

PRODUCT SPECIFICATION

TSL-R-775-DF

Double Head DC Vibration Motor Series

12 V and 24 V options

5000 and 8000 r/min variants

85T, 100T and 125T configurations

12 V

24 V

5000 r/min

8000 r/min

Clean design. Reliable performance. Custom configurations available.



R-775-DF Double Head DC Vibration Motor

Performance Specifications

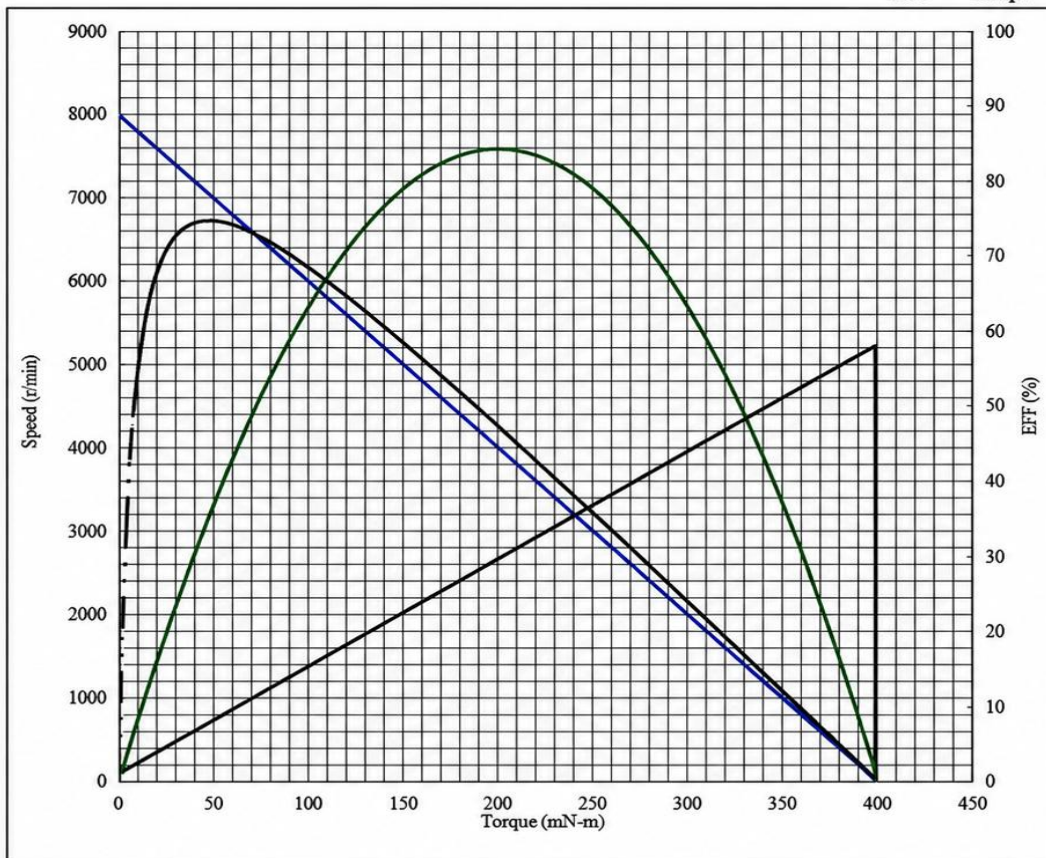
Motor Model	TSL-R-775-DF-1280-100T	TSL-R-775-DF-1280-125T	TSL-R-775-DF-2480-100T	TSL-R-775-DF-2480-125T	TSL-R-775-DF-1250-85T	TSL-R-775-DF-2450-85T
Operating Voltage Range	9.0-14.0	9.0-14.0	14.5-26.0	14.5-26.0	9.0-14.0	14.5-26.0
Nominal Voltage (V)	12	12	24	24	12	24
No-load Speed (r/min)	8000	8000	8000	8000	5000	5000
No-load Current (A)	5	5	5	5	5	5
Max Efficiency Speed (r/min)	7038	7005	6712	6834	4032	4603
Max Efficiency Current (A)	3.949	4.42	2.716	1.824	2.533	1.697
Max Efficiency Torque (g.cm)	477.88	491.98	655.85	473.43	433.03	592.33
Max Efficiency Output Power (W)	35.42	36.79	47.59	32.97	20	29.53
Max Power Speed (r/min)	4145	4323	4010	4006	2573	2763
Max Power Current (A)	14.31	12.85	9.14	6.78	6.47	5.59
Max Power Torque (g.cm)	2002.54	1717.31	2582.32	2028.23	1363.72	2290.65
Max Power Output Power (W)	84.257	74.939	107.322	79.956	37.441	65.581
Stall Torque (g.cm)	4005.1	3434.6	5164.6	4056.5	2727.4	4581.3
Stall Current (A)	29.146	26.437	18.669	13.804	13.419	11.429

Specifications are for reference only. Products can be customized according to customer requirements.

Performance Curve - 12 V / 8000 r/min / 100T

Model: R-775-12800

Date : 05/10/22
 Full scale : - - - - - 100 % Eff
 - - - - - 100.0 Watts
 ——— 2.00 Amp.



Performance (in an ambient temperature of 25-30 ° C)

Motor tested rapidly to prevent significant temperature rise.

At a constant voltage of: 12.0 Volts

Direction : CCW

At No Load

Speed :	7991	r/min
Current :	5	AMPS

At stall (Extrapolated)

Torque :	400.51	mN-m
Current :	29.146	AMPS

At maximum efficiency

Efficiency:	74.7	%
Torque :	47.788	mN-m
Speed :	7038	r/min
Current :	3.949	AMPS
Output :	35.42	Watts

At maximum Power output

Output :	84.257	Watts
Torque :	200.254	mN-m
Speed :	4145	r/min
Current :	14.31	AMPS

Characteristics

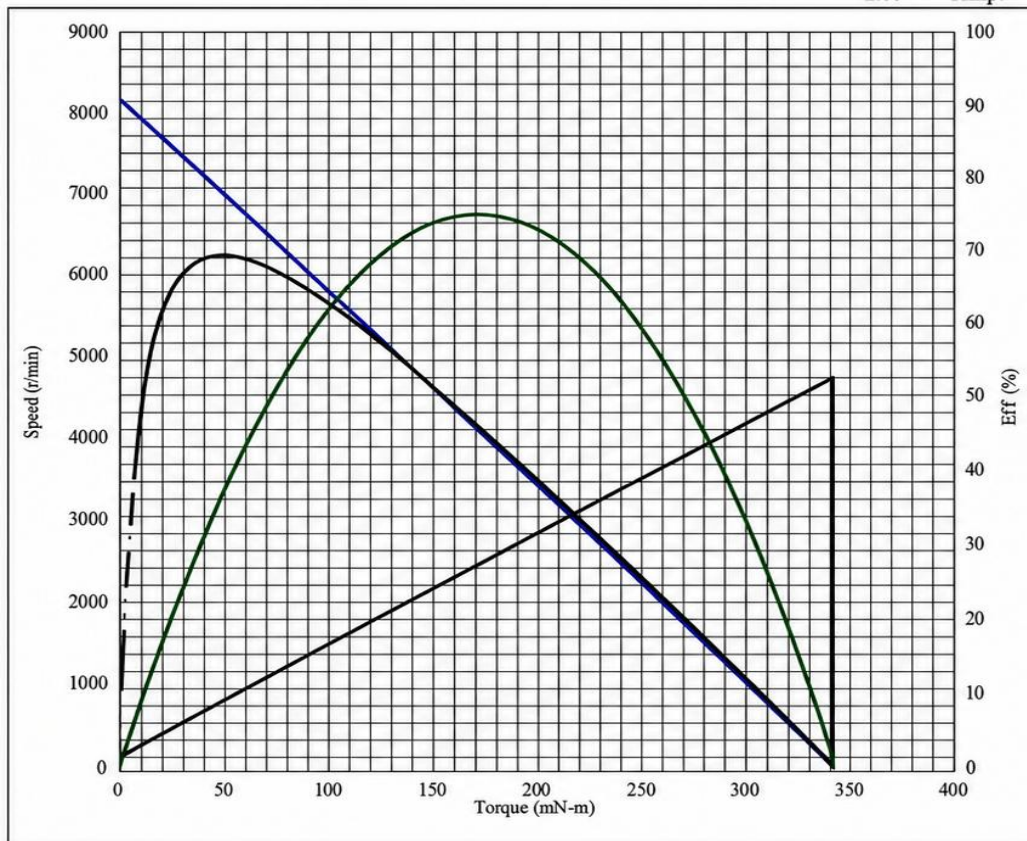
Torque constant K_t :	13.998	mN-m/AMP
E.M.F. constant E_c :	13.998	mV/rad/sec
Dynamic resistance:	0.4117	Ohms
Motor regulation M_r :	19.95	r/min/mN-m

K_m 21.81614131

Performance Curve - 12 V / 8000 r/min / 125T

Model: R-775-12800

Date : 05/10/22
 Full scale : 100 % Eff
 100.0 Watts
 2.00 Amp.



Performance (in an ambient temperature of 25-30 ° C)

Motor tested rapidly to prevent significant temperature rise.

At a constant voltage of : 12.0 Volts

Direction : CCW

At No Load

Speed :	8176	r/min
Current :	5	AMPS

At stall (Extrapolated)

Torque :	343.46	mN-m
Current :	26.437	AMPS

At maximum efficiency

Efficiency:	69.4	%
Torque :	49.198	mN-m
Speed :	7005	r/min
Current :	4.420	AMPS
Output :	36.79	Watts

At maximum Power output

Output :	74.939	Watts
Torque :	171.731	mN-m
Speed :	4323	r/min
Current :	12.85	AMPS

Characteristics

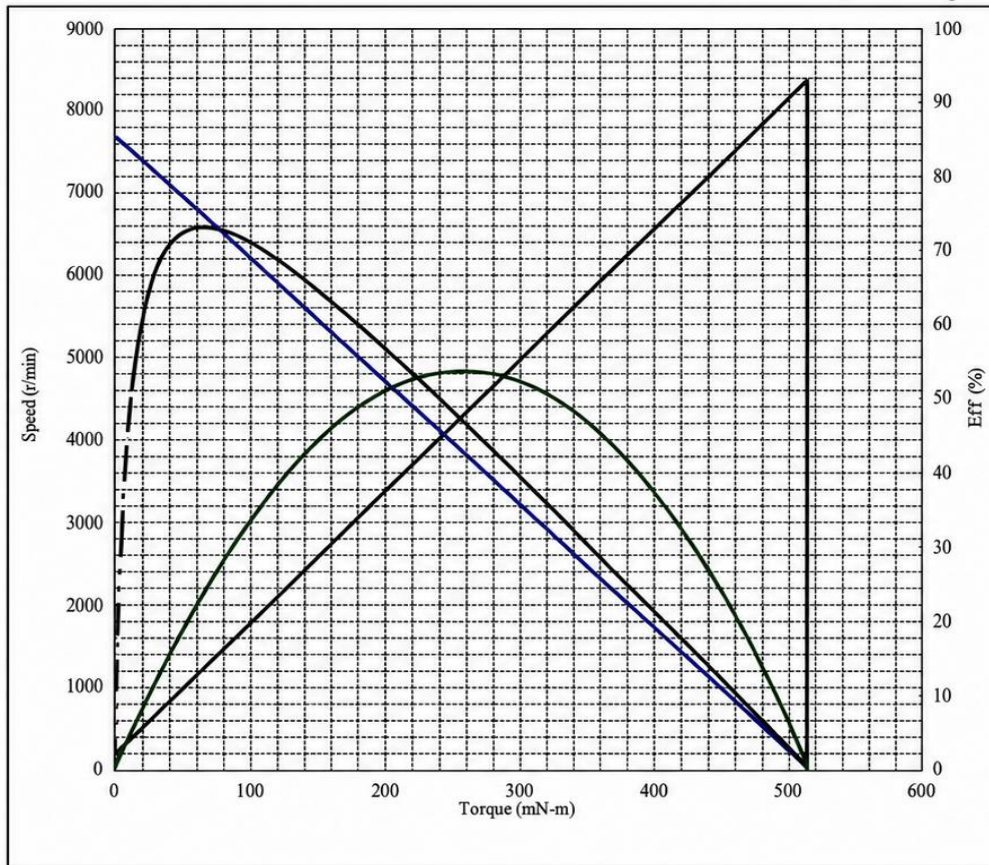
Torque constant K_t :	13.365	mN-m/AMP
E.M.F. constant E_c :	13.365	mV/rad/sec
Dynamic resistance:	0.4539	Ohms
Motor regulation M_r :	23.81	r/min/mN-m

K_m 19.83780745

Performance Curve - 24 V / 8000 r/min / 100T

Model: R-775-24800

Date : 05/10/22
 Full scale : 100 % Eff
 200.0 Watts
 2.00 Amp.



Performance (in an ambient temperature of 25-30 °C)

Motor tested rapidly to prevent significant temperature rise.

At a constant voltage of: 24.0 Volts

Direction : CCW

At No Load

Speed :	7688	r/min
Current :	5	AMPS

At stall (Extrapolated)

Torque :	516.46	mN-m
Current :	18.669	AMPS

At maximum efficiency

Efficiency:	73.0	%
Torque :	65.585	mN-m
Speed :	6712	r/min
Current :	2.716	AMPS
Output :	47.59	Watts

At maximum Power output

Output :	107.322	Watts
Torque :	258.232	mN-m
Speed :	4010	r/min
Current :	9.14	AMPS

Characteristics

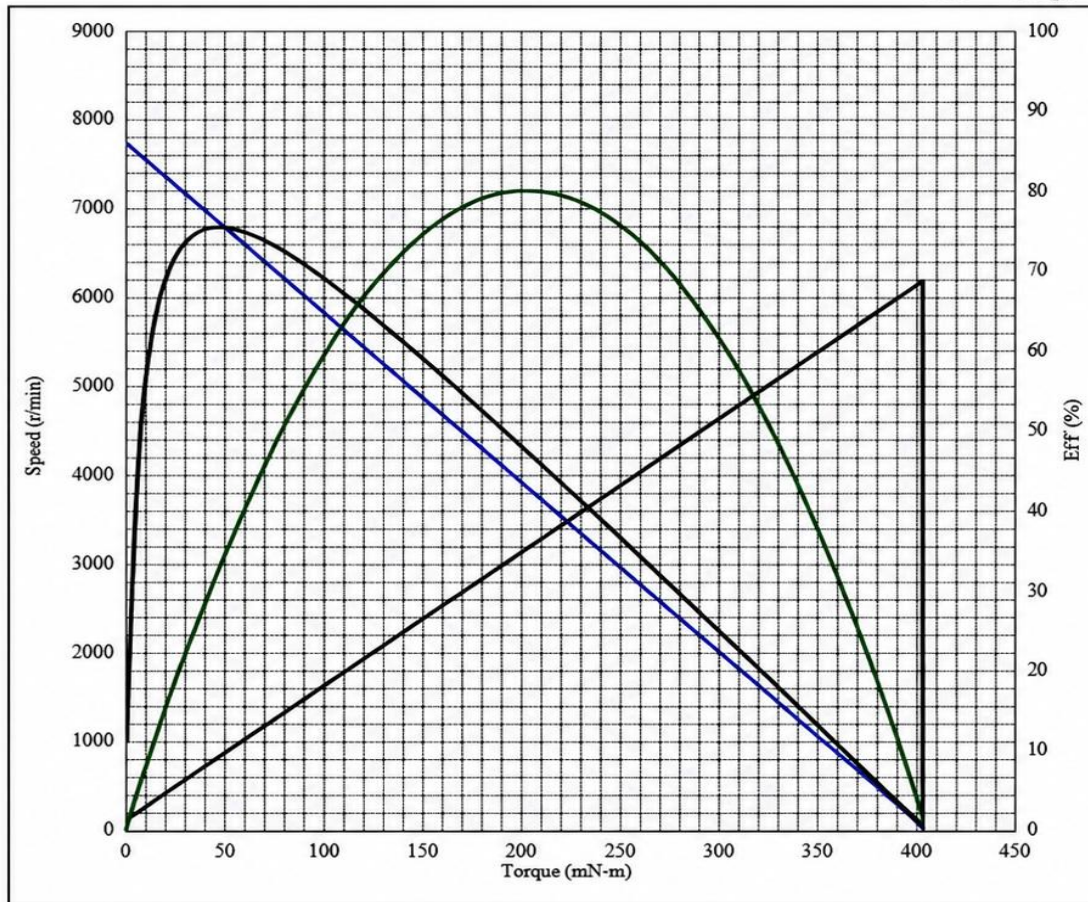
Torque constant K_t :	28.263	mN-m/AMP
E.M.F. constant E_c :	28.263	mV/rad/sec
Dynamic resistance:	1.2856	Ohms
Motor regulation M_r :	14.89	r/min/mN-m

K_{nr} 24.92670058

Performance Curve - 24 V / 8000 r/min / 125T

Model: R-775-24800

Date : 05/10/22
 Full scale : ----- 100 % Eff
 ----- 100.0 Watts
 ----- 2.00 Amp.



Performance (in an ambient temperature of 25-30 ° C)

Motor tested rapidly to prevent significant temperature rise.

At a constant voltage of: 24.0 Volts

Direction : CCW

At No Load

Speed : 7737 r/min
 Current : 5 AMPS

At stall (Extrapolated)

Torque : 405.65 mN-m
 Current : 13.804 AMPS

At maximum efficiency

Efficiency: 75.3 %
 Torque : 47.343 mN-m
 Speed : 6834 r/min
 Current : 1.824 AMPS
 Output : 32.97 Watts

At maximum Power output

Output : 79.956 Watts
 Torque : 202.823 mN-m
 Speed : 4006 r/min
 Current : 6.78 AMPS

Characteristics

Torque constant K_t : 29.909 mN-m/AMP

E.M.F. constant E_c : 29.909 mN/rad/sec

Dynamic resistance: 1.7387 Ohms

Motor regulation M_r : 19.07 r/min/mN-m

K_m 22.68249513

Outline Dimensions - Double Head

