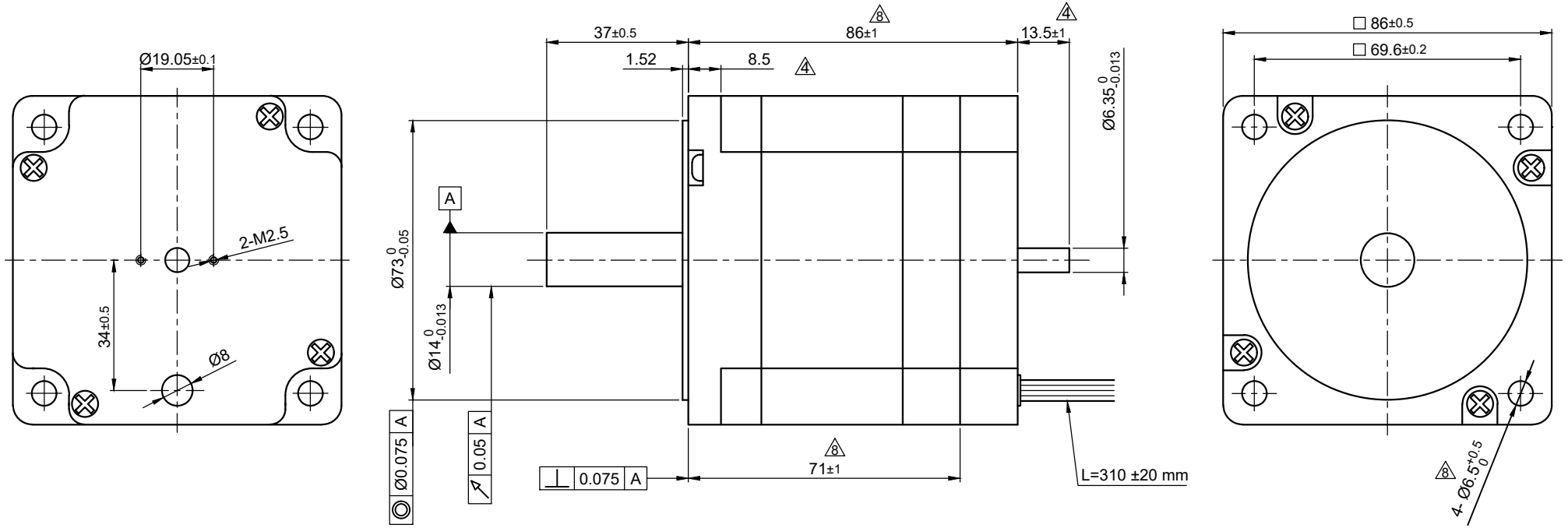
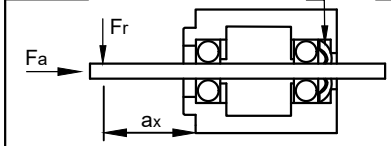


MOTOR SPECIFICATION				
No. of Poles			8	
Rated Voltage		V DC	48	
Current - Rated / Peak		A	6.25	19 (1)
Resistance Line to Line	±15%	Ω	0.34 (7) (6) (4)	
Inductance Line to Line (1kHz)	±20%	mH	1.07 (7) (6) (4)	
Torque - Rated / Peak		Nm	0.70	2.1 (1)
Torque Constant		Nm/A	0.112	
Power - Rated		W	220 (3)	
Speed - No Load / Rated	±10%	rpm	3600 (5)	3000
Rotor Inertia		kg m²	80	x10⁻⁶

WIRING DIAGRAM				
	Colour	Function	Lead Gauge	
Motor	Ye	U	AWM3135 AWG16	(1) (2)
	Rd	V		
	Bk	W		
Hall 24 Impl. per Rev.	Rd	+5V	UL1332 AWG22	(1)
	Bu	H1		
	Wh	H2		
	Gn	H3		
	Bk	GND		



Max. Axial Force	Fa	N	60
Max. Radial Force	Fr (a = 20 mm)	N	220
Axial Play	Fa = 4.5 N	mm	0.08
Radial Play	Fr = 4.5 N	mm	0.02

GENERAL MOTOR SPECIFICATION			
Ambient Temperature	°C	Min. -10	Max. 50
Max. Temperature Rise (at standstill - 2 phases energized)	°C	80	
Max. Ambient Humidity (non condensing)	%	85	
Insulation Class		B	
Insulation Resistance	MΩ	100	
Dielectric Strength (for 1 min - coil to case)	V AC	500	

ISO 8015	ISO 1302	ISO 2768 cK	ISO 13715

REV	Rev. Text	Name	Date
08	change diameter + tol.	Reith_S	17.05.2022
07	change induc./resist.		
05	change no-load-speed		

	Date	Name
Drawn	04.12.2017	Import
Reviewed	09.01.2018	Schneid_A
Released	09.01.2018	Schneid_A

Nanotec® PLUG & DRIVE

Weight: ~1.9 kg

DB87S01-S

03000156

State: Released | Rev: 08 | CONFIDENTIAL