance	°C/W	11

- Motor with preloaded ball bearings
- Typical preload = 2.7 N
- Maximum external load:
 - axial static 17N (without shaft support)
 - axial dynamic 3N
 - radial dynamic 12N
- Operating temperature range -30 to +80 deg
- Max. rated coil temperature 125°C
- Rotor not balanced

Max Power Curve Flat 32BF 3C

