



Van der Graaf  
Power Transmission Equipment



# TM273-40

**Drummotor**

**Product information**

[www.vandergraafpte.nl](http://www.vandergraafpte.nl)

# Selection table TM273-40

TYPE	Power (kW)	Beltspeed at 50 Hz (m/s) Beltpull (N)										Min. L (mm) Design A / B		Full load curr. at 400 V/50 Hz (A)	Weight L=600 (kg)
		5,00 1045	4,40 1190	3,60 1450	3,20 1635										
275	5,50	5,00 1045	4,40 1190	3,60 1450	3,20 1635							500	550	11,0	102
275 Z		2,50 2090													
275 ZV		2,20 2375	2,00 2615	1,80 2905	1,70 3075	1,40 3730	1,30 4020	1,20 4355							
255	4,00	5,00 760	4,40 865	3,60 1055	3,20 1190							500	550	7,9	97
255 Z		2,50 1520	2,20 1725	2,00 1900	1,80 2110	1,70 2235									
255 ZV		1,40 2715	1,30 2925	1,20 3165											
255 ST3-ZV		1,00 3720													
440	3,00	3,70 770	3,00 950	2,50 1140	2,20 1295	1,80 1585	1,60 1780					500	550	6,6	97
440 Z		1,25 2280													
440 ZV		1,10 2590	1,00 2850	0,90 3165	0,85 3355										
430	2,20	3,70 565	3,00 695	2,60 805	2,10 995	1,80 1160	1,60 1305	1,25 1670	1,10 1900			500	500	4,7	97
430 Z		1,00 2090	0,90 2320												
430 ZV		0,85 2460	0,75 2785	0,70 2985	0,65 3215	0,60 3485									
430 ST3-ZV		0,50 4090													
420	1,50	3,70 385	3,00 475	2,60 550	2,10 680	1,80 790	1,60 890	1,25 1140	1,10 1295	1,00 1425	0,85 1675	500	500	3,6	92
420 Z		0,75 1900	0,70 2035	0,65 2190											
420 ZV		0,60 2375	0,55 2590	0,50 2850											
420 ST3-ZV		0,45 3100	0,40 3490												
620 ZV	1,50	0,45 3165	0,40 3565	0,35 4070								500	550	3,7	97
415	1,10	3,70 280	3,00 350	2,60 400	2,10 500	1,80 580	1,60 655	1,25 835	1,10 950	1,00 1045	0,85 1230	500	500	2,9	87
415 Z		0,75 1395	0,70 1495	0,65 1610	0,60 1740	0,55 1900	0,50 2090								
615 Z	1,10	0,45 2320										500	500	2,9	92
615 ZV		0,40 2615	0,35 2985	0,33 3165											
615 ST3-ZV		0,29 3530	0,25 4090												
610	0,75	1,70 420	1,40 510	1,15 620	1,05 680	0,85 840	0,75 950	0,65 1095	0,55 1295	0,50 1425		500	500	2,5	92
610 Z		0,45 1585	0,40 1780	0,35 2035	0,33 2160										
610 ST3-ZV		0,29 2405	0,25 2790	0,23 3035	0,21 3320										

Available standard facewidth's: 500 - 550 - 600 - 650 - 700 - 750 - 800 - 850 - 900 - 950 - 1000 - 1050 - 1100 - 1150 mm.

Minimum facewidth can deviate, see cable exit options.

The total weight of a drummotor grows approx. 6,5 kg per 100 mm.

When an electro-mechanical brake is fitted, the minimum facewidth is increased by 100 mm.

Available torque Nm: (Beltpull N x Drumdiameter m) / 2

## Selection table TM273-40 Dahlander

TYPE	Power (kW)	Beltspeed at 50 Hz (m/s) Beltpull (N)									Min. L (mm) Design A / B		Full load curr. at 400 V/50 Hz (A)	Weight L=600 (kg)
		2,60/5,20 805/550	2,10/4,20 995/680	1,80/3,60 1160/790	1,60/3,20 1305/890	1,25/2,50 1670/1140	1,10/2,20 1900/1295							
430/240	2,20/ 3,00	2,60/5,20 805/550	2,10/4,20 995/680	1,80/3,60 1160/790	1,60/3,20 1305/890	1,25/2,50 1670/1140	1,10/2,20 1900/1295				500	550	5,0/ 6,9	97
430/240 Z		1,00/2,00 2090/1425	0,90/1,80 2320/1585											
430/240 ZV		0,85/1,70 2460/1675	0,75/1,50 2785/1900	0,70/1,40 2985/2035	0,65/1,30 3215/2190	0,60/1,20 3485/2375								
430/240 ST3-ZV		0,50/1,00 4090/2790												
418/230	1,30/ 2,20	2,60/5,20 475/400	2,10/4,20 590/500	1,80/3,60 685/580	1,60/3,20 770/655	1,25/2,50 990/835	1,10/2,20 1125/950	1,00/2,00 1235/1045	0,85/1,70 1455/1230	0,75/1,50 1645/1395	500	500	3,1/ 4,6	97
418/230 Z		0,70/1,40 1765/1495	0,65/1,30 1900/1610	0,60/1,20 2060/1740										
418/230 ZV		0,50/1,00 2470/2090												
418/230 ST3-ZV		0,45/0,90 2685/2275	0,40/0,80 3025/2560	0,35/0,70 3455/2925	0,30/0,60 4030/3410									

Available standard facewidth's: 500 - 550 - 600 - 650 - 700 - 750 - 800 - 850 - 900 - 950 - 1000 - 1050 - 1100 - 1150 mm.

Minimum facewidth can deviate, see cable exit options.

The total weight of a drummotor grows approx. 6,5 kg per 100 mm.

When an electro-mechanical brake is fitted, the minimum facewidth is increased by 100 mm.

Available torque Nm: (Beltpull N x Drumdiameter m) / 2

# Options

	Specification	Standard	Optional
 <h2>CONSTRUCTION</h2>	Shafts and bolts	Mild steel	Stainless steel
	Endflanges	Cast iron	Stainless steel
	Shell	Mild steel	Stainless steel
	Junctionbox	Cast iron	Stainless steel or polyamide
	Cable		Shielded or non-shielded
	Sealing mild steel	RB	RBS, HD-1
	Sealing stainless steel	CR	FS, HD-1, HD-2
 <h2>SHELL</h2>	Crowned	•	
	Cylindrical		•
	Balanced		•
	Lagging, cold vulcanised		•
	Lagging, hot vulcanised		•
	Lagging, FDA approved		•
	Fitted with grooves, patterns		•
 <h2>ELECTRO MOTOR</h2>	Three-phase asynchronous	•	
	Power supply ( $P \leq 3$ kW)	230/400 V - 50 Hz	Other voltages and frequencies on request
	Power supply ( $P > 3$ kW)	400/690 V - 50 Hz	Other voltages and frequencies on request
	Two speed (Dahlander)		•
	Twin drive (double power)		•
	Insulation class	F	•
	Thermal protection		Bi-metal or thermistor
	Run by frequency inverter	•	
 <h2>OTHER OPTIONS</h2>	Food grade oil		•
	Backstop, mechanical		•
	Brake, electro mechanical		•
	Inclined or vertical position		•
	Other facewidth's		•
	Special shaft dimensions		•
	Encoder or sensorbearing in drum motor		•
Sensor bearing in tail drum		•	
 <h2>CERTIFICATES</h2>	CE	•	
	UL		•
	CSA		•
	ATEX zone 22, dust		•

## Our drummotors, an overview

Drummotor type	Drum diameter (mm)	Shaft diameter (mm)	Power (kW)	Speed (m/s)	Max. Beltpull (N)
TM80B20	80	20	0,07 - 0,12	0,11 - 1,15	598
TM100B25	100	25	0,08 - 0,37	0,007 - 3,60	1300
TM113B25	113	25	0,12 - 0,55	0,008 - 4,40	1150
TM127-25	127	25	0,25 - 1,10	0,016 - 2,60	4100
TM138-25	138	25	0,25 - 1,10	0,017 - 2,80	3800
TM160-25	160	25	0,25 - 0,75	0,31 - 3,30	1135
TM160-30	160	30	0,25 - 2,20	0,11 - 4,00	3000
TM215-30	215	30	0,25 - 2,20	0,27 - 5,30	1900
TM215-40	215	40	0,75 - 5,5	0,17 - 4,70	5115
TM215B50	215	50	1,5 - 7,0	0,18 - 0,62	11500
TM273-40	273	40	0,75 - 5,50	0,21 - 5,00	4355
TM315-40	315	40	0,75 - 5,50	0,40 - 5,20	4020
TM315-50	315	50	2,2 - 11,0	0,34 - 4,40	7125
TM315-60	315	60	3,0 - 11,0	0,22 - 1,40	12790
TM400-50	400	50	2,2 - 11,0	0,40 - 4,80	5700
TM400-60	400	60	3,0 - 22,0	0,45 - 4,20	10960
TM500-60	500	60	3,0 - 22,0	0,55 - 4,40	8905
TM500A75	500	75	15,0 - 30,0	1,00 - 3,20	14250
TM500A100	500	100	15,0 - 30,0	0,55 - 1,25	25300
TM620A75	620	75	15,0 - 30,0	1,25 - 3,90	11400
TM630A100	630	100	37,0 - 55,0	1,60 - 4,00	21970
TM800A100	800	100	37,0 - 55,0	2,00 - 5,10	17575
TM800A130	800	130	55,0 - 132,0	2,00 - 4,50	35625

### Contact us

Van der Graaf B.V.  
De Weijert 14  
8325 EM Vollenhove  
The Netherlands  
Tel.: 0031 527 241 441  
sales@vandergraafpte.nl

### Representatives

Check our website for your regional  
representative  
[www.vandergraafpte.nl](http://www.vandergraafpte.nl)