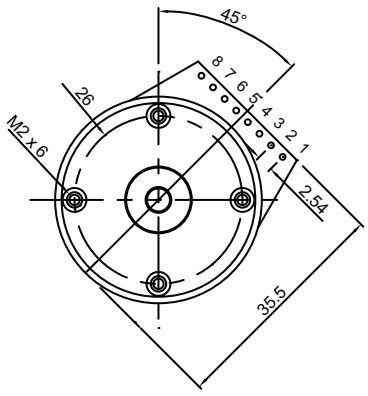
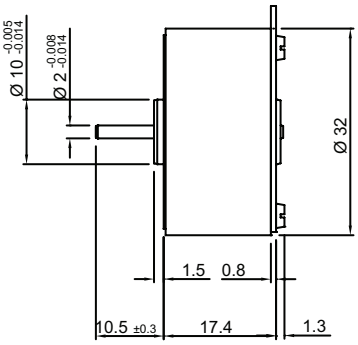
Turbo Disc™ P310

60 steps/revolution
6º step angle





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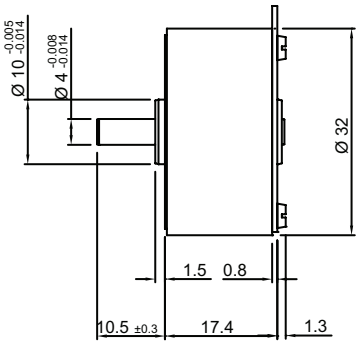

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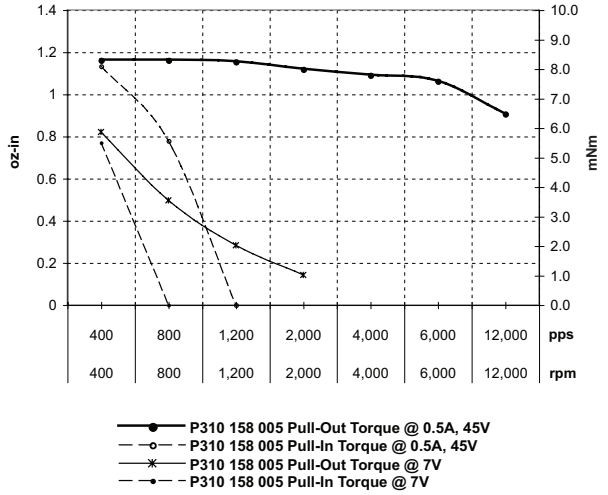
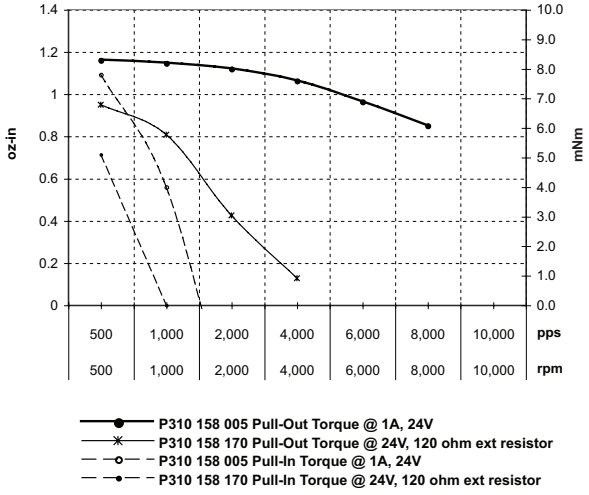
Motor Part Number		P310 158 170 09		P310 158 005 09	
		Series	Parallel	Series	Parallel
Rated voltage	vdc	20.00	10.00	6.00	6.00
Resistance per phase, ± 10%	ohms	332.00	83.00	10.50	2.60
Inductance per phase, typ	mH	184.00	46.00	6.40	1.60
Rated current per phase *	amps	0.06	0.12	0.36	0.72
Back-emf amplitude	V/kst/s	18.00	9.00	3.20	1.60
Holding torque, typical *	oz-in / mNm	2.0 / 14			
Detent torque, typical	oz-in / mNm	0.3 / 2.5			
Step angle, ± 10% *	degrees	6.0			
Steps per revolution *		60			
Natural resonance frequency (nominal current)	Hz	230.00			
Electrical time constant	ms	0.60			
Angular acceleration (nominal current)	rad/s²	140,000			
Thermal resistance	ºC/watt	25.00			
Rotor moment of inertia	oz-in-s²/ g-cm²	0.122 X 10E-4 / 0.86			
Ambient temperature range					
Operating	ºC	-20 ~ +50			
Storage	ºC	-40 ~ +85			
Bearing type		Sintered bronze sleeve or ball bearings			
Insulation resisitance at 500vdc	Mohms	100 megohms			
Dielectric withstanding voltage	vac	500 for 2 seconds			
Weight	lbs / g	0.09 / 40			
Shaft load ratings, max at 1500 rpm					
Radial	lbs / N	0.22 / 1.0, 2.2^ / 10^ (at shaft center)			
Axial	lbs / N	0.11 / 0.5, 4.5^ / 20^ (both directions)			
Leadwires		NA (PCB connection)			
Temperature class, max		B (130°C)			
RoHS		COMPLIANT			

ALL MOTOR DATA VALUES AT 25ºC UNLESS OTHERWISE SPECIFIED
* ENERGISE AT RATED CURRENT, 2 PHASE ON
^ Ball bearings

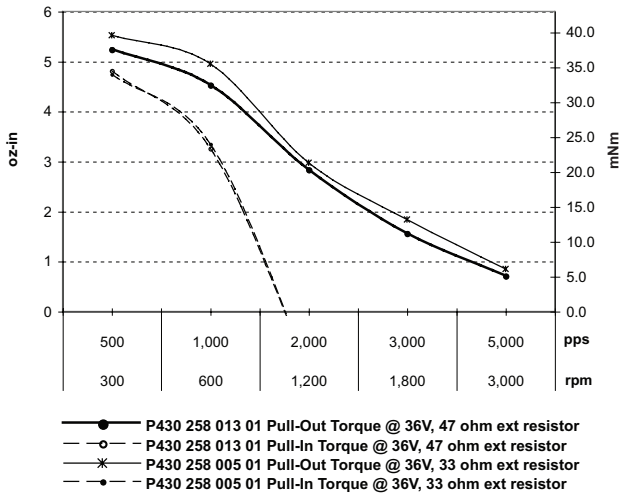
P310 158 005, P310 158 170 Series
Torque vs Speed
Full step, bipolar voltage drive



P310 158 005, P310 158 170 Parallel
Torque vs Speed
Full step, bipolar voltage drive



P430 258 013, P430 258 005 Series
Torque vs Speed
Full step, bipolar voltage drive



P430 258 013 Parallel
Torque vs Speed
Full step, bipolar voltage drive