

Motor Specifications

TS Series Motor Specifications Size 34 & 42 Frame

		Size 34 Frame			Size 42 Frame		
		TS31B	TS32B	TS33B	TS41B	TS42B	TS43B
Static torque**	oz-in (N-m)	455 (3.19)	647 (4.53)	1525 (10.68)	1332 (9.32)	2515 (17.61)	3479 (24.35)
Rotor inertia	oz-in ² (kg-cm ²)	7.80 (1.43)	14.67 (2.68)	21.89 (4.01)	30.22 (5.53)	59.68 (10.92)	88.51 (16.20)
Drive Bus Voltage	(VDC)	170	170	170	170	170	170
Phase Inductance (mH)***	Series	10.3	10.3	13.6	15.8	22.0	30.7
	Parallel	2.6	2.6	3.4	3.9	5.5	7.7
Detent Torque	oz-in (Nm)	18 (0.13)	36 (0.25)	54 (0.38)	42 (0.30)	84 (0.59)	106 (0.75)
Bearings Information							
Thrust Load	lb (kg)	305 (139)	305 (139)	305 (139)	404 (184)	404 (184)	404 (184)
Radial Load	lb (kg)	65 (30)	65 (30)	110 (50)	125 (57)	110 (50)	110 (50)
End Play (Reversing load equals 1 lb)	in (mm)	0.001 (0.025)	0.001 (0.025)	0.001 (0.025)	0.001 (0.025)	0.001 (0.025)	0.001 (0.025)
Radial Play (Per 0.5 lb load)	in (mm)	0.0008 (0.020)	0.0008 (0.020)	0.0008 (0.020)	0.0008 (0.020)	0.0008 (0.020)	0.0008 (0.020)
Motor Weight	lb (kg)	5.0 (2.3)	8.4 (3.8)	11.9 (5.4)	11.0 (5.0)	18.4 (8.4)	25.7 (11.7)
Certifications	UL recognized	Yes	Yes	Yes	Yes	Yes	Yes
	CE (LVD)	Yes	Yes	Yes	Yes	Yes	Yes
	CE (EMC & LVD)*	*	*	*	*	*	*
Drive Current	Apk (Arms)**						
GT	Series	3.3 (2.3)	3.1 (2.2)	5.6 (4.0)	6.4 (4.5)	6.7 (4.7)	6.9 (4.9)
	Parallel	6.7 (4.7)	6.2 (4.4)	12.0 (8.5)	12.0 (8.5)	12.0 (8.5)	12.0 (8.5)
OEM750	Series	3.3 (2.3)	3.1 (2.2)	NA	NA	NA	NA
	Parallel	6.7 (4.7)	6.2 (4.4)	NA	NA	NA	NA
ZETA	Series	3.3 (2.3)	3.1 (2.2)	5.6 (4.0)	6.4 (4.5)	6.7 (4.7)	6.9 (4.9)
	Parallel	6.7 (4.7)	6.2 (4.4)	12.0 (8.5)	12.0 (8.5)	12.0 (8.5)	12.0 (8.5)

* To comply with EMC and low-noise (CISPR22/EN55022 Class A or FCC Class A emissions) standards, the following items are required:

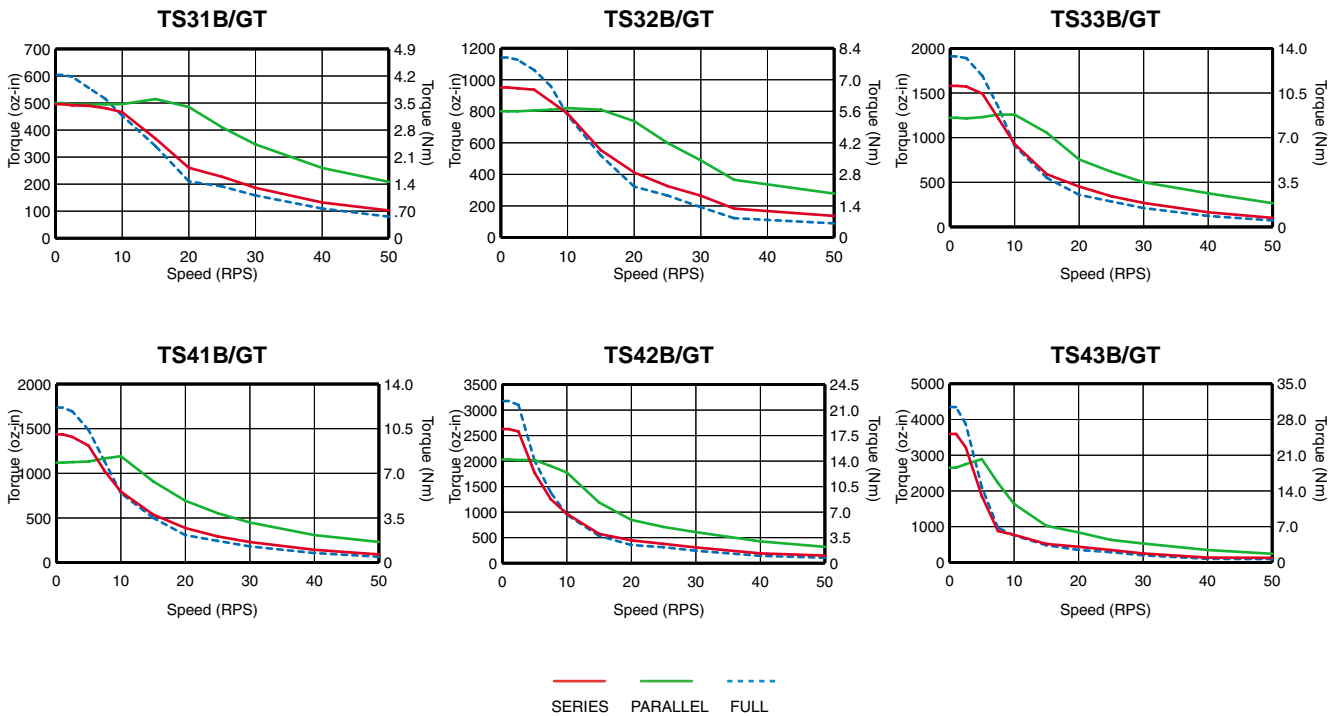
- Gemini GT or GT6 Drive
- CE(LVD) motor for LVD. Compumotor recommends a terminal board (NPS) motor construction for easier EMC installation
- C10(CH10) motor accessory (LVD/EMC cable kit)
- Mains Filter as indicated in the User Guide

** Values shown in speed-torque curves

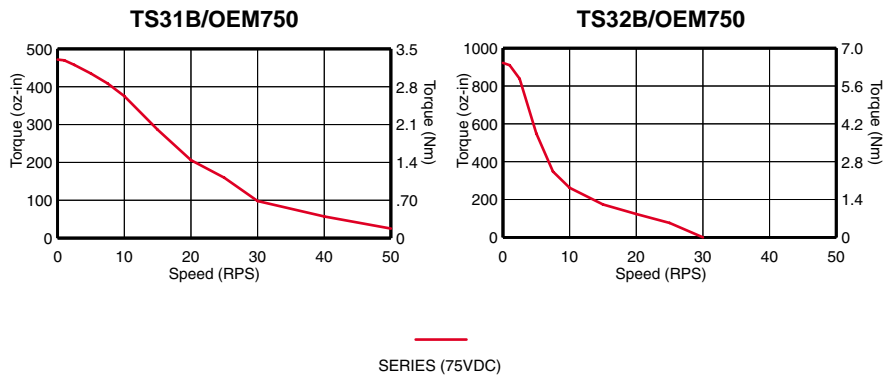
*** Small signal values

Motor Speed-Torque Performance Curves

GT Drive with TS Series motors – 34 and 42 frame

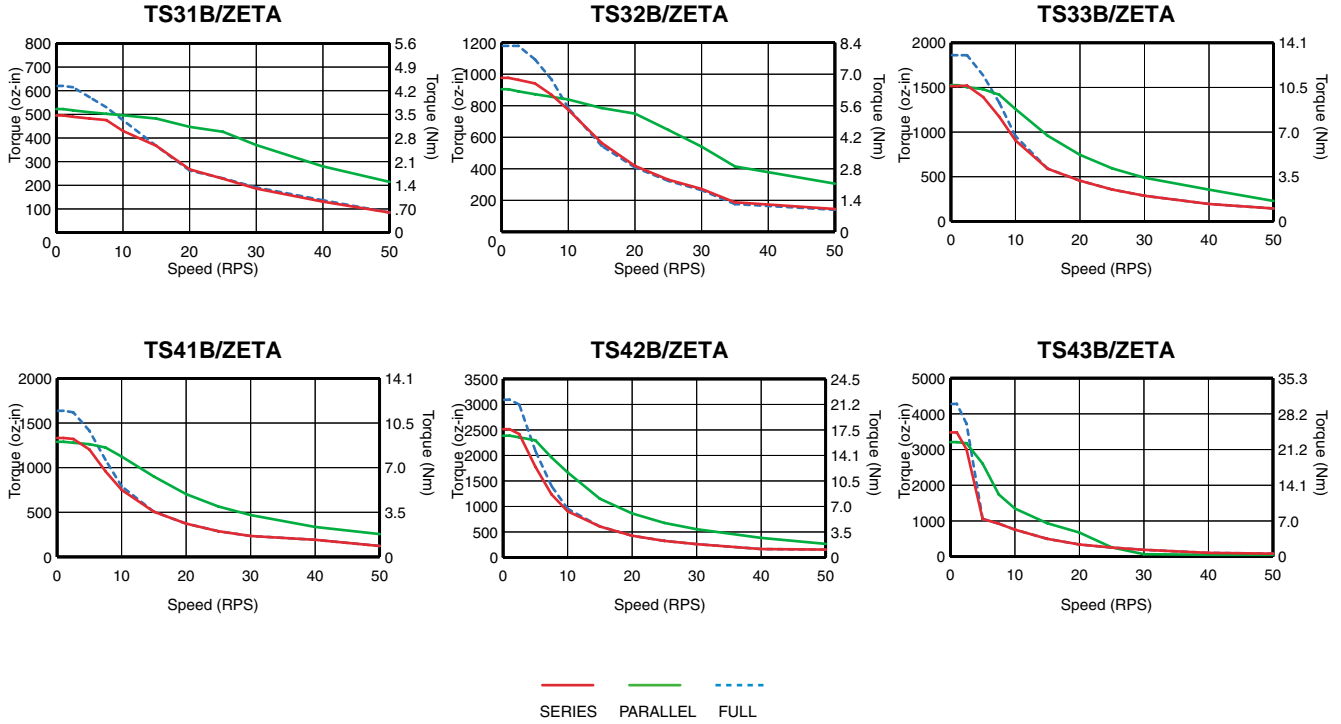


OEM750X with TS Motors – 34 frame



Motor Speed-Torque Performance Curves

ZETA with TS Motors – 34 and 42 frame

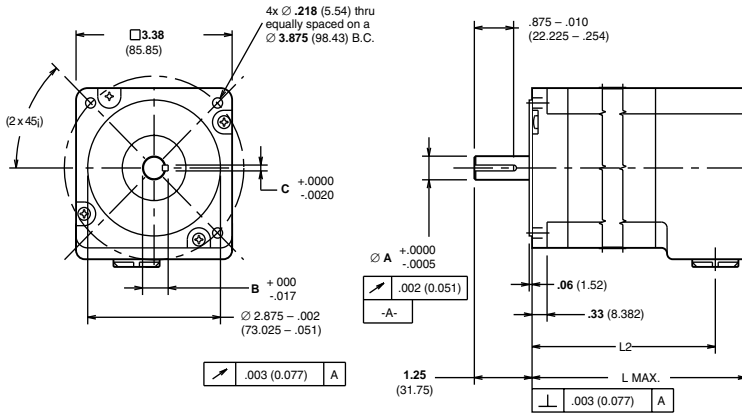


Dimensions

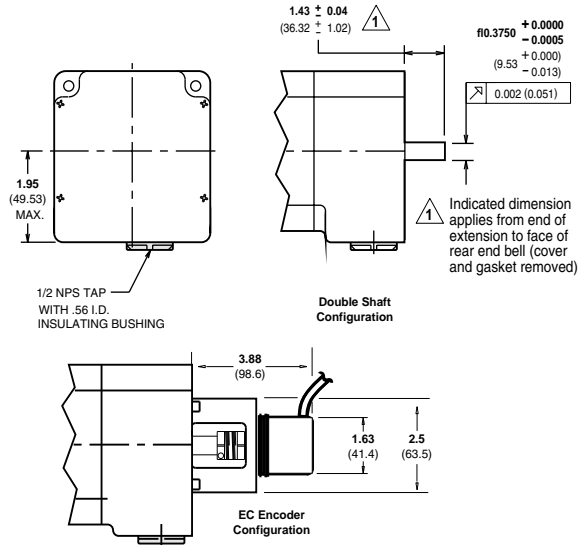
Dimensional Drawings

Size 34 frame

Dimensions in inches (mm)

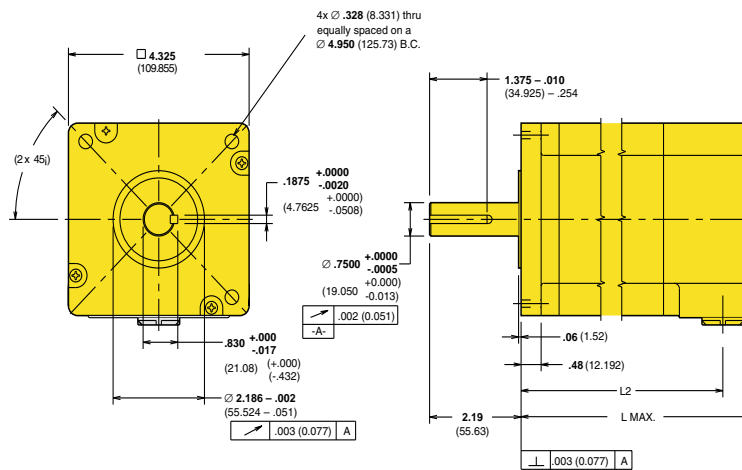


Model	Lmax	L2	A	B	C
TS31B—nnNPS	4.44 (112.78)	3.70 (93.98)	0.5000 (12.70)	.555 (14.097)	.1250 (3.175)
TS32B—nnNPS	5.96 (151.38)	5.22 (132.59)	0.5000 (12.70)	.555 (14.097)	.1250 (3.175)
TS33B—nnNPS	7.48 (189.99)	6.74 (171.20)	0.6250 (15.88)	.705 (17.907)	.1875 (4.763)

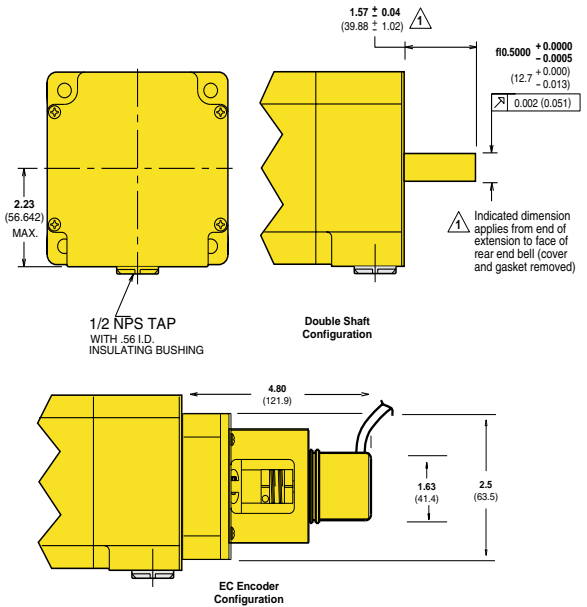


Size 42 frame

Dimensions in inches (mm)



Model	Lmax	L2
TS41B—nnNPS	5.20 (132.08)	4.46 (113.28)
TS42B—nnNPS	7.22 (183.39)	6.48 (164.59)
TS43B—nnNPS	9.23 (234.44)	8.49 (215.65)

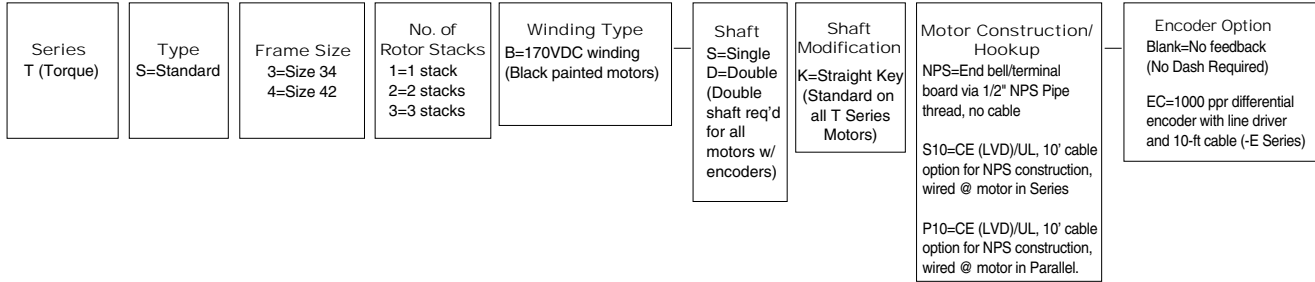


Ordering Information

Motor Ordering Information

TS Series (CE (EMC)*, CE (LVD), UL Recognized)

The TS Series Size 34 and Size 42 Frame motors are available in a B Winding (170VDC). These motors are designed for use with the GT Series, ZETA Series and ZETA-240 Series.



T Series Part Number Example:

TS _ _ B - _ K _____ - _____
 TS31B-SKNPS
 TS43B-DKS10